

Department of Energy

Washington, DC 20585

August 20, 2013

The Honorable Paul Broun, M.D. Chairman Subcommittee on Oversight Committee on Science, Space and Technology U. S. House of Representatives Washington, DC 20515

Dear Mr. Chairman:

On June 27, 2013, Dr. Kathleen Hogan, Deputy Secretary for Energy Efficiency, Office of Energy Efficiency and Renewable Energy, testified regarding "Green Buildings – An Evaluation of Energy Savings Performance Contracts."

Enclosed are the answers to 21 questions that were submitted by Representatives Neugebauer, Hultgren, Schweikert, Weber, Peters and you for the hearing record.

If we can be of further assistance, please have your staff contact our Congressional Hearing Coordinator, Lillian Owen, at (202) 586-2031.

Sincerely,

Brad Crowell

Acting Assistant Secretary

Congressional and Intergovernmental Affairs

Enclosures

cc: The Honorable Dan Maffei, Ranking Member

- Q1. As the office that oversees ESPCs, how comprehensive is the Federal Energy Management Program (FEMP) database of agencies' use of ESPCs? For example, does FEMP keep a record of all federal ESPC projects including the state of progress of each one? Do individual agencies do the same for their own projects?
- A1. The Federal Energy Management Program (FEMP) maintains records of all federal Energy Savings Performance Contract (ESPC) projects (Task Orders) implemented under the Department of Energy's Indefinite Delivery, Indefinite Quantity (IDIQ) Contract. Included in these records is the state of progress of each project during development and information on awarded contracts. FEMP has limited information on federal ESPC projects implemented under other IDIQ contracts such as those administered by the US Army Corps of Engineers, or for site specific contracts not issued under an IDIQ. FEMP's information in those cases is limited to total annual investment for past years. FEMP also assists the Office of the Federal Environmental Executive and the Office of Management and Budget in tracking the progress of all ESPCs for the President's Performance Contracting Challenge (PPCC). However, the system used to track the results of the PPCC, does not collect the same amount of project level data which FEMP has on DOE IDIQ projects.

- Q2. How often do agencies audit their use of ESPCs and broad performance information? Where is such information recorded?
- A2. Agencies perform audits of ESPCs periodically. There have been a number of ESPC audits completed over past years by agency Internal Auditors, as well as agency programmatic self-audits. The results for a few of the IG audits can be found on the Agencies' respective IG websites. While FEMP is not aware of any set audit frequencies at other agencies, since 2009 DOE has committed to visiting active individual DOE held ESPC sites every three years, and has contacted project managers for DOE ESPCs on an annual basis to ensure each ESPC is performing as indicated in the contract.

Audits, are not required under the DOE IDIQ contract. While FEMP has provided some auditrelated services to agencies in the past, FEMP has no formal collection or oversight of the independent audits completed by the Agencies.

Measurement and Verification Plans however are required for each ESPC. It is the agency's responsibility to be knowledgeable of M&V options, methods, and requirements. In addition, the agency is responsible for approving the ESCO's M&V plan according to FEMP's guidance. The agency must witness M&V activities and review calculations, utility bill records, and other elements of the baseline to confirm that the approved M&V plan is followed, as described in FEMP's Guide to Government Witnessing and Review of Post-Installation and Annual M&V Activities. The primary responsibility for witnessing M&V will

fall on the Contracting Officer (CO), CO Representative (COR), or CO Technical Representative (COTR) depending on how it is outlined in the M&V plan.

FEMP ESPC resources are at www.femp.energy.gov/financing/espcs resources.html

- Q3. How are Super ESPCs negotiated, and what is the process by which ESCOs continue to maintain their Super ESPC status? What safeguards are in place to assure Super ESPCs deliver the state commitments over the lifetime of the contract?
- A3. The DOE ESPC IDIQ contract was competed using full and open competition, resulting in multiple awards to 16 energy service companies (ESCOs). The current IDIQ was awarded in 2008 for a 5 year term, with two 3-year option renewals possible for contract extension. DOE recently opted to renew the current contract for one 3-year contract extension, until 2016. If DOE extends it for another 3-year term, until 2019, all ESCOs would then have to re-compete to be included in the DOE IDIQ umbrella contract. DOE awarded these umbrella contracts to ESCOs based on their ability to serve Federal agencies under terms and conditions outlined in the IDIQ solicitation. Under this contract, agencies can use ESPCs in Federal facilities, both domestic and international. Each ESCO has a \$5 billion ceiling amount, for ESPCs that may include energy efficiency, water conservation, greenhouse gas (GHG) emissions reduction investments, and renewable energy projects for Federally-owned buildings and facilities.

ESCOs must compete for each ESPC task order, issued under the IDIQ contract. DOE does not influence which ESCOs are selected for individual Task Orders awarded under the IDIQ, only that they must conform to the requirements of the IDIQ umbrella contract. The contract negotiations associated with the Task Order awards are managed by the respective Agency Contracting Officers. The projects are reviewed prior to award, in part, to assess the reasonableness of the proposal, and the projects require annual Measurement and Verification

to ensure equipment continues to operate as specified over the contract term and that the guaranteed savings are being achieved/delivered annually.

*The term Super ESPC has been replaced with the term DOE ESPC IDIQ.

- Q4. How often have changes in utility rates impacted savings? What is the effect on Federal agencies engaged in ESPCs when utility rates go either higher or lower?
- A4. Contractor payments under an ESPC are generally based on fixed utility price escalation rates. The default escalation rates are those projected by the Department of Energy's Energy Information Agency (EIA). On an annual basis, EIA compares its projections with energy prices that actually occurred. In almost all cases, EIA has under-predicted actual utility price escalation. This means that on a whole, the government is paying the ESCO less than the savings are worth. If there was a decline in energy prices (\$), relative to the estimated price escalation schedule in the contract, it is possible for the reported ESCO energy savings (\$) to be less than what was originally guaranteed in the contract; however with the reduced energy prices (\$) the government would still achieve an overall reduction in their utility costs.

- Q5. A 2005 GAO report noted the 2004 establishment of "a special working group to address the uncertainties about actual savings" between FEMP and DOD. Referred to as the Energy Savings Discrepancy Resolution Working Group, it was to develop "approaches to compare projected and actual savings and to explain any deviations." What findings have emerged from this group, and what is its current status?
- A5. The working group completed its task and published its findings in the summer 2005 issue of FEMP Focus (http://www1.eere.energy.gov/femp/pdfs/fempfocus_summer_2005.pdf).

The key findings of the report were that there are two factors that are largely responsible for the discrepancy between the guaranteed energy savings in ESPCs and actual utility bills.

These factors are load creep (i.e., increases in energy use due to new construction and mission changes) and utility cost increases which occur every year at both ESPC sites and at sites where no significant energy efficiency projects have been implemented. While load creep and utility cost increases are problematic to predict when calculating the guaranteed energy savings, FEMP recommends Agencies and ESCOs use M&V protocols that are appropriate relative to the various energy conservation measures implemented. These other M&V approaches can provide further detail relative to realized savings, even in cases where utility bill reconciliation may have limitations.

The DOE ESPC IDIQ requires active agency input regarding the pre-installation baseline, which is now defined to include factors beyond the ESCO's control that influence post-installation energy use (e.g., building occupancy, weather, plug load creep, etc.). The ESCO is

¹ GAO Report, "Performance Contracts Offer Benefits, but Vigilance Is Needed to Protect Government Interests," GAO-05-340, June 2005, available at: http://www.gao.gov/new.items.d05340.pdf; ² Ibid.

required to verify operation of the installed equipment/systems, calculate the previous year's energy and water savings, and compare verified and guaranteed savings annually.

- Q6. Are all federal agencies on track to meet the President's goal established in 2011 of engaging in \$2 billion worth of ESPCs by the end of 2013?
 - a. Are agencies trying to meet this goal because of the President's 2011 memo, or because they need to? In other words, absent the President's memo, would all agencies still be trying to engage in \$2 billion worth of ESPCs by the end of 2013?
- A6a. The Presidential Performance Contracting Challenge established a comprehensive goal for the Federal government to enter into a minimum of \$2 billion in performance contracts. Agencies have committed to 302 potential ESPC and UESC projects with an estimated \$2.3 billion in investment value. As of July 2013, contracts have been awarded for 72 projects with an investment value of \$621.5 million and 230 projects remain in the development pipeline.

 While some Agencies have already awarded final contracts in FY 2013, FEMP expects most Agencies will be completing final contract actions during the first quarter of FY 2014 or very close to the December 31 target. FEMP is working with agencies to achieve this momentous challenge and streamline contracting processes which historically, have taken about two years to award.

Given the numerous requirements related to energy, water, and emissions reduction, as well as goals for increasing renewable energy use, Agencies have and will continue to have a need to use performance contracts to meet these statutory and Executive Order goals. The Challenge has helped reinvigorate, improve and streamline processes for the use of ESPCs and UESCs throughout the government, and we anticipate they will be increasingly used into the future, given the current fiscal climate and the continued need for efficiency investments in federal buildings.

- Q6. Are all federal agencies on track to meet the President's goal established in 2011 of engaging in \$2 billion worth of ESPCs by the end of 2013?
 - b. How does this monetary goal impact the quality of the ESPCs? How do agencies evaluate impact beyond just how many dollars were spent?
- A6b. The investment goal is not expected to impact quality as both Agencies and ESCOs have adequate resources and processes in place to ensure quality projects are awarded. Agencies should evaluate the impact of their investment relative to its contribution to their efforts to meet mission, achieve energy savings, reduce energy intensity of their buildings, conserve water, and reduce greenhouse gas emissions in addition to evaluating the total cost-benefit of the project. Several key agency sustainability goals can be positively impacted by the investments associated with these contracts. Agencies ensure the high quality of their ongoing implementation of ESPC contracts through measurement and verification procedures. The M&V plan is the primary vehicle for first documenting and then periodically evaluating the performance expectations of the project. The DOE ESPC IDIQ requires additional details in the M&V plan to ensure that the ESCO and agency thoroughly understand what the Task Order covers.

- Q7. As interest rates fluctuate, can ESPCs be re-negotiated to take advantage of lower finance rates, and if so, under what restrictions?
 - a. With record-low interest rates in recent years, how many ESPC contracts have been re-negotiated to save agencies money?
- A7a. Agencies and ESCOs can work together to refinance ESPCs, and have done so on a limited basis to date. Agencies can engage the ESCOs on refinancing; however, responsibility rests with the ESCO to discuss debt modification with its financier. It is important to recognize that ESPC debt service agreements are between an ESCO and its financier, the Government is not a contractual party to the financing agreement.

While DOE's existing ESPC IDIQ contracts contain no express authority for an agency to request refinancing from the ESCO, the individual agency can include such a requirement in its own stand-alone ESPC or task order, allowing it to direct an ESCO to refinance or otherwise modify its ESPC debt. Ideally, such a modification would result in a revised contract or task order payment schedule and contract modification.

- Q7. As interest rates fluctuate, can ESPCs be re-negotiated to take advantage of lower finance rates, and if so, under what restrictions?
 - b. If an ESPC is bundled with other ESPCs and sold to a secondary source, does FEMP have measures to ensure that re-negotiating ESPCs are always available as an option to agencies to take advantage of lower interest rates?
- A7b. Agencies and ESCOs can work together to refinance ESPCs. Agencies can engage the ESCOs on refinancing; however, responsibility rests with the ESCO to discuss debt modification with its financier. It is important to recognize that ESPC debt service agreements are between an ESCO and its financier, the Government is not a contractual party to the financing agreement.

Agencies can optimize their projects by taking advantage of the broad latitude and flexibilities built into these contracts, allowing them to modify the guarantee, reassign ESCO services, and reallocate responsibilities in order to meet their needs and priorities.

- Q8. Is there a standard or uniform system of measuring ESPC costs that must be covered by savings? Also, how consistently do savings actually cover costs, and how is that information calculated, verified, and maintained?
- A8. The International Performance Measurement and Verification Protocol (IPMVP) is the standard method by which guaranteed savings are measured. The IPMVP is maintained with the sponsorship of DOE by a broad international coalition of facility owners/operators, financiers, contractors or Energy Services Companies (ESCOs) and other stakeholders.

 Energy conservation measures covered by the IPMVP include fuel saving measures, water efficiency measures, load shifting and energy reductions through installation or retrofit of equipment, and/or modification of operating procedures.

Savings are tracked through the annual measurement and verification reports on each DOE IDIQ project. On a project level, for the most part, savings cover costs, although in a few cases payments to the ESCO have been reduced to reflect lower verified savings. At any given time, a few ESCOs and agencies may be engaged in efforts to resolve identified shortfalls, which, historically, have resulted in a resolution consistent with the requirements of the contract. FEMP tracks the results of these reports and with assistance from the Oak Ridge National Laboratory. ORNL generates an annual savings report that documents the results of M&V for all active projects. The report verifies that the guaranteed savings requirements have been met, or exceeded.

- Q9. How can agencies verify that an ESCO's Monitoring & Verification (M&V) practices are completely accurate? What role does DOE play in this?
- A9. A condition of a DOE ESPC award is a requirement to have a Measurement and Verification (M&V) plan, which describes how the savings will be verified for each energy conservation measure (ECM), and includes details on the how they will be measured, to what schedule and utilizing what techniques. It is the responsibility of the Agency's Contracting Officer, assigned to the project, to be knowledgeable of all M&V options, methods, and requirements. The agency is responsible for negotiating and approving the ESCO's proposed M&V plan according to DOE guidance. The agency then must witness M&V activities and review calculations, utility bill records, and other elements of the baseline to confirm that the approved M&V plan is followed.

DOE provides several tools to aid the M&V decision-making process for DOE ESPCs. DOE also has a life of contract service which contacts the agencies and individuals responsible for each active ESPC project within DOE's IDIQ portfolio of projects. Twice per year, contact is made to identify the current status of projects. FEMP's Guide to Government Witnessing and Review of Post-Installation and Annual M&V Activities provides Agencies with the relevant guidance, however the primary responsibility for witnessing M&V will fall on the Contracting Officer (CO), CO Representative (COR), or CO Technical Representative (COTR) depending on how it is outlined in the M&V plan.

- Q10. Energy savings estimates are all based on a static evaluation of existing technologies. For example, a new building technology may provide for a 5% improvement in energy efficiency over the lifetime of the ESPC, however, two years later a new technology may emerge that would provide a 20% saving. How is dynamic technology development integrated and considered into ESPCs?
- A10. Generally, ESPCs are long-term contracts that are not particularly well suited to deal with the dynamic replacement of technology. It should be noted that, if appropriated funds were utilized to perform ECMs in which the technology becomes outdated in the near future, there would be no recourse for any type of upgrade. However, a technology installed by an ESCO under an ESPC can be replaced by the agency (using either another ESPC or using appropriated funds) before the contract term ends. However, as with any energy conservation technology, the replacement must be economically feasible. During the feasibility study, the agency will estimate the likely savings from the technology, as well as the cost, which would include the cost of paying the current ESCO the remaining outstanding capital on that particular ECM.

- Q11. In what ways can the Department of Energy provide more oversight on ESPCs to ensure that all forms of energy efficiency technology are being utilized, and that technologies are prioritized on their overall energy efficiency impacts?
- A11. DOE has developed tools and training to encourage both Agencies and ESCOs to fully explore all efficiency and renewable options that could have an impact on the site. The efficiency impact of the technologies, while perhaps the largest driver in the decision making, will be impacted by issues of cost effectiveness, compatibility with the mission requirements, etc.

One type of training tool specifically offered by FEMP is the Renewable Energy and Advanced Efficiency Technologies Planning session, which provides free screenings and guidance to identify cost-effective opportunities for agencies to implement energy-efficient products and renewable energy technologies.

FEMP ESPC training: http://www1.eere.energy.gov/femp/financing/espcs training.html

- Q12. How does an agency or FEMP ensure that an ESCO is offering an agency competitive financing and terms in ESPCs? How much competition is there among the companies that finance ESPCs, and is there a mechanism to provide for a robust financial analysis to further reduce the financing costs?
- A12. FEMP's IDIQ contract requires ESCOs to obtain multiple bids for the financing and that the process is transparent. In most cases, ESCOs obtain three bids and choose the one that provides the best value for the government. In addition, FEMP compares project interest rates with interest rates on other recent awards to determine whether the interest rate is comparable.

- Q13. Are there instances of energy savings companies not fulfilling their contractual duties? What happens in those cases and how many are there?
 - a. Conversely, what happens when agencies don't meet their contractual obligations? What are the some of the reasons for such an event, and how often has that occurred?
- A13a. ESPCs provide Agencies a flexible and practical vehicle for customizing energy projects to their site-specific needs. These flexibilities allow the Agencies to identify and modify potential issues before they endanger the project, mitigating the risk of default or breach.

While contracting officers at individual agencies are responsible for administering ESPCs, FEMP is not aware of any contracts that were terminated because of a default or failure by either the Agency or the ESCO. FEMP's statistics on terminated contracts indicate that, as of May 2013, 76 Delivery Orders have been closed out since 1998, with 58 being terminated prior to completion due to convenience in agreement with the ESCO and 18 completing their full contractual term (e.g. the 12 year contract that is completed after its 12th contract year). The term "Convenience" includes Government buy out according to the cancellation schedule, base or building closure, the use of end of year appropriations, refinancing, etc. In some of these cases, Agencies with a surplus of end of year appropriations have chosen to buy out the rest of the ESPC contract, which is an option in all ESPCs contracts. All ESPC contract have a stipulated buy out price, providing another avenue of flexibility to the Agencies.

FEMP has a proactive approach that mitigates contract issues before they occur. Shortfalls are identified through a FEMP project team and any perceived issues are mitigated. These

mechanisms are built into the ESPC to safeguard the Agency and ESCO. If issues are identified that need follow-up, the DOE ESPC team determines what actions to take. Some examples of typical project issues include training for agency participants on how to navigate the ESPC process and develop a high-value project and advising agencies on their rights and responsibilities if a contract dispute arises.

- Q13. Are there instances of energy savings companies not fulfilling their contractual duties? What happens in those cases and how many are there?
 - b. In either of these situations, what recourse do the wronged parties have, and who arbitrates disputes between agencies and ESCOs?
- A13b. FEMP is not aware of any contracts that were terminated because of a default or failure by either the Agency or the ESCO. FEMP's statistics on terminated contracts indicate that, as of May 2013, 76 Delivery Orders have been closed out since 1998, with 58 being terminated prior to completion due to convenience in agreement with the ESCO and 18 completing their full contractual term (e.g. the 12 year contract that is completed after its 12th contract year). The term "Convenience" includes Government buy out according to the cancellation schedule, base or building closure, the use of end of year appropriations, refinancing, etc.

FEMP works with Federal agencies, which have the ultimate responsibility for their contracts, to see that strong contracts are in place and then provides life of contract support to help address and correct any issues along the way, so contracts do not fail. Through M&V plans and ongoing monitoring, issues are identified and if necessary the amount paid on the contract can be adjusted or the ESCOs can be required to replace equipment to ensure the appropriate savings are achieved. The Federal ESPC Steering Committee is also a resource available to Agencies to help to address common issues and find solutions. Therefore, FEMP is not aware of any DOE IDIQ projects that have ever reached the level where arbitration was required.

- Q14. How many DOE facilities are currently unoccupied or unused? Has DOE entered into ESPCs for any of them, and if no, why not?
- A14. DOE has 6,791 buildings and trailers that are unoccupied and 1,191 buildings and trailers that are not utilized. Unoccupied buildings include warehouses and storage space in addition to other buildings with no current users. Buildings not currently utilized are labeled as zero percent utilization in DOE's real property management system.

Certain unoccupied buildings at DOE sites may no longer have mission relevance and may be candidates for cleanup, demolition, or potential reuse in the future.

ESPC applications for vacant buildings are likely to be limited (especially for buildings slated for near term demolition), but may include measures such as converting fire sprinkler systems from water to chemical based systems, thus allowing for the building to go into a completely unheated state. All of DOE's major laboratory sites were assessed for opportunities to utilize ESPCs and UESCs within the past 5 years, with active project reviews undertaken at approximately 20 sites, resulting in nearly \$500 million in energy related investments.

OUESTION FROM CONGRESSMAN NEUGEBAUER

- Q1. The use of ESPCs has raised questions about how these contracts should be reflected in the federal budget. Currently ESPCs are not "scored," but the Congressional Budget Office (CBO) believes that the obligation to make payments and financing costs is incurred when the government signs the ESPC, and should score the full cost to reflect this commitment as a new obligation at the time of signing. This is very similar to an issue that is preventing Veterans Affairs medical hospitals from being constructed due to CBO's scoring of the leases up front.
 - a. If the scoring method were to change to reflect the CBO method, how would this impact agency usage of ESPCs?
- Ala. The ESPC permanent authority, which was scored by CBO upon enactment, permits an agency to enter into multiyear contracts for a period of up to 25 years as long as it has the funds available for payment of the first year's costs and the ESPC agreement guarantees energy savings sufficient to cover the full cost of the Federal investment. One of the significant advantages of ESPCs is that such contracts allow agencies to undertake energy saving upgrades and enables them to pay for the investment as savings accrue.

QUESTION FROM CONGRESSMAN HULTGREN

- Q1. In 2009, the Department of Energy awarded a 15-year ESPC at Fermilab for 1.4 million in upfront cost projecting savings of 3.25 million over the life of the contract.
 - a. Are these savings on track to reach their expected potential within the 15-year timeline? If not, why not?
- A1a. Fermilab's ESPC Project is on track to realize its expected potential for the remaining term of the contract. For additional information, please see the response to Question 1b.

QUESTION FROM CONGRESSMAN HULTGREN

- Q1. In 2009, the Department of Energy awarded a 15-year ESPC at Fermilab for 1.4 million in upfront cost projecting savings of 3.25 million over the life of the contract.
 - b. What is the total savings amount thus far? How is that amount being measured and verified?
- A1b. Total savings in the first two years of the performance period (May 2011 to June 2013) amount to \$346,683. This exceeds annual performance guarantees and is documented in the annual measurement and verification (M&V) reports.

Savings are being measured and verified in accordance with applicable laws and guidance. The Energy Services Company (ESCO) is required to complete, at a minimum, an annual performance review of each energy conservation measure (ECM) to ascertain that the performance guarantee was achieved during the prior 12 months. The Federal Acquisition Regulation, ESPC statutes, and the DOE ESPC Indefinite Delivery Indefinite Quantity (IDIQ) contract specify those processes which the ESCO must follow to execute the annual M&V inspection. In addition, DOE Federal Energy Management Program (FEMP) guidance prescribes the responsibilities of the Government for witnessing the ESCO's annual M&V activities and reviewing its annual M&V reports.

QUESTION FROM CONGRESSMAN HULTGREN

- Q2. Are there any potential downsides to the federal use of ESPCs?
 - a. If so, how can we improve the program to negate these weaknesses?
- A2a. While there are many opportunities for the use of ESPC's, DOE must ensure that performance contracts remain high-value projects that deliver savings through extensive outreach, training and communication with stakeholders and Agencies. ESPCs are a type of contract that is different from what most Federal agencies are used to executing, and requires contracting officers to be well-trained in managing them. DOE provides several forms of assistance and project facilitation to help agencies ensure they develop ESPC projects that are technically excellent, contractually and legally sound, financially smart and that deliver results.

Another re-occurring challenge to ESPC project implementation is the time involved due to the number of discrete steps and corresponding documents/contract deliverables.

Historically, it has taken anywhere from six months to five years to execute an ESPC. In response, FEMP put together new best practices for steps in the process, including the notice of opportunity, the preliminary assessment, and the investment grade audit that should help achieve reduced cycle time and avoid duplication of efforts. This has resulted in significant progress in shortening the schedule for agencies to make ESPC awards. Currently, it typically takes about 24 months for a contract to be awarded.

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 improvements to allow projects to be awarded as efficiently and expeditiously as possible.

QUESTION FROM CONGRESSMAN SCHWEIKERT

- Q1. Do you know of any instances under an ESPC where there is a purchase buyback?
 - a. How often does this occur?
- A1a. While the Department of Energy (DOE) does not have information on agreements between all federal sites and their utilities relating to the sale of excess energy, we do have project descriptions that include project size for most renewable energy conservation measures (ECMs) within the DOE energy savings performance contract (ESPC) program that may provide insight into this issue. In reviewing the data, almost all ESPC renewable ECMs are below 1 megawatt (MW) and while there are a few 700-900 kilowatt (kW) photovoltaic and wind ECMs, the output of each represents a small percentage of the site's overall electricity consumption.

QUESTION FROM CONGRESSMAN SCHWEIKERT

- Q1. Do you know of any instances under an ESPC where there is a purchase buyback?
 - b. What are the circumstances for this occurring?
- A1b. While the Department of Energy (DOE) does not have information on agreements between all federal sites and their utilities relating to the sale of excess energy, we do have project descriptions that include project size for most renewable energy conservation measures (ECMs) within the DOE energy savings performance contract (ESPC) program that may provide insight into this issue. In reviewing the data, almost all ESPC renewable ECMs are below 1 megawatt (MW) and while there are a few 700-900 kilowatt (kW) photovoltaic and wind ECMs, the output of each represents a small percentage of the site's overall electricity consumption.

OUESTION FROM CONGRESSMAN SCHWEIKERT

- Q1. Do you know of any instances under an ESPC where there is a purchase buyback?
 - c. Does this effect total savings?
- A1c. The Department of Energy (DOE) does not have information on agreements between all federal sites and their utilities relating to the sale of excess energy, we do have project descriptions that include project size for most renewable energy conservation measures (ECMs) within the DOE energy savings performance contract (ESPC) program that may provide insight into this issue. In reviewing the data, almost all ESPC renewable ECMs are below 1 megawatt (MW) and while there are a few 700-900 kilowatt (kW) photovoltaic and wind ECMs, the output of each represents a small percentage of the site's overall electricity consumption.

QUESTION FROM CONGRESSMAN WEBER

- Q1. While executing the President's recent energy directive, which rulemakings do you expect to finalize first and how soon should we expect to see these?
- A1. DOE is actively working on many rulemakings in support of the President's energy goals. These rulemakings are in various stages of development, with some further along in the process than others. The Regulatory Agenda provides a listing of the Department's regulatory activities and projected timeframes for those activities. The 2013 Spring Regulatory Agenda can be found at:

http://resources.regulations.gov/public/custom/jsp/navigation/main.jsp.

QUESTION FROM CONGRESSMAN PETERS

- Q1. In what specific areas do the goals of energy efficiency and resiliency dovetail? Could an ESPC be used to make buildings upgrades that both save energy and increase the resiliency of building infrastructure and critical infrastructure? For example, when you think about an ESPC for a federal data center, would the improvements made also improve the data centers ability to withstand extreme weather events?
- A1. It is possible that such projects would improve a structure's ability to withstand extreme weather events. Combined heat and power (CHP) projects implemented with an ESPC could also be designed to operate during utility outages caused by weather events, such as Hurricane Sandy. One example is an ESPC project at FDA's White Oaks site. Their CHP system has been able to supply electricity and heat to continue their mission during power outages. This type of resiliency application of ESPC could be considered at other federal sites in combination with other energy cost savings measures.

All payments in an ESPC must come from energy savings, including energy –related operations and maintenance. To the extent that energy conservation measures include aspects that also address resiliency, such measures could be considered in the development of an ESPC.

OUESTION FROM CONGRESSMAN PETERS

- Q2. What elements are already in place for ESPCs to incorporate resiliency goals and recommendations so that ESPCs can fully incorporate resiliency as part of the audit or proposed plan?
- A2. DOE-FEMP is currently working with the Army to develop a method of combining an ESPC with a building renovation project designed to upgrade the interior and exterior of a structure. Certain ECMs such as cool roofs, vapor barriers, and efficient windows could potentially be installed more economically if a portion of the cost was paid by the appropriated funds used to perform the building renovation. It is possible that such a project would improve a structure's ability to withstand extreme weather events.

All payments in an ESPC must come from savings in energy costs, including energy –related operations and maintenance. To the extent that energy conservation measures include aspects that also address resiliency, such measures could be considered in the development of an ESPC. The added benefit of potentially addressing resiliency is another example of how ESPC's help support the goals of the Presidents Climate Action Plan.