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Written Statement

Chairman Boxer, Ranking Member Vitter and other members of the Committee, I appreciate the opportunity to testify on the subject of the Renewable Fuel Standard program, which lays a foundation for reducing greenhouse gas emissions and reducing America's dependence on imported oil by growing our nation's renewable fuels sector.

Overview of the Renewable Fuel Standard Program

The Renewable Fuel Standard (RFS) program began in 2006 pursuant to the requirements in Clean Air Act (CAA) section 211(o) which were amended by the Energy Policy Act of 2005 (EPAct). The statutory requirements for the RFS program were subsequently

modified through the Energy Independence and Security Act of 2007 (EISA). These provisions established new year-by-year volume standards for renewable fuel that generally must be used in transportation fuel, reaching a total of 36 billion gallons by 2022. This total includes 21 billion gallons of advanced biofuels, comprising 16 billion gallons of cellulosic biofuel, and at least 1 billion gallons of biomass-based diesel, with the remainder consisting of “other” advanced biofuels. The revised statutory requirements also included new definitions and criteria for both renewable fuels and the feedstocks used to produce them, including greenhouse gas (GHG) emission thresholds. Advanced and cellulosic biofuel must achieve at least a 50 and 60 percent reduction, respectively, in lifecycle greenhouse gases compared to the 2005 baseline average gasoline or diesel fuel that it replaces.

On March 26, 2010, in response to EISA, EPA promulgated regulations to implement these revisions to the national Renewable Fuel Standard program. These regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders. In developing the regulations, EPA applied the best available science, conducted peer reviews on new analytical methodologies, and carried out extensive analyses to implement EISA’s complex and challenging statutory provisions. The regulatory requirements went into effect on July 1, 2010, and apply to domestic and foreign production of renewable fuels used in the United States. EISA requires that each year EPA publish the annual standards for use of total, advanced, biomass-based diesel, and cellulosic renewable fuels that apply to obligated parties, which are typically refiners and importers of gasoline and diesel.

Proposed Required Volumes for 2014

On November 29, EPA published in the Federal Register¹ a notice of proposed rulemaking that would establish the annual RFS volume requirements for 2014. In this action, EPA proposed to set the required cellulosic volumes at a level significantly below the statutory volumes and to maintain the biomass-based diesel volume at the level finalized for 2013. In addition, for reasons explained in detail in this notice, EPA is proposing to use authorities granted under the Clean Air Act to adjust the required total and advanced volumes for 2014 below the targets laid out in the statute.

The proposed rulemaking includes a detailed discussion of what is known as the ethanol “blend wall.” Today, nearly all gasoline sold across the United States contains ten percent ethanol by volume, commonly referred to as E10. In the years between when Congress created the RFS program and today, production and use of renewable fuels has grown rapidly, but fuel economy improvements and other factors have resulted in lower gasoline consumption than what was projected to occur at the time EISA was enacted. Because of those factors, obligated parties are now facing the E10 blend wall, the point at which the gasoline fuel pool is saturated with ethanol at the 10 percent level, a few years earlier than initially projected.

If gasoline demand continues to decline, as is currently forecasted, increasing the amount of ethanol used in the fuel pool will require greater use of higher ethanol blends such as E15 and E85, or other fuels which don’t have such blending limitations. At the present time, however, there are a number of factors that limit the use of these fuels, including the

¹ 78 FR 71732

infrastructure available for distributing, blending, and dispensing renewable fuels, as well as appropriate vehicles in the fleet that can consume various renewable fuels, such as flex-fuel vehicles (FFVs). As a result, using flexibilities built into the law, EPA is proposing to adjust some of the statutory 2014 volume requirements in order to align the program with these current fuel system constraints. EPA discussed the possibility of taking such action in the rulemaking that finalized required volumes under the RFS program for 2013. There, EPA briefly discussed the challenges posed by the E10 blendwall and the higher statutory volume requirements for 2014 and noted that we anticipated proposing adjustments to the 2014 volume requirements to establish volume requirements that are reasonably attainable in light of such considerations.

The proposal includes a lengthy discussion and analysis associated with making adjustments to the RFS program's renewable fuel categories and seeks public comment on several alternative approaches to setting the total and advanced fuel standards described herein. The proposal also includes volume ranges for each biofuel category. Including volume ranges reflects the agency's recognition of the inherent uncertainty in developing projections for biofuel use and provides stakeholders the ability to comment and provide data on a range of volumes and those factors that influence those ranges.

Our approach applies two different authorities in the statute that permit EPA to reduce volumes of advanced biofuel and total renewable fuel below the volumes specified in the statute. When the Administrator lowers the applicable volume of cellulosic biofuel below the volume specified in the Clean Air Act, EPA also has the authority to reduce the applicable

volumes of advanced biofuel and total renewable fuel by the same or a lesser amount. The Administrator can also reduce the applicable volumes of renewable fuel under the general waiver authority provided by the CAA under certain conditions, including if the Administrator makes a determination of “inadequate domestic supply.” This proposal uses a combination of these two authorities to reduce volumes of both advanced biofuel and total renewable fuel.

With regard to the specific volumes, the proposed rulemaking proposes the following volumes: for cellulosic biofuel, 17 million gallons (range of 8-30 million gallons); biomass-based diesel, 1.28 billion gallons; advanced biofuel, 2.20 billion gallons (range of 2.00-2.51 billion gallons), and renewable fuel, 15.21 billion gallons (range of 15.00-15.52 billion gallons).

Cellulosic Biofuel. For cellulosic biofuel, the statute specifies that EPA is to project the volume of production and must base the cellulosic biofuel standard on projected available volume if it is less than the applicable volume set forth in the Act. The cellulosic biofuel industry continues to transition from research and development and pilot scale to commercial scale facilities, leading to increases in overall production capacity. Cellulosic biofuel generation from the first commercial scale cellulosic biofuel facility began in March 2013. A second facility began producing fuel in July 2013 with several others expected to follow in 2014. Based on the information we have received from various cellulosic biofuel companies, our conversations with other government agencies, and EPA's own engineering judgment we are projecting that 8 - 30 million ethanol-equivalent gallons of cellulosic biofuel will be available in 2014, and we are proposing a required volume of 17 million gallons. The approach to determining the cellulosic

biofuel standard for 2014 is consistent with a ruling in January 2013 by the U.S. Court of Appeals for the D.C. Circuit.

Biomass-based Diesel. While the Clean Air Act specifies the volumes of biomass-based diesel through year 2012, it directs the EPA to establish the applicable volume of biomass-based diesel for years after 2012. The rulemaking proposes to maintain the applicable volume of 1.28 billion gallons for biomass-based diesel for 2014. Under the statute's system of nested biofuel categories, biomass-based diesel can be used to help meet the volume requirement for advanced biofuel. As discussed in the proposal, EPA believes providing obligated parties the discretion to choose the appropriate method to comply with their advanced biofuel volume requirement is likely to be the most efficient way to achieve the advanced biofuel volume requirements given the market circumstances present in 2014. While the proposed standard for 2014 is 1.28 billion gallons, in developing the total advanced standard – a component of the total renewable standard – EPA used a range of potential biodiesel volumes, with an upper end of 1.6 billion gallons. EPA examined a number of factors in establishing that range. There is some uncertainty regarding a few of these factors which is one of the reasons EPA is seeking additional data and comment on alternative approaches to establishing the range.

Advanced Biofuel and Total Renewable Fuel. Since the RFS program was amended in 2010, EPA has considered reductions in the advanced and total renewable fuel authorized under the statute's cellulosic waiver provisions. In the past we have focused primarily on the

availability of advanced biofuels in determining whether reductions in the advanced and total renewable fuel standards were also appropriate. The total volume of ethanol that could reasonably be available and supplied to vehicles as either E10 or higher blends was not a limiting factor in years prior to 2014. However, for 2014, the total volume of ethanol that can be consumed, and the total volume of non-ethanol renewable fuels that could reasonably be available, are together expected to be less than the volume requirements established in EISA for advanced biofuel and total renewable fuel. To address this, EPA is proposing reductions in the volume requirements for these categories of renewable fuel.

We believe that our proposed framework for determining appropriate volumes of total renewable fuel and advanced biofuel would simultaneously address the ethanol blendwall and limitations in availability of qualifying renewable fuels. For total renewable fuel, we would project the volume of ethanol that could reasonably be consumed as E10 and higher ethanol blends, and would add to that the volume of all non-ethanol renewable fuels that could reasonably be expected to be available. For advanced biofuel, we would sum the ethanol-equivalent volumes of the cellulosic biofuel requirement, the biomass-based diesel requirement, and the additional non-ethanol advanced biofuels that could reasonably be expected to be available and be consumed. The additional non-ethanol advanced biofuel volume includes volumes of biomass-based diesel beyond the 1.28 billion gallon biomass-based diesel standard. Our proposed methodology includes projected ranges that encompass the most likely outcomes, in recognition of the uncertainty surrounding various variables, and we propose several approaches to determining the most likely value within a given range for the final rule.

The proposed rulemaking is now open for public comment for a period of 60 days from publication, which ends January 28, 2014. We have already held a public hearing on the proposal on December 5 where we had the opportunity to hear from multiple stakeholders. EPA recognizes that the RFS volume standards are important to a wide variety of stakeholders, and we look forward to their active engagement on the proposal and to receiving new data.

Finally, EPA also received several petitions from regulated parties to partially waive the statutory volumes for 2014 and set them below the volumes specified in the statute. In an action separate from the Federal Register notice proposing the 2014 volumes, EPA published a second Federal Register notice seeking comment on these petitions. This will also be open for public comment for 60 days from publication, until January 28, 2014. Given the high degree of overlap between the substance of the rulemaking proposal and the waiver petitions, we expect that a determination on the substance of the petitions will be issued at the same time that EPA issues a final rule establishing the 2014 RFS standards.

Other Ongoing Work

EPA is also doing considerable work to evaluate and qualify new advanced and cellulosic biofuels to support the Congressional goals of the RFS program. We have established a process to evaluate new biofuels for use in the RFS program and already have approved a significant

number. In addition, we have received a number of petitions requesting evaluation of new biofuel production processes.

EPA is also working with stakeholders to improve implementation of the RFS program. Compliance under the RFS program is demonstrated through the use of Renewable Identification Numbers (RINs), which document the production and distribution of renewable fuel. Obligated parties supported the use of RINs to provide them added flexibility in meeting the RFS standards. In February 2013, EPA proposed to establish a voluntary quality assurance program for verifying the validity of RINs. This voluntary program was proposed after receiving extensive input from the oil and renewable fuels industries and is intended to improve RIN market liquidity and efficiency and improve the ability of renewable fuel producers to sell their RINs. EPA hopes to finalize this program early next year.

Conclusion

With the approaches discussed in the 2014 proposal, EPA's intention is to put the RFS program on a manageable trajectory that will support continued long-term growth in renewable fuels. EPA is inviting comment on all aspects of the proposed rulemaking, and we have specifically asked stakeholders to provide us relevant and up-to-date data and information on the many issues discussed in the proposal concerning the production and use of various kinds of renewable fuels. EPA looks forward to continued engagement with our stakeholders as we work in consultation with the Departments of Agriculture and Energy toward the development of a final rule.

Again, I thank you for the opportunity to serve as a witness at this hearing for the
Committee.