Statement of

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Chairmen Broun and Lummis, Ranking Members Maffei and Swalwell, and Members of the Subcommittees, thank you for inviting me to testify today on behalf of the Department of Energy (DOE) regarding energy savings performance contracts (ESPCs).

Energy efficiency is a large, untapped resource in the United States that can provide savings for consumers, improve competitiveness, and reduce reliance on oil. As Deputy Assistant Secretary for Energy Efficiency in the Office of Energy Efficiency and Renewable Energy (EERE), I am responsible for overseeing DOE's portfolio of energy efficiency research, development, demonstration, and deployment activities.

I am pleased to be here today, and look forward to working with Congress to use performance contracting as a tool to help address our nation's energy challenges and save taxpayers money, especially in the current fiscal environment.

In my testimony, I will discuss:

1. Progress by the Federal government in meeting energy and sustainability goals;
2. Federal government use of performance contracting;
3. How DOE helps Federal agencies overcome barriers to performance contracting; and
4. The importance of ESPCs in continuing to achieve energy and cost savings.

1. Progress by the Federal government in meeting energy and sustainability goals

As the nation's largest energy consumer, the Federal government has a tremendous opportunity and a clear responsibility to lead by example. The Federal government operates more than 500,000 buildings and other structures comprising more than 3 billion square feet and operates a fleet of more than 600,000 civilian and non-tactical military vehicles. In FY 2012, the total primary or source energy consumption of the U.S. government, including energy consumed to produce, process, and transport energy, was 1.6 quadrillion British thermal units (Btu) or "quads." These 1.6 quads represent 1.7 percent of the 95.4 quads[1] of total United States energy consumption. Of that consumption, approximately one-third was attributable to building energy use, and two-thirds to vehicles and equipment. The total cost to the Federal government was approximately $25 billion[2] in FY 2012, representing 0.7 percent of total Federal expenditures for that year.[3] For comparison, this level of energy use is approximately the same as the city of Hong Kong or all of New Zealand.

[1] DOE/EIA, Monthly Energy Review March 2013, Table 1.1. http://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf
[2] Unless otherwise noted, all costs cited in this report are in constant 2012 dollars, calculated using Gross Domestic Product implicit price deflators. See Bureau of Economic Analysis web site, http://www.bea.gov/national/xls/gdplev.xls.
[3] *Annual Report to Congress on Federal Government Energy Management and Conservation Programs, FY 2012.*

The size and impact of the government's investment in buildings and vehicles—and the corresponding use of energy and other resources—has prompted a number of energy management and other sustainability goals to be established through statutes and Executive Orders. These include the Energy Policy Act of 2005 (EPACT 2005), the Energy Independence and Security Act of 2007 (EISA), and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance.

The preliminary data from FY 2012 indicate that the Federal government as a whole is making steady progress in achieving many of its energy, water and sustainability goals. For example:

- The Federal government achieved over a 20 percent reduction in energy use per square foot as compared to FY 2003. Under Section 431 of EISA, the Federal government is required by FY 2015 to reduce energy intensity by 30 percent compared to 2003 levels.
- Renewable energy sources provided 7.1 percent of the Federal government's electricity use, ahead of a 5 percent target. In FY 2013 and beyond, the goal under Section 203 of EPACT 2005 is for the government to derive at least 7.5 percent of its electricity from renewable sources to the extent economically feasible and technically practicable.
- The Federal government reduced its potable water intensity use by 16.6 percent as compared to FY 2007. The target was a 10 percent reduction by FY 2012, with a long-term goal of a 26 percent reduction by FY 2020 under Executive Order 13514.
- The Federal government's emission of direct and indirect greenhouse gas (GHG) emissions from the consumption of purchased electricity, heat or steam (the majority of which arise from building energy use) were reduced by 15.1 percent in FY 2012 relative to FY 2008. The government's long-term target is a 28 percent reduction by 2020.

In addition to the goals outlined above, the Presidential Performance Contracting Challenge asks the Federal government to enter into a minimum of $2 billion in performance-based contracts by December 2013.

2. Federal government use of performance contracting

Performance based contracts are a particular form of contracts that makes payment contingent on successful completion of certain tasks outlined in the contract. As part of the Administration's efforts to improve contracting, the Administration issued a directive to agencies to increase the use of this kind of contract, which reduces risk to government. ESPCs and UESCs help Federal agencies meet their energy, water, and other savings goals by allowing them to undertake certain projects without up-front capital costs.

An ESPC is an arrangement between a Federal agency and an energy service company (ESCO). The ESCO conducts a comprehensive energy audit for the Federal facility and identifies energy conservation measures, water conservation measure, or a series of such measures at one or more locations. Each energy conservation measure must be applied to a Federal building, improve energy efficiency, be lifecycle cost effective, and involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operation and maintenance efficiencies, or retrofit activities. Each water conservation measure must improve the efficiency of water use, be life cycle cost effective, and involve water conservation, water recycling or reuse, more efficient treatment of wastewater or stormwater, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities.

While purchase of Federal building improvements with appropriated funds is the lowest-cost approach for the government, since private borrowing costs exceed those of the government, competing demands for funds within agencies often means that these investments in infrastructure get lower priority. Therefore, because the ESCO guarantees that the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract, which is a maximum of 25 years, the government can acquire these assets through ESPCs without capital outlays. The ESCO is also required to conduct periodic measurement and verification to ensure that guaranteed savings under the ESPC are being realized by the Federal agency. Once the contract is completed, the agency—and the U.S. taxpayer—receive the full benefit of any residual energy efficiency savings.

A utility energy service contract (UESC) is a contract between a Federal agency and its serving electric or gas utility for comprehensive energy and water efficiency improvements and demand management services. The utility assesses the opportunities designs and implements the accepted energy conservation measures and may provide third party financing to cover all or a portion of the required capital expenditure.

The Federal government has made great progress in achieving savings through performance contracting. Since the Department's ESPC program began in 1998, there have been over 281 ESPC projects awarded through DOE's contract vehicles alone with a total investment amount of $2.7 billion.[4] The total guaranteed savings of these 281 ESPCs was $7.2 billion. Historical program performance for ESPCs has shown that reported savings is on average 105 percent of guaranteed savings, thus yielding an approximately $7.5 billion in annual savings from the implemented projects to date, for a net savings of over $300 million. The first UESC was awarded in 1991 with 1,763 projects reported through June 24, 2013 totaling over $2.6 billion in total capital investment.

[4] An additional 125 projects have been award through the U.S. Army Corp of Engineers IDIQ contract since 1998.

The Presidential Performance Contracting Challenge for the Federal government to enter into a minimum of $2 billion in performance contracts, which include both ESPCs and UESCs, is catalyzing additional investment. As of June 2013, agencies have identified projects (in the pipeline or awarded) with approximately $2.3 billion investment value. As of June 15, 2013, agencies have identified 301 projects, with 182 of those identified projects to be completed through DOE's contracting vehicle. So far, 65 projects have been awarded with an investment value of $576.5 million. Another 230 projects are in the development pipeline with the expectation of a project being awarded.

3. How DOE helps Federal agencies overcome barriers to performance contracting

DOE's Federal Energy Management Program (FEMP) provides services, tools, and expertise to Federal agencies to help them achieve the statutory and Executive Order goals. FEMP offers technical assistance and guidance to agencies on energy efficiency, renewable energy and other energy management projects. FEMP also helps agencies use both appropriated funds and money leveraged through performance contracts to implement and fund energy efficiency, renewable energy, and water efficiency projects. This type of assistance helps agencies overcome barriers such as lack of available agency contracting and technical staff familiar with the performance contracting process. Thanks in part to FEMP's increased involvement and streamlining efforts, many Federal agencies increased their understanding and utilization of these performance contracts. Efforts around standardization, training, process simplification, project facilitation, and the establishment of goals to help bring these important tools to the attention of agency leadership and staff, are all key ingredients to helping these tools become standard in the Federal government.

One contracting vehicle used to make ESPCs as practical and cost-effective as possible for Federal agencies is the indefinite-delivery, indefinite-quantity (IDIQ) contract. The general terms and conditions of the IDIQ contract provide for an indefinite quantity, within stated limits, of supplies or services during a fixed period. Contracting Officers use the contract only when a recurring need is anticipated. DOE awarded this type of "umbrella" contract to ESCOs based on their abilities to meet specific terms and conditions. ESPCs, including those awarded under the IDIQ contracts are used by Federal facilities worldwide.

FEMP is available to provide technical support to agencies at each stage of the ESPC and UESC process. For example in ESPCs, support is delivered through FEMP project facilitation and development, FEMP training programs, Federal financing specialist services, and project facilitator services. DOE's National Laboratories have also developed screening and analysis tools for renewable and emerging technologies. Projects have utilized these tools to help in their decision making progress.

FEMP staff also coordinates with Federal agencies and ESCOs to provide support, including tracking of performance and completion of upcoming measurement & verification (M&V) activities through the life of the contract. FEMP's ENABLE program also provides a standardized and streamlined process for using ESPCs to implement energy efficiency and water conservation measures in Federal facilities smaller than 200,000 square feet. With the ongoing optimization efforts of FEMP, agencies using the ESPC ENABLE can now realize energy and water savings within six months of project completion.

FEMP has also put together new best practices for the notice of opportunity, the preliminary assessment, and the investment grade audit that will result in reduced cycle time and avoid duplication of efforts. This has resulted in significant progress in shortening the schedule for agencies to make ESPC awards. As a result, FEMP recommends a 12 month planning cycle, but certain project circumstances may add development time beyond this time frame. Agencies can now use this streamlined approach as a template for planning, scheduling, and tracking their activities during the award process.

Finally, FEMP is continually reviewing the DOE IDIQ contract, the FEMP-provided contract documents and templates, and ESPC training materials to identify opportunities to streamline the process and make changes that will allow projects to be awarded as efficiently as possible. The most recent update to the DOE IDIQ contract was to place particular emphasis on assessing renewable energy opportunities along with other energy and water conservation measures.

4. The importance of ESPCs in continuing to achieve energy and cost savings

Federal agencies continue to work on a number of energy and water savings and sustainability goals, and performance contracts will remain an important tool in achieving them. As of March 2013, agencies had identified a potential $735 million in total annual savings from EISA-mandated energy and water audits. The audits identified 75,000 energy and water efficiency/conservation measures, which have the potential to produce $683 million in annual energy savings (34 trillion Btu) and $25 million in annual water savings (15 billion gallons). Federal agencies have reported potential efficiency investments of $9.7 billion in their facilities, so the opportunity for future investments is there for future energy waste reductions. The agency audits estimate an implementation cost for these identified measures of $9.5 billion, Absent appropriated funds to carry out these projects, ESPCs will be critical in achieving significant progress toward reaching these energy and cost savings.

Conclusion

ESPCs offer a great deal of flexibility to Federal agencies by allowing them to perform significant energy and water management upgrades to their facilities without significant upfront costs when appropriated funds for capital investments are not available. By engaging private

sector financing and ESCO expertise, ESPCs provide multiple benefits to both the Federal government and the American public. By making the use of ESPCs, agencies will be able to incorporate more energy and water conservation measures to maximize savings and meet their statutory and Administration energy and sustainability goals.

Thank you again for the opportunity to speak to this important issue, and I would be happy to answer any questions you may have.