

Comments of the Advanced Biofuels Association

RENEWABLE FUEL STANDARD ASSESSMENT WHITE PAPER Implementation Issues

Committee on Energy and Commerce
United States House of Representatives
July 26, 2013

Overview:

On behalf of the Advanced Biofuels Association (ABFA), we welcome the opportunity to comment on the white paper discussing implementation issues with the Renewable Fuel Standard. ABFA represents over 40 member companies who produce advanced biofuels and biofuels feedstocks. As an Association we appreciate the Committee's support and attention to the Renewable Fuel Standard program. We further want to express our gratitude to the Chairman, Ranking Member, and staff of the Committee for their excellent work on the hearing this week titled "Overview of the Renewable Fuel Standard: Stakeholder Perspectives." We appreciated the opportunity to present our views and engage with the Members of the Committee as well as the other stakeholder groups on our panel.

As we expressed during the hearing, ABFA recognizes your jurisdiction and legislative responsibilities. If the Subcommittee should chose to legislate on the RFS, we pledge to work constructively with you and the other stakeholders in whatever process you convene.

1) Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

The EPA's annual RVO setting process has been reasonably open, transparent, and prompt in setting the standards for the obligated parties and the producers of biofuels. The statute gave EPA broad flexibility in order to allow for a wide range of naturally occurring events like hurricanes, droughts, and economic dislocations. EPA has been called on twice by various governors to waive elements of the RFS and in response they have built a very specific record of criteria from which they have made their decisions. On several occasions, we have had significant weather events which have required EPA to waive parts of the Clean Air Act to ease the requirements for the use of certain types of gasoline in non-attainment areas. They have done so effectively and in a timely manner.

As ABFA testified on July 23, 2013, it is our belief that the Committee could most effectively address these issues by submitting a letter to EPA stressing the importance of timely rule making. EPA can use its flexibility to manage the program, thereby sending a clear signal to the market, addressing short term market challenges.

ABFA recommends the Committee send a bipartisan letter calling for EPA to develop a framework, easily understandable by the markets, explaining how they will manage the RFS targets going forward and reflecting the probable pace of development of advanced and

cellulosic biofuels. We are also concerned that significant reductions to EPA's FY2014 budget will only slow the process further.

2) Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

The commercialization of cellulosic biofuels has proceeded more slowly than anticipated by Congress when it revised the RFS in 2007. That reflects the ambition of the RFS schedule rather than limitations in the technology or commercial capacity of cellulosic biofuels. There has been real progress in the cellulosic biofuel sector since EPA finalized the RFS2 in 2010 with plants in Mississippi and Michigan in operation and several more under construction in Iowa and Kansas and Florida. Other advanced biofuels such as renewable diesel, gasoline, and jet fuel, produced from a variety of non-food feedstocks, have exceeded expectations to deliver and to exceed the mandate for biomass-based diesel in 2011, 2012 and 2013. While the petroleum industry has not built a new refinery in the last forty years, the advanced and cellulosic biofuels industry has built three in the last 18 months. Despite some setbacks, we strongly believe the RFS is still driving us towards a diversified, less carbon intensive energy portfolio.

Furthermore, concerns arising from the EPA's cellulosic RVOs have been thoroughly addressed by the Federal District Court ruling in January, when they vacated EPA's 2011 and 2012 cellulosic RVOs and returned compliance costs to the obligated parties. The EPA's 2013 proposed RVOs reflect the court's directive against putting its thumb on the scale. As Dr. Martin of the Union of Concerned Scientists testified in the Committee, the RFS should be looked at as 20 billion gallons plus what the cellulosic sector actually builds between now and 2022. No longer can any stakeholder group claim that they are paying for phantom fuels; this is simply not allowed under the law and the court has emphatically put to rest that assertion.

While we recognize the inherent challenge of making accurate estimates of future production in a rapidly evolving industry, we believe EPA should use the best possible data to reasonably align the volumes and the market in the near term. In the case EPA's requirements are too high, the program does allow the purchase of cellulosic waiver credits to make up any shortfall to obligated parties. The policy signal should continue to be that Congress wants to see energy dense, non-food, lower carbon plants and fuels come to the market. This was the original intent of the RIN and credit mechanisms: to assist in the financing of these particular cellulosic plants. At a minimum the Committee should do no harm to the current provisions.

EPA should not be required to link the cellulosic and advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume. The other pools can contribute, as has taken place since 2010, taking advantage of the nesting of the pools. Differing fuel types will develop on different, independent schedules and linking the RVOs would only serve to inhibit the most rapid pace of development.

3) How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

It is essential that we have a valid RINs market. Without such, the entire RFS program can be called into question. The purchasers of RINs must have confidence in the system. From its inception, the RIN system has been 'buyer beware'. The current proposal seeks to put a framework in place to afford more assurance for the RIN purchasers that they are valid RINs. However, ABFA is concerned that the EPA proposed Quality Assurance Program (QAP) is overly burdensome. The QAPs may hamper advanced biofuels with extra regulatory burdens compared to conventional fuels. Hand in hand with the QAPs, private sector due diligence should address potential RIN fraud, particularly given the obligated parties' knowledge of the potential for such fraud.

4) What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

The rise in ethanol RIN prices this year has been driven primarily by two factors: (1) concerns regarding the E10 blend wall and (2) significant delays in the EPA's final RVOs for 2013 and uncertainty surrounding the RVOs for 2014 and 2015. We would like to stress that these are near-term problems and there are near-term solutions. EPA should release a new framework to set a clear direction for the 2014 and 2015 RVO requirements. EPA has the authority to make adjustments to the RFS and provide the market more certainty, which will reduce RIN volatility and price spikes.

5) Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

The RIN price mechanism was created as a compliance tool to ensure that obligated parties use the renewable fuel gallons required by the statute. There is a recent perception that the blend wall will be breached in 2014 and that insufficient RINs will be available for the obligated parties. This is driving the value of the D6 RIN (representing the renewable pool) from its first three year average of around \$0.02 to over \$1.00.

Since the inception of the RFS, ABFA has argued that speculators should NOT be allowed to trade in the market. This should be a market of biofuels producers and sellers. The Committee should be aware that some refiners are 'merchant' and are not blending ethanol or other biofuels but only selling their fuels to the terminal or blenders. This creates an obligation on their part to go into the market and buy RINs. Speculators are aware of this and can read the daily press clippings about the potential blend wall. This has driven the current volatility.

One positive note has been that some renewable diesel and biodiesel gallons that are not qualified for the advanced pool are coming into the market. This is due to both the value of the RIN credit and the current tax credit for renewable diesel. These additional gallons are taking pressure off the blend wall and creating credits that are available to the obligated parties.

Another important consideration is that the system is not transparent. This is exacerbated by the significant undercapitalization of the market. The market does not know how many RINs are traded in a transaction, nor do they know the identities of the buyer or seller. For example you could have two trades and not know whether they are 10 gallons or 10 million gallons. At \$0.80, a 10 gallon trade is not a significant event, but at 10 million gallons the market reaction may be very different.

6) Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

From the perspective of the advanced biofuels industry, it is important that the RFS remain in place or risk the investments the industry has already made. To create subcategories or exempt sectors of the refining industry from the program would undermine and reduce the number of gallons of renewable fuels used in the United States. We continue to support the goals of the RFS to increase the number of gallons of sustainable fuels moving forward and expand the diversity of supply while backing out foreign oil.

7) Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

The current concerns over whether there will be enough RINs available has raised the question: will refiners export gasoline and diesel as a way in which to reduce their compliance cost? This is clearly something to watch, just like it would be important to the market to be more transparent on the turnaround schedule for refineries in the United States. For those merchant refineries who do not blend, they have the market power to negotiate with the blenders who are currently capturing a windfall in high RIN prices.

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The Honorable Fred Upton
Chairman, Committee on Energy and Commerce
U.S. House of Representatives

The Honorable Henry Waxman
Ranking Member, Committee on Energy and Commerce
U.S. House of Representatives

RE: AEC Comments RFS White Paper: Implementation Issues

Dear Chairman Upton and Ranking Member Waxman,

The Advanced Ethanol Council (AEC) appreciates the opportunity to comment on the Renewable Fuel Standard Assessment White Paper: Implementation Issues. The AEC represents worldwide leaders in the effort to develop and commercialize the next generation of ethanol fuels, ranging from cellulosic ethanol made from dedicated energy crops, forest residues and agricultural waste to advanced ethanol made from municipal solid waste, algae and other feedstocks. The AEC is the only advanced biofuel group with the singular purpose of promoting advanced ethanol fuels and technologies.

General Comments on the RFS: As discussed in prior comments submitted as part of the white paper process, it is important to consider why the Renewable Fuel Standard (RFS) is necessary as an underlying component of any review of the program. If you investigate the history of ethanol use in the United States, it becomes evident that the U.S. liquid fuels industry is not price driven, open or competitive. In a competitive marketplace, if an innovator presents a valuable product for a competitive price, there is a reasonable expectation of demand. This free market principle gives investors a durable benchmark against which to judge the value of their product, which in turn attracts investment to better products. This important market dynamic is largely absent from the global liquid fuels marketplace for a number of reasons, including but not limited to the highly consolidated, vertically integrated characteristics of the oil industry, particularly with regard to wholesale markets, the anti-competitive price distorting behavior of OPEC, and blending constraints such as the blend wall. There is no better example of the consequence of this problem than ethanol, which has generally been offered at a significant discount to gasoline without increased demand significantly beyond the volume of fuel required for blending by the U.S. government.¹ With specific regard to the advanced biofuels industry, it is important to emphasize that one of the primary problems with a non-competitive marketplace is its failure to properly reward innovation. In other words, if the market does not necessarily demand a better and cheaper product,

¹ Some have argued that this discount reflects the lower energy density of ethanol relative to gasoline. This is a misleading argument, because ethanol also contains much higher octane (with lower toxicity) than gasoline, which puts ethanol in a much more expensive class of premium fuel products that are relied upon to meet the minimum performance and environmental standards for gasoline. It is not a coincidence that the primary alternatives to ethanol for octane trade at prices that often exceed \$5.00 per gallon.

then there is no impetus to create one (both from within and outside of the fossil fuel sector). This is one of the primary reasons why the United States remains largely dependent on petroleum to meet consumer demand for liquid fuels. It is also the overarching reason why the RFS is necessary. The RFS provides innovators with a predictable (and flexible) expectation for demand in a marketplace that does not properly reward innovation. Most importantly, the RFS is working. The RFS statutory schedule required 15.2 billion gallons of renewable fuel blending in 2012, of which 2 billion were advanced biofuels. The renewable fuels industry met the challenge. Just five years after the enactment of RFS2, the cellulosic biofuels industry is breaking through at commercial scale.² Given the realities of world and domestic liquid fuels markets, the cornerstone of ongoing investment and development in the advanced biofuels sector is the consistent, unchanged and durable administration of the RFS. The alternative to the RFS – or any gallons waived from the RFS – is not innovation in other areas; it is simply more fossil fuels that are increasingly scarce and carbon intensive.

General Comments on the Impacts of the RFS from an Implementation Perspective: One of the primary points of criticism for opponents of the RFS is there are implementation issues. In fact, there have been very few implementation issues to date, and those that have occurred have been addressed administratively by U.S. EPA. We discuss most of the alleged issues in this document, but would like to highlight a few examples:

- “The RFS is Not Working to Catalyze New Industries.” The RFS is the highest priority target for the oil industry precisely because it is working to diversify a petroleum-dominated liquid fuel marketplace with various types of renewable fuel. The original RFS targets for both the conventional and advanced biofuel pools have been achieved through 2012, including 2 billion gallons of advanced biofuels. The RFS has created an industry that now supports roughly 400,000 jobs, produces about as much fuel as we import from Saudi Arabia annually, and delivers a product that is consistently cheaper than gasoline. Higher RIN prices are providing a further market incentive to blend more renewable fuels without increasing costs to the consumer. And the cellulosic biofuels industry is just beginning to break through at commercial scale, just 5 years after the enactment of RFS2 in December 2007.
- “The Cost of Compliance Is Skyrocketing Due to Higher RIN Prices.” Opponents of the RFS want Congress to believe that because RIN prices have increased, the cost of compliance with the RFS has increased. This argument relies on a number of myths about how the RIN program works:
 1. The price of a RIN credit is not the equivalent of the cost of compliance with the RFS. It is an optional cost of non-compliance with the RFS. Oil companies have essentially three choices to comply with the RFS. They can either buy a wet gallon of renewable fuel

² See AEC Progress report, http://ethanolrfa.3cdn.net/96a2f9e04eb357bbbd_1sm6vadgk.pdf.

(which comes with an attached RIN credit for free, which they can then sell), buy a RIN credit on the open market, or retire a RIN they stockpiled from the previous year. Oil companies are usually the ones selling the RINs, and they only incur the cost of a RIN credit when they choose not to buy more renewable fuel. This means that the entity profiting from the RIN sale may not only be an oil company, but their alleged compliance cost may actually be a profit.

2. In 2013, oil companies appear to have chosen to buy RINs instead of using more of a renewable fuel (ethanol) that is more than 50 cents per gallon cheaper than gasoline. This is case-in-point for the type of market distorting behavior that the RFS seeks to fix (i.e. oil companies are ignoring market signals to blend more ethanol *at a discount to gasoline* to instead buy a RIN, which they then complain about to Congress).
3. Higher RIN prices are a sign that the RFS is working, not vice versa. If oil companies want to avoid using renewable fuel by buying RINs, this optionality provides some level of flexibility in the marketplace that oil companies supported in 2007. However, this non-compliance will increase the price of a RIN if prevalent enough in the marketplace, which in turn incents the increased blending of renewable fuel by those interested in acquiring the now more valuable RIN with the wet gallon of renewable fuel (including independents). In essence, higher RIN prices incentivize more blending of renewable fuel. And that's good news for both the RFS and the American consumer, because the RFS is working to create jobs, reduce foreign oil dependence and moderate pump prices.

In summary, RIN prices are an optional cost of non-compliance, oil companies often profit from higher RIN prices, higher RIN prices help facilitate the RFS, and elevated RIN prices do not necessarily increase the cost of compliance with the RFS.

- "We cannot blend more renewable fuel." This is patently false. E15 is now certified as a legal fuel for roughly three quarters of the passenger vehicles on the road today, and even small penetration of E15 allows billions of gallons of further ethanol blending. Some oil companies, like Philips 66, are actually making it more difficult for franchisees to blend more ethanol. Obligated parties can also facilitate more E85 use, more biodiesel use, more renewable diesel use – without infrastructural or vehicle warranty problems. Again, oil companies are choosing not to blend more biofuel, most likely because they have chosen to take a run at the RFS politically.

- “RIN Fraud.” Much has been made of the RIN fraud issue, but just 0.3% of total RINs generated have been found to be fraudulent. It is hard to imagine a regulatory system in any sector having a better record when it comes to consumer fraud.
- “EPA is Forcing the Use of a Non-Existent Fuel in Cellulosic Biofuel.” U.S. EPA has the discretion within the statute to waive the cellulosic biofuel blending standards if the fuel is not available. The agency waived 98 percent of the cellulosic biofuel requirements from 2010-2013, but *effectively* waived 99.8 percent of the cellulosic biofuels requirements during this period because it has required the oil industry to acquire just 4.26 million waiver credits to date (representing 0.2 percent of the 1.85 billion gallons of cellulosic biofuels required by the statute from 2010-2013). Now, just five years after the signing of RFS2, the cellulosic biofuel industry is building its first wave of commercial facilities.
- “U.S. EPA is Refusing to Exercise Discretion to Alleviate Pressures.” In addition to waiving nearly the entire cellulosic biofuel obligation for oil companies, U.S. EPA *voluntarily* remanded its blending requirements for previous years after the DC Circuit ruling earlier in the year. The one area in which U.S. refused to use its discretion to waive RFS gallons was in the wake of the 2012 drought. But the waiver would not have provided relief because there is year-to-year flexibility built into the RIN program by virtue of the fact that obligated parties can carry over 20 percent of their RFS obligations to ensuing years. In simple terms, oil companies have the ability to defer 20 percent of their obligation to 2013, which more than accounted for forecasts covering the potential impact of the drought. Even with the drought, the U.S. put out its 8th largest corn crop in history. The facts simply did not support the case for a waiver.

As stated in prior AEC comments, Congress is right to ask and answer questions about the energy policy impacts of different fuels. However, we encourage Congress to avoid assessing biofuel production in a vacuum. It is one thing to be responsible about minimizing the potential negative impacts of a certain fuel, but it is quite another to arrest the development of one fuel (based on these concerns) if the real world alternative is measurably worse. It is quite clear that the alternative to renewable fuels under the RFS is unconventional oil in the near to intermediate term. While the United States does have reserves of tight oil in Bakken and Eagle Ford, these reserves are not enough to fundamentally change the energy picture for the United States when it comes to domestic fuel production. Stakeholders from many sectors will be submitting their ideas for how the RFS could be more (or less) protective of the broader energy policy goals of the country, but the AEC does not believe that opening up the RFS under any of these pretenses will ultimately result in a more effective policy when it comes to its primary objective of moving the United States toward greater energy independence and security via the increased production and use of clean renewable fuels. In fact, and as discussed in previous public comments submitted by the AEC as part of this process, changing the rules just one-third of the way through a 15-year policy commitment will discourage existing and future investors from relying on Congress to hold course when it comes to making clean energy investments. As former Shell Oil President John

Hofmeister recently stated, “[w]e need a competitor for oil. We need to open the market to replacement fuels ... Competition will drive transportation fuel prices down, structurally and sustainably.” The need for competition for oil does not change by virtue of the emergence of new oil fields in the United States. The RFS is succeeding at providing competition, and it is critical that Congress not waiver on the 15-year program structure it established in 2007.

Please find below our responses to the specific questions released by the Committee:

1. Does EPA’s annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

There are no statutory changes needed. U.S. EPA has the flexibility to adjust the RFS blending requirements from year-to-year in the cellulosic biofuel pool. If the pool is adjusted downward, which it has been every year since the RFS started to require the blending of cellulosic biofuels, U.S. EPA has the flexibility to also reduce the broader advanced biofuels category. To date, U.S. EPA has reduced the cellulosic biofuel blending requirement by roughly 98 percent by volume, and has allowed other advanced biofuels (e.g. biodiesel) to replace that volume without also reducing the advanced biofuel pool. This decision is consistent with the broader intent of Congress, in passing the RFS, to create domestic jobs and reduce U.S. dependence on foreign oil with low-carbon, advanced biofuels. If there is not enough advanced biofuel volume going forward to replace the volumes of cellulosic biofuel waived, we expect U.S. EPA to begin to reduce the advanced biofuel pool. This has not been necessary to date, but we encourage Congress to steer clear of this technical, decision making process. Obligated parties would like to require U.S. EPA to only require as much renewable fuel as was produced in the *previous* year because this would effectively short-circuit the growth aspect of the RFS by making prospective off-take agreements (i.e. in future years) nearly impossible. So while this proposal might seem reasonable on its face, it would effectively neuter the RFS where it stands today.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit’s decision to vacate EPA’s 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

The cellulosic biofuel provisions in the RFS were designed to address several market realities: (1) the ability to secure off take agreements (i.e. prospective sales agreement with oil companies) is critical to the effort to finance alternative fuel production facilities; (2) major integrated oil companies, which control critical access points in wholesale liquid fuel markets, are generally unmotivated to sign off take agreements for non-petroleum fuels; and, (3) the production of cellulosic biofuel relies on emerging technology, which by definition means that there is some year-to-year uncertainty with regard to

commercial readiness. In essence, Congress responded to this challenge by passing a waivable cellulosic biofuel standard, which facilitates the off take of whatever amount of cellulosic biofuel can be produced in the immediate term, with the balance of the RFS blending target for cellulosic biofuels being waived if there is a shortfall. In recent months, and in the wake of recent lawsuits, U.S. EPA has intensified its industry surveying process to ensure that the annual RVOs accurately reflect actual gallons coming online in the marketplace. The proposed RVO for 2013 for cellulosic biofuels is based on the expected output from facilities already built, and will almost certainly be adjusted downward in the final rule.

U.S. EPA should not be required to adjust the advanced biofuel pool downward when it waives gallons for cellulosic biofuels. The objective of the RFS is to create domestic jobs and reduce foreign oil dependence with various types of renewable fuels. There is flexibility within the advanced biofuel pool because different types of fuel scale at different rates based on market conditions that often cannot be predicted (including the global recession). The flexibility to maintain the advanced biofuel pool is a critical part of U.S. EPA's ability to achieve the objectives set forth by the Energy Independence and Security Act of 2007 (EISA07). Requiring U.S. EPA to simultaneously reduce the advanced biofuel and overall renewable fuel pool when it waives cellulosic biofuel blending requirement would be the equivalent of using petroleum (much of which would be sourced from abroad in a global marketplace) instead of other types of available advanced biofuel (i.e. U.S. EPA only maintains the advanced biofuel pool if other types of advanced biofuel are available for commercial use). This would turn the overarching objective of EISA07 on its head.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

The RIN credit trading program is a first-of-kind regulatory structure that is being well managed by U.S. EPA. Much has been made of the RIN fraud issue but just 0.3% of total RINs generated have been found to be fraudulent. As pointed out by RFA in testimony before Congress, not a single one of the 38.6 billion D6 RINs (typically generated from corn ethanol) have been found to be fraudulent. U.S. EPA response to the advent of an isolated fraud problem was swift and appropriate, and there is nothing new about the "buyer beware" approach to RIN credit markets that U.S. EPA has chosen in the context of virtually every other transaction occurring every day in the U.S. and global economy. With regard to U.S. EPA's new voluntary quality assurance program (QAP) for RINs, it is the product of several years of discussion about how best to help interested parties validate the authenticity of a RIN. While many parties will continue to trade RINs as they have for years, QAP is a good option to have in the event that buyers or sellers want additional protections. Given that the rate of fraud is so extraordinarily low, and the QAP

regulation already provides real time transparency/validation data to those who want it, there is no need for Congress to act legislatively to improve this very important credit trading program.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

The price of a RIN credit is not the equivalent of the cost of compliance with the RFS. It is an optional cost of non-compliance with the RFS. Oil companies have essentially three choices to comply with the RFS. They can either buy a wet gallon of renewable fuel (which comes with a RIN credit for free, which they can then sell), buy a RIN credit on the open market, or retire a RIN they stockpiled from the previous year. Oil companies are usually the ones selling the RINs, and they only incur the cost of a RIN credit when they choose not to buy more renewable fuel. This is a very important clarification because it means that the entity profiting from the RIN sale may not only be an oil company, but this alleged compliance cost may actually be a profit). It also means, in practical terms, that oil companies are choosing to buy RINs instead of using more of a renewable fuel (ethanol) that is more than 50 cents per gallon cheaper than gasoline. This is case-in-point for the type of market distorting behavior that the RFS seeks to fix. Further, if some oil companies are profiting from RIN sales and others are paying for RINs, the net cost to consumers could very well be zero. Oil companies are framing the RIN program, which they supported at the inception of RFS2, as a cost of compliance because they would prefer that the RFS be repealed.

We also encourage the Committee to consider that higher RIN prices are a sign that the RFS is working, not vice versa. If oil companies want to avoid using renewable fuel by buying RINs, this optionality provides some level of flexibility in the marketplace that oil companies supported in 2007. However, this non-compliance will increase the price of a RIN if prevalent enough in the marketplace, which in turn incents the increased blending of renewable fuel by those interested in acquiring the now more valuable RIN with the wet gallon of renewable fuel. In essence, higher RIN prices incentivize more blending of renewable fuel. And that's good news for both the RFS and the American consumer, because the RFS is working to create jobs and reduce pump prices. Higher RIN prices and the certification of E15 as a legal fuel for 2001 and later vehicles are working together to eliminate the ethanol blend wall and bring real choice to the pump. The last thing Congress should do is get involved with RIN markets at the pricing level. The system is working as designed, and if left alone, will facilitate compliance with the RFS.

To the question of why higher RIN prices in 2013, it is very difficult to know what is driving up the price of RINs because RIN trading is not transparent. It could be large purchases of RINs by a small number of oil companies. It could be speculators playing the RIN marketplace. There are a very small number of obligated parties in the RFS, because so few companies provide petroleum fuels to American

consumers, so the behavior of a few could fundamentally change the price of RINs. If Congress is concerned about RIN markets, it should request trading information from U.S. EPA. If appropriate, Congress could take the next step of working with U.S. EPA to ensure that there is more transparency in the RIN trading markets. This solution does not require legislative change to the RFS.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

As discussed in the answer to Question #4, higher RIN prices are an indication of: (1) an increased reliance on credits as opposed to gallons to comply with the RFS; and, (2) the RFS working as designed.

With regard to the increased reliance on credits, the oil trade associations allege that this is happening because they cannot blend more ethanol because of the ethanol blend wall. This is a misleading claim on many fronts. First, E15 is now a certified fuel for roughly 3 out of 4 passenger vehicles on the road today, and a relatively small penetration of E15 in the marketplace alleviates the ethanol blend wall. Instead of facilitating the use of more E15, many oil companies are standing in the way by making it more difficult to add this optionality at the pump.³ Second, oil companies can more aggressively market E85, which has been around for decades and is much cheaper than gasoline. Third, oil companies can use more biodiesel or renewable diesel in distillate blends. In essence, oil companies are alleging that their back is against the wall to protect market share and take a run politically at the most game changing liquid fuel policy ever passed by Congress.

With regard to the RFS working as designed, higher RIN prices reflect higher demand for RINs as an alternative to the more intended path to compliance with the RFS (buying wet gallons of renewable fuel). But higher RIN prices also provide an incentive – especially for petroleum independents more concerned about immediate term competitiveness than longer term market domination – to use more renewable fuel. In simple terms, higher RIN prices help alleviate the blend wall. Higher RIN prices also incent the production and use of advanced biofuels, because a functioning RIN market (with real value for the RINs) demonstrates to investors that the market incentive created by the RIN program is durable and will actually change behavior in a largely non-competitive marketplace. Advanced biofuel RINs have carried some value for many years, and this value spurs innovation in the biofuels sector.

If higher RIN prices spur more renewable fuel marketing, the next question is what happens to RIN prices when this happens? When oil companies ultimately decide to start using more renewable fuel as an alternative to buying RIN credits, which basic market principles suggest should have already happened, RIN prices should fall. In essence, RIN prices fall when more renewable fuel is used. The current price of renewable fuel (ethanol especially) suggests that renewable fuel use should increase

³ http://www.csnews.com/top-story-legislative_regulatory_news-supreme_court_shoots_down_e15_challenge-63889.html

and RIN prices should decline. This outcome depends, however, on the behavior of a highly consolidated, vertically integrated industry that has the market power to stand market principles on their head and further drive up RIN prices. But again, the RFS is not the problem itself when it comes to an industry-wide decision to avoid blending *cheaper* renewable fuels; it is the solution to the problem.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

We strongly recommend that Congress avoid getting involved with relieving certain segments of the RIN marketplace. Any concern about undue RIN pressure should be addressed administratively via U.S. EPA, and certainly does not require legislative action.

First, to clarify, RINs are not generated by obligated parties. They are generated by the renewable fuel producer, and conventional ethanol markets are actually over supplied. This means that there is capacity in the market (with RINs) that is not being used.

Second, higher RIN prices do not necessarily mean that not enough RINs are being generated. In fact, this is highly unlikely given the market conditions described above. Higher RIN prices more likely suggest that one or more entities are holding RINs, or one or more entities took heavy positions in a thinly traded marketplace. The solution here is more transparency at the regulatory level.

Third, protecting entities from “RIN shortages” could have any number of deleterious consequences. Such an allowance will short circuit the predictability of a freely traded marketplace and provide some incentive for companies to stay out of the market and not comply with the RFS in an effort to seek relief at the end of the year. Such an effort would almost certainly create inequities among obligated parties, which in turn could have legal ramifications. And laying controls over the marketplace could distort RIN prices in ways that cannot be foreseen, including higher prices.

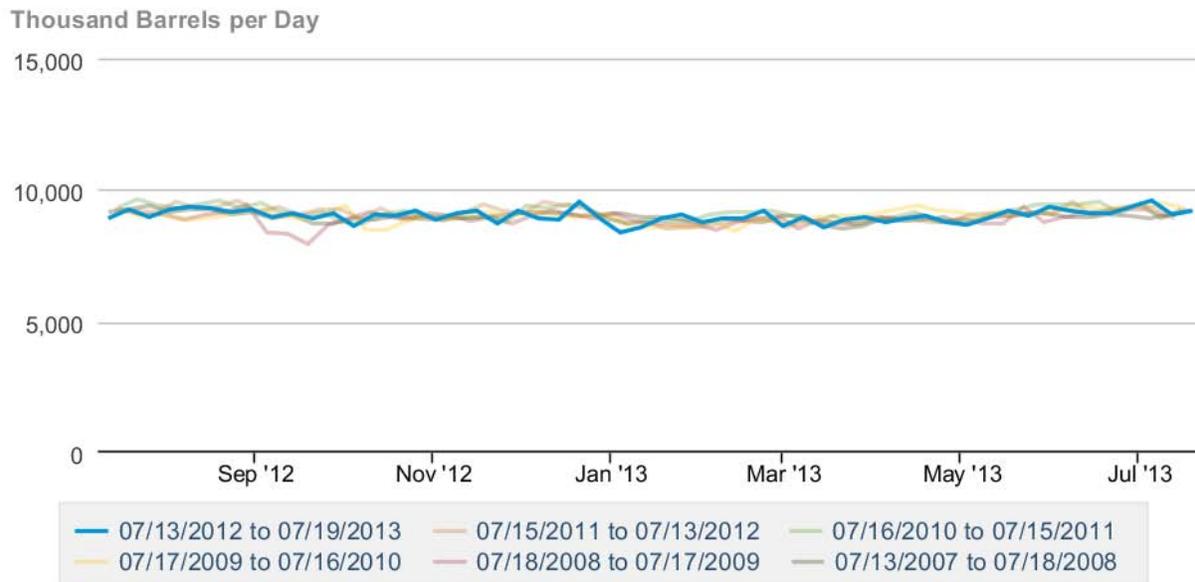
Fourth, and most importantly, manipulating a credit trading system that is working makes little sense. As discussed, RINs are traded within the industry to allow for year-to-year flexibility. There are those who profit in the oil industry from higher RIN prices, and those who do not. As such, RIN trading does not come with significant consumer cost. But higher RIN prices do facilitate ongoing compliance with the RFS and over time will ameliorate challenges like the blend wall. There is no reason to get involved with RIN markets, except by working with U.S. EPA administratively to ensure that trading is transparent and manipulation is not occurring in a thinly traded marketplace.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

Oil industry economist Phil Verleger recently called the threat to have less gasoline available for Americans “export blackmail” when asked about gasoline production in the context of RFS compliance. The oil industry has raised the prospect of increased exports and reduced refinery production, but publicly available data from the Energy Information Administration (EIA) demonstrates that these market dynamics are not actually occurring. For example, U.S. refiner/blender production of finished gasoline is higher in 2013 than it was in 2012. And exports of gasoline are roughly the same in 2013 in comparison to 2012, and are lower in 2013 than they were in 2011 (see charts below).

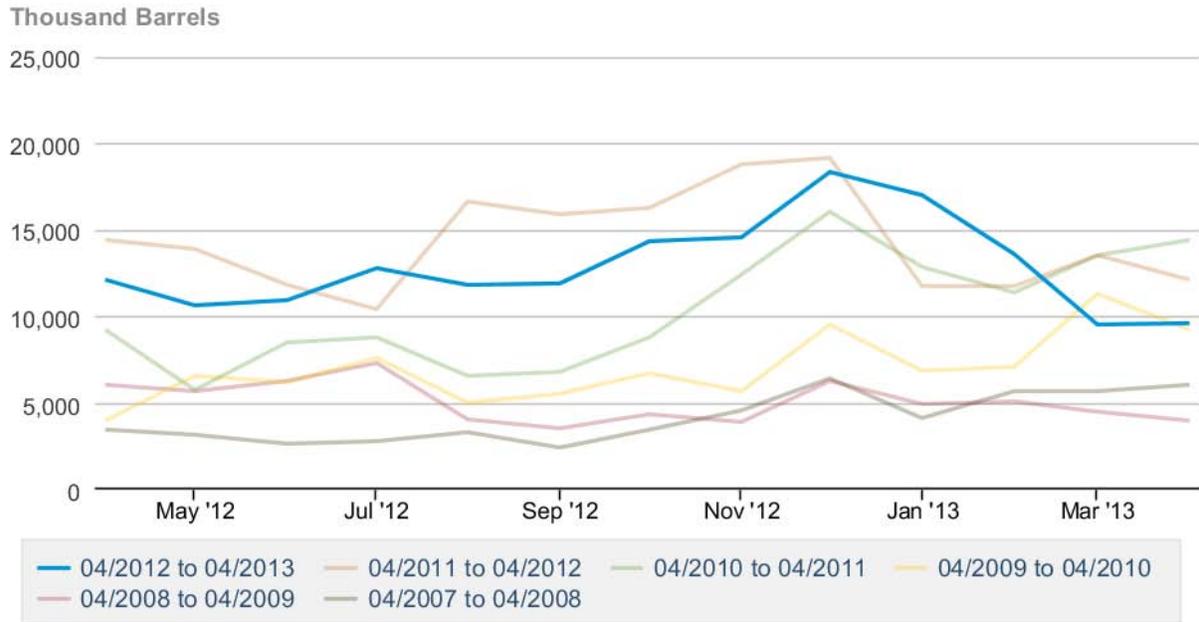
Oil industry claims about the reduced availability of gasoline are nothing more than scare tactics designed to convince Congress they need to repeal a forward looking policy that is creating jobs, finally introducing competition into the liquid fuels marketplace, and reducing U.S. dependence on foreign oil.

Weekly U.S. Refiner and Blender Adjusted Net Production of Finished Motor Gasoline



 Source: U.S. Energy Information Administration

U.S. Exports of Finished Motor Gasoline



 Source: U.S. Energy Information Administration

Thank you for the opportunity to comment on the RFS.

Sincerely,



R. Brooke Coleman
Executive Director
Advanced Ethanol Council (AEC)



Mary Rosenthal

Executive Director

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Algae Biomass Organization

Comments to the Renewable Fuel Standard Assessment White Paper: Greenhouse Gas Emissions and Other Environmental Impacts

The Algae Biomass Organization (ABO) appreciates the opportunity to provide comments to the Energy and Commerce Committee on the implementation of the Renewable Fuel Standard (RFS). ABO represents the entire algae value chain, from algae growers, researchers, fuel and oil producers to end users, including Fortune 500 companies, national laboratories and major universities.

ABO strongly supports the RFS because the RFS plays a critical role in driving the innovation needed for a strong American biofuel industry. The RFS provides the market “pull” for biofuels, incentivizing private industry to conduct the research, development, and deployment needed to commercialize their products at a competitive cost.

While Algae Biomass Organization members are not yet participating in the RFS, the ABO provides the following comments regarding the process for setting the Renewable Volume Obligation (RVO).

As discussed in previous white paper responses, algae-based fuel is only eligible to contribute to the RFS under the “advanced” category. The Algae Biomass Organization advocates a more flexible RFS with only two categories of fuel: conventional ethanol and advanced biofuel.

As noted in the committee’s fifth white paper, when the cellulosic targets are not met, EPA allows other fuel categories, like advanced biofuel, to compensate for the shortfall in the cellulosic category. Reliance on advanced biofuel to produce high volumes only when the cellulosic biofuel industry can not meet the cellulosic obligation is yet another policy which provides uncertainty in the advanced biofuel marketplace. Furthermore, permanently allowing all advanced biofuels the ability to contribute to a RFS category with larger volume requirements will inevitably send a signal to investors that there will be a long-term demand for all advanced biofuel products.

We understand from discussions with EPA officials that a change to the RFS which would allow for advanced biofuels, cellulosic biofuels and renewable diesel to be considered one category would have to be made through statute. Therefore, we encourage Congress to examine this as a possibility for improving the RFS and for providing more policy certainty and stability in the marketplace.

While we strongly support the inclusion of cellulosic fuel in the RFS, we believe that the RFS can be strengthened by a feedstock neutral approach where the “cellulosic” and “advanced” biofuels designations are combined, thereby allowing existing non-cellulosic feedstock as well as any unforeseen future feedstock the same market growth opportunity as cellulosic feedstock.

The Algae Biomass Organization would also support adding algae-based fuel as an eligible fuel under the cellulosic fuel category. While we believe the broader approach outlined above is much better public policy, we understand that a narrower approach may be more easily achievable. We have discussed this “fix” with EPA officials and have been told that this too would need legislative action.

ABO members do not currently participate in the RFS because algae-based fuel is not yet being produced at commercial scale. (Note however that the first UOP licensed Ecofining plant to make renewable diesel started up on June 28, 2013, and is now producing more than 10 million gallons of renewable diesel per month, the equivalent of 17 million RINs each month. While not using algal oils as feedstock, they are fully capable of doing so and likely will in the future.) We anticipate algae-based fuel production at commercial scale within the next two to five years. We believe that in the near future, algae-based fuel will make a significant contribution to the RFS.

The Algae Biomass Organization is grateful for the opportunity to provide comments to the Committee regarding the Renewable Fuel Standard. We appreciate the Committee’s interest in this important policy and look forward to upcoming hearings. Please do not hesitate to let me know if ABO or its members can support your efforts to improve the RFS by providing more written information, participating in hearings, or in any other way.

Sincerely,



Mary Rosenthal

Executive Director

Algae Biomass Organization

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July 25, 2013

Energy and Commerce Committee
Email: rfs@mail.house.gov

The Honorable Fred Upton
Chairman
Energy and Commerce Committee
United States House of Representatives
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member
Energy and Commerce Committee
United States House of Representatives
Washington, D.C. 20515

Re: Responses to Questions for Stakeholder Comment on White Paper Series on Renewable Fuel Standard on Implementation Issues

Dear Chairman Upton and Ranking Member Waxman:

The American Farm Bureau Federation appreciates the opportunity to provide responses to stakeholder questions regarding the white paper series on the Renewable Fuels Standard (RFS) and its impact on implementation issues. The following are Farm Bureau's responses to the questions for stakeholder comment as stated in the white paper on July 11, 2013.

Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

In order to ensure that requisite volumes of biofuels are used each year, the Environmental Protection Agency (EPA) first estimates the total volume of transportation fuel that is expected to be used in the United States during the upcoming year. The RFS mandates are ultimately enforced on retail blenders and exporters and not on biofuels producers or importers. Companies that supply gasoline or diesel transportation fuel for the U.S. retail market are obligated to include a quantity of biofuels equal to a percentage of their total annual fuel sales. This is referred to as a renewable volume obligation (RVO). The RVO is obtained by applying the EPA announced standards for each of the four biofuel categories to the firm's annual fuel sales to compute the mandated biofuels volume. At the end of the year, each supplier must have enough Renewable Identification Numbers (RINs) to show that it has met its share of each of the four mandated standards. Failure to acquire sufficient RINs to meet a party's RVO is subject to civil

penalties of up to \$32,500 per day, plus the amount of any economic benefit or savings resulting from the violation.

RINs and RVOs are the mechanisms the EPA uses to implement the RFS program. RVOs are the targets for each refiner or importer of petroleum-based gasoline or diesel fuel, while RINs allow for flexibility in how each of them may choose to comply. RINs are determined through a four-step process: First, the Energy Information Administration (EIA) projects gasoline demand from October to November for the upcoming calendar year. Once that projection is determined, EPA finalizes percentage standards which represent the ratio of renewable fuel volume (ethanol equivalent) to non-renewable gasoline and diesel volumes. There are for separate RVOs that represent the four different RFS targets. For 2013, the four proposed RVO targets are:

- Cellulosic biofuels – 0.0008%
- Ethanol equivalent for biomass-based diesel, 1.12%
- Advanced biofuels, 1.6%
- Total renewable fuels, 9.63%

One of the ambiguities of the RVO-setting process is that in the past, many obligated parties have over-complied in calculating their RVO because it has been unclear and has been subject to more than one reasonable interpretation. For instance, in some cases, a firm could buy additional expensive biomass-based diesel RINs to comply with the advanced biofuel mandate when they could have bought other, less expensive advanced biofuel RINs. Another example would be that obligated parties could have purchased higher values of corn-ethanol RINs equal to their gasoline and diesel sales when they only needed to buy sufficient RINs that would meet the difference between the total renewable fuels volume percent and the advanced biofuels volume percent.

Another complexity is the confusion as to whether or not cellulosic biofuel waiver credits count toward the obligated parties' advanced biofuel RVO. If an obligated party purchased cellulosic biofuel waiver credits, currently at \$0.42 per RIN-gallon, the obligated party could not use these purchases to meet their total advanced biofuel RVO. The obligated party must purchase additional biomass-based diesel RINs or other advanced biofuel RINs.

Compliance calculations could lead to obligated parties blending more renewable fuel or buying more RINs than necessary to meet the regulation, all due to the ambiguous nature of the RVO-setting calculation. Once the obligated parties determine their market share of RIN compliance for the upcoming calendar year, EPA notifies obligated parties in November and obligated parties must cover their previous calendar year's RVOs by surrendering RINs within 60 days after the end of each calendar year.

Farm Bureau supports the RFS as stated in the Energy Independence Security Act of 2007. At the same time, we encourage clear and concise instructions that eliminate ambiguous processes in order to determine compliance that satisfies the RFS.

Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

To date, the cellulosic biofuel volumes in the RFS have been unrealistic targets which have triggered cellulosic waiver provisions. However, with the cellulosic (D3) RIN over \$1.45 per gallon (\$0.42 per gallon waiver certificate price + D5 price), the question becomes whether or not this RIN price is high enough to force cellulosic technology in the marketplace? With the combination of the \$1.01 cellulosic biofuel tax credit and the high RIN price for the D3 RIN, cellulosic technologies are becoming more mainstream as several cellulosic ethanol plants are scheduled to come on-line beginning in 2014. Still, many questions continue on the overall longevity of cellulosic biofuels due to EPA continuing to delay its final rule for 2013.

In the proposed rule for 2013, EPA proposed to waive the cellulosic production shortfall for calendar year 2013, but left the total and total advanced targets alone. This effect essentially transferred the cellulosic shortfall over to the biofuel category of other advanced. Numerically, this transfer incentivized 816 million gallons of either more biodiesel or more sugar ethanol imports. With biodiesel already set at 1.28 billion gallons (1.9 billion ethanol equivalent), other advanced became 816 million gallons. Essentially, all but 150 million gallons of this volume would have to come from additional biodiesel and/or sugar ethanol imports. Again, this was the proposed rule for RFS volumes in 2013 and it still remains to be seen if EPA will make any adjustments to its final rule for 2013.

For current cellulosic biofuel provisions in the RFS, any time EPA waives any part of the cellulosic mandate, blenders have the option of buying a credit and advanced RIN to fulfill their blending obligation instead of actually blending the biofuel. The current cost of the off ramp is \$1.37 per gallon which would currently make it less expensive for a blender to buy out than to blend. However, if the policy option of eliminating the cellulosic biofuel off ramp were to be put on the table, it would be very unclear on what this would do to the overall direction and potential to the cellulosic industry.

Another option would be to reduce the overall RFS any time the cellulosic mandate is partially waived. Even though this policy would help solve the blend wall problem, Farm Bureau remains cautious.

Looking ahead, Farm Bureau remains optimistic that the cellulosic biofuels provisions can succeed in diversifying the RFS. Continued research and development work has resulted in increasing product yields and, importantly, lowering input costs. From 2007 through the second quarter of 2011, more than \$2.4 billion in venture capital was invested in advanced biofuel companies. The goals set forth by the RFS are creating the opportunity for these new technologies and investments, raising prospects for job creation throughout rural America.

While previously stated in past white papers regarding the RFS, Farm Bureau understands the challenges that exist with cellulosic biofuels meeting the RFS targets in the near-term. Instead of seeing the glass half-full, we see the overarching potential as substantial. However, we as a nation will not see this potential without the continued support for research and development. Farm Bureau will continue to support further research and development of cellulosic biofuel and renewable fuels.

How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

Even though Farm Bureau is not directly involved with the intricacies of the RIN credit trading program, Farm Bureau would like to emphasize that one of the biggest improvements that needs to occur within EPA's enforcement of RINs is data transparency. As the price for all three major categories of RINs become more relevant in the marketplace, it is important that consistent reporting of RIN prices is available to the public at large. If EPA is the enforcer of a publicly tradable market product such as RINs, it is important that a publicly funded entity be responsible for organizing and making a market data product more transparent to its constituent: the public.

An idea for a consistent tracking mechanism of RIN prices would be to incorporate this level of data with the weekly reporting of energy data with the EIA's reports. The primary reason for reporting RIN prices with EIA reports is simple: EIA is already doing this for all major energy fuels that include average prices, consumption levels, inventory levels and many other economic variables that portray the current market conditions of that particular energy source. This data collecting relationship makes sense as the Department of Energy oversees the EIA and already assists EPA with the implementation of the RFS program along with the Agriculture Department.

Farm Bureau supports transparency of market based data, so long as it does not include releasing government collected individual producer data or records. We look forward to working with the appropriate parties in making RIN pricing data available to the public which will help advance market-based research in this incredibly important market.

What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

RINs have value only if an obligated party would rather buy a RIN than a gallon of ethanol. D6 conventional RIN prices never increased beyond near-zero levels and had consistently averaged between \$0.01 per gallon to \$0.05 per gallon until the start of 2013. Then in early March, the D6 conventional RIN price climbed to highs of about \$1.00 per gallon reflecting the market's concern that the rising RFS-mandated volumes and the E10 ethanol blend would contribute to future significant increases in the cost of blending biofuels to meet the RFS statutory volumes. The sharpest increase that was seen from the price of the D6 conventional RIN was seen at the end of February 2013 as this was the reporting deadline for obligated parties to satisfy their compliance requirements for the 2012 RFS program year. While RIN prices reflected the expectation of a D6 RIN shortfall (mostly from corn ethanol) earlier in 2013, the actual finalization of banked RIN totals in late February likely accelerated the demand for available RINs as obligated parties looked to mitigate shortfalls.

As was described with the D3 cellulosic RIN above, the job of RINs is to force technology in to the marketplace. However, with the D6 conventional RIN, the specific job right now is to force different pumps at the retail level in the form of E15 or E85. EPA has issued provisions allowing for the blending of up to 15 percent ethanol in gasoline, but only for vehicles produced after model year 2000. To date, there has been very little adoption of this product because gasoline stations are unwilling to put in pumps for this restricted market. If E15 were adopted for all vehicles, this would solve the blend wall issue. Moreover, from a global standpoint, gasoline use in regular cars can go as high as E25 (75 percent gasoline, 25 percent ethanol), a level that has been seen in Brazil since the late 1970's.

Another option is E85, which has been in the market for some time with more than 11 million flex-fuel vehicles on U.S. roads today. More importantly, there is potential for flex-fuel vehicles to continue to penetrate the automobile fuel fleet as fuel and consumption capacity favor E85. Interestingly enough, the United States is only utilizing 2 to 3 percent of its current E85 capacity. The issue becomes the price competitiveness between E85 and E10. With the U.S. average E10 gasoline price at \$3.60 per gallon, the breakeven pump price for E85 is \$2.68 per gallon. A higher RIN value can be used to cut the price of E85 at the pump, encourage higher sale volume

and thus provide greater volume demand for ethanol itself. This logic would create more RINs in excess of the E10 limit and would reduce the compliance costs that are necessary from within the RFS.

Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

Increases in RIN prices are affecting the production and marketing of renewable fuels. The run up in prices in the value of D6 conventional RINs since the beginning of 2013 is fundamentally supported by the ethanol blend wall. The effect of a rising D6 conventional RIN price can be used to cut the price of E85 at the pump, encourage higher demand for ethanol and encourage higher sale volume. The higher price for RINs allows for breaking through the E10 saturation point and creates more RINs in excess of the E10 limit.

With the rise of the D6 conventional RIN, E85 is now becoming price competitive against E10 for consumers in some locations around the country. If E85 is approximately 75 percent the energy value of E10, 25 out of the 90 gasoline stations that report retail fuel prices on E85prices.com reported E85 selling at an advantage to E10 as of July 18, 2013. This can be contributed to the rise in the D6 conventional RIN. Table 1 shows market conditions for E10, E85 and the D6 conventional RIN as of July 18, 2013 and compares the current market condition to that five months ago (February 2013) when the price of the D6 conventional RIN significantly rose. The D6 conventional RIN price for the month of February averaged approximately \$0.40 per gallon and its value compared to that of E10 makes the value of the D6 conventional RIN at \$0.30 per gallon. Since the reported price of E85 was significantly higher than that of the breakeven E85 pump price required to be energy competitive to E10, this left the difference of the RIN revenue and the pump price reduction at -\$0.26 per gallon. At this point, the price of the D6 conventional RIN was not high enough to encourage higher demand for higher blends of E85. Five months later, the price of the D6 conventional RIN increased to \$1.48 per gallon which has allowed for an incentive for greater market penetration for E85 as indicated from the \$0.81 per gallon total revenue gained from the RIN value. This significant increase in the D6 conventional RIN is being used to cut the price of E85 (\$3.30 vs. \$2.99) and is allowing for some parts of the country to have the price of E85 cheaper than that of the price of E10.

Current E85 Market Conditions as of 7/18/2013		
	Feb-13	18-Jul-13
E10 Price	\$3.67	\$3.63
E85 Price	\$3.30	\$2.99
Energy Ratio	74.6%	74.6%
Breakeven E85 Pump Price	\$2.74	\$2.71
Pump Price Reduction Required	\$0.56	\$0.28
D6 RIN Price	\$0.40	\$1.48
RIN value	\$0.30	\$1.10
RIN Revenue Minus Pump Price Reduction	(\$0.26)	\$0.81

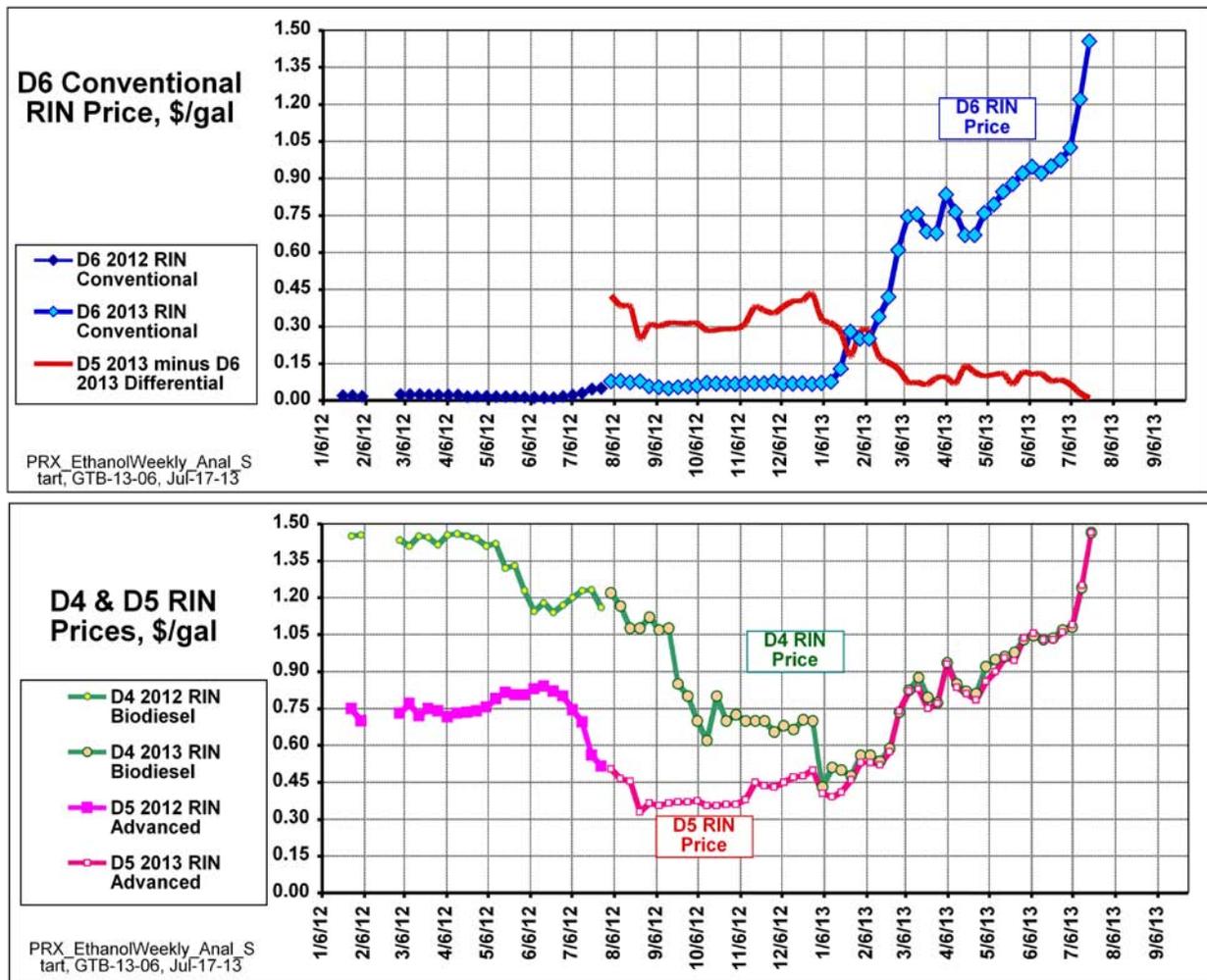
Table 1: Current E85 Market Conditions (July 18, 2013) vs. 5-Months Ago (Feb. 2013)

As shown in Table 1, the effect of a rising D6 conventional RIN price has been used to cut the price of E85 at the pump. Even though the price in some parts of the country favors E85 to the price of E10, logistical hurdles still stand in the way of full-scale E85 as only 2 percent of fuel stations across the country offer E85 blends. In addition, even with the substantial increase of the D6 conventional RIN, E85 production has only increased by a few tens of millions of gallons – a level that is not even close to being considered to solving the ethanol blend wall problem. Nevertheless, the price for D6 conventional RINs is allowing for greater market penetration for E85 and with the U.S. only using 3 percent of its E85 capacity, the potential is real for E85 so long as the price is competitive to that of E10.

As similar to the D6 conventional RIN, the other two major categories of RIN prices have also been increasing (Figure 1). The job of the D4 biodiesel RIN is to force more biodiesel use and has been used to support the price of the D6 conventional RIN. Some of this behavior could be due to speculative buying, but for the most part, this behavior with the D4 biodiesel RIN is also forced by the blend wall issue. Without a resolution to the ethanol blend wall sometime soon, a portion of the renewable (ethanol) mandate beginning in 2014 may have to be satisfied with advanced biofuels or advanced biofuels RIN credits (D4 or D5), but most likely from biodiesel (D4). Without question, the rise in the biodiesel D4 RIN is creating more demand for biodiesel as biodiesel is not subject to the ethanol blend wall.

As for Brazilian sugarcane ethanol imports, the rise in the price of the D6 conventional RIN is decreasing the premium available to Brazilian sugarcane ethanol imports. The premium to Brazilian sugarcane ethanol imports is measured through the difference of the D5 advanced biofuel RIN and the D6 conventional RIN price. In fact, there is currently no premium [or incentive] for Brazilian sugarcane ethanol imports as the D6 conventional RIN price is in a dead-heat with that of the D5 advanced biofuel RIN and also with that of U.S. domestic biodiesel.

However, two possible developments could alter that fundamental support that would result in declining RIN values. First, a more rapid expansion of ethanol blending through E15 or E85 would expand the blend wall and reduce the demand for D6 conventional RIN credits to meet the renewable fuels mandate. Second, a reduction in the RFS mandate for renewable fuels would reduce the demand for the D6 conventional RIN. Without any resolution to the ethanol blend wall, a portion of the renewable fuels mandate in 2014 would have to be met with advanced biofuels or advanced biofuel RIN credits of D4 or D5, but would most likely have to come from biodiesel (D4) due to the infrastructure and capacity that is in place already. If that is the case, the price of D6 RINs could be supported up to the price of D4 biodiesel RINs. The RIN markets are currently dictating that this may be the trend as the D4 biodiesel RINs are currently trading nearly identical to that of the D6 conventional RIN and there is currently no solution to the ethanol blend wall problem. More importantly, these measures and actions should be monitored and reviewed with extreme caution as any policy alteration could create an unintended set of consequences to the U.S. economy.



Source: ProExporter

Figure 1: Current Prices for All Three Major RIN Categories (D4, D5 and D6)

Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

Farm Bureau believes that challenges posed by the ethanol blend wall can be solved, but regulations and the lack of willingness to offer further blends of ethanol in gasoline are standing in the way of a solution. The fact of the matter is that implementation of E15 in all vehicles is one avenue in solving the blend wall problem. Adoption of E15 at retail stations has been tested and held under the microscope since EPA approved E15 for use in 2007 and newer cars and

trucks in 2010, then expanding the approval for vehicles newer than model year 2000 in January 2011. Higher blends of ethanol in gasoline are not uncommon as Brazil makes E25 gasoline blends for use in regular cars and has done so since the 1970's. Figure 2 illustrates some common ethanol fuel mixtures that are currently being used in the United States, Europe and Brazil.

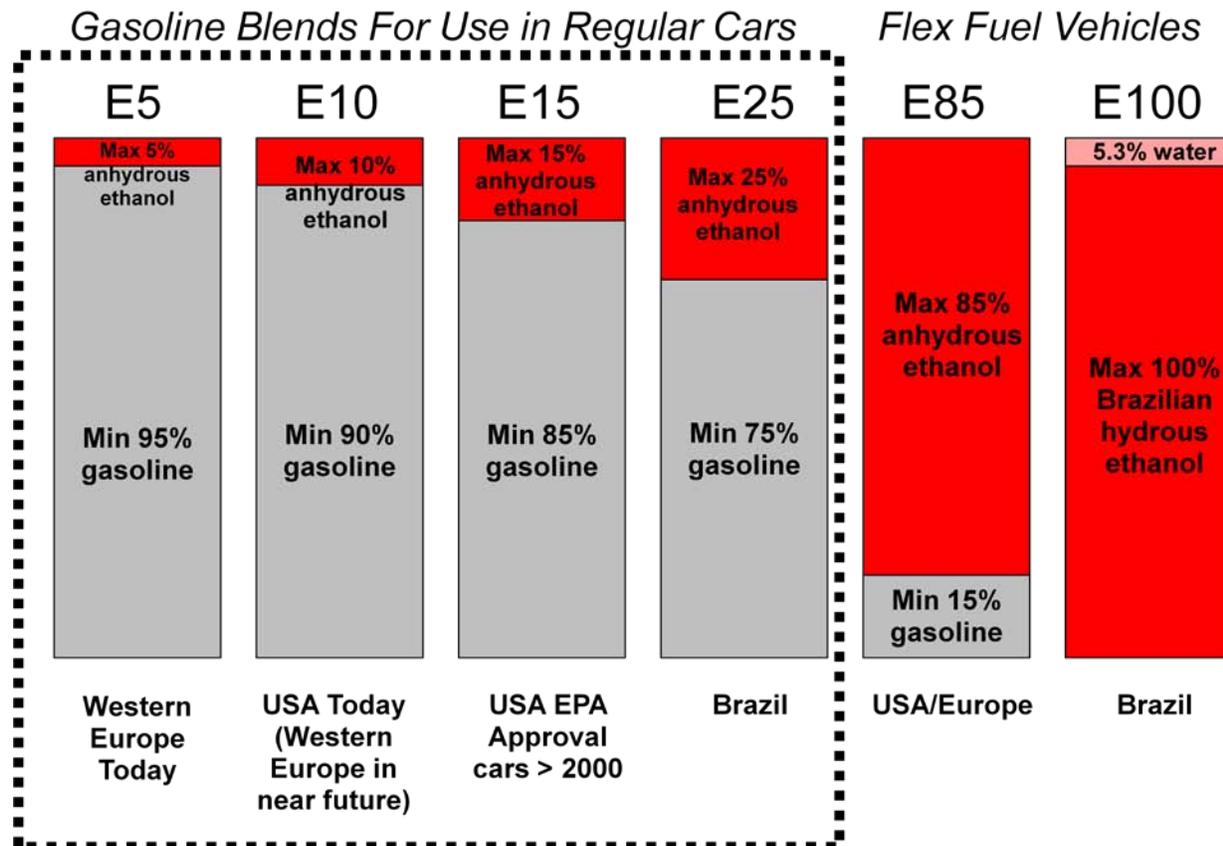


Figure 2: Common Ethanol Fuel Mixtures in the U.S. and International

The E10 blend wall has become both a marketing challenge as well as a legal challenge over the course of the year. On June 24, the Supreme Court refused to hear an appeal of a lawsuit from the petroleum industry claiming that EPA did not have authority to grant a partial waiver for E15. The refusal by the Supreme Court knocked down one hurdle in efforts to sell E15 at retail stations and help in efforts at solving the ethanol blend wall. However, there are many legal and marketing hurdles left with getting widespread E15 at the retail level, such as the willingness of refiners to offer the proper blendstock (or BOB) needed by E15 during the summer months, numerous state laws, and the willingness of the retailers to offer E15 at the pump. With the effect of a rising D6 conventional RIN price, the near \$1.50 RIN value is being seen as breaking through the E10 saturation point and offering an incentive to cut the price of higher blends of ethanol. With over 11 million flex fuel vehicles already on the road, and growing popularity of

these vehicles, they have the capability of consuming billions of additional gallons of ethanol. The problem is not whether E15 or E85 are justifiable: the issue is the petroleum industry defending its declining share of the liquid transportation fuel market. The petroleum industry has repeatedly been on record stating that it has no recourse to remaining compliant with the RFS other than to curtail gasoline supply when they run out of roll-over RINs in 2014 or 2015. Statements and actions like this do not offer responsible solutions, but add to problems that can purposefully harm the state of the U.S. economy. Farm Bureau remains committed to working with all parties in providing solutions that move the country forward in a prosperous manner.

It is for these reasons that Farm Bureau believes that staying the course with the RFS is the soundest and most appropriate course going forward. Doing so will foster constructive solutions that support the goal of reducing dependence on foreign sources of energy. Any attempt to show purposeful non-compliance that affects and harms the U.S. economy should be penalized to the fullest extent possible.

Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

Overall, there are ways to avoid hitting the blend wall while maintaining momentum with the renewable fuels industry. The blend wall is a complex obstacle that has the oil industry defending its declining share of the liquid transportation fuel market – and understandably so. The intent of the RFS is to make the United States more energy independent from foreign sources and to decrease our country's use of crude oil. The overarching concern with the blend wall could have major consequences to the economy at large as the petroleum industry has repeatedly commented that it has no recourse to remaining compliant with the RFS, other than to curtail gasoline supply when they run out of rollover RINs in 2014 or 2015. This would cause shortages of gasoline to the American marketplace, which would include the real possibility of creating severe economic harm to the United States with the end result of making EPA grant a waiver of all required volumes over 10 percent ethanol.

Farm Bureau believes that Section 211(o)(7) of the Clean Air Act gives adequate flexibility to EPA to address any impact that the RFS may have on the economy. Section 211 (o)(7), *“Allows the Administrator of the EPA, in consultation with the Secretaries of Agriculture and Energy, to waive the requirements of the national renewable fuel standard, in whole or in part, if the Administrator determines, after public notice and opportunity for public comment, that implementation of the RFS requirements would severely harm the economy or environment of a State, a region, or the United States.”* Farm Bureau believes that any definition or requirement of flexibility regarding this provision must be determined through sound economic assessment, but consideration should not be given to those that intentionally intend to harm the economy through purposeful means.

The RFS is complex and affects many industries across the country. Since the RFS was last reformed in the 2007 Energy Independence Security Act, net farm income has increased 83 percent, agricultural exports have increased 52 percent, total livestock output has increased by 20 percent and total crop output has increased by 39 percent. Agriculture continues to be a bright spot within what some consider a fragile economy in general terms aggregated across all sectors of the U.S. and perhaps the world for that matter. It is quite clear that challenges lie ahead with the blend wall and the development of new renewable fuels. It is also quite clear that the use of renewable fuels is enhancing our energy security by reducing our dependence on foreign oil.

The RFS has been one variable that has increased economic growth within U.S. agriculture. In addition, increased productivity from within the U.S. agricultural sector has also been a major contributor. According to the USDA Economic Research Service, the level of U.S. farm output in 2009 was 170 percent above its level in 1948, growing at an average rate of 1.63 percent. Aggregate input use increased a mere 0.11 percent annually, thus indicating that the positive growth in farm sector output was substantially due to productivity growth.

Farm Bureau supports and defends the standards and incentives necessary to further develop the U.S. renewable fuels industry. We thank you for giving us the opportunity to comment on this extremely important issue, and look forward to working with you to produce a comprehensive domestic energy policy.

Sincerely

A handwritten signature in black ink, appearing to read "Bob Stallman", with a long horizontal flourish extending to the right.

Bob Stallman, President



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July 26, 2013

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Upton and Ranking Member Waxman,

API appreciates the opportunity to respond to your questions in the Committee on Energy and Commerce white paper examining implementation issues associated with the Renewable Fuel Standard (RFS) program.

The RFS has not delivered the energy security or other benefits envisioned by the Energy Independence and Security Act (EISA) of 2007. The RFS has not unfolded as expected, and we agree that several implementation challenges have emerged that received little if any consideration prior to passage of EISA. The life-cycle impacts of biofuels on air quality, water and land were not fully comprehended at the time when the law passed. There is insufficient supply of domestic advanced biofuels, including cellulosic, and the approaching blend wall could result in severe fuel supply disruptions in the U.S.¹ Meanwhile, the overall energy landscape has dramatically changed. Thanks to technology advances, our nation's energy security is enhanced significantly. According to the U.S. Energy Information Administration (EIA), U.S. crude and natural gas reserves in the year 2022 are projected to be 23% and 62% higher, respectively, than what was projected in 2007.

The House Energy and Commerce Committee's review is timely. As we have explained in our answers to both this and the previous white papers, there are numerous problems with the implementation of the RFS program. The RFS has become an infeasible mandate and Congress should repeal it. For the immediate future, the U.S. Environmental Protection Agency (EPA or the Agency) has the authority to reduce the 2013 and 2014 RFS standards to avert the blend wall and avoid the threat of significant harm to U.S. consumers and the economy.

Please find below our responses to the questions for stakeholder input raised in the white paper:

¹ [NERA Economic Consulting, "Economic Impacts Resulting from Implementation of RFS2 Program", October, 2012](#)

1. Does EPA’s annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

Section 211(o)(3)(B)(i) of the Clean Air Act requires the EPA to determine and publish, by no later than November 30th of each of calendar years 2005 through 2021, the applicable renewable fuel obligation percentage requirements in order to ensure that the Renewable Fuel Standard volumes are met in the following year. In addition, Section 211(o)(7)(D)(i) requires the EPA to reduce, by no later than November 30th, the applicable volume of cellulosic biofuel mandated under the Renewable Fuel Standard for the following year to the projected volume available. Finally, the EPA is required by section 211(o)(2)(B)(i)(IV)(ii) of the Clean Air Act to establish biomass-based diesel standards 14 months in advance of the compliance period.

EPA’s recent record in meeting these statutory obligations under the RFS program is shown in the table below:

Year	Did EPA Meet the CAA Statutory Deadline (11/30 Prior Year) to:			Did EPA Meet the CAA requirement to issue biomass-based diesel std 14 months in advance of compliance period?	
	Determine RVO?	Align Cellulosic Mandate with Projections?	# of Days Late*		# of Months Late*
2010	No	No	116	--	--
2011	No	No	9	--	--
2012	No	No	40	--	--
2013	No	No	206+	Yes	11
2014	Unlikely	Unlikely	?	No	9+

*/ Determined using the date of publication of the applicable final rule in the *Federal Register*

One and only one conclusion is clear from this table: the EPA has not taken statutory deadlines seriously. An annual RVO standard-setting process that should be routine by now has been moving more and more slowly with each passing year, resulting in retroactive rules. This has created regulatory uncertainty which, in turn, has been both disruptive and potentially costly for the obligated parties who must plan for and demonstrate compliance with the rules, and it has likely been a factor contributing to the market volatility evidenced by the sharp escalation and dramatic swings in RIN prices in 2013.

Not only has the EPA failed to act in a timely manner to fulfill its statutory obligations with respect to setting annual RVO requirements, the Agency has repeatedly refused to use the authority under Section 211(o)(7) of the Clean Air Act (“Waivers”) which provides it with flexibility to address the unintended, adverse effects of the RFS on the U.S. economy and consumers. We made this very same observation in earlier responding to questions raised in the second RFS white paper published by the House Energy & Commerce Committee and it bears repetition here:

Because the cellulosic biofuel industry has failed to produce commercial volumes, EPA has needed to lower the statutory cellulosic biofuel volumetric requirements each year. When EPA lowers the cellulosic biofuel requirement from the statutory mandate to the “projected” amount², the agency has the statutory authority to “reduce the applicable volume of renewable fuel and advanced biofuels” by that same quantity as well, pursuant to Section 211(o)(7)(D)(i). EPA does not need to conduct a special rulemaking for this waiver; indeed, the agency may consider this waiver as part of its yearly process in setting the RFS mandates. Despite this basic waiver authority, however, EPA has refused to exercise its discretion and reduce these other RFS requirements.

For example, in its proposed 2013 RFS, EPA reduced the statutory mandate of 1 billion gallons to 14 million ethanol equivalent gallons. Accordingly, EPA can lower the advanced and total renewable fuel RFS requirements each by 986 million gallons. This simple volumetric reduction would lower the ethanol requirement from roughly 10.9% to 10.2% of the 2013 annual gasoline demand anticipated by EIA. While still above the E10 blend wall, this reduction could potentially alleviate much of the current volatility in the secondary RINs market that may be reacting to the anticipated RIN shortage associated with the blend wall.³ To date, however, EPA has failed to take advantage of the flexibility that Congress intended the agency to use for these very situations.

In short, the annual RVO-setting process is flawed. The Agency has repeatedly missed the statutory deadlines and, as will be discussed next, has set aspirational standards. These issues create uncertainty for all of the program stakeholders. The EPA has been unwilling to use its statutory authority to address the blend wall problem by adjusting the RFS volume standards appropriately. The solution is to repeal the RFS.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit’s decision to vacate EPA’s 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

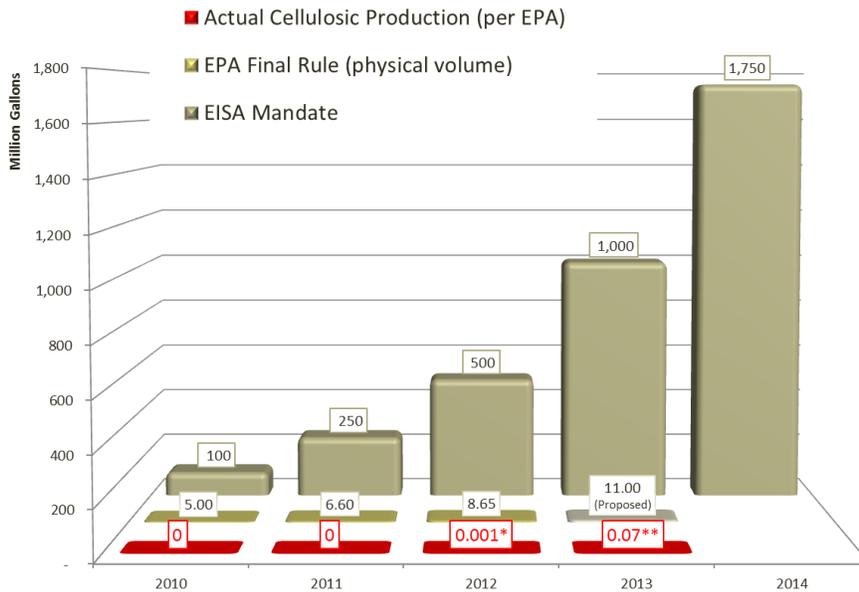
It is clear that there has been a huge disconnect between the aspirational goals established for cellulosic biofuels in EISA 2007 and the actual development of viable, commercial scale production. To date there has been no announcement of cellulosic biofuel production in the US on a continuous, commercial scale.⁴ Despite repeated failures of the EPA to provide rational predictions of cellulosic fuel production, the Agency has continued with its intrinsically flawed aspirational standard setting approach. EPA has also failed to document the decision-making process in the annual setting of the mandated cellulosic volumes.

² API has successfully challenged EPA’s “projected” volumes for cellulosic biofuel in the 2011 and 2012 RFS. It remains to be seen what EPA will require for 2013, even though we are almost through 7 months of the year.

³ [NERA Economic Consulting, “Economic Impacts Resulting from Implementation of RFS2 Program”, October, 2012](#)

⁴ In May 2013, a de minimis amount of 5,000 gallons of cellulosic diesel was recorded in the EMTS. In June 2013, an additional 19,000 gallons of cellulosic diesel and 49,000 gallons of cellulosic renewable gasoline blendstock were recorded in the EMTS. These likely represent the outputs of demonstration-scale biofuels facilities.

The Figure below reviews the annual mandates in EISA, EPA’s projections, and actual cellulosic biofuel production. The data clearly show that the Agency’s aspirational annual cellulosic projections have not been achieved to date:



* An Additional ~20,000 gallons was produced and exported and not eligible for RFS compliance
 ** As of June 30, 2013

API supports the EPA’s use of the waiver mechanism to reduce the cellulosic biofuel standard below the statutory requirements. However, the Agency’s 2013 proposed rule cellulosic standard of 14 million gallons remains aspirational, arbitrary, and out of touch with reality. The EPA’s reasoning in the proposed rule repeats the errors that caused the D.C. Circuit to vacate the 2012 cellulosic biofuel standard. The court’s decision should have caused EPA to change its “self-fulfilling prophesy” approach and adopt a neutral methodology when setting future cellulosic biofuel mandates. The Agency has a statutory duty to make an accurate projection of cellulosic biofuel volume. In establishing the cellulosic waiver provision, Congress recognized the volumes set forth in section 211(o)(2)(B)(i)(III) were optimistic, and Clean Air Act section 211(o)(7)(D)(i) required the EPA to reduce the cellulosic mandate to “the projected volume available.” Instead, the Agency is unrealistically increasing the mandate for the fuel in 2013. This stealth tax on the oil and gas industry is a clear example of bad public policy that only adds a cost to providing transportation fuels, with no environmental or energy security benefit.

As API has suggested in past rulemakings, the EPA would fulfill its duty to issue an accurate projection by using demonstrated rates (continuous operation for at least three months) of existing annual capacity as of the required November 30 notice. This approach would provide a more realistic estimate than relying on the assertions of companies whose self-interest is to advertise lofty projections of their ability to produce cellulosic biofuel. History has shown that biofuel producer’s projections for 2010, 2011, and 2012 have been drastically and consistently overly optimistic. It is unreasonable to expect that the producers’ projections will be more accurate in 2013.

Without any commercial cellulosic biofuel and a mandate based on reality, obligated parties are forced to purchase credits from the EPA – through no fault of their own. The D.C. Circuit pointed out this mismatch of incentives and obligations in noting that EPA’s approach boils down to saying: “Do a good job, cellulosic fuel producers. If you fail, we’ll fine your customers.”

In summary, API recommends that EPA exercise its authority and implement the following for the 2013 RFS standards:

- Reduce the cellulosic volume to a reasonable estimate based on three months of actual production. Based on practically zero production in 2012, the 2013 cellulosic RVO should be set at zero.
- At a minimum, exercise existing discretion to reduce the advanced biofuel and total renewable fuel requirements by the corresponding amount that the cellulosic mandate is reduced.
- Reduce the Advanced and Total renewable fuel requirements so that the total ethanol volume does not exceed 10% of EIA’s estimate for 2013 U.S. gasoline demand.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA’s proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

This question is aimed directly at the issue of invalid RINs and RIN fraud. Since November 2011, the EPA has deemed 140 million fraudulent biodiesel RINs and issued Notices of Violation to innocent obligated parties. At its heart, the issue is a symptomatic of the flawed implementation of the RFS, and the only real solution is to repeal the program. Absent this step, the EPA needs to quickly follow through and finalize its proposal to establish a framework for an EPA-approved RIN Quality Assurance Plan (QAP) that provides an affirmative defense.⁵ The RIN market is functioning today in anticipation of a final rule. API supports the proposal but we have some concerns; these were described in detail in our comments to the Agency in April 2013 and are summarized below.

Our overarching concern is the impact of invalid RINs on the liquidity of the RIN market. The final rule should not include unnecessary elements that increase QAP complexity and costs, potentially impede market adoption of the programs, and do not further reduce risk for invalid RINs. Companies should be able to assert an affirmative defense, without onerous limitations. We remain concerned with the level of detail, and cost; and the market’s willingness to adopt the program, which is needed to ensure RIN liquidity.

In its proposal, the EPA asserts that the requirement to replace invalid RINs is needed to ensure the annual national RFS volumes are met. Yet, the fact remains that it is not possible to go back

⁵ 78 Federal Register, 12158, February 21, 2013

in time and induce additional biofuel production. The Agency continues to insist upon the replacement of invalid RINs, and it correctly puts the obligation for RIN replacement on the generator of such RINs. The two types of QAPS included in the proposal (QAP A and QAP B) place the ultimate obligation for RIN replacement on the QAP provider and the obligated party respectively. Both QAPs are expected to significantly reduce the risk for invalid RINs, and the more stringent requirements under QAP A do not appear to materially increase the assurance of a RIN's validity beyond what is provided by QAP B. If the EPA continues to insist upon RIN replacement, then it is appropriate to put QAP providers in the line of parties obligated to replace invalid RINs.

There is significant variability in the EIA's annual outlook of fuel demand, resulting in inherent variability in the annual RFS percentage standards set by the EPA. Any replacement of invalid RINs by obligated parties should be subject to a de minimis level of 2% consistent with the variability in the EIA fuel demand projections. The Agency should apply this 2% exception to all years starting with 2013, rather than just the first two years as proposed.

API supports the broad scope that the EPA has taken in applying this program to all RIN types, including D6 ethanol RINs. We agree that this program should be applicable to biofuel imports, and allow foreign RIN generators to participate. However, the EMTS should be modified to show which RINs are associated with a foreign producer.

As for exports, it is not appropriate that companies with an RVO - solely based on biofuel exports, should be afforded the deficit carryover provision allowed to the RFS obligated parties. And, API supports more frequent demonstrations from biofuel exporters that their compliance obligations will be met.

As proposed, the EPA would require some tracking of RINs through the system to ensure proper RIN separation. RIN separation violations are RFS violations, but they should not affect the validity of the RIN. This program should ensure RINs are validly generated, and the tracking of RINs to ensure proper separation should be outside the scope of the program. And, we oppose the PTD requirement to identify the name and blend of all components in a product containing renewable fuel.

API believes that RIN generators should not be allowed to separate RINs. This RFS provision is allowed in the isolated cases where a fuel is used as "neat" in transportation. In the marketplace, this scenario is rare, yet the separation provision has been widely exercised with biodiesel. Eliminating this provision would have prevented the fraud experienced thus far, and would go a long way toward preventing future instances of fraud. To this point, we are concerned by the EPA's recent proposal on new RFS pathways (Federal Register vol. 78, pages 36042-3608). As expressed in our detailed comments to the Agency, the scope of the proposed RIN QAP program did not contemplate RIN verification for renewable electricity from landfill biogas and used in transportation by electric vehicles. API opposed allowing renewable fuel producers to separate RINs in the RFS1 and RFS2 regulatory proposals. RIN separation by the producer should only be permitted when a renewable fuel producer is also an obligated party, and even then, only up to that company's RVO.

EPA has delayed the RIN QAP rule, which was expected to be in place on January 1, 2013. EPA will need to extend its *Second Interim Enforcement Response Policy* (issued in January

2013)⁶ to include all RINs (not just biodiesel) generated in 2013 and, if necessary, in 2014 and beyond until the new rule is in place.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

The market sets the price for ethanol RINs based on the fundamentals of supply and demand. The significant increase in demand for a relatively limited supply of available RINs has resulted in the recent increase in ethanol RIN prices. As we hit the blend wall, the inability to blend more biofuel into the transportation fuel pool and expectations of RIN scarcity have likely led to the sharp increase in ethanol RIN prices in 2013.⁷ Fundamentally, RINs are not free.⁸ According to USDA, RIN price is determined by a transaction cost plus the core value of the RIN.⁹ The core value of the RIN has been defined as the gap between supply price and demand price for biofuels at any given quantity.¹⁰ Alternatively, the core value of a RIN has been described as the “value if the mandate is binding or if it could become binding before the RIN expires.”¹¹ In this definition, the RFS is determined to be “binding” if obligated parties are forced to use more biofuel than they would choose to consume in a mandate-free market. Obligated parties have reached the point beyond which further increases in the amount of ethanol in the motor gasoline fuel pool cannot be handled by both the existing fleet of vehicles in operation and the existing fuel distribution infrastructure – in other words, the blend wall.

As noted by Tyner, et al., despite the apparent limit of 10% ethanol in gasoline, the effective maximum blend level for ethanol in gasoline is roughly 9%.¹² The recent spike has been attributed to hitting the blend wall, and includes the expectation of dwindling supplies of separated RINs in the present and future.¹³ Due to the inability to blend biofuels above the 9-10% level, obligated parties have needed to look to the RIN market for separated RINs in order to meet their obligation. As shown in the chart below from the EIA, obligated parties have been increasingly relying on carryover RINs versus biofuel blending to meet the mandate since the beginning of 2013. Additionally, the EIA expects the number of banked RINs to fall over the next year, leading to scarcity in the RIN market.

⁶ US Environmental Protection Agency, *Second Interim Enforcement Response Policy—Violations Arising from the Use of Invalid 2012 and 2013 Renewable Identification Numbers*, January 2013, available at: <http://www2.epa.gov/sites/production/files/documents/secondierp013113.pdf>.

⁷ EIA, “What caused the run-up in ethanol RIN prices during early 2013?” June 13, 2013. <http://www.eia.gov/todayinenergy/detail.cfm?id=11671>

⁸ Wyatt Thompson, Seth Meyer, and Pat Westhoff, “What to Conclude About Biofuel Mandates from Evolving Prices for Renewable Identification Numbers?” *Amer. J. Agr. Econ.* 2011, 93(2): 481-487.

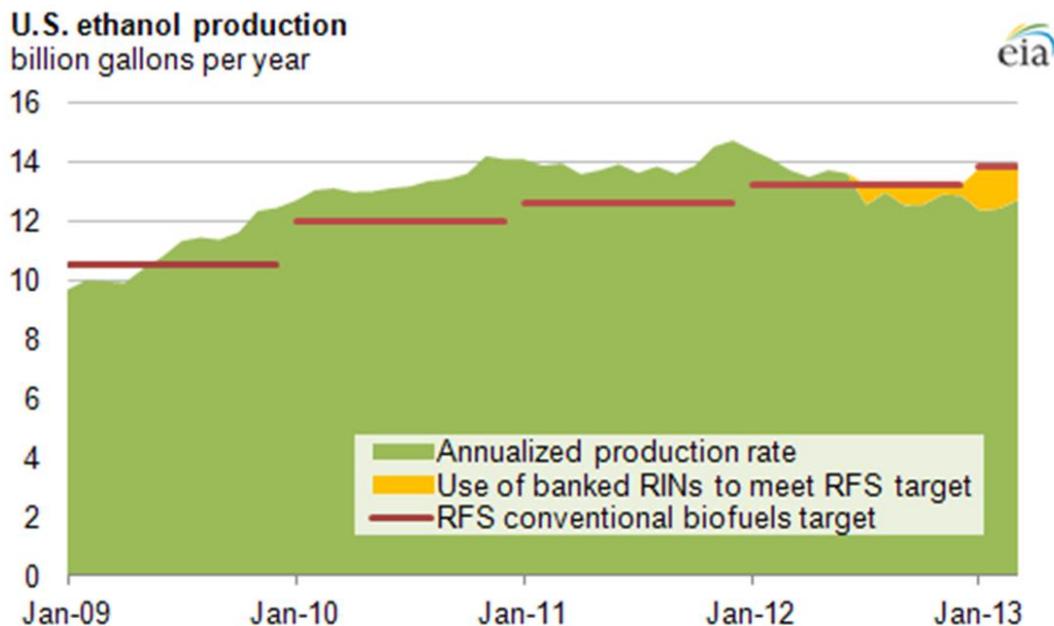
⁹ Lihong McPhail, Paul Westcott, and Heather Lutman, “The Renewable Identification Number System and U.S. Biofuel Mandates.” USDA, November 2011.

¹⁰ McPhail, 2011.

¹¹ Thompson, 2011.

¹² Wallace E. Tyner, Frank J. Dooley, and Daniela Viteri, “Alternative Pathways for Fulfilling the RFS Mandate.” *Amer. J. Agr. Econ.* 2010, 93(2): 465-472

¹³ EIA, 2013.



Source: EIA, *Today In Energy*, June 5, 2013. <http://www.eia.gov/todayinenergy/detail.cfm?id=11551>

In the future, as the RFS volume mandates continue to increase, they become more burdensome. A recent NERA study of the economic impacts of the RFS made the following conclusions¹⁴:

“This study finds that the RFS2 volume requirements will exceed the transportation fuel market’s ability to absorb the biofuel volumes mandated within three to four years. At that point in time obligated parties will not be able to meet market demand for transportation fuel and still remain in compliance with the RFS2. Therefore, after exhausting all other available options for compliance, individual obligated parties, each acting independently, could be forced to reduce their RIN obligation by decreasing the volume of transportation fuel supplied to the domestic market – either by reducing production or exporting.

As domestic fuel supplies decrease, large increases in transportation fuel costs would ripple through the economy imposing significant costs on society. More specifically, as the RFS2 mandate is ratcheted up every year, the fuels market will be pushed into a death spiral... The death spiral depicts the economic harm that occurs as individual obligated parties act to remain in compliance with the program. Once the blend wall has been reached, the annual increase in the RVO results in decreased fuel availability and increased fuel costs to society. These increased fuel costs have a broad impact across the economy.

This process repeats itself yearly. As domestic supply continues to decline, the blending percentage obligation becomes increasingly untenable. Obligated parties rely on RINs acquired and carried forward from earlier years to meet compliance obligations. However, ...by 2015-2016 compliance with the RFS2 in its current form will likely be infeasible, which would result in significant damage to the economy.

¹⁴ NERA, “Economic Impacts Resulting from Implementation of RFS2 Program.” October 2012. http://www.epi.org/policy-and-issues/policy-items/alternatives/~media/Files/Policy/Alternatives/13-March-RFS/NERA_EconomicImpactsResultingfromRFS2Implementation.pdf

The death spiral impact is seen most acutely in the diesel fuel market. The tightening of the diesel supply (up to 15% decline in 2015) causes large fuel cost increases to ripple through the economy, adversely affecting employment, income, consumption, and GDP. By 2015, the adverse macroeconomic impacts include a \$770 billion decline in GDP and a corresponding reduction in consumption per household of \$2,700."

NERA's statement on RINs and gasoline exports has been corroborated recently by a public statement made by at least one fuels producer.¹⁵

Any changes to the existing compliance requirements must be very carefully considered because these could penalize those parties that have attempted to comply versus those that have been slow (or unable) to comply. Furthermore, changing the rules once could increase the likelihood of slow or reluctant compliance in the future, since everyone will come to expect continued government intervention when problems arise.

With respect to the question on "what actions the government could take to limit increases in compliance costs," the answer is the full repeal of the RFS, and, at a minimum, issuance of waivers. As with most efforts to "fix" problems, there remains always a probability of additional unintended consequences. The best policy option is a complete repeal of the RFS.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

The premise of the question is wrong. RINs are, in essence, "permits" to supply transportation fuels for U.S. consumption -obligated parties can only legally supply as much gasoline and diesel for U.S. consumption as they have RINs to comply. The ever increasing RFS volume mandates are surpassing the ability of the transportation sector to consume the renewable fuels, leading to a shortfall in RINs available, and a consequent impact on RIN prices. The RFS is a mandate that requires consumption of biofuels in the U.S. market and high RIN prices would likely not be alleviated by the production of more ethanol; EIA data show that E85 fuel is practically not a viable option for additional RINs, as owners of FFV vehicles chose E85 fuel only about 1% of the time. As explained in previous whitepapers, E15 has significant issues. Because of the blend wall more ethanol cannot be consumed, therefore, no more RINs could be generated by new production and RIN prices would remain unaffected. Increased production of renewable fuels would likely lead to increases in renewable fuel exports.

The biofuel industry currently has excess capacity and has produced in excess of the RFS mandate. In 2012 the domestic ethanol industry produced nearly 100 million gallons of ethanol more than the 13.2 billion gallons required (and that qualify) under the mandate.¹⁶ In fact, the industry has produced more ethanol than can be consumed domestically for the past 3 years, acting as a net exporter of fuel ethanol since 2010.¹⁷ Though it has served to support the ethanol industry in the past, it is clear that the ethanol industry has found other markets for its products.

¹⁵ [Valero Says Ethanol Blending Costs to Double or Triple this Year](#), The Wall Street Journal, March 20, 2013

¹⁶ EIA, "Oxygenate Production" 6/27/2013. http://www.eia.gov/dnav/pet/pet_pnp_oxy_dc_nus_mbb1_m.htm

¹⁷ EIA, "U.S. Net Imports by Country" 3/15/2013 http://www.eia.gov/dnav/pet/pet_move_net1_dc_NUS-Z00_mbb1pd_a.htm

Increases in RIN prices could affect the marketing of renewable fuels by incentivizing E85 (high ethanol blends) at the expense of consumers who can use only E10 (low ethanol blends). However, this cross-subsidization has a practical limit. A recently released study by EPRINC concludes that 2.94 billion gallons of E85 would have to be sold to bring obligated parties into compliance with a projected shortfall of 2.5 billion RINs in 2014.¹⁸ This represents an E85 consumption growth of nearly 3,000% over recent years. EPRINC states, “In order to sell 2.94 billion gallons in a year, each of the 2,400 retail station[s] that offer E85 would have to sell 140 gallons per hour, 24 hours per day, for 365 days. The average US gas station sells 100 gallons of gasoline per hour across all of their pumps.” According to NERA, E85 sales cannot completely alleviate high RIN prices or the blend wall in the near term: “The cost of the RINs is borne by the obligated party and leads to higher costs and lower sales (effectively rationing) for fuels that require additional RINs.”¹⁹

Regardless of the effect of RIN prices on the production or marketing of renewable fuels, it is likely, according to the NERA study, that increases in RIN prices will impact the marketing of fuels in general, and could result in severe economic harm. As the RFS progresses and RIN prices increase, NERA found that the impacts could be as severe as rationing of diesel fuel, and could cause increases in costs of 300% for diesel fuel and 30% for gasoline by 2015. The effects could ripple through the economy, costing Americans \$580 billion in decreased take-home pay, and the country \$770 billion in lost GDP by 2015.²⁰

As mentioned above, the best policy option is a complete repeal of the RFS.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

No modifications should be made to relieve certain entities unable to generate sufficient RINs for compliance purposes. The only solution is that which provides a level playing field for all obligated parties. In that regard, the best relief possible would be to repeal the RFS program and let the market provide ethanol and other renewable fuels based on their blending characteristics. Absent this approach, EPA already has the legal authority to waive any or all of the RFS volumes required in situations of “severe economic or environmental harm” or “inadequate domestic supply.”

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

According to a recent article in Platts,²¹ the RFS is likely impacting imports and exports of gasoline and diesel in the United States. The article, consistent with the NERA study, indicates

¹⁸ Montalbano, Ben, EPRINC, “The Mortar is Nearly Set: The Consequences of Exceeding the Blendwall in 2013 and 2014,” (July 22, 2013) available at <http://eprinc.org/pdf/EPRINC-RFS2014.pdf>

¹⁹ NERA, 2012.

²⁰ NERA, 2012.

²¹ <http://www.platts.com/latest-news/oil/newyork/skyrocketed-rins-prices-boost-us-diesel-exports-21325808>

that as the blend wall causes RIN prices to escalate, it is affecting US fuel supplies. The problem could worsen as the RFS volume mandates continue to escalate unless EPA and Congress take action. Without revision, the RFS will reach a point where it forces refiners, in the aggregate, to make less gasoline available to the American market according to NERA.²²

The number of RINs available for compliance depends on the consumption of renewable fuels in U.S. transportation fuels. The NERA report demonstrates that as the RFS volume mandates exceed the ability of the existing infrastructure and vehicles to consume the renewable fuels, there will likely be a shortfall of RINs. This could, in turn, adversely impact domestic fuel supplies. Thus, reduced domestic supply is an unintended consequence of the RFS.

Obligated parties must comply with laws and regulations – which in the case of the RFS attempts to force an increasing amount of biofuel into a decreasing transportation fuel pool.. As NERA concludes, "...after exhausting all other available options for compliance, individual obligated parties, each acting independently, could be forced to reduce their RIN obligation by decreasing the volume of transportation fuel supplied to the domestic market – either by reducing production or exporting."²³

As mentioned above, the best policy option is a complete repeal of the RFS.

As previously stated, the RFS contains unfulfilled aspirational goals and numerous unintended consequences and other adverse impacts. Again, we appreciate the opportunity to provide these responses. If you have any questions, please don't hesitate to contact us.

Sincerely,



Bob Greco

Group Director: Downstream and Industry Operations

API is a national trade association that represents all segments of America's technology-driven oil and natural gas industry. Its more than 500 members – including large integrated companies, exploration and production, refining, marketing, pipeline, and marine businesses, and service and supply firms – provide most of the nation's energy. The industry also supports 9.2 million U.S. jobs and 7.7 percent of the U.S. economy, delivers \$86 million a day in revenue to our government, and, since 2000, has invested over \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives.

²² NERA, 2012

²³ NERA, 2012.



July 26, 2013

The Honorable Fred Upton
Chairman
Energy and Commerce Committee
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry A. Waxman
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
2322A Rayburn House Office Building
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via email at: rfs@mail.house.gov

Dear Chairman Upton and Ranking Member Waxman:

The Biotechnology Industry Organization (BIO) is pleased to comment on the U.S. House of Representatives Committee on Energy and Commerce's (Committee) fifth Renewable Fuel Standard (RFS) assessment white paper¹ examining the Implementation of the RFS.

Introduction:

BIO is the world's largest biotechnology organization, with more than 1,100 member companies worldwide and in all 50 U.S. states. BIO represents leading technology companies in the production of conventional and advanced biofuels and other sustainable solutions to improving energy security and reducing U.S. dependence on oil imports. BIO also represents the leaders in developing new technologies for food, feed, fiber, and fuel.

These innovative industrial and agricultural biotechnology companies are developing new feedstocks and biological catalysts for production of a range of fuels from conventional ethanol to advanced biofuels, renewable chemicals, and biobased products. These technologies are reducing oil imports and contributing to U.S. energy security by providing affordable domestically produced alternatives to oil through environmentally friendly energy crops, cleaner-burning biofuels and renewable chemicals that help reduce greenhouse gas emissions and provide more sustainable sources of energy and materials. Further, the technology being developed by these companies, in large part due to the regulatory and financial certainty provided by the RFS, is helping the U.S. economy by mitigating the

¹ U.S. House of Representatives Energy and Commerce Committee. 7 June 2013. **RENEWABLE FUEL STANDARD ASSESSMENT WHITE PAPER: Energy Policy**
<http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/20130607RFSWhitePaper4.pdf>



impact high and volatile global oil prices have on all facets of the economy and reducing gas prices at the pump for American consumers.

Given BIO's broad and diverse set of member companies who have decided to invest in the United States due to the policy stability provided by the RFS, we are able to provide a unique perspective on the issues the Committee is seeking to address regarding Implementation of the RFS.

As discussed in BIO's responses to the Committee's first four white papers, the RFS has been a success in driving the commercialization of technologies that help to reduce the U.S. transportation system's overwhelming reliance on foreign petroleum. The RFS provides exactly the type of long-term regulatory stability needed to send a signal to investors to develop a domestic biofuels industry that lessens our dependence on foreign fuels and creates jobs in America, using homegrown technology.

Congress established the RFS to encourage the use of existing biofuels and the development of advanced biofuels in order to reduce our reliance on the rising cost and price volatility of oil. It is crucial we maintain the RFS in order to spur alternative energy production and mitigate the impacts of overreliance on oil.

White Paper Response:

The Committee has again requested comments on a list of questions in this white paper. In order to properly address these questions, BIO has listed each question below in order with its answer immediately following.

1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

EPA's consistent and carefully balanced implementation of the RFS has provided advanced biofuel developers and investors with confidence that if they can produce advanced and cellulosic biofuels, there will be market access for these fuels.² BIO supports EPA's continued recognition that many factors must be taken into consideration in developing projections of its Renewable Volume Obligations (RVO) under the RFS, and that information obtained directly from biofuel producers should be evaluated in addition to the

² "The value proposition for cellulosic and advanced biofuels under the US federal renewable fuel standard." Ind. Biotech. J. 7(2), April 2011.



U.S. Energy Information Administration's (EIA) estimate.³ To ensure the maximum possible reliability of future year projections, and to comply with the ruling of the U.S. Court of Appeals for the D.C. Circuit in *API v. EPA* (API v. EPA), No. 12-1139, slip op. at 5-10 (D.C. Cir. January 25, 2013),⁴ EPA must maintain the ability to interpret and implement RVOs based on the best available information.

EPA's methodology – including input from producers – is likely to produce the most accurate projection, as companies have now constructed and are commissioning first-of-a-kind commercial-scale cellulosic biofuel production facilities. Construction and commissioning of these first commercial cellulosic biorefineries has provided valuable experience and insight into the challenges of bringing such facilities online.

BIO believes EPA has the regulatory flexibility to adjust the RVOs as necessary to properly forecast future production in a manner that will drive development of the advanced and cellulosic biofuel producers, but in a manner that is not burdensome to obligated parties. EPA has demonstrated this in developing more accurate RVOs each year by utilizing the knowledge it has gained from these experiences to ensure the most reliable prediction possible. This regulatory flexibility was upheld by the U.S. Court of Appeals for the D.C. Circuit.

In order to maintain the certainty the RFS provides for investors in the biofuels industry, BIO would urge Congress to allow EPA to continue to exercise the flexibility it has under the RFS, rather than foster instability in the marketplace by undoing the current process and forcing investors in the industry to wait for years on end for EPA to rewrite the rules.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

³ Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 26, 9294 (Feb. 7, 2013), available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-02-07/pdf/2013-02794.pdf>.

⁴ U.S. Court of Appeals for the D.C. Circuit in *API v. EPA*, No. 12-1139 (D.C. Cir. January 25, 2013) [http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/\\$file/12-1139-1417101.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/$file/12-1139-1417101.pdf)



The cellulosic biofuel provisions in the RFS are working well. This provision is driving investment and commercialization of cellulosic biofuels. **Facilities like INEOS Bio's in Vero Beach, Florida, and KiOR's in Columbus, Mississippi, representing several hundred million dollars of investment in the United States, are poised to begin production of the next generation of renewable fuel from wood and woody waste in 2013.** Dozens more advanced biofuel projects are planned or under construction.

As discussed earlier, while API v. EPA vacated EPA's cellulosic standard, it also rejected API's argument that EPA was required to follow EIA projections in setting its annual RFS. The court also rejected API's argument that EPA was not entitled to consider information from cellulosic biofuel producers in setting its projection, finding that cellulosic producers were, of course, an "almost inevitable source of information" for EPA. Under the D.C. Circuit's decision, EPA was free to reinstate the volumes that it had established, as long as the information available at the time would support the agency's conclusion that those volumes were reasonably achievable.

EPA published its Proposed Rule on the Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards⁵ shortly after the court ruling. In setting its 2013 numbers, EPA **properly followed the DC Circuit Court's** decision. EPA developed a methodology, using input from EIA, producers, companies, and others in industry to implement cellulosic volumes based on the best available information.

Further, EPA should not be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volumes. EPA has the regulatory flexibility to adjust the cellulosic volumes as appropriate without adversely affecting the advanced biofuel volumes. By even raising the possibility that advanced biofuels should be reduced in conjunction with cellulosic biofuels it creates a self-fulfilling prophecy, potentially slowing **advanced biofuel companies' entry to the market by chilling investment from the financial community and bolstering legal challenges to any future advanced biofuel projections.**

Rather it would be better for EPA to focus on garnering more cellulosic and advanced biofuel pathways under the RFS. We would encourage EPA to find ways within the law to expedite the approval of new feedstocks, which will help the industry produce cellulosic biofuel volumes.

⁵ Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 26, 9292 (proposed Feb. 7, 2013) (to be codified at 40 C.F.R. pt. 80) (available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-02-07/pdf/2013-02794.pdf>) [hereinafter *The Proposed Rule*].



Challenges surrounding cellulosic biofuel numbers can also be handled by overcoming limits to market access for all biofuels; commonly referred to collectively as the blendwall, these limits represent a series of barriers contrived by obligated parties⁶ to prevent biofuels from gaining access to the marketplace.⁷ Multiple avenues exist for blending additional volumes of biofuel into the nation's fuel supply. E15 blends are approved and ready for use, and production of flex fuel vehicles ("FFVs") continues to increase. These options, combined with the introduction of new "drop-in" fuel molecules, provide a suite of opportunities for RFS compliance. The main obstacle to compliance is the dilatory tactics of obligated parties to pursue the options available to them.⁸ Obligated parties have had more than five years to begin establishing the infrastructure necessary to distribute RFS-mandated biofuel volumes, but have taken few steps to do so. Congress should therefore resist all efforts by obligated parties to reduce RFS obligations based on blendwall claims.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

As noted by the Committee, EPA administers the RIN credit trading program as a "buyer beware" system, where RIN purchasers are responsible for conducting due diligence on the validity of RINs. This buyer beware approach is consistent with other compliance credit trading programs EPA administers under the Clean Air Act.⁹ The oil industry trade group, the American Petroleum Institute (API), in its comments on the original RFS, fully supported the RIN compliance trading program.¹⁰ The National Petrochemical & Refiners Association

⁶ *'Big oil' may block branded retail blender pumps: Green Plains*
<http://www.platts.com/RSSFeedDetailedNews/RSSFeed/Oil/8102457>

⁷ *Fill Up With Ethanol? One Obstacle is Big Oil*, <http://online.wsj.com/article/SB117547886199856472.html>

⁸ *Trade group requests U.S. probe of oil industry's efforts to impede renewable fuels*,
<http://eenews.net/eenewspm/2013/03/19/archive/9?terms=RFA%2C+ConocoPhillips>

⁹ RFS Renewable Identification Number (RIN) Quality Assurance Program; Proposed Rule (Feb. 21, 2013), 78 Fed. Reg. 35, p.12162.

¹⁰ Comment submitted by Alfonse Mannato, American Petroleum Institute (API), on the Environmental Protection Agency (EPA) Proposed Rule: Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, November 12, 2006. <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2005-0161-0185>.



also fully supported the RIN system as the compliance mechanism for the RFS.¹¹

BIO commends EPA for its steadfast commitment to ensuring the RFS works as Congress intended to promote the commercial development of a domestic biofuels industry to help **further this country's energy security. Stability in the RIN market is important to the** functionality and effectiveness of the RFS. Reducing regulatory uncertainty for biofuel producers and obligated parties – for instance, through timely rulemakings and greater transparency in RIN trading – would provide the greatest benefit for all program participants compared to any legislative changes. Unfortunately, legal and legislative challenges to the RFS by petroleum refiners and producers have delayed the finalization of the 2013 RVO, adding to the existing atmosphere of regulatory uncertainty.

EPA and advanced biofuel companies already expend tremendous resources in ensuring the validity of RINs. Advanced biofuel companies in the process of raising capital and building commercial biorefineries must simultaneously invest time and money in meeting the regulatory requirements both for Registration of Fuels and Fuel Additives (Title 40 CFR §79) and for RFS2 Registered Renewable Fuel Producers (Title 40 CFR §80.1450). Prior to generating RINs, a renewable fuel producer must have independent third-party engineering reviews and verification **of its facility's capacity to produce fuel and co-products**, its feedstocks and suppliers, its process heat source and suppliers, its waste separation plan (if needed), and any required permits. Regulatory delays and barriers in these registration processes are already a significant challenge for advanced biofuel companies trying to commercialize new technology. Federal policies should clear a path for companies making investments, building new biorefineries and bringing innovative technologies to the marketplace.

EPA's proposed voluntary Quality Assurance Plan (QAP) duplicates to a large degree the engineering review and attest engagement requirements for CFR §79 and §80 under RFS. EPA even notes this redundancy in its proposed rule.¹² **BIO recommended in its comments to EPA's proposed rule that the final QAP not include unnecessary, duplicative and** burdensome requirements on biofuel producers, especially less well capitalized, smaller producers that should be encouraged to make RFS qualifying fuel. Elimination of duplicative

¹¹ Comment submitted by Bob Slaughter, National Petrochemical & Refiners Association (NPRA). November 9, 2006. <http://www.regulations.gov/#!documentDetail:D=EPA-HQ-OAR-2005-0161-0170>.

¹² RFS Renewable Identification Number (RIN) Quality Assurance Program; Proposed Rule (Feb. 21, 2013), 78 Fed. Reg. 35, p.12169, "Note that the components proposed for monitoring, whether on an ongoing or periodic basis, are components that are already regulated under the RFS program."



regulatory requirements can reduce the overall costs of the program for renewable fuel producers.

BIO additionally urged EPA to ensure that the QAP is truly a voluntary program in practice, as intended. Making the program truly voluntary will help level the playing field between large and small producers and help ensure that all producers are encouraged to participate in the RFS. EPA should be wary of creating an additional layer of regulation that competing companies and industries can use to raise regulatory and business costs to an intolerable level and drive small renewable fuel producers from the market.

EPA recognized in its proposed rule that already, without the proposed QAP in place, **“individual obligated parties are now conducting their own audits of renewable fuel production facilities”; including “indemnification clauses in the contracts with RIN suppliers”; and “opting instead to purchase RINs primarily from the largest biodiesel producers”.**¹³ EPA and Congress should therefore recognize that obligated parties have significant leverage within the RFS program to impose costs and conditions on renewable fuel producers as well as to selectively identify and trade RINs from certain producers within the EPA Moderated Transaction **System (EMTS). In fact, the committee’s white paper recognizes that obligated parties have this leverage.**

Obligated parties should be expected to seek to comply with the RFS at the lowest cost to themselves, their customers and end consumers. Obligated parties may not require a QAP as a condition for trading RINs from larger, well-established producers. Larger producers – already potentially able to produce lower cost fuel through economies of scale – may not feel the need to participate in a QAP and would thereby be able to provide fuel at a lower cost than small producers. There is no guarantee that obligated parties will favor verified RINs, since they generally view them as a burdensome compliance cost. Small producers forced to use a QAP option by obligated parties could see significantly higher costs with no corresponding enhancement in their participation in the RFS.

Since EMTS adequately enables due diligence against RIN fraud, the potential costs of the proposed QAP are disproportionate to its potential rewards for renewable fuel companies that have not yet actively participated in the RIN market. Cellulosic biofuel producers in particular may be unable to capture additional value for verified RINs because the RFS program provides obligated parties a compliance option for cellulosic renewable volume obligations that does not exist for other RVOs. The cellulosic waiver credit was designed to

¹³ Ibid. p. 12160 and p. 12163.



establish an upper bound for the value of a cellulosic biofuel gallon and assigned RIN as well as to ensure liquidity in the RIN market.¹⁴

Flexible and transparent RIN trading benefits all, but it should not facilitate the imposition of costs by one party on a competitor. Renewable fuel producers and petroleum refiners are competitors. In partially granting the American Petroleum Institute's recent "Petition for Review of Final Agency Action," the United States Court of Appeals for the District of Columbia Circuit indicated that, "[a]part from their role as captive consumers, the refiners are in no position to ensure, or even contribute to, growth in the cellulosic biofuel industry."¹⁵ Given this assertion by the Court, Congress should be wary of giving refiners added power to contribute to delays in the growth of the cellulosic biofuel industry through legislative and regulatory uncertainty. In its comments on the proposed rule, BIO urged EPA to rigorously ensure that the QAP does not enable and facilitate potentially discriminatory and anti-competitive behavior by obligated parties against biofuel producers.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

It should be noted that the rapid increase in RIN prices in 2013 has occurred in the absence of a final rule on 2013 RVOs. RIN prices for conventional biofuels (corn ethanol) began to climb in late January – following the publication of the proposed 2013 RVOs – and peaked in early March – following the compliance deadline for the 2012 RVOs.¹⁶ RIN prices have again peaked in July, after the final rule for the 2013 RVOs was transmitted from EPA to the White House Office of Management and Budget for interagency review. It is possible that regulatory uncertainty is contributing to speculative activity in RIN trading. Again, the delay in the rulemaking for the 2013 RVOs was caused in part by legal and legislative challenges to the RFS by petroleum refiners **and producers, including last year's request of Governors from several States and a number of organizations requesting a waiver of the**

¹⁴ Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program; Final Rule, (March 26, 2010) Fed.Reg. Vol. 75, No. 58, II.I.3, p.14727.

¹⁵ U.S. Court of Appeals for the D.C. Circuit in *API v. EPA*, No. 12-1139 (D.C. Cir. January 25, 2013) [http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/\\$file/12-1139-1417101.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/$file/12-1139-1417101.pdf)

¹⁶ Energy Information Administration, Today In Energy, "What caused the run-up in ethanol RIN prices during early 2013?", June 13, 2013, at <http://www.eia.gov/todayinenergy/detail.cfm?id=11671>.



national volume requirements for the RFS pursuant to Section 211(o)(7)(A).¹⁷ These challenges have a negative effect on the production of cellulosic biofuels by chilling investment in the industry; further, they slow other regulatory rulemaking procedures necessary for the industry's progress toward commercial scale production.

Congressional challenges also contribute to the uncertainty of EPA's implementation of the rule. In its proposed Department of the Interior, Environment, and Related Agencies Appropriations Act for Fiscal Year (FY) 2014, the U.S. House Appropriations Subcommittee for Interior, Environment, and Related Agencies reduced EPA's overall funding by 34 percent from FY 2013 levels and capped personnel levels for the agency at 1992 levels. In doing so, Congress is creating a self-fulfilling prophecy that the RFS is unworkable by EPA, by taking away EPA's resources to do so.

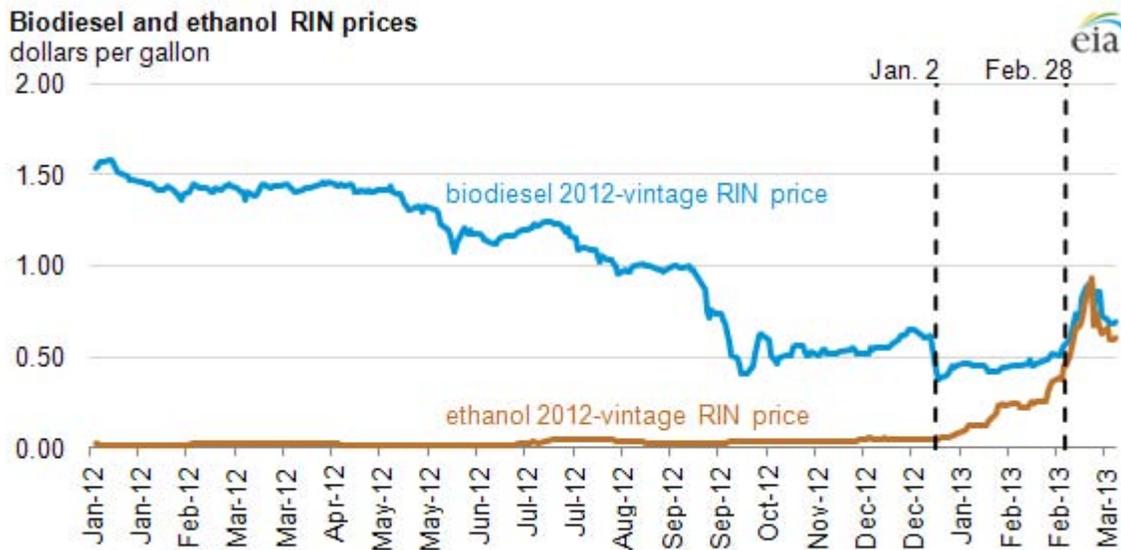


Figure 1: Source, Oil Price Information Service.

The EPA has proposed an overall RVO of 9.63 percent of transportation fuel for 2013 – with 1.6 percent reserved for advanced biofuels.¹⁸ While the agency has derived this RVO from the requirements in the Energy Independence and Security Act, the final number of actual gallons necessary to meet the RVO will depend on transportation fuel production and use within the United States throughout the year. A final tally will be determined only in February 2014 during annual compliance reporting and retiring of RINs.

¹⁷ Notice of Decision Regarding Requests for a Waiver of the Renewable Fuel Standard (Nov. 27, 2012), 77 Fed. Reg. 228, (available at: <http://www.gpo.gov/fdsys/pkg/FR-2012-11-27/html/2012-28586.htm>)

¹⁸ Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards: Proposed Rule (Feb. 7, 2013), Fed.Reg. Vol. 78, No. 26.



Obligated parties, including refiners, have to blend biofuels with gasoline to separate the RINs for either compliance reporting or trading. With demand for gasoline essentially flat, after multiple years in which demand has been destroyed by spiraling and unstable prices, there does not appear to be a market-driven reason for the increase in RIN prices – since obligated parties need only retire sufficient RINs at the end of the compliance period to meet a percentage of the fuel they produced.

But RINs are traded among a relatively small number of obligated parties and other market participants. According to the Oil Price Information Service:

"A majority of these RINs sellers are large independent gasoline retailers, such as Sheetz, Gulf, Quiktrip, Wawa and 7-Eleven, sources told OPIS. Some RINs sellers could also include oil refiners that have a comparatively larger retail network than they do refinery capacity."¹⁹

Further, OPIS notes "that the values of RINs acquired by actual blending at the racks are significantly lower than the spot market."²⁰ It would appear, then, that much of the run-up in RIN prices has been on the speculative resale of separated RINs. And this speculation has occurred in the absence of a final RVO. But blending additional gallons of renewable fuels is a lower-cost – and potentially lucrative – option for RFS compliance.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

RIN prices are intended to provide incentive for obligated parties to increase the use of biofuels in the U.S. transportation fuel mix. As BIO has previously demonstrated in a white paper on the value proposition offered by the RFS compliance mechanism:

"The RFS2 requirement is a critical determinant of the demand for renewable fuels, providing both market assurance and value, particularly for cellulosic and advanced biofuels. For cellulosic biofuels, the RFS2 requirements provide assurance that all cellulosic biofuel produced up to annually prescribed volumes will have a market. The RFS2 compliance mechanisms promulgated by EPA also allow producers of innovative

¹⁹ OPIS Ethanol & Biodiesel Information Service, July 22, 2013 • Volume 10, Issue 29, p.4.

²⁰ Ibid.



*renewable fuels, such as advanced and cellulosic biofuels, to capture additional value for their products.*²¹

But regulatory uncertainty is likely to have a larger impact on renewable fuel production and marketing than RIN prices, particularly in the advanced biofuel sector, which is commercializing new technology.

The U.S. biofuel industry has generated an average of 1.05 billion gallons of conventional biofuel each month through May 2013.²² At a steady rate, the industry will provide approximately 12.56 billion gallons of conventional fuel during 2013. These companies benefit from steady, predictable demand for their product, understanding that demand for gasoline is flat. Biofuel producers – particularly ethanol producers who do not sell transportation fuel to the end market – do not separate RINs. They generate the RINs but transfer them with the volume of biofuel when selling it. RIN prices may incentivize **additional demand for conventional biofuel before the year’s end, but only if overall transportation fuel demand increases.**

RINs of any type can be used to satisfy the overall RVO, and obligated parties should be expected to choose the lowest cost RINs. EPA data shows that nearly 6.3 billion RINs were separated in the first five months of 2013, and 2.56 billion 2012 vintage RINs are available to be used to comply with the 2013 RVO (in February 2014). Fewer than 80 million RINs have been retired during 2013. RIN prices for the advanced categories of biofuels have followed much the same pattern of price increases as conventional biofuel RINs.

The 2013 RVO for biomass-based diesel was finalized September 27, 2012, projecting production and availability of 1.28 billion gallons of fuel in 2013. This volume was first proposed in June 2011. And EPA factored this volume into the proposed 1.6 percent RVO for advanced biofuel in 2013, but that percentage obligation has not been finalized. With this relative certainty of an expanding market size, biomass-based diesel production in 2013 has increased steadily each month, from 80 million gallons in January to 140 million gallons in May.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an

²¹ “The value proposition for cellulosic and advanced biofuels under the US federal renewable fuel standard.” Ind. Biotech. J. 7(2), April 2011.

²² Environmental Protection Agency, EPA Moderated Transaction System (EMTS) data, <http://www.epa.gov/otaq/fuels/rfsdata/2013emts.htm>.



approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

Congress should not modify or change provisions of the RFS for obligated parties unable to generate sufficient RINs. The RFS was designed to open the U.S. transportation fuel market to renewable fuels, because it has to date been completely dominated by petroleum producers, refiners and other interests. To give obligated parties an opportunity to opt out because they are unwilling to meet their obligations under the RFS undermines the whole program.

As discussed in question 3, the oil industry supported development of the RIN market as a tool to help meet its obligations in a flexible and cost-effective manner. Obligated parties have had more than five years to begin establishing the infrastructure necessary to distribute RFS-mandated biofuel volumes, but have taken few steps to do so. Congress should therefore resist all efforts by obligated parties to reduce RFS obligations based on the RIN market. Any concession by Congress to accommodate these assertions regarding the RIN market will only serve to embolden obligated parties in their effort to resist compliance with the RFS.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

The RFS is not incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production. U.S. exports of refined fuels have been growing in recent years with finished transportation fuel becoming **America's top export (measured in dollars) for the first time in 2011, well before the rise in RIN prices or the argument that the RFS obligations were the cause for increased exports.** In 2011, the U.S. consumed 18.8 million barrels a day of petroleum products, a 9 percent decrease from 2005. At the same time, domestic production of liquid fuels increased by 24 percent from 2005 because of onshore crude oil in the lower 48 states, fuel ethanol, and natural gas liquids. As a result of lower consumption and higher production, the need for imported oil fell, from 60 percent of consumption in 2005 to 45 percent in 2011. Because of the growth in the industry, gross imports fell 17 percent from 2005, while exports increased



by 150 percent beginning in 2005.²³ The increase in exports is due to demand destruction in the United States and growing demand in neighboring countries as reported by the Associated Press in December 2011:

Crude oil, the raw material from which gasoline and other refined products are made is a lot more expensive. Oil prices averaged \$95 a barrel in 2011, while gasoline averaged \$3.52 a gallon – a [then] record. A decade ago oil averaged \$26 a barrel, while gasoline averaged \$1.44 a gallon.

The volume of fuel exports is rising. The U.S. is using less fuel because of a weak economy and more efficient cars and trucks. That allows refiners to sell more fuel to rapidly growing economies in Latin America for example. In 2011, U.S. refiners exported 117 million gallons per day of gasoline, diesel, jet fuel and other petroleum products, up from 40 million gallons per day a decade earlier.²⁴

According to API, in 2012, fuel and other petroleum products were a significant part of U.S. exports, as measured in dollars, at \$117 billion. While API suggested that an increased use of biofuels was a factor, they again identified the same culprits as in 2011, a lagging economy and more fuel efficient cars. API went on to point out that in addition to the external factors, the industry chooses to export gasoline for a variety of factors. Primarily, many East Coast refineries (PADD I) are having difficulty remaining competitive, especially given the relatively high crude oil costs and competition from foreign refiners. They also note that it is more economical to export excess production of gasoline in the Gulf refineries (PADD III) overseas than to ship gasoline from the Gulf to areas like the northeast, which can get gasoline from Europe or Canada at a lower cost.²⁵ Because of increased domestic production, refiners are enjoying robust crack spreads, benefitting from comparatively stronger margins than others.²⁶

²³ U.S. Oil Imports and Exports, Congressional Research Service, April 4, 2012

²⁴ Chris Kahn, *In a first, gas and other fuels are top US export*, Associated Press, December 31, 2011, available at: <http://news.yahoo.com/first-gas-other-fuels-top-us-export-200739553.html>

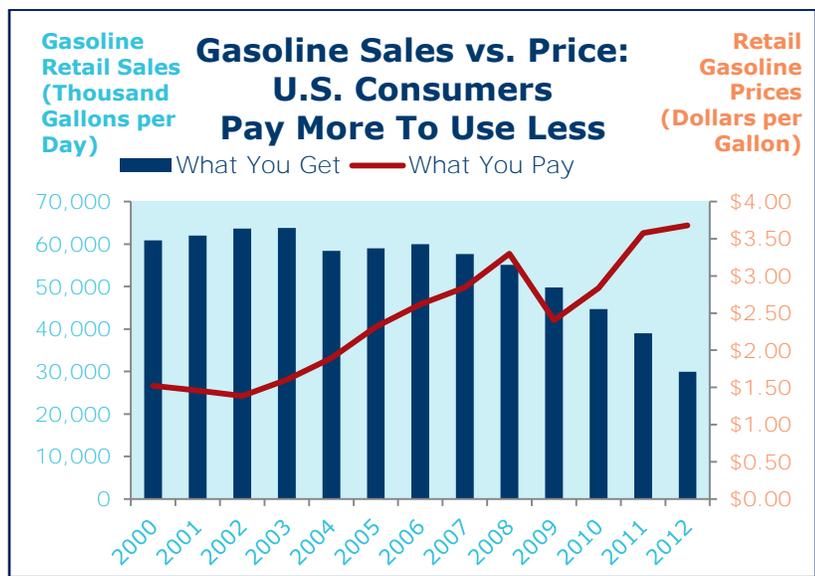
²⁵ EnergyAPI, *U.S. Petroleum Exports and related Issues*, June 6, 2013, available at: <http://www.api.org/policy-and-issues/policy-items/keystone-xl/-/media/Files/Policy/Keystone-XL-Pipeline/Exports-talking-points-6-6-13.ashx>

²⁶ Edgar Ang, "Major Gasoline Retailers Ranking In Profits from Lucrative RINs Sales." Oil Price Information Services, July 17, 2013.



These increases reflect obligated parties' greatest problem: they are facing a shrinking domestic market, even as export markets provide growth opportunities, due to demand for their primary product, transportation fuel.

American consumers have drastically cut back on driving over the past several years due to high and unpredictable gas prices, which have followed unstable international oil prices. At the same time, the oil industry has sponsored a myth-filled public relations campaign to destroy demand for alternative fuels.²⁷ In 2012, the average U.S. household spent \$257 more on transportation fuel than in 2011 – even while driving substantially fewer miles. The 3.3 percent increase in gasoline prices in 2012 outpaced the 2.9 percent average growth in American's incomes, compounding a multiyear trend of fuel prices outpacing use and income growth.²⁸



A recent national opinion poll conducted by Research Now found that more than half of Americans plan to find additional ways to cut back on driving if fuel prices spike again. A majority of those surveyed (55%) ranked "taking fewer road trips to visit friends and family"

²⁷ Brad Mallory, "Ad Against Ethanol Causes Controversy." Keloland Television, July 17, 2013. <http://www.keloland.com/newsdetail.cfm/ad-against-ethanol-causes-controversy/?id=150809>.

²⁸ U.S. Energy Information Administration, *U.S. household expenditures for gasoline account for nearly 4% of pretax income*, February 4, 2013, at <http://www.eia.gov/todayinenergy/detail.cfm?id=9831>



as their most likely sacrifice in the face of rising fuel prices.²⁹

Fuel price spikes both decrease demand for fuel and stall economic growth as America continues to recover from its economic recession. The 30 percent increase in the price of oil from October 2011 through April 2012 adversely affected household budgets and likely contributed to a slow rate of increase in consumer spending.³⁰ According to Dean Maki, chief United States economist at Barclays Capital, a \$10 increase in the price of oil shaves about two-tenths of a percentage point off America's growth rate and raises unemployment by one-tenth of a percentage point.³¹ Another study has shown that 10 of the 11 U.S. recessions since World War I have been preceded by significant oil price spikes.³²

The U.S. petroleum refining industry over many years consolidated operations in the Southern United States to take advantage of growing export markets and to handle heavier, sour imported crude oil. This consolidation left them poorly positioned to efficiently handle the recent boom in shale oil production in Midwest and Northeast states. Further, despite the continued projected growth in oil production in the United States³³, oil is traded on a global market and prices will still be affected by international events.³⁴ As long as oil is tied to the global market, U.S. production will not be enough to offset shocks in the global market, leaving American consumers, and the U.S. economy, vulnerable to any rise in oil prices.

Conclusion:

Implementing the RFS has certainly been a complex and challenging effort for the EPA. However, despite some setbacks and delays, in BIO's view, the EPA has provided consistent and carefully balanced implementation of the RFS that has provided advanced biofuel developers and investors with the confidence needed to take financial risks and begin multi-year efforts to commercialize advanced and cellulosic fuels. EPA has the

²⁹ Lorraine Mirabella, "Consumers cut family activities when gas prices rise, poll shows." *Baltimore Sun*, June 26, 2013. http://articles.baltimoresun.com/2013-06-26/business/bal-consuming-consumers-cut-family-activities-when-gas-prices-rise-20130626_1_gas-prices-gas-stations-gallon

³⁰ U.S. Energy Information Administration, *Petroleum; Weekly Spot Price, July 2012*, at <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RCLC1&f=D>

³¹ *New York Times*, *Rising Oil Prices Pose new threat to U.S. Economy*, February 24, 2011, at http://www.nytimes.com/2011/02/25/business/economy/25econ.html?_r=0

³² Resources for the Future, *Reassessing the Oil Security Premium*, Stephen P.A. Bran and Hillard G. Huntington, February 20120, at <http://www.rff.org/REF/Documents/REF-DP-10-05.pdf>

³³ U.S. Energy Information Administration, *U.S. Field Production of Crude Oil*, at <http://www.eia.gov/dnav/pet/hist/leafhandler.ashx?n=pet&s=mcrfpus1&f=m>

³⁴ U.S. House of Representative's Energy and Commerce Committee, *RENEWABLE FUEL STANDARD ASSESSMENT WHITE PAPER: Energy Policy*, June 7, 2013, p. 3 at <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/20130607RFSWhitePaper4.pdf>



flexibility in setting annual RVOs to include input from producers along with other resources in addition to EIA evaluations in setting its projections.

Hopefully these comments, along with BIO's responses to the previous four White Papers, are beneficial for the Committee as it concludes its review of the RFS and how to address the challenges surrounding its implementation. The RFS provides exactly the type of long-term regulatory stability needed to send a signal to investors to develop a biofuels industry that lessens our dependence on foreign fuels and creates jobs in America. ***The single most important thing Congress can do to reduce our nation's dependence on foreign oil, create more high quality jobs, and cut pollution is to leave the RFS in place, as-is.***

We are just 1/3 of the way through the timeline Congress laid out in 2007 and we must stay the course or risk losing the progress we've made. Should Congress feel compelled to act on the RFS, it should not revise the RFS but instead it should investigate the artificial barriers erected by obligated parties and, if necessary, take action to remove them to ensure that the market for transportation fuel alternatives established by the RFS is allowed to operate. Any remaining challenges to overcoming the blend wall can be addressed through the broad regulatory flexibility granted to EPA under the statute. None of these solutions require changes to the RFS.

Sincerely,

A handwritten signature in black ink that reads "Brent Erickson".

Brent Erickson
Executive Vice President
Industrial and Environmental Section
Biotechnology Industry Organization



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202-596-3974 tel • 202-223-5537 fax • info@biomassthermal.org

July 26, 2013

House Energy and Commerce Committee

The Honorable Fred Upton
Chairman
House Energy and Commerce Committee
Washington, D.C. 20003

The Honorable Henry Waxman
Ranking Member
House Energy and Commerce Committee
Washington, D.C. 20003

Dear Chairman and Ranking Member,

The Biomass Thermal Energy Council (BTEC) appreciates the opportunity to provide the House Energy and Commerce Committee with input regarding the committee's continuing discussion on the Renewable Fuel Standard (RFS). BTEC is an association of biomass fuel producers, forest landowners, appliance manufacturers, and related organizations that view biomass thermal energy as a renewable and efficient pathway to meeting America's energy needs. BTEC engages in research, education and public advocacy for the biomass thermal energy sector.

BTEC is encouraged by the recent dialogue occurring in the House Energy and Commerce Committee on the RFS and opportunities to reform the program to better align its requirements with its goals. While many aspects of the committee's White Papers series have been constructive in addressing the RFS's flaws, like RIN fraud, the White Papers fail to address the restrictive energy definition of the RFS itself. This myopic definition is detrimental to America's energy evolution. By only encompassing transportation fuels into the RFS regulatory mechanisms, the program is neglecting an equally important part of America's energy consumption; thermal energy. Thermal energy constitutes approximately one-third of America's energy consumption, opposite power and transportation. Through the inclusion of renewable fuels for thermal use—in addition to transportation—, the RFS could displace billions of gallons of often imported fossil fuels used for heating, like #2 heating oil and diesel fuel.

In fact, biomass used for thermal energy production is already acknowledged as an advanced biofuel in other federal programs. In Section 9005 of the current Farm Bill, the production of wood pellets receives recognition alongside biogas and ethanol. Further, in 2012, the Environmental Protection Agency attempted to amend the RFS section of the Clean Air Act to expand the scope of the RIN and the benefits of the RFS to include thermal energy from liquid biofuels. While much of the committee's focus has centered on the biofuels industry's difficulties in reaching RFS production mandates, the biomass thermal industry has been producing heating fuels that cost up to 50% less than heating oil and are able to greatly expand.

Ensuring policy parity between energy sources will grant biomass the opportunity to economically displace volatile and environmentally detrimental fossil fuels, while also producing jobs and building up rural and urban economies. Recent economic analyses demonstrate that biomass thermal fuels and technologies have the ability to displace 1.12 billion gallons of heating oil in the Northeastern U.S.,¹ as well as create as many as 210,000 jobs in the Midwest.² These benefits, and more, can only be achieved if biomass used for thermal energy is granted the same kind of regulatory recognition as other energy forms.

Biomass has a legitimate opportunity to help the nation taper off of its dangerous reliance on fossil fuels, often from hostile countries, and build a new energy policy that pushes America yet again to the forefront of economic

¹ "Heating the Northeast with Renewable Biomass: A bold vision for 2025," April 2010,
<http://biomassthermal.org/resource/2025vision.asp>

² "Heating the Midwest with Renewable Biomass: A Midwest vision for 2025," April 2013,
http://biomassthermal.org/resource/2025vision_mw.asp

progress. It is for this reason that BTEC urges this committee to consider including renewable biomass fuels used for thermal energy within the RFS.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joseph Seymour". The signature is fluid and cursive, with a long horizontal stroke at the end.

Joseph Seymour
Executive Director
Biomass Thermal Energy Council
202-596-3974
Joseph.seymour@biomassthermal.org

House Energy and Commerce Committee – RFS Whitepaper 5 Responses from Butamax™ Advanced Biofuels, LLC

Questions for Stakeholder Comment

1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

Generally speaking, the EPA's annual RVO setting has worked. As a general rule, and as is appropriate, most of what EPA does in the annual RVO-setting process is defined by statute and EPA has, to date, operated under reasonable interpretations of their statutory obligations and authority. However, EPA's failure to meet the statutory timeline for issuing a final rule for 2013 RVO's does create significant uncertainties for obligated parties as well as biofuel producers and other stakeholders. Companies such as Butamax require regulatory certainty in order to move forward in a timely manner with commercialization plans.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed?

Butamax believes – in general – that the RFS is working as envisioned by the Congress and the President when it became law. However, to specifically address this question, Butamax believes that other parties who operate exclusively in this area can provide more appropriate answers.

Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

To date, EPA's exercise of the discretion provided to it in statute has been appropriate, the proof of which is that the required volumes of non-cellulosic advanced biofuels have been readily achieved in the marketplace. Moving forward, as the discrepancy between statutory and achieved cellulosic volumes grows, it will be increasingly difficult for non-cellulosic advanced biofuels to cover the gap. In their proposed rule for 2013, EPA recognizes this as a growing issue and the Agency has properly sought input on this topic.

Butamax sees an opportunity for development of non-cellulosic advanced biofuels such as biobutanol and biomass-based diesel. However, realizing this opportunity requires investment and the current, single-year rule-making process creates considerable uncertainty for this category. That uncertainty likely limits actual investment as it drives potential investors to focus on the size (5 billion gallons per year in 2022) of the category as currently defined by statute rather than the uncertain opportunity to cover the expected near-term cellulosic shortfall. Accordingly, a change in the annual rule-making process which provides longer-term guidance to all stakeholders would create a smoother path forward for the fuels market.

Though production pathways for Conventional, Cellulosic and non-Cellulosic Advanced biofuels may be very different, the actual fuel molecules they produce are often identical and the requirements for long-lead investments in retail and distribution infrastructure as well as requirements of the vehicle fleet in order to implement the goals of the RFS remain the same – thus, reductions in the advanced and total renewable requirements will have the unintended consequence of penalizing parties who have made timely investments as envisioned by bi-partisan legislators and the Bush White House in these key areas and rewarding those who have not.

It should also be noted that, while it has been appropriate for EPA to reduce cellulosic volumes, there are now significant commercial scale projects underway, which demonstrate that the RFS has been effective in stimulating investment in cellulosic biofuel technology, and that cellulosic biofuel volume will become available with significantly increasing quantities in the next few years.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

Butamax believes that other parties are better placed to address these questions. Butamax does, however, recognize that unfortunately bad players are part of every industry and that the EPA, appropriate judicial agencies and the Congress should take steps to ensure that entities that violate the law are appropriately punished and that the laws that exist are complied with.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

Prior to 2013, ethanol RIN prices were low because the RVO's were at levels which could be satisfied by blending E10 in an annually rising share of the US gasoline market. Refiners with downstream integration to the terminal rack were usually able to purchase ethanol at prices well below that of wholesale gasoline and use it to profitably blend E10. As E10 is approved for use in all US vehicles, most U.S. markets have come to exclusively feature E10 in all grades from all brands and there effectively is little need to discount E10 in order to drive consumers to purchase it. It is a matter of fact that through 2012, the US market generally over-complied with RFS requirements because blending economics favored ethanol use well beyond obligations. The law as designed allowed for forward looking companies to create scenarios where they could comply with the law and its goals and use the free-market to create revenue generation. It is worth noting that many players in industry were generally supportive of the RFS as a matter of principle and law when it resulted in increased profits. This set of circumstances allowed "RIN-long" refiners (generally, refiners with large marketing businesses) to be able to sell unneeded RINs to "RIN-short" refiners (generally, refiners with little or no marketing businesses) for a relatively low transaction cost. While the ownership of the surplus RINs generated over the past few years is not public, it is well-known that past over-compliance has enabled the banking of a large volume of 2012 RINs which are available to smooth the pathway forward.

As the RVO's have risen each year towards E10 levels, however, the opportunity for RIN-long refiners to generate surplus RINs through E10 blending diminishes and the need for those RINs by RIN-short refiners increases. The expected outcome of this increasing demand is the observed increase in RIN prices, an outcome which has been expected since enactment of EISA – in fact, such increase is one of the key mechanisms that make the RFS work. Economic theory predicts that the price of a RIN should rise to the cost of generating the marginal RIN; in today's markets this could come either from blending biodiesel at levels above the biomass-based diesel RVO or it could come from marketing of higher ethanol blends (e.g. E85) at prices sufficiently discounted to drive required levels of consumer demand. Over the longer term, this naturally creates the market environment necessary for biobutanol or other drop-in biofuels to come into the market.

As Butamax has continually noted, market stability ensured by a stable regulatory environment is required if bringing increased biofuels into the market place is to succeed. Factually, current RIN prices exceed

those which would be predicted by theory, this is not surprising in the short-term as delivery of the required biofuel blends requires independent companies to come to agreement on contracts, make significant capital investments and educate consumers. Getting obligated parties and their business partners to take these steps requires that the situation be recognized and that the stakeholders be convinced that this situation will endure. From there it will require some time to execute the necessary actions. RIN prices will come back down towards theoretical values as supply and demand gradually find their way back into balance. Initial steps in this direction can be observed as some merchant refiners are increasing their marketing businesses, some ethanol producers are taking actions to blend E85 themselves and some retailers are experimenting with E85 pricing to see what is required to generate additional volume – these early actions, multiplied, will begin to rebuild the supply of RINs and work to lower RIN prices. Success of small firms taking these actions can be expected to lead larger firms, including refiners, to follow suit.

Butamax believes that the most cost effective compliance strategy for the U.S. market is to increase market penetration of E85 in regions where it can be supplied most cost effectively, and for the growing volumes of E85 to be accompanied by increased adoption of drop-in biofuels, such as biobutanol, as they become available at scale. Targeted blending and sales of comparatively low volumes of E85 can generate large numbers of RINs very cost effectively in the short term, and in current market conditions this initiative would be handsomely rewarded. Further, drop in biofuels will allow further renewable fuels scale up without substantial infrastructure investment, and with improvements in refining economics. Taken together, these measures enable compliance across the industry to be achieved cost effectively.

Actions taken by the government to artificially limit RIN prices would cause the market to slow or stop activity which has already started to find pathways to increase the supply of RINs. The net result would be to slow down realization of the benefits which Congress sought to achieve through enactment of RFS.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

Increasing RIN prices support production and marketing of renewable fuels and are essential to RFS2 compliance. Increased RIN prices serve to effectively lower the purchase price of a biofuel (effective price is purchase price less the value of the associated RINs). RIN prices will increase until biofuels become cheap enough to enable retail prices of higher ethanol blends to be low enough to attract required levels of consumer demand. Butamax believes that this consumer demand, while slow in coming, is in fact succeeding and should be allowed to continue to grow.

Increased RIN prices also serve to make biobutanol and other drop-in biofuels, which can be blended at higher volumes without need for changes in the vehicle fleet or investment in new infrastructure, more attractive while fulfilling the goals of the RFS. It is important to note that further investment in these new biofuel technologies very much depends on an expectation that RFS will continue to be enforced in a manner which requires blending levels which cannot be met with E10. Current private investments into biofuels which will accomplish these goals were premised on the RFS and companies that were and are complying with the law should not now be punished and have their investments made worthless due to unnecessary changes to the RFS.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs?

No. The market – as is appropriate -- is already moving to address this issue on its own; this year's increase in RIN prices was the catalyst which is only now driving obligated parties who are RIN-short to take action to address this cost to their business. These actions include developing marketing channels which will

enable them to generate more of their RINs internally and restructuring their bulk sales contracts to include delivery of RINs as part of the purchase price. Introducing the prospect of relief at this stage will only motivate delay in compliance activities, including investments in biofuels and, therefore, compromise delivery of Congressional intent.

Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

As RVO's increase annually, all obligated parties will face increasing challenge in satisfying their RFS requirements. This was always entirely predictable from the time the annual schedule of RFS volumes was first published in 2007 and it was always clear that compliance would require extensive, multi-year investment across the full length of the fuels value chain. Different obligated parties have pursued different strategies in planning for compliance. Many biofuels firms have invested many billions of private funds to deliver the volumes of biofuels required by the statute. Relaxation of the statutory requirements will adversely and unfairly penalize those firms who have complied with the law and the intent of the Congress and invested in expectation that the law would be enforced, reward those who have not prepared, and undermine delivery of the environmental and energy security benefits which RFS brings to the United States.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

U.S. gasoline inventory data from EIA this year have generally been at the high end of the 5-year range. Retail gasoline prices this year have generally been in the range seen in recent years and domestic gasoline consumption is very slowly recovering from recession lows. All of these data suggest that the U.S. market continues to be well supplied with gasoline.

Simultaneously, recent U.S. refinery operating rates have also come back strongly from recession lows. U.S. net exports of petroleum products have grown over the past few years and that should be seen as testimony to the high efficiency of U.S. refineries and their ability to take advantage of the advantaged crude and natural gas prices available due to growing North American production. The growth of U.S. exports of refined products reflects the ability of U.S. refiners to profitably use capacity which would otherwise be idled; this also supports an increasing number of high-paying jobs in the refining industry.

This completes the white paper series, but given the breadth of issues raised by the RFS, the committee recognizes that not all concerns have been addressed. For this reason, the committee will also accept stakeholder comments on any aspect of the RFS. Please respond by July 26, 2013, to RFS@mail.house.gov. Should you have any questions, you may contact Majority staff Ben Lieberman at (202) 225-2927, or Minority staff Alexandra Teitz at (202) 225-4409.

July 26, 2013

Comments from cLausten LLC

Submitted by email: rfs@mail.house.gov

Comments to Renewable Fuel Standard Energy Policy White Paper:

Thank you for the opportunity to provide input to the questions posed by the Energy and Commerce Committee pertaining to the Renewable Fuel Standard. The Committee's approach has been thoughtful and measured and is clearly working to generate sound energy policy with respect to biofuels. The comments here below are limited to only a few questions in which I have experience or expertise.

- 1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?*

The primary concern with the RVO setting process pertains to the timeliness of the release of the volumes. The later EPA releases the RVOs, the more uncertainty there is for biofuel production requirements and RIN requirements. EPA must get sign off from OMB and the internal approval process appears to be slowing down the release of the requirements. The volumes established in the statute should perhaps be reviewed and tied to the consumption of petroleum products as opposed to a set amount which may be modified by EPA based on biofuel production. Perhaps a more certain approach to determining the RVO requirements would be to establish a certain percentage of the average amount of transportation fuels consumed in the prior 3 years as per the Energy Information Agency. The percentage increase of biofuels could then increase over time, in a more step wise fashion as opposed to the present "hockey stick" written into statute. The volume increase based in EIA consumption from the average of the previous 3 years may provide more certainty in the market.

The Advanced Biofuel pool could also be created into one "bucket" without separate "buckets" for cellulosic and biomass based diesel fuels. A single Advanced Biofuel category would provide both the biofuel industry and the obligated parties with more flexibility to meet the RVOs.

Lastly, the use of the biofuels should be expanded such that biofuels may be used in any application where petroleum products are used. Such a policy would help further reduce

GHG emissions and provide an alternative to the Commercial and Industrial sectors to reduce GHG emissions in a potentially cost effective manner.

2. *How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?*

With respect to RIN integrity, industry has responded and has put in place third party market driven checks and balances to ensure that RINs are valid. The proposed Quality Assurance Program from EPA would impose burdensome, expensive and unnecessary regulations to ensure the RIN market. Moreover, the challenge with RIN integrity was not in the corn ethanol market and the QAP would impose extreme expenses to implement that QAP with little to no benefit. The marketplace has found a way to ensure that RINs are valid and therefore it is better for EPA to not finalize the QAP or to dramatically modify it to follow that which the industry has implemented.

Thank you again for the opportunity to provide input to the review of the Renewable Fuel Standard.

Respectfully submitted,

Connie Lausten, PE

cLausten LLC



Renewable Fuels Standard Assessment White Paper The Committee on Energy and Commerce

CountryMark is Indiana's only American-owned oil exploration, production, refining and marketing company and is recognized as a leader in the distribution of biodiesel and ethanol. The CountryMark refinery uses 100% American crude oil sourced from the Illinois Basin located in Illinois, southwest Indiana, and western Kentucky. Our refinery processes 28,000 barrels of crude per day which represents only 0.15% of the entire domestic refining industry. Even though CountryMark is small from a refining industry perspective, we have a large impact on the State of Indiana. CountryMark supplies over 75% of the agricultural market fuels and 50% of school district fuels in the state.

CountryMark is owned and controlled by its member cooperatives that are in turn owned and controlled by individual farmers within our trade territory. Over 100,000 farmers in Indiana, Michigan, and Ohio participate in these local cooperatives who own CountryMark. CountryMark's Board of Directors is comprised of farmers. Each year, profits are distributed back to these farmers via the cooperative system. These distributions remain in rural communities where the dollars support local economies.

CountryMark appreciates the opportunity to comment on the Renewable Fuels Standard (RFS) Assessment White Paper #5: *Renewable Fuel Standard Assessment White Paper Implementation Issues* and provide valuable information as the Committee on Energy and Commerce deliberates changes to the RFS.

On the following pages you will find input on many of the questions that were posed in the RFS Assessment White Paper. For continuity, the question numbers are consistent with those in the solicitation. CountryMark has decided to only address questions that are related to our business.

1.) Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

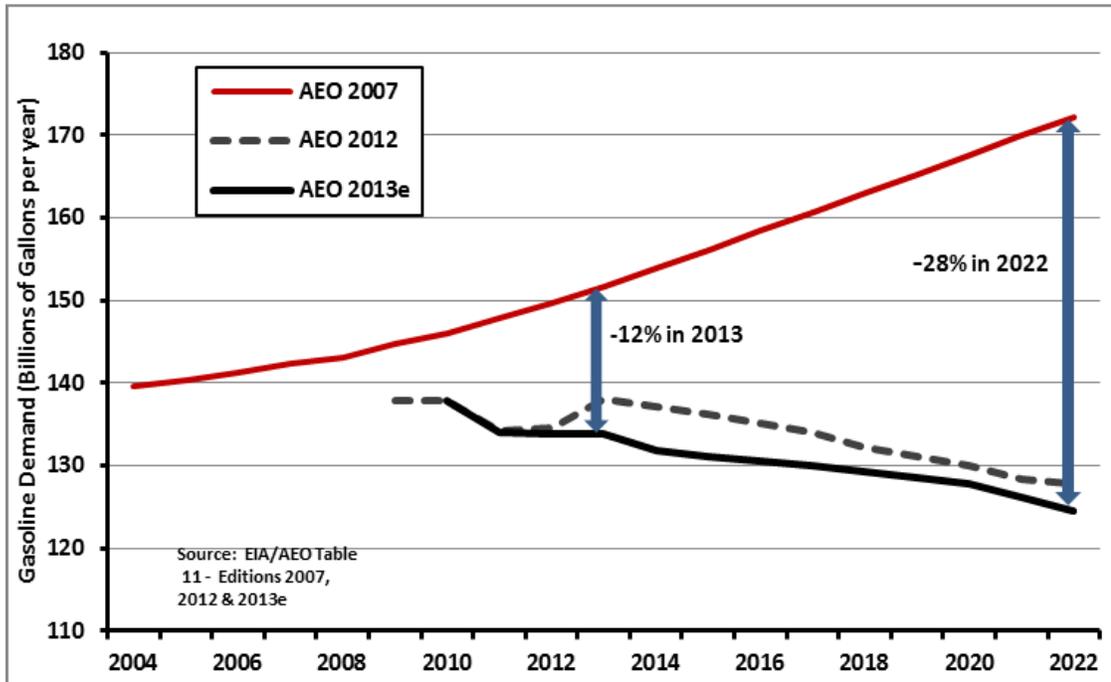
CountryMark believes that statutory changes are required for the optimum solution to occur in the transportation fuels market place. We believe that the RFS should be repealed and all producers compete in an open market environment. At this point biofuels blending will occur based on customer demand and economic justification of the business proposition, principles that this country were found upon.

We see value in blending biofuels with our manufactured fuels, but believe that we should be able to determine what the blending ratio is based on our local economics. CountryMark was blending ethanol prior to EPA requirements because our customers supported the practice and because blending was an economically justifiable business proposition.

If RFS cannot be repealed, enabling the free market to determine blending ratios then we offer the following comments:

An example of EPA's inability to set achievable targets for biofuel blending is the blend wall that obligated parties are currently struggling to meet. Based on current forecasting, 2014 targets cannot be met because there will not be enough Renewable Identification Numbers (RINs) because biofuel blending will be limited by the 10% blend wall of ethanol into gasoline.

EPA has been setting RVO targets based on old data, when the RFS was originally implemented. Below is graph of 2007 projected gasoline and actual gasoline demand.

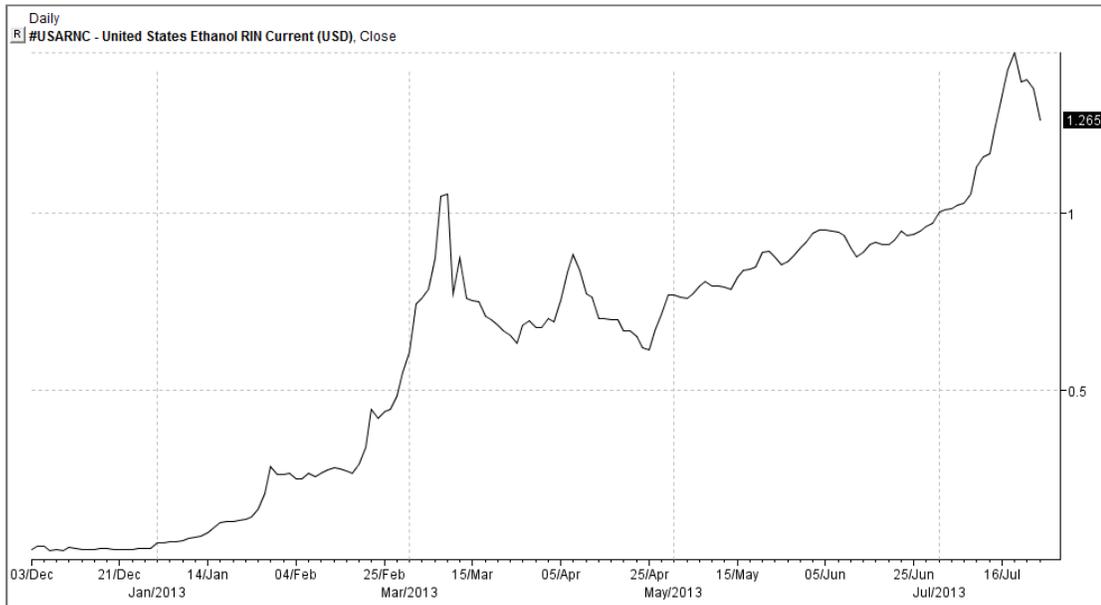


Establishing achievable RVO's can be improved by incorporating the following recommendations into the process:

- EPA should use the most current Energy Information Agency (EIA) data to set achievable biofuels blending targets. Existing practice has established the "blend wall" that could have been avoided if EPA continued to update the RVO based on current fuels consumption.
- EPA should work with all parties involved with fuels production and consumption. Review of current targets suggest that EPA only consults with the biofuels industry about proposed targets and not auto manufactures about vehicle capability or fuels producers about the logistics of transporting, blending, and selling fuels.

In addition to the information provided above, EPA should be required to follow statutory process in releasing volume requirements under RFS. 2013 proposed volume requirements were not released until January 31, 2013 (two months after the date to publish finalized volume requirements). The volume requirements for 2013 have yet to be finalized. The deadline to finalize biofuels volume requirements is November 30th of the preceding year. EPA was also one month late in finalizing the 2012 volume requirements.

Releasing proposed volumes two months after the deadline to release the finalized version does not provide obligated parties enough of time to develop and execute compliance strategies. Reducing available time to plan and execute cost companies real money to achieve compliance based on RIN pricing throughout the year (see the chart below). CountryMark could have purchased RINs in January at less than \$0.10/RIN to address our shortfall instead of later in the year when the RIN price was far more expensive. The lack of certainty of RVO obligation combined with the elevated RIN price will cost CountryMark an additional cost in excess of \$5 million. This takes away money from our farmer owners – money that could have been distributed into rural areas through patronage refunds.



- 2.) *Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit’s decision to vacate EPA’s 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?*

The cellulosic biofuels provisions in RFS are not working well for obligated parties. The best example of this was illustrated in January 2013 when the courts determined that obligated parties could not be held responsible to blend fuels that were not produced. Less than a week after the court issued its ruling, EPA published the 2013 cellulosic requirement at a level greater than 2011 or 2012.

As a result of API’s lawsuit against EPA, the court found that EPA did not make a “neutral” assessment of the amount of cellulosic biofuels that would be produced during the year. Instead of waiving obligated parties requirement to blend fuels that were not produced, EPA collected waiver credits instead. Credits collected by EPA have not been returned to obligated parties yet, despite the court’s ruling.

During this same case, API recommended that EPA use EIA data to set obligated parties blending requirements. The court denied this request, permitting EPA to continue setting blend requirements autonomously. We believe that EPA's setting targets without industry involvement or independent scientific data to support the requirements is the reason for all of the controversy around RFS. If EPA changed blend targets by using EIA's data, the "blend-wall" would only be a theoretic discussion and not an expensive problem.

Every year EPA takes an idealistic position that biofuel capacity will come on line to meet obligations. When capacity does not materialize, obligated parties are fined for non-compliance. EPA should change their policy of establishing cellulosic mandates until production has been on line for a reasonable period of time to demonstrate reliable operation of the facility. Only after reliable operation of a facility has been demonstrated should EPA establish blending requirements.

The first commercial cellulosic batch of fuel was produced in 2012 (21,000 gallons). Most of this volume was exported and not able to be used for RFS compliance. The producer subsequently went out of business because the process was not sustainable. Through the first five months of 2013, less than 5,000 gallons of cellulosic fuels have been produced. The required technology and manufacturing capability are not economically viable yet and cannot be depended upon to meet fuels obligations.

CountryMark has had to purchase waiver credits to comply with the cellulosic obligation which arbitrarily raises our operating costs. Since cellulosic biofuels production is not available on the market, this is essentially a tax on obligated parties like CountryMark. We have no option to meet compliance other than purchasing waiver credits from EPA. We do not believe that this practice was intended when the RFS2 was signed into law in 2007.

The EPA should be required to reduce the total and advanced biofuel requirement commensurate with the reduction in cellulosic biofuel requirement. The cellulosic requirement is nested within the advanced biofuel obligation. In other words, blending cellulosic biofuel also meets the requirement for advanced biofuel. Since cellulosic biofuels are not commercially available, obligated parties must buy waiver credits which CANNOT be used for advanced biofuel compliance. Therefore, obligated parties must blend additional biodiesel or purchase advanced RINs in addition to waiver credits to be fully in compliance. This results in an obligated party essentially paying twice to meet the same requirement.

Given all of this information, EPA has not established a biofuel standard-setting process that is achievable. Cellulosic blends are established based on idealistic production that has not materialized. Advanced and renewable targets are not reduced properly to account for the lack of cellulosic biofuels or the ethanol 10% blend wall. This raises costs on obligated parties like CountryMark. These increased costs are not economically sustainable so they are either passed onto the consumer or refiners such as CountryMark could go out of business.

- 3.) *How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?*

The RFS should be eliminated, permitting the free market to determine blending of biofuels with hydrocarbon based fuels. Through eliminating RFS, RIN enforcement or a credit trading program will not be required. This will enable EPA to focus their resources on more important issues than compliance verification and RIN fraud. Obligated parties will also be able to focus their limited resources on improving their core business instead of RFS compliance issues and RIN verification. Without RFS requiring a RIN program, a third party quality assurance program will not be required. This quality assurance program is another cost of compliance that is passed on to the consumer through higher fuel prices.

This is especially important to CountryMark because we have limited staffing compared to large oil companies. We will be able to utilize all of the time spent on RFS compliance on more important activities to strengthen our business instead of being focused on compliance and the risk of purchasing fraudulent RINs. Eliminating RFS will reduce our cost to produce and supply fuels to our markets, which will benefit our customers through lower fuel costs.

In the past two years significant resources have been consumed because several companies engaged in the sale of fraudulent RINs. During the fraudulent RINs event, EPA abdicated any responsibility in the process. EPA pushed all of the responsibility onto the obligated parties to ensure that valid RINs were being purchased. EPA's response to this action was to fine companies that unknowingly purchased fraudulent RINs and then require them to purchase valid RINs for compliance. Estimated cost was \$200 million, which impacts investors and consumers. Even though CountryMark was not directly affected by this RIN fraud incident, we have spent additional time and money to ensure RIN integrity. In addition, our cost to purchase RINs to meet our obligation has increased because of 3rd party quality control required to ensure RIN integrity.

EPA created this program and administers compliance of the program. EPA also controls which companies are granted access. If the RFS is not eliminated, EPA should be involved with validating which companies are producing RINs prior to allowing access to the EPA's RIN trading system.

Producers of biofuels should have the requirement to validate that the production of their fuels meets the RFS requirements – not the obligated parties. This should be part of their cost of doing business and participating in the market. Once biofuel producers are granted access into the EPA's trading system, obligated parties should be protected from additional penalties or duplicate requirements to purchase additional RINs.

Under the existing structure, obligated parties carry all of the risk with no benefit for the additional exposure. This proposed structure shares the risk of fraudulent RINs with all of the parties participating in the market, not disproportionately on the obligated parties.

4.) *What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?*

We believe that several factors in the market place contributed to the rise in RIN prices in 2013. These items can be summarized below:

- Ethanol industry production capacity has rationalized due to several factors, low margin, high corn prices caused by drought, and lower demand for ethanol. As a result of capacity rationalization, 13.9 billion gallons of ethanol production capacity will be available in 2013 (per EIA data). With a compliance requirement of 13.8 billion gallons of ethanol in 2013 (D6 RINs), capacity is available to meet EPA's requirements. However, due to decreasing gasoline demand and the practical limit of 10% ethanol in a blend, there is only room in the market to absorb approximately 13 billion gallons of ethanol. The industry will under produce the requirement. Therefore, in 2013, all excess RINs will be used up and with an increasing mandate, obligated parties will not be able to catch up on RIN requirements.
- EPA has yet to use their power to reduce the total renewable fuels mandate. Therefore, it is projected that EPA will set the 2014 ethanol blending requirement at 14.4 billion gallons – a shortage of about 1 billion gallons compared to practical demand. With this view of the future, obligated parties are purchasing RINs to fill potential future compliance gaps.
- Based on the expected availability of RINs (below), industry is expecting that compliance will not be possible without a change to the structure to the program. Referring to EPA's past performance with obligated parties on the inability to meet the cellulosic mandate, the obligated parties are purchasing RINs to minimize potential penalties from non-compliance.
- Under short supply conditions, the price of renewable RIN (D6) will increase to parity with Biodiesel (D4) or Advanced (D5) RIN because the Biodiesel and Advanced RINs can be used to meet renewable obligations.
- In summary, we believe that the structure of RFS2 is causing the high RIN pricing because the program did not consider decreasing gasoline demand, drought, or other significant factors when the program was approved.

D6 Renewable Fuel RIN Balance		
		Billion Gallons/RINs
2011	RIN Carryover to 2012	2.6
2012	RFS2 Mandate for D6 RINs	13.2
	Adjusted Mandate for less gasoline consumption	13.0
	U.S. Ethanol Consumption	12.9
	Less imported Sugarcane Ethanol (D5- Adv. Biofuel)	0.5
	Total Consumption of D6 Ethanol	12.4
	D6 RIN Deficit for 2012	-0.6
	RIN Carryover to 2013	2.0
2013	RFS2 Mandate for D6 RINs	13.8
Forecast	U.S. Ethanol Consumption	13.0
	Less imported Sugarcane Ethanol (D5- Adv. Biofuel)	0.8
	Total Consumption of D6 Ethanol	12.2
	D6 RIN Deficit for 2013	-1.6
	RIN Carryover to 2014	0.4
2014	RFS2 Mandate for D6 RINs	14.4
Forecast	U.S. Ethanol Consumption	13.3
	Less imported Sugarcane Ethanol (D5- Adv. Biofuel)	1.0
	Total Consumption of D6 Ethanol	12.3
	D6 RIN Deficit for 2014	-2.1
	2014 Year-end RIN DEFICIT	-1.7

For CountryMark, increased RIN price significantly increased our cost of compliance. Even though we blend our gasoline with 10% ethanol and blend all of our diesel fuel with 2% biodiesel, we will fall short of our obligation in 2013 and 2014. This shortfall combined with high RIN costs will increase our operating costs in excess of \$5 million in 2013.

With increasing mandates in 2014, this compliance cost will increase further. Even CountryMark, a leader in ethanol and biodiesel blending, will be adversely affected with higher compliance costs due to the current RFS. Future compliance costs can be avoided by eliminating the RFS and permitting the market to determine biofuels blending. As the cost of renewable fuels increases or decreases, obligated parties will purchase and blend to optimize fuel offerings to their customers.

- 5.) *Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?*

CountryMark does not believe that high RIN prices will significantly affect the production and marketing of renewable fuels. Since the only method for getting renewable fuels into the marketplace is by blending with gasoline or diesel fuel, renewable fuels production will only increase if demand for transportation fuels increase.

High RIN costs increase the cost of compliance for obligated parties. At current prices, this significant compliance cost could cause some refiners to curtail production or shutdown in total. The result will be less fossil fuel to blend renewables into. In the long run, this would adversely affect renewable fuel production volumes.

- 6.) *Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?*

The RFS in its current form should be repealed, enabling all producers to compete equally in the fuels market. This year and potentially next year obligated parties will incur significant expenses through RIN purchases to meet compliance requirements. If RFS cannot be repealed, we suggest two alternatives to the program which will improve obligated parties opportunity to comply with regulation.

The first recommendation is to reinstate the small refiner's exemption. This change will enable small refiners to generate RINs that can be used by larger companies to meet compliance. More RINs will be available on the market, reducing the RIN price and cost of compliance. DOE estimates that small refiners contribute less than 12% of the gasoline supply in the United States. When small refiners are not obligated parties, they will continue to blend adequate volumes of biofuels with their products because this practice is economically viable.

The second recommendation is to eliminate all RIN subcategories and make all RINs equally valid to meet compliance. Eliminating the subcategories will enable the free market to determine which biofuels are the most desirable to achieve compliance requirements. This proposed change will eliminate the struggle that obligated parties face to meet individual blending mandates within the current structure of RFS. It will utilize resources that are more available to achieve RFS compliance such as proximity to biodiesel or ethanol production.

CountryMark's cellulosic RVO for 2013 is estimated at 32,000 gallons and renewable RVO is estimated at 34,000,000 gallons. Securing and blending 32,000 gallons of cellulosic fuel in our overall product balance is an added cost and consumes more resources than this type of activity should require. In this case, blending an additional 32,000 gallons of another biofuel would be more efficient for our company than all of the effort required to blend the cellulosic fuel.

CountryMark is considered a leader in blending renewable fuels. We blend 10% ethanol in our gasoline and about 2% biodiesel equivalent in all of our diesel fuel. We do this partly for economics but also to meet our compliance requirements. Making compliance obligations different based on the ability to blend renewable fuels would distort the market.

As a small refiner, CountryMark's operating costs are greater on a per gallon basis because we have less production in which to spread our operating costs. If others in the industry do not have the same compliance obligation, their cost per barrel would decrease and they would become more competitive which could result in CountryMark becoming the marginal producer. This could drive CountryMark out of business and the investment of 100,000 farmers would be lost. By setting different obligations, the government would be picking winners and losers in the marketplace.

7.) *Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?*

Refiner's incentive to increase gasoline and diesel exports continues to grow as compliance costs continue to grow through higher RIN prices. This is one of the unintended consequences of the RFS program because each gallon that is exported is exempt from blending requirements.

RINs recently sold at a unit price of approximately \$1.45. This is 14.5 cents per gallon incentive for water born refiners to export fuel to Latin America, South America, Africa, and the far-east. One major refiner recently secured transportation for 77 tankers for international shipments of light products. This single transaction surpassed all of the total ship bookings for July 2012 for the same tanker company.

Low American crude oil prices, as a result of the shale oil boom, and the potential to export finished products internationally and avoid RFS compliance costs is reducing gasoline and diesel fuels domestically and increasing prices to consumers. Refiners are processing more crude oil than any other time since 2005; even though demand is 13% lower than 2005.

Between the higher compliance cost and lower product availability, prices for Americans to fuel their vehicles will be higher. Supporters of biofuels blending argue that RIN price is not a significant driver in fuel pricing; but this is only part of the reason for higher fuel prices. Finished product exports incentivized through high RIN prices also support higher fuel prices.

As refining margins change throughout the year from increased crude oil prices or decreased product prices, producers will reach a point where high RIN pricing provides incentive to reduce overall production. At this point, fuel supply decreases and product price increases for the American consumer again.

Since CountryMark does not have the ability to economically export products, we cannot reduce our obligation through this method. If the RFS is not changed, in future years, the compliance obligation will increase disproportionately greater for those refiners that cannot export product – they will be left to blend all of the required biofuel. Once again, the RFS will pick winners and losers where the losers could go out of business due to non-competitive operating costs. CountryMark being a small refiner with limited export ability would be most vulnerable to this scenario.

Thank you for your consideration of these comments. As Congress moves to address the Renewable Fuels Standard and the significant challenges that it presents in the current transportation fuels market, CountryMark will be an enthusiastic and valuable participant in your deliberations.

For further information or any questions, please contact Matt Smorch, Vice President – Strategy, Countrymark Cooperative Holding Corporation, 225. S. East Street Suite 144, Indianapolis, IN 46022 (office: 317-238-8228; email: matt.smorch@CountryMark.com).



July 26, 2013

VIA ELECTRONIC MAIL
rfs@mail.house.gov

The Honorable Fred Upton
Chairman
Energy and Commerce Committee
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, DC 20515

The Honorable Henry A. Waxman
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Upton and Ranking Member Waxman:

On behalf of the DuPont Company, I am pleased to offer the following responses to stakeholder questions that accompanied the House Energy and Commerce Committee's white paper on Implementation Issues released on July 11, 2013. The white paper and stakeholder questions raise key issues and DuPont is well positioned to provide constructive feedback. I want to thank you for giving all stakeholders the opportunity to comment on the white paper series over the past few months in an open and objective manner.

DuPont is an industry leader in providing advantaged products for agricultural energy crops, feedstock processing, animal nutrition, and biofuels. Our three-part approach to biofuels includes: (1) improving existing ethanol production through differentiated agriculture seed products, crop protection chemicals, as well as enzymes and other processing aids; (2) developing and supplying new technologies to allow conversion of cellulose to ethanol; and (3) developing and supplying next generation biofuels with improved performance, such as biobutanol.

DuPont has been a global leader in greenhouse gas emission reduction for many years, having begun systematic reduction of emissions from our operations almost two

decades ago. Between 1990 and 2004 DuPont reduced our global greenhouse gas emissions by more than 70%. By 2015 we will further reduce our greenhouse gas emissions at least 15% from a revised base year of 2004 that reflects portfolio changes. We believe biofuels have a critical role to play in the development of alternatives for the transportation fuels sector, in ways that are renewable, cost-effective, and commercially viable in multiple geographies with minimal environmental footprints.

Questions for Stakeholder Comment

1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

Response:

The EPA's annual renewable fuel volume obligations (RVO)-setting process generally works well. It is important to recognize that because it is a forward projection of a relatively complex market that there are inherent uncertainties. There are uncertainties with both fuel demand and production rates for some renewable fuels that are just beginning to enter the market, one of the reasons that Congress granted the Agency a variety of tools to manage variability and uncertainty. The agency has been tardy in issuing the annual volumes, creating some uncertainty for obligated parties. Every year, EPA is required to set the annual standards under the Renewable Fuel Standard program for the following year based on gasoline and diesel projections from the Energy Information Administration (EIA). EPA is also required to set the cellulosic biofuel standard each year based on the volume projected to be available during the following year, using EIA projections and assessments of production capability from industry. EPA also takes into account the projected gasoline and diesel consumption. EPA is also permitted to waive any part of the RFS if the Administrator determines the program is causing "severe harm" to the economy or environment, or if there is "inadequate domestic supply." States and parties subject to RFS requirements may also petition the Administrator to consider waiving the RFS, in whole or in part, based on these criteria.

Given the criteria and data that EPA considers in setting the annual RVO's and the regulatory flexibility, EPA's process is sound. It could be improved if EPA finalized the annual volumes in a more timely manner.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

Response:

It should first be noted that when Congress established the schedule for cellulosic and other advanced renewable fuels there were no such products in the market, and so the schedule reflected a Congressional best guess as to the rate of development of a new fuels sector combined with a certain level of ambition to incent private sector investment. As the industry launches its first major wave of commercial development, with multiple plants starting up and under construction, it has become clear that the schedule that Congress created was overly ambitious not in its scale but in its timing, essentially setting a start date that is about five years earlier than was practical given the time needed for commercialization. Recognizing its ambition, Congress provided the Agency with the flexibility to adjust the schedule for cellulosic and other advanced renewable fuels on an annual basis reflecting the actual rate of the development of production. EPA has exercised that authority.

The structure Congress laid out, an ambitious goal with flexibility tools, was the most appropriate approach in the face of the inherent uncertainty of a new and rapidly developing fuels supply. This is perhaps the most difficult element of establishing the annual RVO as it is a forward projection in a rapidly developing industry. It is akin to asking an entity in the first six months of the introduction of the first iPhone to estimate the subsequent year's sales demand. Rapidly developing markets tend to be non-linear and therefore difficult to estimate.

EPA has modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, and consistent with the D.C. Circuit's opinion issued in January 2013. The D.C. Circuit ruled in January 2013 that EPA's action to deliberately set cellulosic mandates somewhat higher than EIA's production estimates, in order to err on the side of promoting development of cellulosic fuels, was not permissible under the law. The Court stated that although Congressional intent was to promote development of renewable fuels, the portion of the law specifying that EPA could adjust the cellulosic volumes was put in place not to promote the industry, but instead to correct for anticipated production volumes.

The RFS2 also gave EPA the authority to reduce the annual statutory cellulosic biofuel requirement to the projected volume available during the calendar year. EPA has done this every year since the RFS2 was promulgated. In projecting these production rates there has been inevitable uncertainty. We think that the criticism of EPA in this regard has been overblown. Their production estimates have been within a couple of percentages of actual production each year. In 2012, for instance, EPA reduced the cellulosic biofuel requirement from the statutory level of 500 million gallons to just 10.45 million gallons, and actual production was below that figure. This means that EPA's estimate was off by less than 2%.

EPA should not be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume. Cellulosic and other advanced biofuels production are on different schedules that are not inherently linked, and there is no reason to link EPA's projections. The D.C. Circuit addressed this question in its

January 2013 opinion. The court stated that while the law allowed EPA to reduce the other fuel volumes accordingly, it did not require such action, and that EPA was within its authority to not do so. The court went on to cite that EPA's decision was supported by the available data and EPA was within its authority to determine that other advanced biofuels (sugarcane ethanol, biomass-derived diesel) could make up the difference caused by the cellulosic shortfall.

To link these two unrelated fuel pools would be to artificially slow the development of advanced biofuels. For example, in addition to cellulosic ethanol DuPont's JV Butamax is commercializing the advanced renewable fuel biobutanol, a high performance fuel similar to gasoline. Its pace of development is independent of the development pace of cellulosic ethanol. Were the cellulosic and other advanced schedule waivers to be hard linked it would inevitably serve to artificially slow the development of one of those fuels.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

Response:

While it is unfortunate that fraud has been present in the biofuels RINs market, it has been a small component of the overall RIN pool. While we believe that RIN compliance, like any other regulatory compliance, should be backed by robust private sector due diligence, we recognize that some obligated parties have succumbed to this fraud. We believe that EPA has responded appropriately to the fraudulent activity in proposing the voluntary third-party quality assurance program and it should address the concerns of market participants. The proposed provisions provide assurances to obligated parties both prior to RIN purchase and after the transaction is complete. The program will allow obligated parties to use third party auditors to verify that RINs have been validly generated. After the RINS are purchased, "the proposed program would provide an affirmative defense against liability for civil violations under certain conditions for the transfer or use of invalidly generated RINs, and would specify both the conditions under which invalid RINs must be replaced with valid RINs, and by whom."

Perhaps the most effective way to avoid future mischief in RINs would be to bring them into a more transparent trading platform that inherently imposes rigorous standards.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

Response:

The rise in RIN prices in essence reflects a business strategy choice by obligated parties. With a clear line of sight to rising RVOs and declining national fuel consumption, they had full knowledge that absent more RINs entering the market they would see rising RIN prices. Obligated parties have a variety of means available to bring more RINs into the market and therefore lower RIN prices. For refiners who do not blend, they could have ensured that their contracts with blenders provided for risk management against higher RIN prices (e.g. right of first refusal on RINs etc.). Any obligated party could also choose to finance E-15 and/or E-85 fueling infrastructure at retail stations to increase sales of higher blend fuels, thereby creating additional RINs.

Rather, obligated parties who have excess RINs have elected to hold them in anticipation of future compliance obligations rather than generate more RINs and that has led to obligated parties without RINs chasing a shrinking supply, raising costs. It is worth noting that for every obligated party that is paying more for RINs there is another obligated party being enriched by a similar amount. These are profits they are happy to quietly pocket while decrying high RIN prices.

Specific data on the factors that have led to the price spike in RIN prices beginning in mid-March is not available to the public. Information regarding RIN prices, the daily or weekly volume of RIN transactions, the identity of parties buying and selling RINs, and other key information is not available to the public. Only EPA has visibility on this information, and the RIN market remains entirely opaque to the public. Daily RIN prices are reported by energy trade publications such as OPIS, Argus Media, and Platts. The methodology used by these publications for reporting RIN prices isn't always clear, and the volume of trades represented by the daily quoted price is not reported.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

Response:

Yes, higher RIN prices are likely to expand the production and marketing of renewable fuels. The higher the RIN price, the lower the effective biofuel price thereby encouraging higher ethanol blends. In addition, because of the large number of RINs generated by blending E-85 we would expect the profit motive to result in expanded E-85 blending and sales, and we are in fact seeing this.

In general, ethanol blending should lower retail gasoline prices due to the lower wholesale price of ethanol as compared to gasoline, taking into account energy density. Energy economist and analyst Phillip Verleger has examined the potential market share for renewable fuel and prices. According to his calculations if E-85 were to attain a 5% market share, every gallon of E-85 sold would save the consumer \$0.57. In addition, if fuel blenders chose to comply with the RFS through E-85, it would be expected to further reduce gasoline prices because of the large number of RINs. Thus if fuel

blenders perpetuate the blend wall by not installing the infrastructure for higher blends, the effect is higher fuel prices for consumers, the benefit of which, we note, accrues to the obligated parties.

In addition, as Butamax points out in their comments, higher RIN prices will ultimately promote advanced biofuels such as biobutanol that can be blended at higher volumes than ethanol without changes to the vehicle fleet.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

Response:

No, changes should not be made for obligated parties. Any change in requirements for obligated parties to generate RINs would undermine the intent of the RFS. In creating the RFS, Congress set forth a long term policy signal that was intended to induce extensive and sustained private sector investment in developing, demonstrating and commercializing advanced renewable fuels. DuPont and other companies have responded with multi-year development programs that in our case have involved investing some \$500 million dollars and extensive internal technical capacity, significant capital facility investments to date for technology development and demonstration, and we are now making major capital investments for first commercial scale production facilities. There are a number of other companies similarly situated. We have done so under a policy framework that set a fifteen year plan and provided the kind of line of sight that is important for investment confidence. We are only five years into that fifteen year policy. To change the RFS now would create tremendous uncertainty and potentially undermine the anticipated return on these investments for our shareholders.

It would also serve to take the U.S. out of its current front runner position in fuels innovation, and possibly jeopardize its front runner position in biotechnology development. Under the RFS, we are seeing investments flow into the U.S. from Swiss, Danish, Dutch and Spanish companies in the renewable fuels sector. Were the RFS changed we would likely see those investments shift elsewhere, such as to China or Brazil, which are also pursuing these technologies.

Nothing prevents obligated parties who do not currently blend or have contractual relationships with blenders that provide them access to RINs from doing so. In fact we see refiners who previously did not blend beginning to do so.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

Response:

EIA data does not indicate that refiners are making less gasoline. For 2013, gasoline inventories have been relatively high and prices are relatively stable. We have also seen an increase in petroleum exports as a result of increased crude and abundant natural gas. We note that multiple news reports show the U.S. refining industry to be healthy and profitable, and investing and growing in the U.S. even as the RFS grows.

Thank you for the opportunity to comment on the RFS and the Implementation Issues white paper. Please contact me at Jan.Koninckx@dupont.com if you have any questions about the responses provided.

Sincerely,

Jan Koninckx
DuPont Industrial Biosciences



July 24, 2013

Responses to Stakeholder questions for 5th Energy and Commerce Committee's whitepaper submitted by Ergon Inc

1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

There are serious concerns with several areas of the EPA's RVO-setting process. First, the EPA failed to give adequate attention to basic, but necessary functions of supply and demand when establishing RVOs. Such failure has the entire petroleum industry facing a blend wall with ethanol and potential shortages of supply in the advanced biofuels categories. The EPA must realize that mandated biofuel consumption, without infrastructure and market considerations, will never work. A clear example of this oversight is that in 2010, when the RFS2 was enacted, gasoline demand was 9,393,000 barrels per day (BPD) and will need to be 9,785,000 BPD in 2014 to absorb mandated ethanol. Currently gasoline demand is 8,729,000 BPD and predicted to fall to 8,660,000 BPD in 2014 according to the Energy Information Agency. The best solution would be to do away with the current RFS2 structure and simply mandate the addition of 10% ethanol in every gallon of gasoline produced and 5% Biodiesel in every gallon of diesel produced. Gasoline blend requirements should be separated from diesel requirements Or, at least adjust mandated volumes accordingly and separately. Since these concerns have been clearly stated to the EPA with supporting documentation, yet no adjustments have been made, it is absolutely necessary for statutory changes. The current RFS is written as if you can add ethanol to diesel, which you absolutely cannot.

Another concern is the timing of EPA's published Renewable Fuel Volume Obligations. Congress mandated that EPA publish RVOs by November 30 of the preceding year. As of July 17, 2013 no RVOs have been finalized. With increases in RIN values exceeding 2000% since late 2012, RINs have become a commodity with incredible volatility. For many smaller, privately held refineries, this makes financial planning and forecasting almost impossible. Again, since the EPA has failed to hear the industries concerns, statutory action is necessary to force EPA's adherence to Congress's mandate.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

Cellulosic biofuel is currently mandated to reach 16 billion gallons per year by 2022. By vacating the cellulosic requirement for 2012 and 2013, the DC Circuit gave adequate consideration to the supply of this biofuel. Monitoring must continue each year to assure the mandate does not exceed supply. Also, the EPA must consider the market demand, especially if the cellulosic biofuel is ethanol. The demand is set by the market, not by the mandate. Mandated volumes should be set based on what the market will absorb and what supply of biofuel is available. In addition, any reduction in Cellulosic biofuel volumes should result in a corresponding reduction in Advanced biofuel. Failure to do so only encourages additional imported ethanol causing further problems with the ethanol blend wall.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?

We have policies in place to purchase direct from blenders that either we know or that our consultant (Weaver) recommends. Weaver checks them out pretty closely for compliance. If we purchase RINs from a blender we don't know, we ask Weaver to search the source of that RIN back to the biofuel producer. We try not to buy any third or fourth party RINs. I would suggest not responding to this question.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

The reason RIN values have seen such dramatic increases over the past 9 months is that all obligated parties, blenders and commodity traders recognized that the ethanol blend wall is here and the inventory of RINs is insufficient to meet demand in 2014. For obligated parties, RIN purchases are primarily to meet the misguided EPA mandate. For non-obligated blenders and traders, RIN purchases are purely speculative positions for profit due to the forthcoming blend wall.

Future increases in RFS compliance costs can be avoided by statutory actions to align RVOs with fuel demand. It is a fact that the market can not yet accept ethanol blend rates higher than 10%. Although EPA has approved E-15 blends in 2001 and later vehicles, AAA estimates only 5% of vehicle warranties cover use of E-15 vehicles. In addition, there are more than 90 state laws and regulations currently limiting sales of E15 in 36 states. Some state restrictions that are in conflict include 10% ethanol blend cap, state biofuels mandates and technical fuel specification standards. Independent convenience store owners/operators cannot afford the huge liability for potential vehicle failure and warranty cancellations – therefore most will not touch E-15.

Before answering the last portion of this question, one must realize the current RFS2 is anything but a market-based program. Careful consideration must be given to both volume and type of biofuels the market can bear and are available.

We should also point out to the Energy and Commerce Committee that failure to address this problem immediately could have serious implications for motor fuel availability in the US. To avoid RIN obligations, refiners can export gasoline and distillates; likewise, importers could redirect fuels to destinations outside the US to avoid the RIN obligation.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

Increased RIN prices could positively affect the production of renewable fuels. The higher the cost of RINs, the more apt obligated parties are to blend to the limits of the market. It however, does not change what can be sold into the market. Once the market is to the blend saturation point and the inventory of RINs is depleted – refineries will have to shut down or EPA will have to generate and sell RINs as an added tax on refineries. The committee should keep in mind that any increased cost will find its way to the consumer.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

There should absolutely be relief for small refiners that produce small volumes of fuels and cannot generate sufficient RINS to satisfy their RVO. The definition of a small refiner in the RFS2 mentions “under 75,000 barrels per day (BPD) and under 1,500 employees”. That definition should be to the “small volume refiner” definition, used in the TIER III proposed regs, to read “less than 75,000 BPD” without regard for employee count. The current definition of small refiner under RFS2 puts unnecessary burden on a small refiner that has related businesses outside the refining sector which causes an employee count above 1,500 yet has refining capacity less than 75,000 BPD.

In addition, there are some refiners that may produce a disproportionate volume of diesel versus gasoline. These refiners are unable to blend enough ethanol because the RVO calculation for Total Renewables is applied to total fuels produced ($RFS2 \text{ CATEGORY} \% \times \text{TOTAL PRODUCTION} = \text{RENEWABLE VOLUME OBLIGATION}$). It does not seem prudent to use different compliance requirements for blenders and non-blending obligated parties. The most practical way to resolve this issue is to mandate 10% ethanol in all gallons of gasoline and 5% biodiesel in all diesel fuel produced. Or, align the mandate to accomplish the same result. The justification for this adjustment to the RFS is that it no

longer places an unachievable burden on refiners by making them purchase RINs because the market will not allow them to blend volumes required in the RFS2.

Aligning mandated volumes with the market will not create a market distortion. A huge market distortion exists currently because non-obligated parties are able to generate a RIN through blending, then turn and compete at wholesale and retail levels with obligated parties by taking advantage of the approximate \$.13 per gallon advantage. (\$1.30 ethanol RIN X 10% blend).

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

The way the RFS2 is structured, with no regard to fuel supply and demand or the availability of biofuels, it is a huge cost to all obligated parties. When the RIN savings are added to the arbitrage, it can encourage increased exports. Also, any refiner that can convert fuel into another non-obligated product, will do so. At worst case, if RINs are too expensive for some obligated parties or simply not available, they will either reduce fuel production or close the refinery. All of these scenarios reduce US fuel supply and can increase fuel prices. The best solution, as mentioned previously, is to simply mandate the addition of 10% ethanol to every gallon of gasoline produced and 5% biodiesel to every gallon of diesel produced. If this can't be achieved, the mandate should align supply of mandated biofuels to demand of fuels.

Respectfully submitted



H Don Davis

President Refining and Marketing

Ergon Inc

July 26, 2013

The Honorable Fred Upton
Chairman
House Energy and Commerce Committee
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member
House Energy and Commerce Committee
Washington, DC 20515

Dear Chairman Upton and Ranking Member Waxman:

Thank you for the opportunity to respond to your query for additional information regarding EPA's implementation of the Renewable Fuel Standard.

Since its expansion in 2007, by ensuring competition in the marketplace and providing a stable policy environment with a 15-year time horizon, the RFS has driven billions of dollars of investment in the sector, and renewable fuel already makes up about 10% of our fuel supply. In response to the statute, and the EPA regulations finalized in 2010, the industry has also supported jobs for over 365,000 Americans, reduced the need for imported oil by 462 million barrels, cut greenhouse gas emissions by 33.4 million metric tons, and saved the average American household \$1,200 on their gas bill in 2011.

EPA's implementation of the statute is a large part of its success. Recognizing the inherent uncertainty over a 15 year time horizon, Congress built significant flexibility into the statute, ensuring that the executive branch has ample authority to make adjustments to respond to shifting conditions over time. For example, specific annual targets are set by EPA for advanced, cellulosic, and biomass-based diesel fuels based on anticipated production. Through the annual rulemaking process, EPA may also reduce the annual advanced biofuel requirement by an amount commensurate with the cellulose biofuel waiver. EPA also has the authority to reduce the total annual RFS requirement by the amount of the cellulose biofuel and advanced biofuel waivers. EPA has not reduced the overall advanced or total annual RFS requirement to date because there have been ample commercial volumes of both conventional and advanced renewable fuels available to meet the RFS targets through 2012. Refiners have multiple options for compliance, including blending fuel, purchasing RINs from refiners who receive them free of charge when they blend renewable fuel into their product, or using a banked RIN from a previous year.

By including this level of flexibility in the statute, Congress provided the Agency with the tools it needs to address changing circumstances and eliminated the need for repetitive reauthorization or modification by Congress – a process that yields inherent uncertainty in the marketplace.

To ensure that the renewable fuel industry has the policy stability it needs in order to continue to attract investment needed to commercialize more fuels and deliver choice to consumers at the pump, we urge you to leave the RFS in place, as is, allowing the flexibility in the statute to be exercised by the EPA. Even discussing changing the program this soon after enactment creates uncertainty, impacting our ability to meet our goals.

In spite of the progress the renewable fuel industry has made, the U.S. today remains the top global consumer of oil, using almost 20 million barrels a day. Regardless of how much oil we drill at home, the price that American families pay at the pump, as well as the cost of transportation fuel throughout our economy is dictated by global markets that are manipulated by foreign nations and external forces like OPEC. The International Energy Agency reported in its World Energy Outlook that oil prices will continue to rise in the coming years, reaching \$125/barrel (in year-2011 dollars) by 2035 (over \$215/barrel in nominal terms). In 2013 the World Bank concluded that almost two-thirds of the post-2004 food price increase is attributable to the price of crude oil, reinforcing the near-perfect correlation of oil and food prices.

Greenhouse gas emissions attributed to transportation accounted for about 31 percent of U.S. CO2 emissions from fossil fuel combustion in 2011, with nearly 65 percent of those emissions stemming from gasoline consumption for personal vehicle use. The International Energy Agency (IEA) in 2013 called for a more than doubling of renewable fuel production and a sixfold increase in advanced biofuel capacity by 2020 in order to avoid a 2°C rise in global temperatures.

It is only with the stability of the RFS statute that we can continue on our current trajectory to achieve these goals. We cannot afford to go backwards with amendments to the Clean Air Act undermining our move toward lower carbon fuels. If permitted to function without interference, this flexible policy will stand the test of time and ensure that America's energy goals are met.





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July 26, 2013

Representative Fred Upton
Chairman
House Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Representative Henry Waxman
Ranking Member
House Committee on Energy and Commerce
2322 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Upton and Ranking Member Waxman:

Growth Energy is the leading trade association for America's ethanol producers and supporters. Growth Energy promotes expanding the use of ethanol in gasoline, decreasing our dependence on foreign oil and creating American jobs. As such, we are pleased to submit these comments in response to your questions for stakeholder comment released on July 11th regarding implementation issues and the Renewable Fuel Standard (RFS).

Sincerely,

Tom Buis
CEO, Growth Energy

Questions for Stakeholder Comment

1. Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

The RFS provides EPA the necessary flexibility to set the annual volumes for renewable fuel. While the original volumes were prescribed under EISA, Congress gave flexibility to EPA to adjust these volumes based on actual production in the marketplace. More importantly, these annual volumes go through an open process whereby stakeholders have extensive opportunity for input and comment. While we don't always agree with EPA's assessment, Growth Energy, along with those in the oil industry, have had, and continue to have, ample opportunity for input and comment each year. It would be a mistake to make any changes in the law simply because those who would abolish the RFS disagree with the policy.

2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?

While the volumes of cellulosic biofuel envisioned six years ago have not materialized as quickly as expected, there has been significant investment in cellulosic biofuel production, and we are poised for the first commercial-scale availability within the next year. EPA has already waived 97 percent of the proposed cellulosic volumes originally established under RFS2. For 2013, EPA has proposed 14 million gallons of cellulosic biofuel based on production from several facilities – including one of Growth Energy's member projects, the joint POET-DSM Project Liberty venture in Emmetsburg, Iowa, which has been harvesting biomass for production. EPA's 2013 proposal was based on extensive discussions with cellulosic biofuel producers and on real market conditions, along with significant input analysis from USDA and DOE. We are just three years removed from the finalized RFS2 regulations – thus, labeling cellulosic biofuels as “phantom fuels” does a significant disservice to hardworking Americans who have made substantial financial commitments, and invested their time and effort into helping move our nation's fuel supply away from an overreliance on foreign oil.

3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants?

The RFS continues to be a significant success, and of the published notices of violation, over 99 percent of the RINs generated have been compliant with no published notices of violations for ethanol. RIN owners and obligated parties understandably want some degree of confidence that the RINs they are acquiring are indeed applicable for compliance purposes, but we believe there is ample room for this to occur in a fashion that utilizes the significant resources already invested by the industry to ensure the validity of RINs. We have some concerns about the burden of EPA's Quality Assurance Program being put on the backs of small ethanol plants who would potentially have to hire a slew of outside consultants to replicate what is largely being done as part of the current RFS2

compliance procedures; however, we are working through this proposal with the EPA, and they have, and continue to, provide ample opportunity for stakeholder input.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

The refusal of the oil industry to offer higher biofuel blends to consumers. The easiest way to bring down RIN prices and reduce compliance costs is to increase market access for higher blends of biofuels. If the major oil companies stop erecting artificial hurdles to E15 and midlevel ethanol blends, there would be ample RINs available to meet obligations under the RFS. They continually point to an 8-vehicle test performed by the CRC, a test that the Department of Energy (DOE) called “significantly flawed;” in fact, the DOE tested 86 vehicles for over 6 million miles, and did not find any significant impacts on performance and durability. The RFS was enacted nearly six years ago – it is time for the petroleum industry to move to higher biofuel blends and comply with the law; they have several options to do so, including moving to E15, blending more E85 or other midlevel ethanol blends such as E30.

5. Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?

Again, as RIN prices increase, the dynamics become even more favorable to blend more biofuels. Currently retailers and others are able to provide favorable pricing back to the consumer – in fact, we’re seeing E85 being sold for over a dollar less than a gallon of regular gasoline, so for every drop more of ethanol, consumers can benefit at the pump. As more and more participants in the liquid fuel marketplace move to higher biofuel blends, consumers will benefit at the pump, while obligated parties will be able to more easily meet their RFS requirements.

6. Should the provisions applicable to obligated parties be modified to provide relief for entities unable to generate sufficient RINs? Would such an approach apply different compliance requirements for refiners that blend ethanol and refiners that do not blend ethanol? What would be the justification for and potential consequences of such a change, including the potential for market distortions?

Again, the market is adjusting to conditions and the easiest way to comply is to blend more biofuels. Some of the conditions causing higher RIN prices are market conditions amongst competitors – those obligated parties that have banked excess RINs and others that have not based on obligated parties’ own market analysis and forecasts. Modifying the program midstream could unnecessarily tip the scales in one direction or the other. Similarly, because the RFS has been law for several years, different companies have planned and acted accordingly, some even investing heavily in ethanol production on their own. Because some have failed to plan and do their own due diligence, they are asking for the law to be repealed. What about biofuels producers who have made significant investments and have provided thousands of American jobs? What about those who have invested hundreds of millions of dollars to develop next generation biofuels? By removing the certainty of the law that is still in its infancy, you would be significantly jeopardizing those valuable jobs and investments.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

The RFS is incentivizing refiners to blend more biofuels. Again, the easiest way to comply is to simply blend E15 and higher ethanol blends. Refiners, rather than moving to E15 and higher blends, have chosen to try and do everything to avoid meeting their obligations – from increasing gasoline exports, reducing refinery production, selling jet fuel at a discount because it reduces their obligation and so on. The intent of the RFS was not to put biofuels into 10 percent of our nation’s fuel supply and then stop. The RFS calls for increasing volumes of biofuels, and this law clearly intends our nation’s liquid fuel supply to move to higher biofuel blends. With gasoline near \$4 a gallon, it would be foolish for refiners to limit consumer access to biofuel blends.

July 26, 2013

The Honorable Fred Upton
Chairman
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U.S. House of Representatives
2125 Rayburn House Office Building
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via email at: rfu@mail.house.gov

The Honorable Henry A. Waxman
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
2322A Rayburn House Office Building
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RE: Comments on Implementation Issues of the Renewable Fuels Standard

Dear Chairman Upton and Ranking Member Waxman:

On behalf of INEOS Bio, I appreciate the opportunity to submit the following comments in response to the Energy and Commerce Committee's fifth and final white paper on the EPA's implementation of the Renewable Fuel Standard (RFS).

INEOS Bio is part of INEOS, one of the leading petrochemical companies in the world. INEOS is a leading producer of commodity chemicals and one of the leading independent refiners in Europe. In the U.S. INEOS employs over 3,000 people and we have manufacturing facilities in Alabama, Ohio, Texas, Illinois, Massachusetts, California, and Florida.

The Indian River BioEnergy Center coming online in Florida is one of the first cellulosic biofuels facilities in the U.S. and is the first plant in the world showcasing our new technology that converts waste materials into cellulosic biofuels and renewable power. We are in the final start-up phase and when the facility is in full operation, it will produce 8 million gallons of cellulosic ethanol and 6 megawatts (gross) of renewable power annually. We use the vegetative, yard and agricultural waste from the Indian River/Treasure Coast region to run this plant and make cellulosic ethanol and renewable power.

As EPA expects our Florida facility to be one of two facilities generating cellulosic RINs for 2013, we can provide a unique perspective on how the implementation of the RFS impacts the next-generation of cellulosic biofuels. Repealing the RFS will undermine investments in innovation and jeopardize our ability to displace fossil fuels with cleaner, cellulosic domestic fuels.

1. *Does EPA's annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?*

Despite some initial bumps in the road, EPA's annual RVO-setting process works well. No statutory changes are needed because the original statute grants EPA the flexibility to adjust the standard to reflect market realities. In setting RVOs for cellulosic biofuels, EPA is faced with the unenviable task of trying to estimate the production levels of a new, highly capital intensive industry with long technology development and scale-up times.

EPA's current methodology, which includes EIA estimates but also input from biofuel producers like ourselves, will create the most accurate projection. We can attest that EPA is closely monitoring our start-up.

Granted, EPA missed the statutory deadline for publishing the 2013 RVO levels. This delay is understandable, however, as well-funded opponents launched a court attack on EPA's methodology for previous year RVOs. Besieged on one side by a challenge to the RVOs, the EPA was faced with setting a target on time but without the latest information on anticipated cellulosic production. While this delay unfortunately imposes potential uncertainty on obligated parties, EPA is trying to make the RVOs as accurate as possible. Something the obligated parties are also demanding.

Whatever the actual cellulosic RVO for 2013 is -- whether EPA keeps the 14 million gallons proposed or lowers it -- 2013 cellulosic RVO currently represents a small amount for compliance each year for the obligated parties. EPA makes available cellulosic waiver credits in years where EPA waives some portion of the statutory volume for cellulosic biofuel; obligated parties can then use these credits as a way to comply with the cellulosic biofuel volume obligation in lieu of RINs generated with the production of the cellulosic biofuel. As Jeremy Martin of the Union of Concerned Scientists noted in a 2012 letter to EPA, the required purchase of \$6.8 million of cellulosic waiver credits for 2011 represented less than one hour of profits earned by the top three U.S. oil companies for the previous year. The expensive lobbying and media campaigns to overturn the RFS have surely cost more than the cost of the waivers. But obligated parties are willing to make that investment in defeating the RFS and cellulosic fuels now because they realize that new disruptive technologies combined with other biofuels are a direct substitute for conventional fuels. Every gallon of cellulosic biofuel displaces a gallon of gasoline that they can sell. And as the cellulosic levels are poised to increase rapidly, this trend will only continue. Nothing has stopped the obligated parties since 2007 from investing in cellulosic technologies, building plants and infrastructure, and ensuring the RFS succeeds. They have decided it is easier to defeat the policy than to invest in its success.

- 2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?*

Admittedly, the cellulosic biofuel industry, which didn't exist at commercial scale when Congress passed revisions to the RFS, has taken longer to commercialize its technology than originally foreseen in 2007. However, in a testament to how well Congress crafted the program, the EPA has the necessary flexibility to adjust cellulosic levels based on production volumes.

Building an entirely new industry with new technology, combined with the challenges in obtaining financing for new technology during the recession of 2008-09 contributed to this initial lag in commercial production. But now that KiOR's facility has started up and our facility in Vero Beach is starting up this year, the standard-setting process for future years will be more predictable because a cellulosic production baseline will exist. Currently, there are 3 additional plants under construction and poised to enter service in 2014. These facilities will continue to add additional gallons to further the goals of the RFS. EPA and Congress should ignore calls by some to base mandated cellulosic volumes in 2013 on actual

production in a previous year or select quarters because new plants will have come online since then. Pursuing such a course this year would have resulted in an effective cellulosic volume of zero. As the Congressional Research Service noted, “setting a standard too low could impact federal support (e.g., grants, tax incentives) and private investment for the technology. This could have hindered the overall goals of the RFS, economic development in rural areas, and more.”^{1/}

EPA can adjust the cellulosic volumes appropriately without adversely modifying the advanced biofuel volumes. Lowering advanced biofuels levels automatically along with any reduction in cellulosic levels now would create a self-fulfilling prophecy and undermine investments made to date on advanced biofuels.

Moreover, under the current RFS, if the EPA Administrator waives volume requirements either by 20% or more for two consecutive years or 50% or more in a single year, she must reduce the total required volumes in all subsequent years by that amount. Thus, the existing RFS already includes much the flexibility that opponents are calling for. As the Congressional Research Service explains, “if the administrator reduced the overall RFS requirement by 6.0 billion gallons in both 2017 and 2018, then she would be required to reduce the total RFS requirement by 6.0 billion gallons in 2019 and beyond.”^{2/} The key, however, is that this trigger does not activate until calendar year 2016. That delay in implementation wisely allows the cellulosic industry a few years grace period to achieve commercial scale without the risk of permanently lowering subsequent requirements for future years. The provision thus balances the interests of both cellulosic biofuel producers and obligated parties: it allows cellulosic producers the market certainty for a period of years; on the other hand, if the industry fails to deliver the volumes, then EPA is required to lower total volumes in subsequent years by that amount, relieving pressure on obligated parties. This well-crafted provision is forgotten amid the calls to immediately reduce total fuel volumes (either partially or completely). We urge Congress to keep it in place and to keep the 2016 timeline, which would allow the next wave of cellulosic plants to come online.

3. *How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA’s proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?*

The EPA should not be responsible for policing the RIN credit trading program. The agency has neither the resources nor the expertise to oversee every transaction. Instead, the obligated parties are far better suited to have the ultimate responsibility. Obligated parties sell millions of gallons each year ensuring the fuel meets specifications and that their counter parties have sufficient credit for commercial transactions. Simple due diligence by the obligated parties – including sending personnel to see if there was an actual biodiesel production facility – would have likely prevented RIN fraud in at least one recent case.

Biofuel producers like INEOS Bio have every reason to ensure the integrity of the cellulosic RINs they sell. However, options A and B of the Quality Assurance Program (QAP) proposed earlier this year by EPA are not practical for small cellulosic producers. The proposed added layer of verification, which duplicates much of the oversight EPA already requires for cellulosic

^{1/} Kelsi Bracmort, “Meeting the Renewable Fuels Standard (RFS) Mandate for Cellulosic Biofuels: Questions and Answers,” Congressional Research Service, March 11, 2013.

^{2/} Brent Yacobucci, “Waiver Authority Under the Renewable Fuels Standard,” Congressional Research Service, Sept. 25, 2012.

fuels, would impose costs on producers and slow the commercialization of next generation biofuels.

The ongoing compliance under Option A is financially costly for any producer aside from a very large producer, which, ironically, is the least likely to need that exacting level of due diligence. The quarterly audits proposed under Option B are less burdensome. Still, biofuel producers are at the mercy of the Obligated Parties as to whether they will accept these RINs or not since under Option B obligated parties must replace any invalid RINs (though they have an affirmative defense for civil penalties). Moreover, the EPA has underestimated the compliance costs--3rd party engineering review, annual 3rd party attestations, etc. INEOS Bio has started implementing a program similar to Option B and the cost of just the initial visit to the site exceeded what EPA has estimated for the entire year of compliance costs. In addition, the 3rd party engineering reviews that are currently required for initial RFS II registration and every three years thereafter range between \$10-20,000. INEOS Bio urges the EPA to investigate further into the true cost of compliance under option A and B, taking into account the differences that exist between conventional, advanced and cellulosic producers.

The costs of compliance seem all the more significant when compared to the low risk of invalid RINs from newly commercial cellulosic producers. The EPA, the U.S. Energy Information Administration (EIA), the Department of Energy, and other interested entities have closely monitored the first cellulosic biofuel technologies. The proposed QAP audits duplicate much of the engineering review and attest engagement required by 40 CFR §79 and §80 (As the EPA states in the proposed rule: “Note that the components proposed for monitoring, whether on an ongoing or periodic basis, are components that are already regulated under the RFS program.” 78 Fed. Reg. 12169). The risk of fraudulent RIN generation under such existing scrutiny is low enough not to warrant the compliance burdens proposed.

The compliance costs for cellulosic producers is particularly acute because these new technologies coming online allow for various feedstocks, and EPA’s proposal implies separate QAPs for each pathway. One of the great advantages of the proprietary INEOS Bio technology is that it is feedstock agnostic. Our Vero Beach facility will utilize yard and vegetative waste and small amounts of post-recycled municipal solid waste (MSW). INEOS Bio also must submit a waste separation plan for regulatory approval. If “a separate QAP is required for each pathway” as EPA proposes (78 Fed. Reg. 12173), we could also have to implement a separate QAP for each new facility registered under 40 CFR §80 as well, depending on the feedstocks utilized.

Cellulosic biofuel producers should be exempted from QAP compliance initially because there are no approved QAPs utilizing Option A for cellulosic RINs. Of the five pre-registered QAPs, only one contains a pathway for cellulosic RINs (Weaver and Tidwell’s “RIN-tegrity”). That QAP is only available under Option B. Whether auditors did not submit cellulosic pathways or EPA rejected those that were submitted, the resulting lack of competition and choice among auditors and plans would increase costs for renewable fuel producers. Since no Option A QAP currently is available for cellulosic, it also threatens to degrade the value of cellulosic RINs versus other RINs that have an approved pathway under Option A.

Instead, EPA should allow cellulosic producers to submit their own QAP and self-certify RINs. If EPA considers an exemption for cellulosic fuels infeasible, the agency should allow cellulosic producers to self-certify their RINs pursuant to a QAP approved by the EPA. Just as foreign refiners can post a bond under 40 CFR §80.1465(h) to satisfy any judicial judgment that results from an action for violation of the subpart, so too could cellulosic producers post a bond of sufficient size to satisfy the purchase price of cellulosic waiver credits to replace potentially invalidated RINs. This bond would help alleviate the perceived riskiness of RINs from new or small cellulosic biofuel producers.

We realize EPA must walk a fine line: facilitating the integrity of the RFS while not stifling emerging fuels with costly new compliance. With the right modifications, the QAP proposal can shift away from the latter and closer to the middle ground. But as currently proposed, the QAPs would create another burden on a heavily-scrutinized cellulosic industry trying to emerge from its infancy.

4. *What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?*

While the rapid increase in ethanol RIN prices is clear, the sudden increase could be caused by several factors. The Energy Information Administration noted that the sudden increase in early 2013 in the ethanol RIN price “reflects the market's concern that the rising RFS-mandated volumes and the E10 ethanol blend wall will contribute to future significant increases in the cost of blending biofuels to meet the RFS statutory volumes.”^{3/} In addition, the regulatory uncertainty caused by the delay in the 2013 RVOs could contribute to speculative activity in RIN trading. It is worth noting again that this delay largely is due to numerous legal and legislative challenges to the RFS. And this speculation is driven on the spot market, as RIN acquired by actual blending at the racks are significantly lower than the spot market.^{4/}

A second potential for the run-up in RIN prices is simply pure speculation. The volumes of RINs traded daily do not match the daily production volumes by the ethanol producers. Just this week, the price rose to \$1.50 only to fall by over 50 cents in one day as profit takers cashed in on the short-term run-up in the market. The RIN market is relatively new and not transparent in transactions. Greater oversight and transparency over the market will ensure a healthy RIN market.

Ethanol producers are not benefiting from the uplift in RIN prices like the blenders are. Ethanol producers that do not sell transportation fuel to the end market generate RINs but do not separate them; instead they transfer them with the volume of biofuel when selling it. Since a RIN travels with the ethanol, a blender can buy ethanol at \$2.60/gal with the \$1.40 RIN included; then strip it off, blend, and sell the blended gasoline at \$3.60 a gallon and sell or trade the RIN for the \$1.40 or more as the market goes up. Ironically, many of these blenders are also the ones who complain about the costs involved with investing in infrastructure for E-15 and E-85. These investments would help relieve pressure on the blend-wall and reduce corn ethanol RIN prices.

A recent OPIS article confirms that any independent retailer that is buying gasoline, blending it with ethanol, and then selling the RIN “is making money.”^{5/} Of course, retailers assert that refiners aren't doing too poorly themselves:

“Although refiners are complaining about the rising RINs costs, some retailers said that the refiners are enjoying a relatively robust crack spread. Some are benefitting from comparatively stronger margins than others, depending on regions. The strong cracks, together with high export volumes, have helped boost refinery utilization rates.

Despite the higher RINs values, refiners are still net positive after factoring in the strong crack spreads, retailers said.... Depending on the refinery capacity and retail network size, a refiner could be net long on RINs if its retail network is larger than its refinery capacity. The

^{3/} Energy Information Administration, “What caused the Run-Up in Ethanol Prices During Early 2013?”, June 13, 2013, available at <http://www.eia.gov/todayinenergy/detail.cfm?id=11671#>.

^{4/} OPIS Ethanol & Biodiesel Information Service, “Major Gasoline Retailers Raking In Profits from Lucrative RINs Sales,” July 17, 2013.

^{5/} *Id.*

comparatively larger retail segment would allow a refiner to blend more gasoline to generate RINs to meet its own RFS obligations as well as to sell in the spot market.”^{6/}

The run up in ethanol RIN prices complicates the economics for cellulosic producers. Corn RINs recently are pushing close to \$1.50 per gallon. However, for meeting cellulosic obligations, obligated parties can either obtain cellulosic RINs or purchase cellulosic waiver credits. Since obligated parties are expected to use the least expensive means of compliance, cellulosic RINs will not exceed the price of the waiver credit, which is fixed under the formula of \$3 minus the wholesale price of gasoline. Today, that calculus means the value of cellulosic RINs are about \$0.42.

5. *Are increases in RIN prices likely to affect the production or marketing of renewable fuels? If so, how might this affect implementation of the RFS and RIN prices moving forward?*

The entire RIN system was developed as a market-based mechanism for obligated parties to meet the obligations of the statute. At the time, it enjoyed the support of API and AFPM.^{7/} Because a higher ethanol RIN price makes it more economical for the blender to add greater volumes of ethanol to gasoline blends, the EIA has suggested that increased ethanol RIN values may provide “provide an incentive for blenders to lower the retail price of E85 gasoline relative to E10 gasoline, given E85's lower energy content.”^{8/} This in turn would increase the use of E85.

Thank you for the opportunity to comment.

Sincerely,



Daniel M Cummings

^{6/} *Id.*

^{7/} See comment submitted by Alfonse Mannato, American Petroleum Institute (API), on the Environmental Protection Agency (EPA) Proposed Rule: Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, November 12, 2006. <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2005-0161-0185>; comment submitted by Bob Slaughter, National Petrochemical & Refiners Association (NPRO). November 9, 2006. <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2005-0161-0170>.

^{8/} Energy Information Administration, “What caused the Run-Up in Ethanol Prices During Early 2013?”, June 13, 2013, available at <http://www.eia.gov/todayinenergy/detail.cfm?id=11671#>.

Institute for Energy Research
Renewable Fuel Standard Assessment White Paper
Implementation Issues

The Institute for Energy Research¹ (IER) welcomes the opportunity to provide comments on the Renewable Fuel Standard (RFS) white paper series. The RFS is a critical issue for all Americans because the federal mandate increases the price of gasoline and impedes economic growth. Affordable, reliable energy is key to reviving the economy. We are grateful the Energy and Commerce Committee is examining this important issue.

When the RFS was created in 2005 and expanded dramatically in 2007, America's oil-production looked the opposite of what it does today. Decades of restricting access to hydrocarbon resources on federal lands and waters contributed to falling oil production, with no end in sight. And while domestic oil production was falling during this period, domestic oil consumption was continuing to increase, further exacerbating the situation. The Senate Energy and Natural Resources Committee report on the Energy Policy Act of 2005 (EPAAct 2005) recognized this reality when they stated that a "widening gap between supply and demand, accompanied by reliance on foreign sources to close that gap, has created profound concerns in the Congress over the Nation's energy security."² They further stated that there was a "dismal oil outlook."³

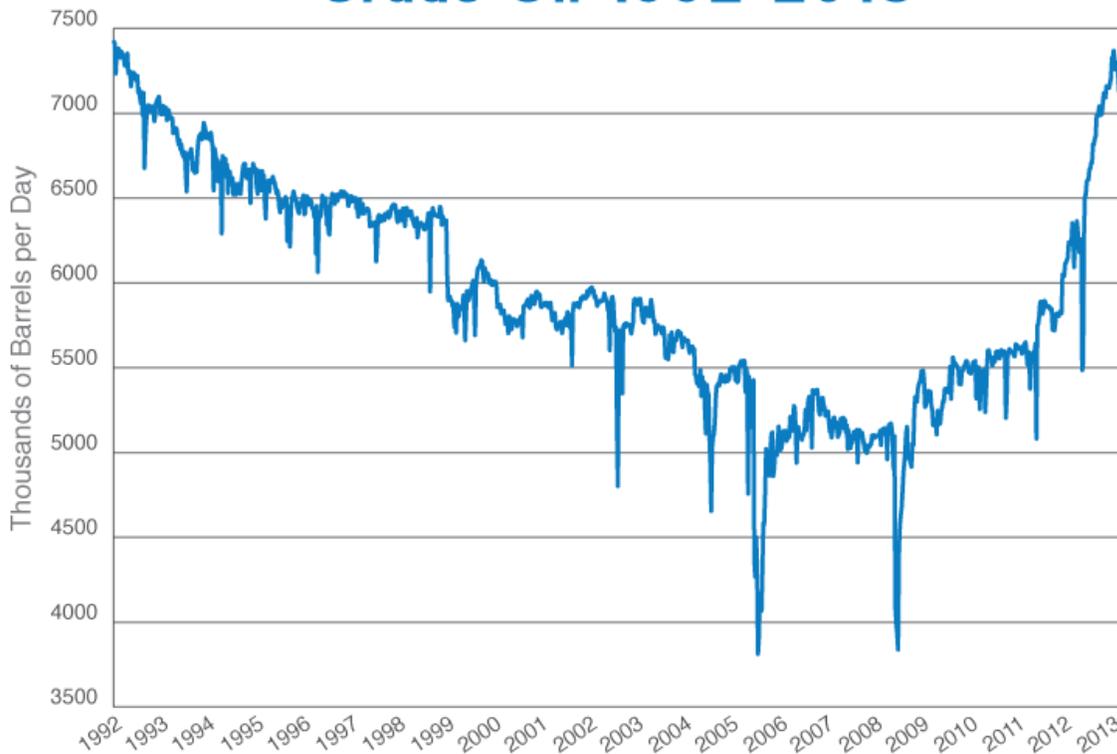
The RFS was a response to the reality of decreasing domestic oil production and increasing oil consumption. But the assumptions Congress made in 2005 have been shown to be dramatically incorrect, especially with regard to America's "dismal oil outlook."

While Congress and the Administration lifted the offshore moratorium in 2008 to help restore domestic oil production, the current Administration has opted to reverse this progress by consistently restricting access to America's vast oil resources on federal lands. Given these impediments, entrepreneurs have taken to state and private lands, where a new combination of horizontal drilling and hydraulic fracturing has been employed to greatly increase our oil production. Congress aided this by assuring in EPAAct 2005 that states would continue to be the proper authorities for regulating these practices, something they have done successfully for decades.

This innovation in drilling technology on state and private lands has led to the greatest domestic energy boom in U.S. history. EIA recently announced that U.S. weekly oil production is now the highest since 1992.⁴ Over the last two years, U.S. oil output increased by almost 1.9 million barrels per day (bpd) from 5.52 million bpd in July 2011 to 7.40

million bpd the week of July 5, an increase of 34 percent. This increase is roughly equivalent to adding Venezuela's total average annual oil production since 2008 to U.S. production totals.⁵

Weekly U.S. Field Production of Crude Oil 1992-2013



Source: US Energy Information Administration



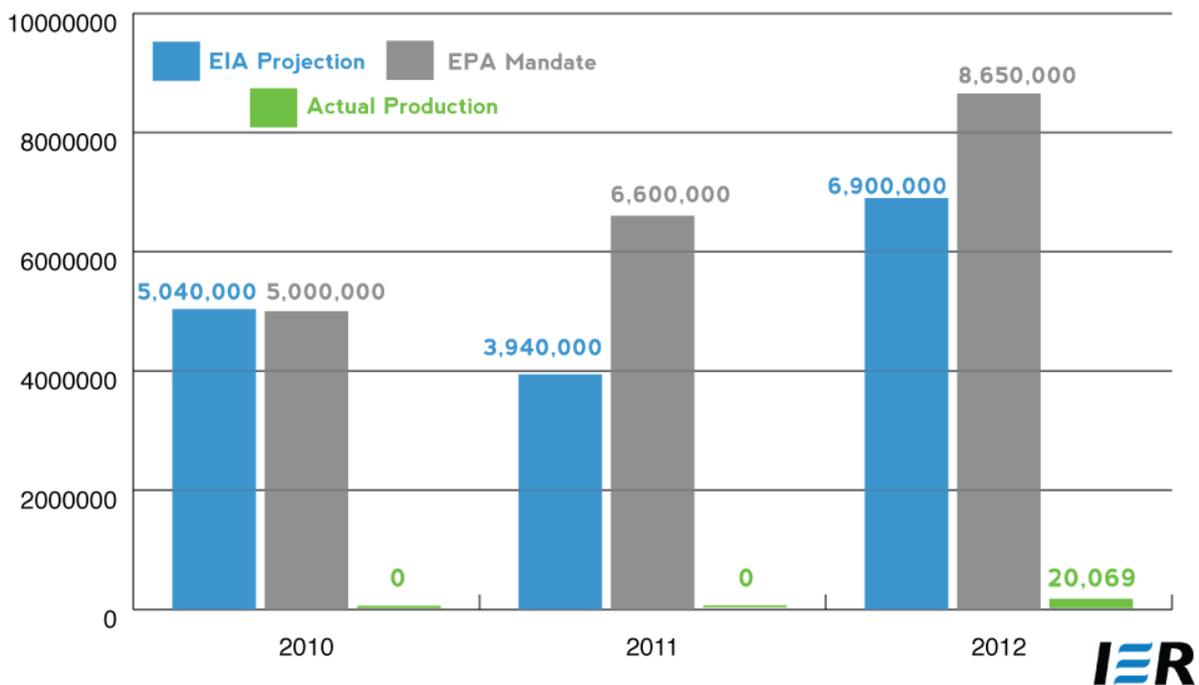
Because of this massive increase in supply, the assumptions underlying the RFS debate in 2005 no longer apply. Far from “dismal,” the outlook for domestic oil production is more promising than ever. Concerns about importing too much oil from volatile regions have been replaced with questions about exporting oil and natural gas. America’s new energy landscape makes the RFS an obsolete relic of a bygone era. For this reason, the RFS should be repealed—not “fixed” or “improved.”

1. Does EPA’s annual RVO-setting process work well or are there concerns? If there are problems, are they correctable by EPA? Are any statutory changes needed?

The Environmental Protection Agency (EPA) has a notoriously poor track record of estimating cellulosic biofuel production. In 2010, for example, the EPA mandated the

blending of 5 million gallons of cellulosic biofuel into conventional gasoline, but the U.S. did not produce a single drop of cellulosic biofuel for commercial use. The EPA's estimates have only gotten worse since. The agency increased its 2011 mandate to 6.6 million gallons, yet the country still produced no cellulosic biofuel. Undeterred, the EPA boosted the mandate for 2012 to an astounding 8.65 million gallons, even though the U.S. produced just 20,069 gallons for the entire year.⁶ In 2013, production of cellulosic biofuel has returned to zero.⁷

EPA's Gross Forecasting Incompetence on Cellulosic Biofuel (units in gallons)



These unrealistic, arbitrary standards have already led to litigation by parties who have been adversely affected by the RFS. In January, the D.C. Circuit Court ruled that the EPA's cellulosic biofuel mandates violated the requirements of the RFS.⁸ In its decision vacating the 2012 mandate, the D.C. Circuit said the EPA let "its aspirations for a self-fulfilling prophecy divert it from a neutral methodology." EPA's inability to develop cellulosic biofuel mandates in an objective manner has harmed U.S. refiners, who were required to pay \$7 million in EPA fines in 2011 for not using cellulosic biofuel, even though no such fuel was available.⁹ The D.C. Circuit described EPA's approach to the cellulosic biofuel mandate as, "Do a good job, cellulosic fuel producers. If you fail, we'll fine your customers."

These issues should prompt an examination by Congress as to whether cellulosic biofuel can meet the requirements of the RFS. EPA is statutorily obligated under the Energy Independence and Security Act of 2007 (EISA 2007) to require refiners to blend 36 billion gallons of biofuels into gasoline by 2022. As corn ethanol is capped at 15 billion gallons in 2015, other biofuel volumes, including cellulosic, must continue to rise to meet the mandate—an increasingly uncertain scenario.

As aforementioned, the most efficient policy solution would be to repeal the RFS entirely, as it renders no obvious benefit to U.S. consumers. However, if full repeal is unattainable, Congress should change the statute to reflect actual, not aspirational, production volumes.

- 2. Are the cellulosic biofuel provisions in the RFS working well or do they need to be changed? Has EPA modified its cellulosic biofuel standard-setting process for 2013 and future years appropriately, following the DC Circuit's decision to vacate EPA's 2012 standard? If not, what further changes are needed? Should EPA be required to reduce the advanced biofuel and total renewable fuel volumes when it lowers the cellulosic biofuel volume? What would be the consequences of such a change?**

As noted above, the EPA's cellulosic biofuel mandates have not reflected reality, or even anything close to approximating reality. EPA has demonstrated that it should not have discretion when it comes to setting the RVOs, especially with cellulosic biofuel production. The RVO should be set using a formula based on the production from the previous year—such as last year's production plus 10 percent. When the previous year's production is zero, the RVO for the next year would be zero.

- 3. How can EPA improve its enforcement of the RIN credit trading program? Does EPA have the resources that would be required to oversee RIN production and enforce against production of invalid RINs? What role should obligated parties have in verifying the integrity of RINs and what additional information do they need to exercise due diligence? Will EPA's proposed voluntary third-party quality assurance program address the concerns of all RIN market participants? If not, what else is needed?**

In its RIN credit trading program, EPA has created a market for a product with no intrinsic value. This creates a system ripe for fraud and abuse. Obligated parties should have neither the obligation nor the incentive to make EPA's trading program work. Moreover, the artificial RIN market increases compliance costs on refiners and raises gas prices at the pump. A NERA Economist Consulting study entitled *Economic Impacts Resulting from Implementation of RFS2 Program*¹⁰ finds that the RFS will result in a \$770 billion decrease

in the United States' Gross Domestic Product by 2015. A direct solution to this particular problem would be to end the RFS, rather than attempt to "fix" the broken RIN system.

4. What is responsible for the rise in ethanol RIN prices in 2013? Can future increases in RFS compliance costs be avoided, and if so, how? If the government takes action to limit increases in RFS compliance costs, how might such action affect this market-based program?

RIN prices spiked from 7 cents in early 2013 to over \$1 in March and have remained high since. RINs are likely so high because refiners recognize that the U.S. is rapidly approaching the blend wall, which is the maximum amount of ethanol that can be blended into gasoline under federal law. The volatility in the RIN market increases compliance costs on refiners, which in turn artificially raises the price of gasoline. The NERA study cited above finds that the RFS will increase diesel costs by 300 percent, gasoline costs by 30 percent, and will reduce take-home pay for American workers by \$580 billion.¹¹ NERA warns of a "death spiral" in which increasing blending mandates depress gasoline sales, which then leads to supply disruptions and makes compliance unattainable.

If Congress is serious about reducing RFS compliance costs, then it should repeal the RFS. Papering over some problems will not end the problems.

7. Is the RFS incentivizing refiners to make less gasoline available to the American market, either through increased exports or reduced refinery production? If so, can anything be done to address this?

Any time the government increases compliance costs on businesses, it incentivizes the flow of goods and services to countries with more hospitable regulatory environments. The blend wall gives refiners the incentive to sell more refined products outside the U.S. instead of purchasing expensive, volatile RINs to comply with the RFS. This means less fuel will be available for U.S. drivers and Americans will have to deal with higher prices than would otherwise be necessary. The solution is to end the RFS.

¹ The Institute for Energy Research (IER) is a non-profit organization that conducts intensive research and analysis on the functions, operations, and government regulation of global energy markets. IER articulates free market positions that respect private property rights and promote efficient outcomes for energy consumers and producers. IER staff and scholars educate policymakers and the general public on the economic and environmental benefits of free market energy. The organization was founded in 1989 as a public foundation under Section 501(c)(3) of the Internal Revenue Code. Funding for the institute comes from tax-deductible contributions of individuals, foundations, and corporations.

² U.S. Senate, Committee on Energy and Natural Resources. Report together with additional views (to accompany S. 10), (109 S. Rpt. 109-78), p.6, <http://www.gpo.gov/fdsys/pkg/CRPT-109srpt78/pdf/CRPT-109srpt78.pdf>.

³ Ibid., p. 7

⁴ See <http://ir.eia.gov/wpsr/overview.pdf>

⁵ See <http://www.eia.gov/countries/country-data.cfm?fips=VE#pet>

⁶ Institute for Energy Research, *Cellulosic Biofuels: Basically Still Nonexistent But Must Be Purchased Anyway*, January 29, 2013, <http://www.instituteforenergyresearch.org/2013/01/29/d-c-circuit-chastises-epa-for-biofuel-bias/>.

⁷ Environmental Protection Agency, *RIN Generation and Renewable Fuel Volume Production by Month*, <http://www.epa.gov/otaq/fuels/rfsdata/2013emts.htm>.

⁸ See

[http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/\\$file/12-1139-1417101.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/$file/12-1139-1417101.pdf).

⁹Op. cit., IER

¹⁰ NERA Economic Consulting, *Economic Impacts Resulting from Implementation of RFS2 Program*, Oct. 2012, http://www.api.org/news-and-media/news/newsitems/2013/march-2013/~media/Files/Policy/Alternatives/13-March-RFS/NERA_EconomicImpactsResultingfromRFS2Implementation.pdf

¹¹ Ibid.