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Following-up on RFS Questions

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February 10, 2016

farmdoc daily (6):26

Recommended citation format: Coppess, J. "Following-up on RFS Questions." *farmdoc daily* (6):26, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 10, 2016.

Permalink: <http://farmdocdaily.illinois.edu/2016/02/following-up-on-rfs-questions.html>

The Renewable Fuel Standard (RFS) has been a hot topic of late given the release of the final rule and its rather prominent feature leading up to the recent Iowa caucuses. The RFS discussions have raised a few questions about some aspects of the statute and this article looks to discuss these issues.

First, there have been questions about whether the RFS expires. During the debates and campaigning leading up to the Iowa caucus, there was talk about the RFS expiring in 2022. As was pointed out by the [Washington Post](#), the RFS does not expire in 2022. The statute provides specific volumetric mandates in a set of tables that run through calendar year 2022. (42 U.S.C. §7545(o)) It also provides, however, that for those years after 2022 the EPA Administrator is to establish the applicable volumes for each year. This is continuing and permanent authority for the RFS; the statute does not contain a sunset or end date provision. After 2022, the applicable volumetric mandates for renewable fuels are to be determined by the EPA administrator and based on analysis of the impact of the production and use of renewable fuels on various matters such as environment factors, U.S. energy security, infrastructure, cost to consumers of using renewable fuels and other factors including job creation and food and commodity prices. The determination for the mandated volumes are also to consider estimates of expected commercial renewable fuel production each year. This analysis is to take place for each type of renewable fuel within the mandate (e.g., advanced, cellulosic and biomass-based diesel). For advanced biofuel, the statute further provides that the applicable volume cannot be less than the mandated volume in calendar year 2022. For cellulosic ethanol, the applicable volume after 2022 is to be based on the assumption that there will not need to be a waiver of the requirement, and biodiesel cannot have an applicable volume below the 2012 calendar year volume (1.0 billion gallons). Therefore, the RFS does not expire in 2022, but the setting of the year-by-year mandated volumes becomes much more discretionary for the EPA Administrator beginning with calendar year 2023.

Additionally, the continuing authority provision may impact any review of EPA's interpretation of the waiver authority. One of the impacts EPA is to consider in post-2022 mandate levels does mention consumers, but only with regard to "the impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods" (42 U.S.C. §7545(o)(2)(B)(ii)(V)). After 2022, EPA is also to consider analysis of the impact on infrastructure including "the sufficiency of infrastructure to deliver and use renewable fuel" (42 U.S.C. §7545(o)(2)(B)(ii)(IV)). These two provisions add a wrinkle to previous

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discussions about EPA's general waiver authority (*farmdoc daily* [January 7, 2016](#); [January 14, 2016](#); [January 22, 2016](#)). On one hand, Congress included issues related to the ultimate consumer and fueling infrastructure (the blend wall) in EPA's volumetric determinations. On the other hand, however, those matters are included only for determinations made after 2022 when the statutory levels (and arguably the waiver authority) no longer apply. Additionally, these are among a large set of factors within six categories for EPA to consider and all of the analysis is to be based upon a review of implementation of the RFS during the calendar years leading up to 2022. Use of the waiver authority in those years would impact the analysis for future years and thus further impact the effectiveness of the RFS to drive innovation and change within the industry. While these matters could weigh on a court's decision, it is difficult to determine how much of an impact they might have, if any.

Second, there have been questions about whether the reduced mandates in the final rule will have any impact on the remaining statutory mandates for calendar years 2017 to 2022. This is due to another feature of the waiver provisions in the statute. If any of the statutory mandated levels are reduced by at least 20 percent for two consecutive years or at least 50 percent in any single year, the EPA Administrator is given the authority to write a rule modifying the applicable volumes for all years that follow the final year of the waiver, except that this modification cannot take place prior to 2016 (42 U.S.C. §7545(o)(7)(F)). For example, if EPA had used the waiver authority to set 2015 and 2016 levels at less than 80 percent of the statutory mandate, EPA could modify all statutory levels beginning in 2017. The total renewable fuel mandates for 2014-2016 in the final rule, however, ended up just shy of this modification provision (see Table 1 below), but both advanced and cellulosic biofuels have been reduced enough in the final rule to permit modification in future years. The following tables compare the RFS levels with EPA's final rule, along with the final rule's percentage of the statute.

Table 1. Total Renewable Fuel Mandate

Year	Renewable-Statute (gallons)	Renewable-Final Rule (gallons)	Percentage
2014	18.15 billion	16.28 billion	89.70%
2015	20.5 billion	16.93 billion	82.59%
2016	22.25 billion	18.11 billion	81.39%

Table 2. Cellulosic Renewable Fuel Mandate

Year	Cellulosic-Statute (gallons)	Cellulosic-Final Rule (gallons)	Percentage
2014	1.75 billion	33 million	1.89%
2015	3.0 billion	123 million	4.10%
2016	4.25 billion	230 million	5.41%

Table 3. Advanced Biofuel Mandate

Year	Advanced-Statute (gallons)	Advanced-Final Rule (gallons)	Percentage
2014	3.75 billion	2.67 billion	71.20%
2015	5.5 billion	2.88 billion	52.36%
2016	7.25 billion	3.61 billion	49.79%

Importantly, the statutory mandate increases every year and that means it could become easier to cross the 20 percent threshold in future years in light of the final rule. For example, the statutory requirement in 2017 is 24 billion gallons of renewable fuel. If EPA were to use the waiver to reduce the mandate to the same

18.11 billion gallons as it used for 2016, the amount would be 75.5 percent of the mandate. By comparison, a requirement of 19 billion gallons would be just over 79 percent; both levels would satisfy the modification requirement for the first year. Similarly, the 2018 mandate is for 26 billion gallons and it would take an EPA volumetric requirement of around 21 billion gallons to avoid the modification authority.

The modification issue, however, depends in part on whether EPA's interpretation of its waiver authority is found to be permissible. The modification provisions might also factor into any decision on that matter. The fact that EPA's use of the waiver authority could also set it up to completely modify the statute might well impact a judge's review of the reasonableness of EPA's arguments. As previously discussed, however, the outcome of any litigation on this matter is very much unknown and difficult to determine.

Finally, in the pre-Iowa caucus discussion there were questions about whether ethanol was subsidized. Beginning in 2005, there was an ethanol tax credit called the Volumetric Ethanol Excise Tax Credit (VEETC). That tax credit, however, expired on December 31, 2011 (see Cunningham et al., 2013). Thus, there currently is no direct subsidy for ethanol (nor any ethanol tax credits). The RFS is a mandate on blending renewable fuels, but not a direct subsidy. There remain questions about whether a binding mandate can create an implied subsidy, particularly with respect to biodiesel, but that is beyond the scope of this discussion (see *farmdoc daily* July 22, 2015).

References

Coppess, J. "[Questioning the Final RFS Rule, Part 3: Reasonableness of the Interpretation.](#)" *farmdoc daily* (6):14, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, January 22, 2016.

Coppess, J. "[Questioning the Final RFS Rule, Part 2: the Meaning of the Word 'Supply'.](#)" *farmdoc daily* (6):9, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, January 14, 2016.

Coppess, J. "[Questioning the Final RFS Rule, Part 1: the Rule and a Review.](#)" *farmdoc daily* (6):4, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, January 7, 2016.

Irwin, S. "[Why Do Blenders Share Retroactively Reinstated Tax Credits with Biodiesel Producers?](#)" *farmdoc daily* (5):133, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 22, 2015.

Lynn J. Cunningham, Beth A. Roberts, Bill Canis and Brent D. Yacobucci, "Alternative Fuel and Advanced Vehicle Technology Incentives: A Summary of Federal Programs," Congress Research Service, CRS Report for Congress, R42566 (Jan. 10, 2013), at 10.

Michelle Ye Hee Lee. "The candidates and media are getting the Iowa ethanol debate all wrong." *The Washington Post*, January 14, 2016, accessed February 10, 2016.
https://www.washingtonpost.com/news/fact-checker/wp/2016/01/14/the-candidates-and-media-are-getting-the-iowa-ethanol-debate-all-wrong/?postshare=221452785256366&tid=ss_tw