To: Gunasekara, Mandy[Gunasekara.Mandy@epa.gov]; Dominguez, Alexander[dominguez.alexander@epa.gov]; Doug.matheney@hq.doe.gov[Doug.matheney@hq.doe.gov]; kyle.yunaska@hq.doe.gov[kyle.yunaska@hq.doe.gov]; mark.maddox@hq.doe.gov[mark.maddox@hq.doe.gov]
Cc: Susan Butler (sbutler@capitolresourcesllc.com)[sbutler@capitolresourcesllc.com]; Lyman, John (Perkins Coie)[JLyman@perkinscoie.com]
From: Johnson Koch, LeAnn M. (Perkins Coie)
Sent: Wed 11/15/2017 11:50:45 PM
Subject: Small Refinery Hardship Scoring -- DOE Metrics -- Follow-Up Meeting Week of December 4
Small Refiners Coalition RFS Small Refinery Hardship - 9.13.2017.pdf
2011 DOE Study B-5 Excerpt.pdf
2011 DOE Study Metrics Excerpt.pdf
Contract Example.pdf

All -

Thank you for meeting with us on October 27 to discuss DOE's scoring of small refinery hardship petitions under the Renewable Fuel Standard pursuant to the metrics in DOE's 2011 study. During our meeting, you indicated that you would need a little time to review our meeting materials, digest the information from the meeting, and then schedule a follow-up meeting. I wanted to check in with you about scheduling the follow-up meeting. We will make ourselves available whenever it is convenient for you. Because next week is Thanksgiving, I was wondering if we could schedule a meeting for the week of December 4th?

For your convenience, I'm attaching a copy of some of the materials we provided at the meeting: (1) the document we prepared on DOE scoring of the metrics in 2016 and prior years; (2) the metrics, excerpted from the 2011 study; (3) Appendix B-5 to the DOE study, which describes the competitive distortion in favor of large integrated oil companies and the harm to small refineries from high RIN-prices; and (4) an example (redacted) contract showing that small refiners are not recovering their RIN costs in higher prices paid for their transportation fuel, as stated in the Burkholder paper (the contracts show that small refiners are forced to discount their fuel and give away RIN value, even though they need the RINs for compliance). Please let us know if there is other information that would be helpful to see in advance of the meeting.

Thank you for your consideration. We look forward to further discussing these issues with you.

LeAnn

LeAnn Johnson Koch | **Perkins Coie LLP**

202.654.6209 (office)

202.253.8152 (mobile)

Average vs. Marginal Ethanol RINs:

The impact on refiner margins of a rapid rise in RINs prices can be illustrated by discussing the economics of three refiners in different circumstances relative to the RFS. In the illustration, Company A blends all its production with ethanol, so it does not have to purchase ethanol RINs. Company B does not do any blending and must purchase RINs to meet all of its RVO. Company C has excess RINs to sell into the market. Company C could be a blender that does not have an RVO, i.e. a gasoline marketer, or it could be a refiner who blends in excess of its RVO.

	Average Values (over 11 months)			Marginal Values (December)		
Values in Cents per Gallon	Company A Blends to meet RVO	Company B Buys RINs to meet RVO	Company C has RINs to sell	Company A Blends to meet RVO	Company B Buys RINs to meet RVO	Company C has RINs to sell
Gasoline Price	200.00	200.00	200.00	200.00	200.00	200.00
Ethanol Price	190.00	n/a	190.00	190.00	n/a	190.00
Price Difference	10.00	n/a	10.00	10.00	n/a	10.00
Fuel margin/gallon of E10	1.00	n/a	1.00	1.00	n/a	1.00
VEETC (cpg of E10)	4.50	n/a	4.50	4.50	n/a	4.50
RINs Price (cpg of ethanol)	n/a	1.50	1.50	n/a	15.00	15.00
RINs Price (cpg of E10)	n/a	0.15	0.15	n/a	1.50	1.50
Blender Margin (cpg of E10)	5.50	n/a	5.65	5.50	n/a	7.00
Total Cost (cpg of E10)	194.50	200.15	194.35	194.50	201.50	193.00
Advantage vs. B (cpg of E10)	5.65		5.80	7.00		8.50

In the above example, the companies experience an average price for gasoline, ethanol and RINs for eleven months of a year. In the last month, December, RINs prices increase by ten times, from 1.5 cpg to 15 cpg. The average RIN price is 1.5 cpg and the marginal RIN price is 15 cpg.

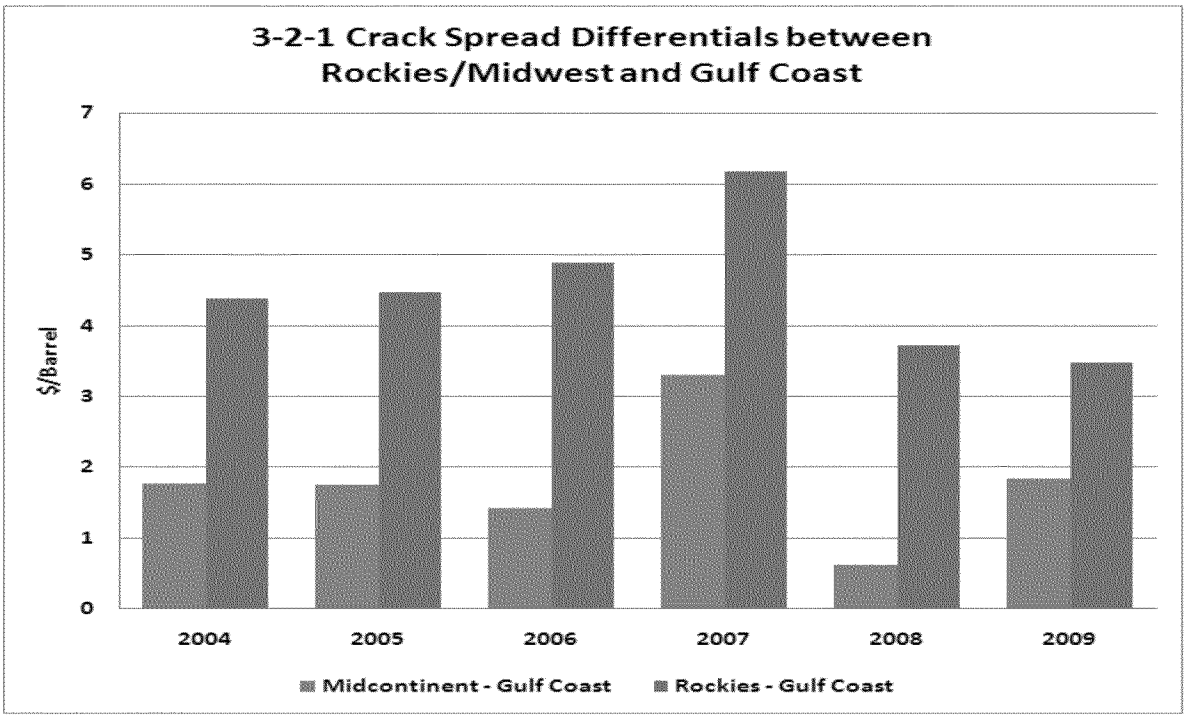
The companies value their gasoline at 200 cents per gallon and ethanol at 190 cpg. Companies A & C have a fuel margin on a gallon of E10 of 1 cpg, (10 cpg gasoline price – ethanol price times 10%.) They reduce their excise tax obligation with the VEETC by 4.5 cpg of E10.

Company A does not have to buy any ethanol RINs, so its "Blender Margin" is the fuel margin of 1 cpg + the tax credit of 4.5 cpg or 5.5 cpg. This reduces the cost of its product to 194.5 cpg. Company B does not blend and has to buy RINs. Its total cost is 200.15 cpg. Company C blends ethanol, reduces its taxes and sells a RIN. This reduces its cost to 193.00 cpg.

On average, Company A has a cost advantage over Company B of 5.65 cpg and Company C has an advantage over Company B of 5.8 cpg.

In the final month, when RINs prices go to 15 cpg, Company A's advantage vs. Company B grows to 7.00 cpg and Company C's advantage grows to 8.50 cpg. Assuming a net refining margin of 5 cpg, high RIN prices could significantly impair the profitability of non-blending small refineries.

Figure 10. Crack Spread Differentials



Source Data: EIA.

Independent U.S. refiners are highly focused on maintaining sufficient capitalization because they operate in a capital intensive business with continuous expenditures and volatile refining margins. Sufficient capitalization allows them to purchase crude oil and other feedstocks on competitive terms, to remain in regulatory compliance and to survive periodic downturns in their refining business.

Independent refiners typically operate under a variety of debt covenants, including debt to equity ratios and other restrictions. Independents may have limited access to public or private debt depending on the number, size, complexity and location of refineries they own and the degree to which they are integrated in their refined product transportation, storage and retail marketing systems.

Assessing Disproportionate Economic Hardship

A scoring matrix was designed to evaluate the full impact of disproportionate economic hardship on small refiners and used to assess the individual degree of potential impairment. The matrix is comprised of two major sections described individually below: one section combining the scoring for disproportionate structural and economic weightings, and a separate section regarding the impact of compliance with the RFS2 program on the viability of the firm. Each of the eight individual disproportionate structural and economic metrics is weighted equally to derive the disproportionate impact index. The index is then scaled from 0 to 5, with 5 indicating conditions likely to lead to disproportionate economic hardship. Similarly, the three metrics for the viability

index are then equally weighted and scaled to the same range. The lines shaded gray have not been used in this analysis, but should be maintained as part of the matrix for use in the future when other renewable fuels become commercially available.

Disproportionate Impacts Index Analysis

Disproportionate impacts consist of Disproportionate Structural and Disproportionate Economic measures, which are described below. Table 10 shows the Disproportionate Structural Impacts metrics.

Table 10. Disproportionate Structural Impact Metrics

1	**Disproportionate Structural Impact Metrics**	
a	Access to capital/credit	0 = Good access (BB- or above credit rating), 5 = Moderate access (rating in B's) 10 = Poor access (C rating or 50% D/E)
b	Other business lines besides refining and marketing	0 = Other Lines, 10 = No Other Lines
c	Local market acceptance of Renewables	0 = Products accepted, 10 = Product not accepted
	i E10	0 = High acceptance, 5 = Low acceptance 10= No acceptance
	ii E85	Not scored because of small E85 volumes
	iii Biodiesel	Not available
d	Percentage of diesel production	0 = D/(G+D) < Industry Avg. 5 = D/(G+D) > Ind. Avg<40%. 10=D/(G+D) > 40%
e	Subject to exceptional state regulations	0 = not subject, 5= Some barriers for compliance 10 = subject to exceptional state regulations
2	**Disproportionate Economic Impact Metrics**	
a	Relative refining margin measure	0 = Above 3 year industry average 5 = positive, and below 3 year industry average 10= Negative, 3 average,
b	Renewable fuel blending (% of production)	
	i Ethanol blending	0 = 75%+, 5 = 25-74%, 10 = <25%
	ii Biodiesel blending (not used)	0 = 1.1% of diesel production, 1 = <1.1%
	iii Other Advanced Biofuel blending (not used)	0 = some blending, 10 = no blending
c	In a niche market	0 = niche 5 = moderate niche impact 10 = no niche
d	RINs net revenue or cost	0 = revenue > cost, 10 = revenue < cost
	Subtotal	

1a. Access to capital/credit. Restrictions on capital may significantly limit the compliance options for firms. If new blending facilities are needed, borrowing would likely be necessary. High borrowing costs would have a disproportionate impact on the ability of less credit-worthy firms to comply with RFS2. In the worst case, loan covenants may prevent firms from taking cost-effective measures for compliance. Even if the firm would be purchasing RINs, additional working capital may be needed to effectively manage the RIN purchases. Access to capital was provided by the survey respondents and publically available data. In the absence of credit ratings, other financial information provided by the respondent (such as debt/equity ratios) were used to determine an individual refinery score. Those companies with poor access to capital were scored a 10 as demonstrated by a credit rating of C or below were scored a 10, below BB- were scored a 5, and those companies above a BB- were scored a 0.

1b. Other business lines besides refining and marketing. Refining margins tend to have considerable volatility. Additional lines of business, in particular upstream operations such as exploration and development that are less correlated with refining, would tend to smooth the firm's cash flows, and improve its ability to borrow money at closer to the investment grade rates. Those refineries without additional lines of business score a 10.

1c. Local market acceptance of Renewable Fuels. Local conditions may inhibit blending as a compliance strategy for meeting RVOs. Blending category can be separated as follows: low ethanol blends (E10), biodiesel and E85. There was no scoring for E85 and biodiesel due to a lack of data.

i. Ethanol blending (E10). Not every state has switched completely to E10. Some locations, due to either logistical obstacles or consumer behavior, still sell clear (unblended) gasoline. Refiners who reside in states with less than 75 percent E10 blending receive a 5; those with less than 25 percent blending receive a 10. Given the current state of ethanol blending, no state which participants in the program would cause a refiner to receive the higher score.

ii. E85. Reserved for later evaluation

iii. Biodiesel. Reserved for later evaluation

1d. Percentage of Diesel Production. While ethanol blending at 10 percent is already common, biodiesel is normally blended at 5 percent or less due to a lack of market acceptance. Therefore, refineries that disproportionately favor diesel production over gasoline inherently have a more difficult compliance pathway, as the percentage of renewable fuel available to blend into diesel is much lower than the 10 percent of ethanol that can be blended into gasoline. Refineries that have greater than the industry average of approximately 32 percent diesel production receive a score of 5; those at 40 percent diesel or above have a score of 10.

1e. Subject to exceptional state regulations. Certain states such as Tennessee and North Carolina require refiners to sell unblended fuel. Refiners are required to purchase RINs to meet their obligations even though they have no blending opportunities with this fuel. Also, under certain unusual circumstances, the interplay between the State regulations (such as the California

Low Carbon Fuel Standard) and the Federal RFS may increase compliance costs. Those refiners subject to exceptional regulations receive a 10.

2a. **Relative refining margin measure**. Refining margins differ from refiner to refiner for many reasons. In order to eliminate market volatility, a three year average was calculated for each small refinery. Refineries with a negative net average margin were scored a 10; those below the industry average were scored a 5.

2b. **Renewable fuel blending (% of production).** The degree to which a small refiner can actively blend refinery production with renewable fuels is a large component of economic impairment. Generally, for ethanol, (and biodiesel and other advanced biofuels) the lower the proportion of renewable fuel blending the greater the impairment.

i. Ethanol. Those refineries with between 25 and 75 percent of their gasoline at E10 were scored a 5; those with less than 25 percent were scored a 10.

ii. Biodiesel. Reserved for later evaluation.

iii. Advanced Biofuels. Reserved for later evaluation.

2c. **In a niche market.** The rationale for utilizing the classification of "niche" refinery is necessary to determine if it has access to specific geographical markets with limited alternative finished product supply or access to distressed crude oil supply, thus creating higher than industry refining margins for the niche refiner. Other refineries classified as "niche" are those that produce a specialty slate of products (lube oils, greases, asphalt, etc.) in addition to gasoline and diesel. The sale of these types of products will also result in higher than industry refining margins. Landlocked refiners whose immediate market does not have access to a refined product pipeline are scored a 0 as are or those whose primary products are not transportation fuels. Landlocked refiners with direct access to single pipeline are scored a 5. Refiners with access to more than one pipeline are scored a 10.

2d. **RINs net revenue or cost**. This criterion was not utilized in the current assessment due to lack of consistency among the survey participants. However, depending upon the business model of the small refiner, complying with their RVO can either be a net cost if they purchase all of their RINs or can generate revenue should they be able to actively trade RINs in the open marketplace. Firms that have a small refiner exemption and generate revenue by blending renewable fuels and selling RINs are not experiencing hardship related to the RFS. The windfall profit may be utilized to offset other margin related impairments. From the DOE small refiner survey, many (but not all) the respondents blended ethanol in 2009. These firms separated RINs and either sold them into the market or held them for future use. Indeed, one publically traded firm reported $4 million of revenue from RINs sales in 2009.[33]

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[33] Frontier Annual Report 2009

Viability Index Analysis

Refiner viability refers to the ability of the refiners to remain competitive and profitable. That requires sufficient profits to make investments in the refinery to remain competitive. In general, small independent refiners generally lack the revenue streams generated by crude oil production and national product marketing to counteract the historic volatility in cash flows from the refining industry. Therefore, under some circumstances, a small refinery may face compliance costs that would significantly impact the operation of the firm, leading eventually to an inability to increase efficiency to remain competitive, eventually resulting in closure. These impacts are evaluated in the viability metric shown in Table 11.

Table 11. Viability Metrics

3	Viability Metrics	
a	Compliance cost eliminates efficiency gains (impairment)	0 = no impact on efficiency, 10 = impact on efficiency
b	Individual special events	0 = no special event, 10 = special event impacting viability
c	Compliance costs likely to lead to shut down	0 = not likely to shut down, 10 = likely to shut down
	Subtotal	

3a. Compliance cost eliminates efficiency gains (impairment). This metric evaluates whether the totality of factors, including both survey results and public information would reduce the profitability of the firm enough to impair future efficiency improvements. While this would not lead to immediate shutdown, given the increasingly competitive refining market, significant constraints on efficiency improvements would eventually leave many small refineries at risk. Refineries that receive a extension of their exemption and do some blending, could sell RINs to improve their ability to position themselves to economically comply with RFS2 (through capital expenditures for blending or increasing capital for a RIN purchase program), thus reducing the impact of their future RFS2 compliance. Thus refineries that currently score high in this category and receive an extension will likely see a reduction in the scoring of this category in the future.

3b. Individual special events. Refinery specific events (such as a shutdown due to an accident, and subsequent loss of revenue) in the recent past that have a temporary negative impact on the ability of the refinery to comply with the RFS.

3c. Compliance costs likely to lead to shutdown. Some refineries have a unique vulnerability such as a weak competitive position and any significant additional burden could cause bankruptcy or closure. This metric covers those refineries indicating that compliance may lead to such an outcome.

Recommendation for Exemption Extension

Utilizing the individual scoring metrics and the previously described index analysis, Figure 11 shows the disproportionate impacts and viability indices for each of the eighteen refineries that submitted sufficient data to be evaluated[34]. A recommendation of disproportionate impact was determined if both indices were greater than 1. This requires a score equivalent to at least four of the eight metrics for disproportionate impact at the moderate level (5), and a positive value for at least one of the three metrics for the viability index. Thirteen of the eighteen refineries scored a 1 or higher in both indices, thus qualifying for a recommendation for extension of their RFS1 exemption.

Figure 11. Refinery Rankings by PADD

[Redacted]

XII. Findings and Conclusion

EPAct 2005, through the establishment of the RFS1 program, mandated a minimum renewable fuel content of gasoline, while exempting certain small refineries from compliance from 2007 through 2010. EPAc 2005 also required DOE to conduct a study for the Administrator of the EPA assessing whether the RFS would impose a "disproportionate economic hardship" on the statutorily defined small refineries. On February 24, 2009, DOE transmitted its study with recommendations to EPA.

In October 2009, Congress directed DOE to seek input from small refineries and revisit the issue of disproportionate economic hardship for small refineries. A survey of local market and financial data from currently exempt small refineries revealed individual differences between refineries that allowed the identification of disproportionate economic hardship among the respondents.

Eighteen refineries responded to the survey and fell within the scope of the study, and it is recommended that thirteen of them should receive an extension of their RFS1 exemption. The refineries recommended were geographically diverse: **[Redacted]**. The refineries recommended for the exemption are:

[Redacted]

[34] The scoring for individual refineries is presented in Appendix H.

[redacted]

PRODUCT AGREEMENT
Contract No. [redacted]

Buyer:		**Seller:**	
[redacted]		[redacted]	
Attn:	[redacted]	**Attn:**	[redacted]
Phone:	[redacted]	**Phone:**	[redacted]
Fax:	[redacted]	**Fax:**	[redacted]
Email:	[redacted]	**Email:**	[redacted]

DURATION: April 1, 2017 to March 31, 2018 and month to month unless cancelled by either party with a 30 day written notice after the initial term.

MODE/LOCATION: Truck Transport – [redacted] and [redacted] Terminal

PRODUCT(S): Regular E10 and Premium E10 blends, #2 Ultra Low Sulfur Diesel (ULSD) Clear

VOLUME: Gasoline E10 Blends – Minimum of 500 bbls and a maximum of 800 bbls per day lifted on a ratable basis. Additional volumes must be mutually agreed upon.

ULSD – Minimum of 1,000 bbls and a maximum of 1,600 bbls pe r month lifted on a ratable basis throughout the month. Additional volumes must be mutually agreed upon.

PRICING:

[redacted] – [redacted] **Terminal formula:**

Regular E10 – lower of:

1. (Previous day Platts Gulf Coast Pipeline mean (87 CBOB-PGCM, symbol AARQU00) plus 3.50 CPG X 90%) Plus (Previous day Chicago Ethanol Platts, symbol AALRI00, mean plus 28 CPG X 10 %) minus (Previous day Platts Current year Ethanol RIN (RINCY02) mean X .05). Day of lift.

   OR

2. The current day gross low unbranded rack posting for 87E10 at the [redacted] terminal as reported by OPIS minus 0.50 CPG. Day of lift.

Premium E-10 – lower of:

1. (Previous day Platts Gulf Coast Pipeline Mean (93 Premium-PGCM, symbol PGAJB00) plus 3.50 CPG X 90%) Plus (Previous day Chicago Ethanol Platts, symbol AALRI00, mean plus 28 CPG X 10 %) minus (Previous day Platts Current year Ethanol RIN (RINCY02) mean X .05). Day of Lift.

   OR

2. The current gross low unbranded rack posting for 93E10 at the [redacted] terminal as reported by OPIS minus 0.50 CPG. Day of lift.

Ultra-Low Sulfur Diesel:

1. [redacted] OPIS Gross Low unbranded posted rack plus 1.0 CPG. If [redacted] is the OPIS Gross low rack poster for the day, the 1.0 CPG will not be added. Day of lift.

[redacted] **Refinery formula:**

Regular E10 – lower of:

1. (Previous day Platts Gulf Coast Pipeline mean (87 CBOB-PGCM symbol AARQU00) plus 2.50 CPG X 90%) Plus the (Previous day Chicago Ethanol Platts, symbol AALRI00, mean plus 28 CPG X 10 %) minus (Previous day Platts Current year Ethanol RIN (RINCY02) mean X .05). Day of lift.

   OR

2. The current day gross low unbranded rack posting for 87E10 at the [redacted] terminal as reported by OPIS minus 1.50 CPG. Day of lift.

Premium E-10 – lower of:

1. (Previous day Platts Gulf Coast Pipeline Mean (93 Premium-PGCM symbol PGAJB00) plus 2.50 CPG X 90%) Plus the (Previous day Chicago Ethanol Platts symbol AALRI00, mean plus 28 CPG X 10 %) minus (Previous day Platts Current year Ethanol RIN (RINCY02) mean X .05) Day of Lift.

   OR

2. The current gross low unbranded rack posting for 93E10 at the [redacted] terminal as reported by OPIS minus 1.5 CPG. Day of lift.

Ultra-Low Sulfur Diesel:

2. [redacted] OPIS Gross Low unbranded posted rack plus 1.0 CPG. If [redacted] is the OPIS Gross low rack poster for the day, the 1.0 CPG will not be added. Day of lift.

Rev. 5/2016

Weekend pricing: Friday's OPIS and Platts close prices will be in effect for Saturday, Sunday, and Monday.
Holiday pricing: Any holiday that falls throughout the week, pricing for the prior day will carry through.
Pricing based: Midnight to Midnight
PLATTS File: Close of Business (5pm EST)
OPIS File: Close of Business (5pm EST)

PAYMENT TERMS: Net 10 by Electronic Funds Transfer (EFT) from day of lift.

The payment terms are Seller's standard payment terms for this market. If standard payment terms change, the updated payment terms will become a part of this Agreement.

OTHER: The parties agree that Seller's Terms and Conditions of Sale located at http://www [redacted] are considered to be part of this Agreement and are incorporated herein by reference. This Product Agreement constitutes the entire agreement between the parties relating to the subject matter hereof and supersedes all prior negotiations, proposals, inquiries, commitments and agreements, whether written or oral with respect to the subject matter hereof, except for any credit agreement entered into between Buyer and Seller, which shall remain in effect. In the event of a conflict between the Product Agreement and the Terms and Conditions of Sale, this Product Agreement shall control in all cases.

NOTICES: All notices hereunder shall be in writing and shall be deemed given when delivered in person or sent by facsimile transmission, or if mailed, on the third business day after being mailed.

PLEASE SEND NOTICES TO: All written notices required under this Agreement shall be in writing and addressed to the parties at the addresses set forth above, unless a party notifies the other, in writing, of another address to which notices are to be sent. All notices shall be deemed delivered when (i) personally delivered (ii) upon delivery confirmation if sent by registered or certified mail, postage prepaid, return receipt requested; or (iii) upon delivery confirmation if sent by a nationally recognized courier service.

This confirmation shall be deemed conclusive, absent manifest error, unless objected to in writing within 48 hours. Any terms in your confirmation, if any, which are inconsistent with or additional to the terms set forth in this confirmation are hereby rejected. Please send your confirmation to the noted address or email address to the seller noted at the top of this agreement.

Buyer: _____ **Seller:** [redacted]

Signed: _____ **Negotiated By:** _____ [redacted]

Name: _____ **Signed By:** _____ [redacted]

Date: _____ **Date:** _____

Rev. 5/2016

Renewable Fuel Standard
Small Refinery Hardship Program
Suggestions for Streamlining the Petition Process

I. General Changes to the Hardship Petition Process

1. Streamline the Petition Process

The petition process is burdensome for petitioning small refineries, EPA and DOE. To ease the burden on all parties, the small refiners suggest that EPA and DOE streamline the petition process by withdrawing the agency's December 6, 2016 memorandum requiring small refinery petitioners to submit voluminous amounts of financial and other data in favor of the streamlined process that DOE previously used.[1] Small Refineries should be required to complete and submit the DOE survey form in accordance with its definitions and instructions, the RFS compliance costs spreadsheet, and a petition containing information not covered by the DOE survey or RFS cost spreadsheet.

2. Score all of the DOE Metrics

In 2011, DOE determined that it did not then have adequate data to score three of the metrics described in the DOE Small Refinery Exemption Study ("DOE Study"). The metrics for local market acceptance of renewable fuels (metric 1.c.) and renewable fuel blending (% of production) (metric 2.b.), were to be applied "in the future when other renewable fuels [became] commercially available."[2] E85, biodiesel, and advanced biofuels are all commercially available, enabling DOE to score these metrics. The metric measuring whether RINs are a net revenue or cost was not scored in 2011 "due to a lack of consistency among [petitioners]."[3] Since 2013, petitioners have been required to submit RFS compliance cost spreadsheets with their petitions, which has given EPA consistent data among petitioners for purposes of evaluating whether RINs are a net revenue or cost.

Therefore, the reasons for not scoring these metrics in 2011 are no longer valid and they should be scored going forward. If DOE thinks the data necessary to evaluate these metrics is not available or reliable, the metrics should not be scored at all.

3. Use Objective Criteria

To ensure consistent and fair application of the hardship standard to all small refineries, and to streamline the petition process, EPA should use objective criteria when applying the DOE metrics. Using objective criteria will give small refineries certainty of their RFS obligations which will allow them to make important operational decisions. *See* Section II for a discussion of the DOE metrics.

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[1] U.S. EPA, FINANCIAL AND OTHER INFORMATION TO BE SUBMITTED WITH 2016 RFS SMALL REFINERY HARDSHIP EXEMPTION REQUESTS (Dec. 6, 2016), available at: https://www.epa.gov/sites/production/files/2016-12/documents/rfs-small-refinery-2016-12-06.pdf.
[2] DOE Study at 33.
[3] DOE Study at 35.

4. Do Not Adopt Scoring Under the DOE Addendum

In March of 2014, DOE issued an addendum to the DOE Study, making hardship relief more difficult to secure. The DOE addendum is inconsistent with Congressional intent that small refineries not bear a disproportionate regulatory burden and should not be applied. For the reasons described above, EPA should reject DOE's scoring based on the 2014 addendum to the DOE Study; "any impact on efficiency gains" (metric 3.a.) and "any individual special event" (metric 3.b.) warrant a score of "10."

5. Use of Independent Contractors

To the extent that DOE and EPA rely on contractors to evaluate small refinery hardship petitions, the agencies should rely only on contractors that are neutral, independent parties that do not have an interest in the outcome of the petition. DOE and EPA should also instruct any contractors that they rely on to evaluate small refinery hardship petitions consistent with the DOE Study and the additional information provided in this document. This will help ensure that the agencies receive and are able to impartially and accurately assess all small refinery hardship petitions.

6. Issue Timely Decisions

The regulations require EPA to act on small refinery hardship petitions within 90 days. This deadline will be easier to achieve if the petition process is streamlined and the agency applies objective criteria, which will also reduce the burden in preparing lengthy decision documents. Simplifying the process will also enable small refineries to submit their petitions earlier in the year. The complexity of the process and volume of data required to be submitted with the petition results in petitions being submitted later in the compliance year.

7. Give Petitioners An Opportunity to Meet Prior to the Denial of a Petition

Final decision documents are not always accurate, leading to costly appeals. Prior to denying a hardship petition, EPA should offer the petitioner an informal opportunity to meet to discuss the basis for the intent to deny.

II. DOE Scoring Metrics

1. Disproportionate Structural Impact Metrics

a. *Metric 1.a. Access to Capital/Credit (DOE Survey Form Lines 3.15 – 3.17)*

The DOE survey form, lines 3.15 to 3.17, ask for the small refinery's credit rating and debt to equity ratio, which matches scoring metric 1.a. DOE/EPA should rely on this objective criteria to score metric 1.a., and not require the production of loan covenants, financial statements, and other financial information to do a more expansive analysis of the company's access to capital. This will streamline the petition process and assure consistent application among petitioners.

Score	Description
0	Good access (BB- or above credit rating)
5	Moderate access (rating in Bs)
10	Poor access (C rating or 50% D/E)

b. *1.b. Other Business Lines Besides Refining and Marketing*

DOE's metric 1.b. is intended to measure whether small refineries have other business lines *besides refining and marketing*. DOE has scored refineries that produce refined petroleum products other than transportation fuels as having "other business lines," while at the same time including non-transportation fuels in the measure of "net refining margins" (metric 2.a.). This approach is internally inconsistent because "refining" cannot mean two different things in two metrics using the same term.

The DOE survey form instructions state that all definitions are to be construed as "consistent with" the Energy Information Administration's ("EIA's") Form EI-810, "Monthly Refinery Report"; EIA-815, "Monthly Bulk Terminal and Blender Report"; and EI-28, "Financial Reporting System"; and other forms as appropriate. Each of the sources consistently treats refining as the production of all refined petroleum products including lubricants and asphalt. EIA defines "Refinery" and "Petroleum Products" as:

> ***Refinery.*** An installation that manufactures finished **petroleum products** from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.
>
> ***Petroleum Products.*** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.[4]

[4] *Petroleum & Other Liquids, Definitions, Sources and Explanatory Notes*, U.S. Energy Information Administration, https://www.eia.gov/dnav/pet/TblDefs/pet_cons_psup_tbldef2.asp (last visited Aug. 22, 2017) (emphasis added).

EIA also defines "Refining" as:

> After crude oil is removed from the ground, it is sent to a refinery where different parts of the crude oil are separated into useable petroleum products. These petroleum products include gasoline, distillates such as diesel fuel and heating oil, jet fuel, petrochemical feedstocks, waxes, lubricating oils, and asphalt.[5]

EPA's definition of refining is the same as EIA's, producing a range of petroleum products including non-transportation fuels.[6]

Treating the production of lubricants, asphalt, and other non-transportation fuels as "other business lines" also is inconsistent with the purpose of this metric as described in the DOE Study, which was to evaluate whether a refinery has "other lines of business" that are less correlated with refining. The example used by DOE was upstream exploration and development. The DOE Study was trying to assess the degree to which these separate, non-refining operations would make a small refinery less vulnerable to the volatility in "refining margins," not whether a refinery produced products other than transportation fuels.[7]

If DOE treats refined petroleum products other than transportation fuel as "other business lines," then it should exclude everything but transportation fuels from net "refining" margins in metric 2.a. because refining cannot mean two different things in two metrics using the same term.

Score	Description
0	Other lines
10	No other lines

c. *1.c. Local Market Acceptance of Renewable Fuels*

In scoring whether there is "local market acceptance of renewable fuels," DOE only considers E10, and not E85 and biodiesel, although the metric contemplates one score that captures market acceptance of all three "products" and requires a score of "10" if any product (singular) is not accepted.

The DOE Study indicated that there was no scoring for E85 and biodiesel due to a "lack of data." The EIA publishes detailed data each year on the volume of E85 used and the number of vehicles capable of accommodating it. DOE maintains an "alternative fuels data center" that tracks the number and location of all E85 fueling stations across the United States, and EPA's 2014-2016 final RFS rule acknowledged that a number of market constraints, including that "blenders and distributors [will need to see] sustained profit opportunities before they are willing to invest in new infrastructure to increase their capacity to blend and distribute renewable fuels." 80 Fed. Reg. 77,420, 77,459 (Dec. 14, 2015). In addition, small refinery hardship petitioners

[5] *Oil: Crude and Petroleum Products Explained*, U.S. ENERGY INFORMATION ADMINISTRATION, https://www.eia.gov/energyexplained/print.cfm?page=oil_home (last visited Aug. 11, 2017).
[6] *Types of Refined Petroleum Products*, U.S. ENVIRONMENTAL PROTECTION AGENCY, https://www.epa.gov/emergency-response/types-refined-petroleum-products (last visited Sept. 7, 2017).
[7] DOE Study at 34.

describe constraints in their local markets on the sale of E85 and large retail chain owners admit that they are "fuel agnostic" and unwilling to offer fuels that their customers are not inclined to buy.[8] Finally, a report for Growth Energy, a trade association representing the ethanol industry, acknowledges the market constraint on E85 and concludes that greater E85 penetration will not occur until RINs trade at $2-3/RIN at which point "blenders [will] face stronger incentives to reduce E85 prices (i.e., reduce their margins) in order to drive needed volumes."[9] All of these data points indicate that there is voluminous data about local market resistance to E85 use to enable DOE to score this metric.

In addition, DOE should be scoring local market resistance to biodiesel blending. Small refineries disproportionately produce diesel; diesel is blended at lower rates than gasoline; and fewer RINs are generated from blending biodiesel. Therefore, not scoring local market acceptance of biodiesel skews the scoring against granting small refinery hardship. There are very significant obstacles to biodiesel blending, some of which are specific to small refineries. For example, a small refinery will not be able to sell blended biodiesel in a market where the large integrated refiner has chosen not to do so. Large integrated refiners pick and choose in which markets they blend based on geography (warmer climates), proximity to biodiesel production, transportation costs, etc. A small refinery will not be able to sell blended biodiesel where the largest market player, with its lower overall cost structure, chooses not to do so. This is why state biodiesel blending mandates help small refineries compete against larger, vertically-integrated refiners (unless their customer base is exempt from the mandate). However, many states do not have biodiesel blending mandates.

In addition, large truck stop chains and convenience stores like Kwik Trip, Love's (Musket), and Pilot have displaced small refineries' ability to blend biodiesel. Due to the grossly inflated value of the RIN, large truck stop chains and convenience stores that are not obligated parties under the RFS program refuse to buy blended biodiesel from small refineries or cap the amount of blended biodiesel that they will accept in order to capture the RIN value themselves. Small refineries that have made investments to add biodiesel blending have seen their investments displaced by large truck stop chains and convenience stores.

Biodiesel is not accepted in all markets and is not amenable for use in all markets. EIA and DOE track biodiesel volumes and retail outlets where it is sold. EPA evaluated market constraints on biodiesel blending in its 2014-2016 rulemaking, and small refinery hardship petitioners describe in their petitions the local market acceptance of biodiesel and market constraints on more biodiesel blending in their markets. Therefore, DOE has ample data with which to determine whether there are market constraints on biodiesel blending to enable DOE to score this metric.

A score of "0" for this metric only reflects local market acceptance of E10, but the metric was intended to score the local market acceptance of all three products – E10, E85, and biodiesel. If DOE does not think the data is available or reliable to evaluate all three products,

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[8] Letter from David Masuret and Matthew Durand, Cumberland Farms, Inc. to Gina McCarthy, Administrator, EPA (Nov. 2, 2016) (EPA Docket ID No. EPA-HQ-OAR-2016-0544-0055).

[9] MARC CHUPKA, J. MICHAEL HAGERTY, NICHOLAS POWERS & SARAH GERMAIN, THE BRATTLE GROUP, PEEKING OVER THE BLENDWALL: AN ANALYSIS OF THE PROPOSED 2017 RENEWABLE VOLUME OBLIGATIONS at 15 (July 11, 2016).

then it should not score this metric at all. Scoring the metric based solely on E10 acceptance is inaccurate because the metric was intended to measure local market of all three renewable fuels, and ignoring E85 and biodiesel hides the small refinery hardship caused by overwhelming evidence that there is substantial local market resistance to E85 and biodiesel that uniquely harms small refineries.

	Score	Description
c. Local market acceptance of Renewables	0 10	Products accepted Product not accepted
i. E10	0 5 10	High acceptance Low acceptance No acceptance
ii. E85	Not scored because of small E85 volumes	
iii. Biodiesel	Not available	

d. *1.d. Percentage of Diesel Production (DOE Survey Form Line 4.12, 4.13)*

Evaluation of this metric should be based on industry average diesel production and not the 2011 industry average of 32%. The DOE scoring metric description (below) uses "Industry Average" rather than 32%, indicating its intent that the current industry average, and not the average in 2011, should be applied. In 2015, 2016, and 2017, the industry average diesel production as reported by EPA in the annual RFS rulemakings was much lower than the 2011 average – 29%, 30%, and 28% – respectively. EPA should use the industry average in the most recent compliance year for purposes of scoring this metric.

Score	Description
0	D/(G+D) < Industry Avg.
5	D/(G+D) > Ind. Avg. < 40%
10	D/(G+D) > 40%

e. *1.e. Subject to Exceptional State Regulations (DOE Survey Form Line 4.16)*

DOE has been too narrow in construing what constitutes an exceptional state regulation. For example, state biofuel blending mandates generally help small refineries because they force large integrated refiners, that ordinarily pick and choose in which markets they blend based on favorable market conditions, to blend in all markets with state mandates. Small refineries cannot sell blended fuel when competing with large integrated refiners offering unblended fuel. However, when the small refinery's customers are exempt from the state biofuel blending mandate, state biofuel mandates have just the opposite effect – the state biodiesel mandate benefits others, but not the small refinery. In this situation, the small refinery should receive a score of "5," some barriers for compliance, per the chart below.

DOE's description of this metric indicates that it is trying to identify state laws that create obstacles to blending for the individual refinery, forcing the small refinery to buy RINs or generate RINs but give away the RIN value in order to achieve compliance. Therefore, in scoring this metric, DOE/EPA should be more expansive in considering whether the state law creates obstacles to blending for the small refinery.

Score	Description
0	Not subject
5	Some barriers for compliance
10	Subject to exceptional state regulations

f. *2.a. Relative Refining Margin Measure (DOE Survey Form Line 3.7)*

EPA has instructed small refineries to exclude taxes, depreciation, and finance charges (interest) from their net refining margin calculation. This contradicts the definition in DOE's survey instructions, which states:

> **Net Refinery Margin (dollars per barrel) (3.7) Report** the difference between the gross refining margin and the costs of producing and selling the petroleum products (e.g., refining energy costs and selling costs). The net margin measures before-tax cash earnings from the production and sale of refined products. The net margin excludes peripheral activities such as non-petroleum product sales at convenience stores.[10]

Small refineries' net refining margins should be based on the DOE survey instructions. "Before-tax cash earnings" takes into account the company's finance charges (interest), but EPA has instructed refiners to exclude interest.

In calculating the industry average net refining margins against which small refinery margins are compared for purposes of scoring this metric, DOE is required to factor in the RIN revenues from integrated refiners' affiliated marketing arms, which is where their windfall RIN revenues are reflected. According to the DOE survey instructions, the net refining margin includes "the production and sale of refined products" and only excludes "non-petroleum product sales at convenience stores," indicating that the net refining margin carries all the way to retail, which is consistent with the DOE's evaluation of "of other business lines besides refining **and marketing**."

Therefore, if a large integrated refinery has an affiliated retail chain/marketing arm, its net refining margin must include the margins from its retail operations to capture its windfall RIN revenues. By way of example, to avoid the extreme competitive disadvantage for refineries that do not own retail, Marathon bought the Speedway retail chain. Marathon reported that "synergies across the network" contributed to its exceptional performance and record earnings in 2016:

> Speedway continued its exceptional performance in the quarter and set multiple records for the full-year 2016 while maintaining tight control on expenses. Speedway surpassed segment all-time highs in income from operations, light product gallons sold, merchandise sales, and merchandise gross margin on a percentage and absolute dollar basis. Speedway continues to exceed our expectations by driving marketing-

[10] U.S. DEPT. OF ENERGY, RFS2 SMALL REFINERY SURVEY 2010, INSTRUCTIONS (May 2010), available at: *https://www.reginfo.gov/public/do/DownloadDocument?objectID=17799501.*

enhancement opportunities and continuing to realize acquisition synergies across the network.[11]

Windfall profits from selling RINs are reflected in the marketing arms of large integrated refining companies and, according to DOE's survey instructions, must be captured in calculating the net refining margin for the industry.

Each year DOE determines the industry-wide net refining margin, but it's not clear how they do so. EPA notes that "DOE calculates three-year average industry refining gross and net margins…based on public data." It is not clear, however, how that calculation is done and the information that the agency relies on in performing the calculation is not made public to small refinery petitioners. In particular, it is not clear that profits from marketing or "synergies across the network" have been included or that the production and sale of all types of refined petroleum products have been accounted for. Therefore, there should be greater transparency in how the net refining margin is calculated.

Net refining margins should be reported on the DOE survey (line 3.7) consistent with the definitions in the DOE survey instructions, and the industry-wide refining margins against which small refineries are compared should include affiliated marketing businesses and the production and sale of all types of refined petroleum products.

Score	Description
0	Above the 3-year industry average
5	Positive, and below 3-year industry average
10	Negative

g. *2.b. Renewable Fuel Blending (% of production) (RFS Compliance Cost Spreadsheet)*

The DOE Study explains that the degree to which a small refinery can blend its production with renewable fuel is a large component of assessing small refinery hardship; yet, this metric has never been scored for biodiesel and other advanced biofuel blending. All small refineries that petition for hardship relief submit the RFS compliance costs spreadsheet that includes the amount of renewable fuel blending in each of these categories. The RFS compliance cost spreadsheet was developed by DOE/EPA in 2013, and all hardship petitioners are required to submit it with their petition in order for their petition to be deemed complete. Therefore, DOE has had the data it needs to score this metric since at least 2013 and, by not scoring this metric, has underestimated the harm to small refineries.

Like metric 1.c., DOE scoring metric 2.b. is based on ethanol blending alone. Ethanol is the fuel that is most readily accepted for blending. Scoring this metric as a "0," without accounting for the lack of blending in the other fuels categories underestimates small refinery hardship. This is particularly true because small refineries disproportionately produce diesel. If

[11] *Marathon Petroleum Corporation Reports Fourth-Quarter and Full-Year 2016 Results*, MARATHON PETROLEUM CORP., http://ir.marathonpetroleum.com/phoenix.zhtml?c=246631&p=irol-newsArticle&ID=2241160 (last visited Aug. 22, 2017) (internal quotations omitted).

DOE does not score the other categories of renewable fuel blending, it should not score this metric at all.

Score	Description
Ethanol blending	
0	75%+
5	25-74%
10	<25%
Biodiesel blending (not used)	
0	1.1% of diesel production
10	<1.1%
Other Advanced Biofuel blending (not used)	
0	Some blending
10	No blending

h. *2.c. In A Niche Market*

The DOE Study rationale for characterizing a small refinery as a "niche" refinery based on its production of specialty products is that specialty products have higher refining margins. Because DOE requires that refineries include all refined petroleum products in their calculation of "net refining margins," any higher margins from specialty product sales are already reflected (counted against) small refineries in metric 2.a. In addition, DOE treats specialty products as "other business lines" in metric 1.b., stacking the deck against small refineries that produce specialty products.

In addition, small refineries suspect that the industry average net refining margins calculated by DOE do not include specialty products, resulting in a lower industry average net refining margin, even though small refineries that produce specialty products are compared against the industry average refining margins and receive a score of "0" for this metrics.

Therefore, DOE should exclude "specialty products" from "net refining margins" (metric 2.a.) or, if they are included in net refining margins, refineries should not be characterized as "niche" under metric 2.c., or as having "other business lines" under 1.b., to be internally consistent and avoid stacking the deck.

Score	Description
0	Niche
5	Moderate niche impact
10	No niche

i. *2.d. RINs Net Revenue Or Cost (RFS Compliance Cost Spreadsheet)*

The DOE Study explains that complying with RFS can be a net cost to refineries that purchase RINs to comply and can generate revenue for refineries that comply by blending. DOE explained that it did not score this metric in the 2011 study "due to lack of consistency among survey participants." As described above, in 2013, DOE/EPA developed the "RFS Compliance

Cost" spreadsheet, which provides consistent data from petitioners on RFS compliance costs. As a result, DOE has the data necessary to score this metric and this metric should be scored.

EPA should make one change to its instructions for completing the RFS Compliance Cost Spreadsheet to accurately capture small refinery compliance costs. As the Coalition has explained to EPA, it has become an increasingly common practice for distributors to buy blended fuel from small refineries only if the small refinery agrees to disgorge a significant portion of the RIN value (i.e., the opposite of RIN cost pass-though). In other words, due to their lack of market power, small refineries that blend renewable fuel are forced to give away RIN value to capture the sale. Small refineries also are forced to discount the sales price of their fuels to compete with RIN-long refiners that use their excess RIN sales to discount the sales prices of the petroleum fuels they sell and undercut their small refinery competitors.

EPA should make clear in its instructions that small refineries should include these RIN stealing discounts in the RFS Compliance Cost Spreadsheet. The small refineries have provided EPA with contracts showing, for example, that the price for blended fuel is the spot price less 70-90% of the RIN value, depending on the customer. This is now a common practice in the industry and uniquely harms refineries that do not own retail and are forced to sell their products to distributors. The RFS Compliance Cost spreadsheet needs to capture the hardship to small blending refineries that cannot retain the RIN value and are effectively buying RINs even though they generate RINs through blending.

Further, DOE and EPA should recognize that small refineries are not able to pass-through or "recover" their RFS costs in the sales price of the fuels they produce. As explained in the DOE Study:

> The degree to which the costs burdening small refineries will be passed through to the market depends on many factors, including the market power and the relative cost level of a small refiner relative to other market participants.

DOE Study at 22-23. Because small refineries have very limited market power and have costs proportionally higher than their market competitors, small refineries are not able to pass through their RFS costs. The "RIN stealing" described above is further evidence of small refineries' inability to pass through their RFS costs.

Score	Description
0	revenue > cost
10	revenue < cost

2. Viability Metrics

The viability metrics measure "the ability of the refiner [] to remain competitive and profitable." A small refinery cannot remain competitive when it bears a disproportionate

regulatory burden and competes with multi-national super majors with full integration and economies of scale.[12]

Appendix B-5 to the DOE Study explains the extreme, permanent, competitive advantage large integrated oil companies enjoy over small refineries in a high-priced RIN market. While DOE predicted that small refineries would be harmed significantly by high RIN prices when the blendwall was reached, it did not anticipate that RINs would trade at ten times their intrinsic value:

> RIN prices should rise to reflect the most expensive blending opportunity taken. As the RFS mandate increases, obligated parties will demand more RINs, adding upward price pressure. As the mandate increases, increasing the supply of RINs becomes difficult or nearly impossible. In anticipation of the blend wall, obligated parties may stockpile RINs through discretionary blending in anticipation of a shortage of blending opportunities. Those parties that are short, i.e. cannot generate enough RINs through their own facilities to meet their RVO, will need to purchase RINs and could suffer significant economic hardship.[13]

The DOE Study concluded that when the blendwall was reached, RIN prices would reflect the most expensive blending opportunity. The fact that they are trading at ten times their intrinsic value means that the harm to small refineries is more acute than DOE ever anticipated.

The extreme competitive disadvantage for small refineries caused by the current rule structure is aptly described in Appendix B-5, but several market shifts have occurred that DOE did not predict. First, DOE did not predict that RINs would trade at ten times the cost of blending. Second, the DOE Study also did not predict RIN value stealing – downstream distributors/retailers forcing small refineries to disgorge RIN value to secure the sale because they lack market power to retain the full value of the RIN. Third, DOE did not predict that even if small refineries were able to make investments in renewable fuel blending to avoid the high cost of RINs, those investments could be displaced by unobligated blenders (e.g., Kwik Trip setting up a competing blending operations to displace the small refiners blending operation). Finally, DOE did not predict the market manipulation and fraud in the RIN market that has caused wild volatility, higher prices, and fraud costing taxpayers over a billion dollars.

The harm to small refineries became acute in 2013 when RIN prices increased by 5000%, which is when DOE adopted the addendum to the DOE Study, raising the bar for securing hardship relief. The addendum should be abandoned to avoid greater harm to small refineries.

a. *3.a. Compliance Costs Eliminates Efficiency Gains (impairment)*

The DOE Study recognized that small refineries could suffer a disproportionate economic hardship under the RFS program if buying RINs is more expensive than RINs that can be generated through blending.[14] The harm is both the cost of RINs and the competitive advantage high RIN values bestow on large integrated refiners that achieve compliance through blending

[12] DOE Study at 23.
[13] DOE Study at 17-18.
[14] DOE Study at 2.

and generate and sell excess RINs. As RIN prices have increased from 2-3 cents per RIN in 2010 to close to nearly $1.00 per RIN today, the competitive distortion in favor of large integrated refiners has become extreme.

In numerous decision documents, EPA acknowledged that it was denying hardship relief to small refineries notwithstanding its conclusion that doing so would prevent the refinery from making investments to improve efficiency, reliability, and safety:

> The cost of RFS compliance, either through purchasing and blending renewable fuels, or purchasing RINs, or a combination of both, may reduce funds available to pay for other potential projects to improve the efficiency, reliability, and safety of a refinery, but that fact does not establish entitlement to an exemption.

As the 10th Circuit just concluded in *Sinclair*, Congress did not intend for the RFS to prevent small refineries from investing in efficiency, reliability, and safety projects in order to pay for RINs.[15]

As DOE predicted, high RIN prices are causing a disproportionate economic impact on small refineries. This disproportionate economic impact, by its very nature, is reducing small refineries' profitability relative to their large integrated refining competitors that generate excess RINs through blending, and the reduction in relative profitability is impairing the small refineries' ability to invest in future efficiency improvements. As DOE noted, significant constraints on efficiency improvements eventually will leave small refineries at risk, which is all that is required to demonstrate an impact on efficiency gains.

In the past, EPA has denied small refinery hardship petitions, stating in decision documents that small refineries must shoulder their share of the RFS compliance burden.

> EPA has considered the language in the recent explanatory statement for the 2016 Consolidated Appropriations Act which states: 'The Secretary [of DOE] is reminded that the RFS program may impose a disproportionate economic hardship on a small refinery even if the refinery makes enough profit to cover the cost of complying with the program.' Thus, in 2012, the statutory presumption was that in 2013 and future years, [refinery] would shoulder its share of responsibility for the compliance burden borne by obligated parties under the RFS program, unless it could show 'disproportionate economic hardship.'

Small refineries do not mind shouldering their share of any compliance burden, but that is not what is happening under the RFS. The RIN market is no longer a compliance market; it has become a market that is highly susceptible to manipulation, speculation, and fraud. Vertically-integrated refineries that avoid the RIN market or benefit from it because they have excess RINs or are sophisticated enough to have a RIN trading desk and buy and sell RINs for profit at the expense of small refineries. Small refineries that are paying ten times the intrinsic value of a RIN to a RIN-long integrated oil company, an exempt (non-refining) blender like Murphy USA

[15] *Sinclair Wyoming Refining, et al. v. EPA*, Case No. 16-9532 (10th Cir. 2017).

or Kwik Trip, or multi-national commodity trader with links to Russia, are shouldering more than their share of the compliance burden.

As DOE predicted, small refineries owned by large integrated oil companies are not suffering from the same competitive distortion because they have access to RINs from their affiliated marketing arms, but all other small refineries, blending and non-blending, are harmed by the current market conditions and should receive a score of "10."

Score	Description
0	No impact on efficiency
5	Moderate impact on efficiency
10	Impact on efficiency

b. *3.b. Individual Special Events*

The DOE Study recognizes that certain events can have a temporary negative impact on a refinery's ability to comply with the RFS. In the past, EPA and DOE have taken an unreasonably narrow view of what qualifies as an "individual special event." EPA and DOE should find that pipeline shutdowns, extended refinery turnarounds, unplanned outages, and key unit shutdowns that have a temporary negative impact on a refinery's ability to comply with the RFS should be considered "individual special events."

Score	Description
0	No special events
5	Moderate event
10	Special event impacting viability

c. *3.c. Compliance Costs Likely To Lead to Shutdown*

The DOE Study recognized that some refineries have a unique vulnerability, such as a weak competitive position, and any significant additional burden could cause bankruptcy or closure. This metric measures whether a small refinery may face compliance costs that would significantly impact the operation of the facility, leading eventually to an inability to increase efficiency to remain competitive, eventually resulting in closure. Over the past several years, small refineries have shut down and others have been acquired. In addition, to consider bankruptcy or closure, DOE/EPA should consider the necessity of the sale of the asset because the small refinery can no longer afford to operate it.

A refinery does not need to be on the verge of shutdown to receive a "10" on this metric.

Score	Description
0	Not likely to shut down
10	Likely to shut down