Addendum

to the

Small Refinery Exemption Study

An Investigation into

Disproportionate Economic Hardship

Office of Energy Policy and Systems Analysis

U.S. Department of Energy

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Assessing Small Refineries' Disproportionate Economic Hardship from the RFS Program

Under Section 7545(o)(9)(A)(ii)(I) of the Clean Air Act, the US DOE conducted a study to determine whether compliance with the RFS requirements would impose a disproportionate economic hardship on small refineries. [1] In the 2011 study, DOE developed a scoring matrix to assess the degree to which compliance with the RFS would impair individual small refineries. The matrix comprised two major indices: (1) a structural and economic weightings index and (2) a viability index. The structural and economic weightings index was composed of eight equally weighted structural and economic metrics. Seven of the eight metrics were scored a 0, 5 or 10, and one metric ("other business lines besides refining and marketing") was scored a 0 or 10. Higher scores reflected greater likelihood of disproportionate economic hardship. Similarly, the viability index comprised three equally weighted metrics. In the 2011 study, each viability metric was scored either a 0 or a 10. Scores for each index were averaged, and then divided by two. A waiver extension due to disproportionate economic hardship was recommended if a refinery scored greater than one for both the structural and economic weightings and the viability indices. All of the individual metrics are described in the 2011 Study.

For the 2011 DOE exemption study, the economic recession and the relative recent implementation of the RFS2 regulations resulted in a number of individual small refineries receiving individual viability metric scores of 10, and scores greater than one for the viability index as a whole. However, circumstances have changed since the 2011 study was completed. Generally, there is an improved business climate for refineries that is associated with the country's economic recovery. In addition, refiners have now had many years since the initiation of the RFS program in 2007 to develop business practices to meet RFS obligations.[2] In assisting EPA in evaluating petitions for small refinery RFS exemptions for 2013, DOE has found that some small refineries should be scored an intermediate level of 5 for metric 3a. This intermediate score acknowledges an impact of RFS compliance costs on efficiency gains, but at a level lower than would justify a score of 10. DOE also has concluded that an intermediate score of 5 may be appropriate for viability metric 3b in certain circumstances. Both of these viability metrics address impacts that may occur across a continuum, and providing for the possibility of an intermediate score allows DOE to more accurately assess an individual refinery's economic situation. This is unlike viability metric 3c which involves essentially a binary determination – whether or not RFS compliance costs would likely lead to a facility shut-down. For viability metric 3c, therefore, DOE continues to believe that it is appropriate to limit scores to either a 0 or 10.

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[1] "Small Refinery Exemption Study: An Investigation into Disproportionate Economic Hardship", March 2011.

[2] As the market for renewable fuels matures, obligated parties have developed a much wider suite of physical and contractual arrangements to meet their RFS mandates. In general, small refineries with an RFS exemption have a competitive advantage over the others. This advantage can be enhanced in situations where an exempt party separates some attached RINs through blending renewable fuels, and sells those RINs to improve profitability. A firm's competitive advantage during an exemption period, and any profits from RIN sales during an exemption period, could lead to lower scores in subsequent evaluations of disproportionate economic impact.

The result of allowing intermediate scoring for viability metrics 3a and 3b is that a facility with only a moderate score of 5 in a single viability metric will not have a total viability index score indicating disproportionate economic hardship. On the other hand, a moderate score under both metrics 3a and 3b will be sufficient to generate a viability score indicating the existence of disproportionate economic hardship. [3] DOE has determined that it is appropriate that a moderate score in two viability metrics would result in a total viability index score greater than 1. This reflects the real-world situation where different factors may combine to produce disproportionate economic hardship. In this regard, however, DOE notes that these are two distinct metrics: where DOE determines an intermediate score of 5 under metric 3b on the basis of an individual special event, that same event will not necessarily lead to an intermediate or higher score for viability metric 3a ("RFS compliance costs eliminates efficiency gains").

[3] The facility must also score a 1 or higher in the structural and economic weightings index.