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**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY  
UNITED STATES SENATE  
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**Written Statement**

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to submit this statement on the renewable fuel provisions of the Energy Independence and Security Act of 2007 (EISA) and the status of the Agency's review of the petition we now have before us to increase the amount of ethanol that can legally be blended into gasoline.

*Background on EISA*

Since EISA was signed into law on December 19, 2007, the Agency has been working to develop regulations to implement the new RFS program established by that legislation, commonly called RFS2. The EISA legislation increased the national requirement for use of renewable fuels to 9 billion gallons in 2008 and required annual increases reaching a total of 36 billion gallons in 2022. Beyond the significant increase in the volume mandate, EISA expanded the parties responsible for ensuring use of the specified volumes to include producers of both nonroad gasoline and diesel fuel. The 36 billion gallon requirement includes several sub-standards, including 21 billion gallons of advanced biofuels, which must include 16 billion gallons of cellulosic biofuel and a minimum of 1 billion gallons of biomass-based diesel. The Clean Air Act also provides

EPA with the authority to grant a waiver of these volumes on the basis of either inadequate supply or severe harm to the economy or the environment. EISA provides EPA the authority to adjust the cellulosic biofuel standards from those specified in the statute to a lower volume. EPA is to establish the cellulosic biofuel standard each November for the following year based upon a projection of the volume that can be produced, up to the level of the target in EISA. Another key component in EISA requires the Agency to apply lifecycle greenhouse gas (GHG) performance standards to each category of renewable fuel. As a result, the new EISA provisions require careful evaluation and considerable new analysis. EPA has developed an extensive proposed rulemaking to implement the complex RFS2 provisions. This proposal was submitted to the Office of Management and Budget on February 6, 2009 and is currently undergoing interagency review.

### *Blendwall Issue*

In order to meet these aggressive standards, a variety of actions may need to be taken to facilitate the increased consumption of much larger volumes of renewable fuels in our transportation vehicles and equipment. At present, the vast majority of renewable fuel consumed in the U.S. is ethanol in the form of 10% blends (E10), the maximum level allowed to be blended into gasoline for use in most types of vehicles and equipment. While ethanol is also consumed as E85 in flex-fueled vehicles (FFVs) specifically designed to operate on this alternative fuel, the volume has remained small. Based on the Annual Energy Outlook gasoline volume projections, if E10 blends were to be used nationwide, the gasoline market could consume approximately 14 billion gallons of

ethanol in the 2012 to 2013 time period. Even when taking into account the EISA required volume of biomass based diesel, the renewable fuels requirement in 2013 will very likely exceed the amount of ethanol that can be accommodated by the E10 market alone. This is often referred to as the ethanol "blendwall."

Given this situation, EPA believes there are three potential pathways for continuing to increase our nation's use of renewable fuels beyond 2013 and achieve the levels required by EISA. One pathway that is already being pursued is to expand the use of ethanol in the form of E85. Approximately 6 million vehicles capable of using such fuels have already been certified by EPA and are on the road today. Furthermore, the domestic vehicle manufacturers have committed to have 50% of their production be FFVs by 2012, but in order to increase ethanol consumption, more will have to be done to expand the retail infrastructure to make E85 more readily available to consumers across the country, and to ensure E85 can be priced to appeal to consumers

A second pathway would be through the use of non-ethanol renewable fuels that are not faced with the same blending limitation. New emerging renewable fuel production technologies are already being developed to make gasoline and diesel-like fuels from renewable sources. Their continued commercialization would provide another path for increasing renewable fuel use in the U.S. beyond the ethanol blend wall. Within the last year, the Agency has registered a number of these advanced fuels and continues to meet with numerous advanced technology companies regarding their potential contribution toward meeting the renewable fuel standards.

A third pathway would be through raising the concentration of ethanol used in conventional vehicles and engines beyond the current E10 limit; such fuels are often

referred to as “mid-level ethanol blends.” Under the Clean Air Act, EPA may consider a waiver for fuels and fuel additives to be used in gasoline. Waiver applications must be from a fuel or fuel additive manufacturer. EPA reviews the waiver applications to determine whether the applicant has established that the fuel or fuel additive does not cause or contribute to the failure of any vehicle or engine emissions control systems or devices. EPA also evaluates the drivability and durability impacts associated with the use of the potential waiver fuel. Historical experience with both highway vehicles and nonroad equipment, even on E10, suggests that addressing these questions will be critical to ensure that the use of higher level ethanol blends will not cause any unacceptable unintended consequences to the in-use fleet of vehicles and equipment. Consequently, in order for there to be useful information for waiver purposes, mid-level ethanol blend testing for any level above E10 must consider the different engines and fuel systems currently in service that could be exposed to mid-level ethanol blends and the long-term impacts of such blends. It should be noted that EISA revised the fuel additive CAA waiver provisions, and E10 was approved in 1978 under different statutory requirements that included a default waiver approval if the Agency did not make a determination within 180 days.

Recognizing the need to address the blendwall issue, EPA has been engaged in an extensive and ongoing dialog and technical analysis for several years with our federal partners, and a wide range of other stakeholders. We have been working especially closely with the Department of Energy (DOE) to evaluate the impacts of the use of higher blends on the in-use fleet of highway vehicles and nonroad equipment, and hope to complete the testing over the course of the next year. This testing effort has been

designed to provide the necessary emissions and durability data to support a decision on the appropriate use (if any) of higher blends of ethanol in gasoline vehicles and engines. In coordination with EPA and the Coordinating Research Council, DOE is currently conducting a multi-million dollar testing program on a representative sample of newer vehicles to evaluate emissions impacts of higher ethanol blends, including durability over the useful life of the vehicle.

### Growth Energy Petition

EPA recently received the first petition for a waiver for higher ethanol blends. On March 6, 2009, Growth Energy and 52 ethanol manufacturers submitted an application to the Agency requesting a waiver under section 211(f)(4) of the Clean Air Act to allow for the use of an ethanol-gasoline blend of up to 15 volume percent ethanol in conventional gasoline powered engines. Growth Energy maintains that this is a necessary first step to delay the pending blendwall.

As required by statute, EPA will establish a public docket for the petition from Growth Energy and will soon issue a Federal Register notice to take comments on the waiver application. EISA directs EPA to take action on this waiver request within 270 days of receipt. We recognize the tremendous interest in this issue from a wide variety of stakeholders and are moving forward to evaluate the petition and move through the public process.

As part of the notice, EPA will request comment on all legal and technical aspects that pertain to the decision criteria under the Clean Air Act. A key issue is whether a waiver should be granted in whole or in a conditional or partial manner, such that the use

of up to E15 would be restricted to a subset of gasoline vehicles or engines covered by the waiver provision, while other vehicles or engines would continue using fuels with blends no greater than E10. If a conditional waiver were granted, it may necessitate changes in the fueling infrastructure to accommodate different blend levels. New pump labeling requirements or other measures may be needed to ensure consumers use the appropriate fuel for their vehicles and equipment. EPA intends to seek comment on these issues in both the federal register notice on the ethanol blend waiver request and in our proposal to implement RFS2. We will also continue to work with stakeholders to solicit their input.

### Conclusion

The RFS2 program, as mandated by EISA, will require use of increasing volumes of renewable fuels in our existing fleet of vehicles and equipment. For this reason, EPA has been actively engaged with our Federal partners and stakeholders for a number of years on all potential pathways to achieve these objectives, and is continuing to do so. As an important part of this process we will be acting as expeditiously as possible on the E15 waiver application. I appreciate the opportunity to share this update with you today.