

Focus on Fuels

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TM&C Services

Renewable Fuel Standards Set for 2014, 2015, & 2016

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For all of the folks waiting with bated breath for the renewable fuel standards that were supposed to be set one to two years ago, they have arrived. They are not earth shattering but they are seen by both the petroleum industry and the renewable fuel producers as significantly less than optimum.



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Finally! Renewable Fuel Standards Set for 2014, 2015 & 2016

by Tom Hogan

The final rule was announced by the EPA on the afternoon of November 30, 2015, the last day allowed by the consent decree requiring the EPA to set the standards. The final rule generally followed the pattern set in the proposed rule with total renewable fuel increasing 0.35, 0.63 and 0.71 billion gallons in 2014, 2015 and 2016 respectively.

These are relatively small changes from the June 10, 2015 proposed levels which portend a potentially large problem. Some important points are listed below.

TM&C Services in Fuel Regulations

TM&C provides a full range of services in its fuels regulatory practice. Some of these services are listed below.

- Preparing, reviewing and submitting fuels reports, including CDX submissions.
- Facility audits for compliance with fuels programs.

1. 2014 and 2015 obligations appear to be set higher than the actual/projected RINs available. The only way to meet these shortfalls is to reduce the RIN inventory.
2. The 2016 obligation appears to be set at a level where gasoline would need to contain on the order of 10.8 volume percent ethanol. The only way to achieve those levels would be to increase E15 or E85 sales.
3. The 2016 problem could also be solved by higher biodiesel/renewable diesel usage. However, it seems unlikely that

- Interaction with EPA to pose fuels-related questions.
- Industry specialist assistance for required gasoline attestations.
- Industry specialist assistance for in-line blending audits.
- Assistance in setting up a fuels compliance group/program.
- Personnel reviews of compliance-related groups.
- Compliance status reviews and recommendations.
- Negotiations/consultation during EPA enforcement actions.
- 3rd-Party Engineering reviews.
- Due diligence reviews of facilities and companies in RFS RINs Program.

higher volumes of diesel alternatives could be manufactured on such short notice.

4. The prior year RIN carryover from 2013 appears to be about 3.3 billion RIN-gallons.
5. Assuming the 2014, 2015 and 2016 shortfalls are all met by drawing down RIN inventory, the balance is shown in the table below.

RIN Inventory, billion gallons			
	Prior Year RINs Available	RIN Shortfall	RIN End of Year
2013	3.3	0	3.3
2014	3.3	0.3	3
2015	3	0.53	2.47
2016	2.47	1.71 (1)	0.76

⁽¹⁾ Assumes the blendwall was met in 2015 and all of the 2016 increased RVO plus 0.53 billion RINs, the same shortfall as 2015, is met by inventory drawdown.

The 2016 inventory draw is similar to what was expected in 2014 and which resulted in the two year delay in setting an RVO. It also resulted in very high RIN prices which were only alleviated when the EPA suggested that they were going to recognize the ethanol blendwall and reduce the obligation.

Since 2016 is upon us, it is unlikely that the E15 and E85 markets or the amount of other biofuel volumes blended can be increased enough to eliminate the inventory drawdown. It is likely that RIN prices will increase significantly in 2016 which could again precipitate action by the EPA to modify the program.

Refiners must choose between purchasing RINs today to assure a maximum RIN carryover from year to year in anticipation that these RINs will be cheaper than buying future RINs, or delaying purchase of more expensive RINs on the hope the EPA will again intervene if the RIN prices become more expensive than EPA desires.

The refiner's risk is either high cost RINs that lose their value if EPA modifies the program versus even higher cost RINs if the refiner does not pre-purchase RINs and the program stays as currently promulgated.

The Obligation

	Renewable Fuel Requirements, billion gallons						
	Final (11/30/15)				Proposed (6/10/15)		
	2014	2015	2016	2017	2014	2015	2016
Cellulosic Biofuel	0.033	0.123	0.23	N/A	0.033	0.106	0.206
Biomass-based diesel ¹	1.63	1.73	1.9	2	1.63	1.7	1.8
Advanced biofuel	2.67	2.88	3.61	N/A	2.68	2.9	3.4
Renewable fuel	16.28	16.93	18.11	N/A	15.93	16.3	17.4
Imputed Corn Ethanol	13.61	14.05	14.5		13.25	13.4	14

¹Based on diesel equivalent, all other volumes are ethanol equivalent

The final renewable volumes are generally significantly less than the volumes in the legislation as shown below.

Renewable Fuel Requirements, billion gallons							
	Final (11/30/15)				Clean Air Act		
	2014	2015	2016	2017	2014	2015	2016
Cellulosic Biofuel	0.033	0.123	0.23	N/A	1.75	3	4.25
Biomass-based diesel ¹	1.63	1.73	1.9	2	≥ 1	≥ 1	≥ 1
Advanced biofuel	2.67	2.88	3.61	N/A	3.75	5.5	7.25
Renewable fuel	16.28	16.93	18.11	N/A	18.15	20.5	22.25
Imputed Corn Ethanol	13.61	14.05	14.5		14.4	15	15

¹Based on diesel equivalent, all other volumes are ethanol equivalent

The actual cellulosic requirement is the primary change from the Clean Air Act obligation. Cellulosic biofuel cannot currently be produced in large volumes economically. The reduction in the cellulosic biofuel obligation rippled through the other categories because the obligations are "stacked." That is, the cellulosic biofuel and the biomass-based diesel are included in the advanced biofuel and the advanced is included in the renewable fuel. The shortfall of cellulosic biofuel has been recognized in the program from the outset, and the obligations have been set accordingly. What is different in the final rule is that in the early years of the program, when the cellulosic availability did not meet the Clean Air Act volume, the EPA did not reduce the advanced or renewable volumes to reflect the lower cellulosic obligation. The petroleum industry challenged this interpretation in court, and the EPA's interpretation prevailed. The 2016 obligation is the first prospective obligation that has been set less than the Clean Air Act obligations.

Although the EPA sets a target volume, the regulatory requirement is translated into a percentage, and the percentage requirements become the actual standards for the regulated parties. Therefore, if the actual volumes of gasoline and diesel produced or imported are greater or less than the gasoline and diesel assumed by the EPA in setting the percentages, the volume of renewable fuel added to the transportation pool will be more or less than the volumes shown above.

Renewable Fuel Requirements, Percentage						
	Final (11/30/15)			Proposed (6/10/15)		
	2014	2015	2016	2014	2015	2016
Cellulosic Biofuel	0.02	0.07	0.13	0.02	0.06	0.11
Biomass-based diesel	1.41	1.49	1.59	1.42	1.41	1.49
Advanced biofuel	1.51	1.62	2.01	1.52	1.61	1.88
Renewable fuel	9.19	9.52	10.1	9.02	9.04	9.63

After three tables, that is a lot of numbers. What do they all mean?

How to Comply

The first question is how to comply. For 2014 and 2015, the answer is essentially set since all but one month of activity is complete.

Compliance for 2014 and 2015 will be made through retiring RINs generated in the two years, plus RINs from 2013 that can be used for up to 20% of the 2014 obligation. RINs generated from the production or importation of renewable fuel in 2014 and 2015 are shown below.

RIN Balance, Billion RIN-gallons						
	2014			2015 (YTD+Proj)		
	Generated	Unlocked	Final Rule	Generated	Unlocked	Final Rule
Cellulosic Biofuel	0.033	0.031	0.033	0.12	0.1	0.123
Biomass-based diesel	2.7	2.5	1.63	2.8	2.5	1.73
Advanced biofuel	0.144	0.136	2.67	0.12	0.12	2.88
Renewable fuel	14.4	13.3	16.28	14.8	13.7	16.93
Total	17.28	15.97	16.28	17.84	16.4	16.93

The shortfalls in 2014 and 2015 are about 0.31 and 0.53 billion RIN-gallons respectively. This shortfall could be made up by using prior year RINs. The program allows up to 20% of the current year obligation to be met with prior year RINs. Typically, there have been enough RINs unused in any given year to satisfy 20% of the next year's obligation. RINs can only be carried over for one year; and therefore, if enough RINs are not generated in a specific year, prior year RINs can make up the deficit, but there will be less than 20% of the next year's obligation carried over. Therefore, if the shortfalls in 2014 and 2015 are made up by prior year RINs, the carryover into 2016 will depend on the 2013 through 2015 RIN carryover. The RIN carryover is described below.

2013 carryover into 2014 = 2013 obligation X 20% or about 3.31 billion RINs (16.55 X 0.20). This assumes RINs generated in 2013 were equal to the obligation.

2014 obligation that can be met by 2013 RINs is 3.31 billion RIN gallons. Since the 2014 obligation is 16.28, the total 2014 available to carryover to 2015 is about 3 billion RIN gallons (3.31-(16.28-15.97)).

2015 obligation that can be met by 2014 RINs is 3 billion gallons. Since the 2015 obligation is 16.93, the total 2015 available to carryover to 2016 is about 2.47 billion RIN gallons (3-(16.93-16.40)), which is only about 13.6% of the 2016 obligation.

Once the RIN inventory is used up, the renewable fuel obligation will need to be met by current RIN generation.

What happens to RIN Prices?

At the beginning of the renewable fuel program, RIN pricing began with an abundant surplus of RINs and very low RIN prices of a few cents per RIN-gallon. The RIN prices spiked in early 2013 when people realized that if the program were not modified, it would be very difficult to obtain enough RINs to meet the demand. The RIN prices eased when the EPA indicated that at least for then, it recognized the gasoline blend wall and intended to reduce the obligations.

The final rule is likely to push RIN prices higher as the RIN inventory decreases. Neither the 2014, 2015 nor the 2016 obligations are likely to leave the petroleum industry with an insolvable obligation since the RIN inventory can cover any shortfall; however, without knowing what the obligation might be for 2017 and beyond, the industry is likely to assume the worst and RIN prices could again increase. Indeed, the ethanol RIN market price increased by a little less than 100% on the first two days after the final rule was announced.

Where do we go from here?

The renewable fuel program was written with a certain amount of humility in that the program had several clauses that allowed the obligation to be

changed based on the availability of renewable fuels. The cellulosic obligation in particular was designed to be a technology forcing regulation. Cellulosic biofuel was not then and is still not economically viable. The legislation allowed the EPA to set alternative cellulosic levels as well as to sell cellulosic biofuel waivers if the set obligation was not attained. The program has no corollary option for the other renewable fuel categories.

However, the legislation does include a provision that if a renewable fuel is not available or if the addition of the fuel creates economic harm, the obligations can be modified. In addition, there is a provision that if an obligation is set below the Clean Air Act level for a minimum amount of time, the obligation must be modified. The language is shown below.

"(F) MODIFICATION OF APPLICABLE VOLUMES.-For any of the tables in paragraph (2)(B), if the Administrator waives- "(i) at least 20 percent of the applicable volume requirement set forth in any such table for 2 consecutive years; or H. R. 6-37

"(ii) at least 50 percent of such volume requirement for a single year, the Administrator shall promulgate a rule (within 1 year after issuing such waiver) that modifies the applicable volumes set forth in the table concerned for all years following the final year to which the waiver applies, except that no such modification in applicable volumes shall be made for any year before 2016. In promulgating such a rule, the Administrator shall comply with the processes, criteria, and standards set forth in paragraph (2)(B)(ii)."

It appears that the obligations for cellulosic biofuel and advanced biofuel for 2014 and 2015 meet the criteria for requiring the EPA to modify the applicable volumes in future years. The renewable fuel obligation is very close to meeting the criteria for modifying future obligations, but does not quite meet the threshold requiring a modification. This criterion might set a floor on future "renewable fuel" category obligations. For instance, the Clean Air Act volume of renewable fuel for 2017 is 24.0 billion gallons. To stay above a 20% reduction, which would automatically trigger a reduced schedule if it occurred for two years, the renewable fuel obligation would need to be above 19.2 billion gallons in 2017. If the obligation were set at that level for 2017, the RIN inventory would almost be depleted and significant volumes of E85 and/or E15 would need to be sold in the market place.

Predictably, the renewable fuel industry called the obligation inadequate and the petroleum industry called for abolishing or significantly modifying the entire program. Based on the last three years, it appears that there is inadequate political support for either position.

Conclusions

The renewable fuel obligations set by the final rule are not likely to disrupt transportation fuels in the United States. It's likely that the price of RINs will increase, but they are not likely to skyrocket in the near future. It appears that some of the obligation will need to be met by reducing the prior year RIN inventory. If the prior year RIN inventory falls significantly, it is likely we will see RIN prices as high as, or higher than, those seen in early 2013, over \$1.00 per RIN gallon.

Politics will continue to be a consideration in the renewable fuel program. The final rule for 2017 does not need to be set until November 2016, after the presidential elections. As a result, it is unlikely that the administration

will allow the program to significantly impact the supply or pricing of transportation fuels before the election.

Turner, Mason & Company's regulatory compliance group is available to help you with all of your renewable fuel or fuels compliance needs.

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