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Changes in Biofuel Mandates

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Changes in Biofuel Mandates

Last month the Environmental Protection Agency (EPA) said it will reduce total required biofuel volumes in its proposal for 2014. What does this mean? Specifically, it means that it will set the overall mandate for renewable fuels at somewhat below the 18.15 billion gallons specified by the 2007 Energy Independence and Security Act legislation (EISA) for the year 2014, commonly referred to as the Renewable Fuels Standard 2 (see Figure 1 on next page for these “RFS2" requirements).

The law, enacted well before cellulosic ethanol was commercially feasible, allowed the EPA to reduce the mandated volumes of cellulosic ethanol in response to delays in the commercial development of cellulosic ethanol refineries.

For 2013, in fact, the EPA had already reduced the mandate for cellulosic ethanol from the 1.0 billion gallons per year (bgy) mandated by the 2007 law, to a mere .006 bgy. However, it did not reduce the overall RFS requirement, nor did it reduce the requirement for “advanced biofuels," which includes cellulosic ethanol and biodiesel, as well as other fuels that have a 60 percent or smaller carbon footprint than gasoline (such as sugar cane ethanol from Brazil). The reduction in cellulosic ethanol requirements is to be replaced with an additional mandated 0.42 bgy of biodiesel, plus other advanced biofuels.

For 2014, however, the total RFS volume will be reduced, possibly by the amount of reduction in cellulosic ethanol requirements, which the legislation allows EPA to do. This will reduce pressure on other sources of advanced biofuels (biodiesel and sugar cane ethanol, primarily) to make up for the reduction in cellulosic ethanol.

In addition, it is possible that the EPA may make other adjustments in the RFS in light of the blend wall issue. In Figure 1, a line equal to ten percent of gasoline-equivalent used over the past five years, is shown. This is the...
maximum amount of ethanol that could be blended in E10, and thus represents somewhat of a maximum feasible disposition of ethanol. The corn ethanol blending mandate of 14.4 billion gallons (bgy) for 2014 exceeds by seven percent the maximum use in E10 (13.4 bgy), and the total RFS mandate exceeds it by over 20 percent. To meet the RFA targets, ethanol consumption would need to be well over ten percent of motor fuel use. This is the “blend wall” problem well publicized by the oil companies.

The blend wall can be avoided in several ways, so it is not exactly a wall. In the short-run, blenders can submit Renewable Identification Numbers (RIN), certificates of ethanol having been blended in excess of mandated levels in the past, but there will probably not be enough RINs in existence to satisfy the shortfall described above.

An alternative method of avoiding the blend wall would be for the oil companies to price E85 much lower than in the past, when pump prices of E85 have not been low enough relative to gasoline to offset their 25 percent lower energy content. We are now beginning to see E85 price reductions, particularly with wholesale ethanol prices being highly discounted relative to gasoline blending stocks. The potential for this market is limited by the fact that only about 3,000 of the 160,000 gasoline stations in the United States have E85 pumps, and by the fact that only about three percent of autos have flex-fuel engines.

Now that E15 has been approved for recent model cars, is the E10 blend wall still relevant? It seems so, because the safety of using E15 has been disputed by oil companies, some auto companies, the American Automobile Association (AAA) and others. This has effectively discouraged a large portion of drivers from using E15. Beyond that, the number of E15 pumps in the country is smaller even than E85 pumps.

Although the blend wall is not rigid, EPA may nevertheless find a way to make some accommodation on blending requirements. What would this mean for the Nebraska economy? It would mean a hold on increases in ethanol production, which implies a slight reduction in corn use and corn prices relative to what would have been the case under the full requirements of the 2007 RFS legislation. These adjustments should have minor impacts on Nebraskans, but any change for next year’s mandates raises questions about the future of the RFS. These are questions with which both the EPA and Congress will no doubt grapple with next year. The current RFS2 standards will create continuing accommodations that disrupt consumers’ and producers’ planning.

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