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**SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**

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**Written Statement**

Chairman Boxer, Ranking Member Inhofe, and members of the committee, I appreciate the opportunity to appear before you today to testify on the renewable fuel provisions of the Energy Independence and Security Act of 2007 (EISA).

On March 26, 2010, in direct response to EISA, the Environmental Protection Agency (EPA) took final action and set forth the regulations to implement revisions to the national renewable fuel standard program, commonly called the RFS. These provisions established new year-by-year specific volume standards for renewable fuel reaching a total of 36 billion gallons by 2022. This total includes 21 billion gallons of total advanced biofuels, comprised of 16 billion gallons of cellulosic biofuel, 4 billion gallons of "other" advanced biofuels, and a minimum of 1 billion gallons of biomass-based diesel, that must generally be used in transportation fuel. The revised statutory requirements also include new definitions and criteria for

both renewable fuels and the feedstocks used to produce them, including new greenhouse gas emission (GHG) thresholds. The regulatory requirements went into effect on July 1, 2010 and apply to domestic and foreign producers and importers of gasoline and diesel for renewable fuel used in the U.S.

The RFS program will provide both energy security and environmental benefits. We estimate that the use of renewable fuels to reach the 36 billion gallons mandated by 2022, relative to market projections in the absence of the mandate, will displace over 13 billion gallons of petroleum-based gasoline and diesel fuel, which represents about 7 percent of expected annual gasoline and diesel consumption; decrease oil imports by \$41.5 billion dollars; and result in additional energy security benefits of \$2.6 billion. The RFS should also reduce GHG emissions from the transportation sector by an average of 138 million metric tons of CO<sub>2</sub> equivalent per year when the program is fully implemented -- equivalent to annual emissions produced by 27 million vehicles.

Since the final rule was published, we have focused our efforts on successfully implementing the RFS program. This includes running the program on a day-to-day basis, but also taking steps to maximize the program's potential to encourage the development of advanced biofuels. My testimony today will outline a handful of key areas of focus.

EPA strongly supports expanded use of advanced biofuels, especially cellulosic biofuels, which under EISA must achieve at least a 60 percent reduction in

lifecycle greenhouse gases compared to the 2005 baseline average gasoline or diesel fuel that it replaces. Each year, EPA is required to publish the annual standards for total, advanced, bio-mass based diesel, and cellulosic renewable fuels. In doing so, EPA must determine the projected volume of cellulosic biofuel production for the following year, and if that number is less than the volume specified in the statute, EPA must lower the standard accordingly. Before proposing annual volume standards, we conduct a thorough review of the cellulosic industry, including one-on-one discussions with each producer to determine their individual production capacities. EPA also consults directly with the Department of Agriculture, the Energy Information Administration (EIA), and the Department of Energy's Office of Biomass, to determine the status of production capacity and capabilities of the cellulosic sector. Since these evaluations are based on evolving information about emerging segments of the biofuels industry, and may result in the applicable volumes differing from those in the statute, we propose the annual volume standard through a transparent rulemaking process, allowing for public review and comment, prior to finalizing the standards. This process ensures the most robust determination possible at the time the standards are set.

In 2010 and 2011, as a result of limited production capacity, we found it necessary to reduce the cellulosic standard to about 6.5 million gallons, substantially below the EISA targets of 100 and 250 million gallons for those years. Under the statute, when the standard for cellulosic is lowered EPA has the discretion to maintain or reduce the total advanced and total renewable fuel

standards. In 2010 and 2011, we did not reduce these standards because we expect sufficient volume of other advanced biofuels will be available.

The Agency is now evaluating production capacity for next year and we anticipate our proposal for the 2012 standards to be published early this summer, with our final determination based on comments received in response to the proposal, estimates provided by EIA, and other sources. Final RFS standards for 2012 must be in place by the end of November 2011.

Several other provisions established in the final rule are specifically intended to incentivize the expanded use of advanced and cellulosic biofuels. For instance, while EISA provides a formula by which EPA must set the price for cellulosic biofuel waiver credits that EPA makes available to obligated parties in the event the cellulosic biofuel volume is set below that required by EISA, the design of the program restricts how these credits can be used for compliance, effectively ensuring that the other advanced biofuels are indeed being used in the market.

The biofuels sector is a dynamic one, and we frequently hear from companies who are in various stages of developing fuels based on innovative new production techniques or different types of feedstocks. We recognize the importance of evaluating and qualifying such new biofuels, where possible, for use in the RFS program. We already have a strong list of qualified advanced and cellulosic biofuels approved in the current RFS, such as biodiesel and renewable diesel from certain

feedstocks; ethanol from sugarcane; biodiesel and renewable diesel from algal oil; ethanol and diesel from approved cellulosic feedstocks; and jet fuel and heating oil from certain feedstocks. We also have established a process to evaluate new biofuels for approved use in the RFS program, including analysis of GHG impacts that are based on the best available science. Last year we successfully added canola-based biodiesel as an approved pathway. We have also approved a number of other new technology based pathways. Beyond that, we have a number of additional petitions requesting evaluation of new biofuel production processes and new feedstock pathways. We are currently in the process of evaluating each of these requests, working in coordination with USDA and DOE, and are moving as quickly as practicable to complete and issue final determinations. Many of these offer potential as a qualified advanced or cellulosic biofuels.

EPA also worked closely with industry on a sophisticated enhanced data system designed to accommodate the new EISA standards. This progressive new system is referred to as the EPA Moderated Transaction system, or EMTS. This system supports real time submission of information, accounting and validation of renewable volumes, and close monitoring of many of the program requirements. Since last July, this system has helped manage transactions for billions of gallons of renewable fuels.

In closing, EPA is currently working to successfully implement the RFS program, both by following the specific direction established in EISA and by

recognizing the statute's strong intent to replace conventional petroleum-derived fuels with advanced biofuels. The program today contains several innovative elements that together help incentivize the advanced and cellulosic biofuel sector. We recognize that current cellulosic production is not in line with the volumes established in EISA, and we will continue to closely monitor the progress of this sector and set standards as instructed by the statute. Thank you for the opportunity to testify today.