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PBS Energy Savings Performance Contract Awards May Not Meet Savings Goals

*Audit Number A150009/P/5/R16003
September 27, 2016*

EXECUTIVE SUMMARY

PBS's Energy Savings Performance Contract Awards May Not Meet Savings Goals

Report Number A150009/P/5/R16003

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Audit Objectives

The objectives of our audit were to determine whether the Public Buildings Service (PBS): (1) awarded Energy Savings Performance Contract (ESPC) task orders in accordance with the applicable regulations and guidance, and (2) has an effective process in place to verify that the energy savings calculated by the energy service company (energy company) are accurate.

Background

The December 2011 Presidential Memorandum, *Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings*, mandated implementation of \$2 billion of ESPCs government-wide within 24 months from the date of the memorandum. GSA initially responded by committing \$175 million to meet this mandate.

Under an ESPC, a federal agency uses a private energy company to finance and install energy efficiency improvements in a federal building and then uses the energy savings to fund the payments to the energy company until the improvements have been paid off. The agency may award its own contract or award task orders against contracts established by the Department of Energy's Federal Energy Management Program (FEMP). As part of the contracting process for ESPCs, GSA and the energy company must agree on a baseline, which is the cost for energy consumption the government would have incurred without the ESPC project. After the installation of the energy improvements, energy costs are compared to the baseline to determine savings. The federal ESPC authority requires the energy company to undertake measurement and verification activities to demonstrate whether projected savings have been met.

Summary of Findings

PBS awarded 14 ESPC task orders, valued at over \$200 million, to improve energy efficiency and reduce greenhouse gas emissions in GSA-managed buildings. However, PBS may not be able to achieve these goals because it did not take the proper steps while awarding the task orders. We found that PBS:

- Risks paying for unrealized energy savings because it did not comply with guidelines for witnessing energy baseline measurements;
- Did not achieve energy-related savings on one ESPC task order because it overestimated savings and was unable to renegotiate the operations and maintenance contract to achieve the remaining savings;
- Did not comply with requirements for establishing fair and reasonable pricing;
- Awarded a task order for a building that may be disposed of before planned savings can offset its costs; and
- Awarded a stand-alone ESPC that had no approved Measurement and Verification Plan for achieving energy savings.

EXECUTIVE SUMMARY

Recommendations

Based on our findings, we made several recommendations to improve PBS's oversight of the award and administration of ESPC task orders. The recommendations include ensuring that PBS personnel witness energy baseline measurements, ensuring that energy-related savings calculations are accurate, implementing training for price reasonableness, and ensuring that Measurement and Verification Plans are approved prior to contract award. Strengthening oversight will allow PBS to award future and administer current ESPC task orders more effectively and help ensure GSA achieves its energy saving goals.

GSA Comments

See *Appendix C*.

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Introduction

We performed an audit of the 14 Energy Savings Performance Contract (ESPC) task orders that PBS awarded from September 2013 to April 2014, which are valued at approximately \$201 million.

Purpose

We performed this audit to assess the economy and efficiency of PBS's ESPCs. The purpose of an ESPC is to improve energy efficiency, a key sustainability goal for GSA. GSA encouraged the use of ESPCs for building renovation projects beginning in fiscal year 2015.

Objectives

The objectives of our audit were to determine whether PBS: (1) awarded ESPC task orders in accordance with the applicable regulations and guidance, and (2) has an effective process in place to verify that the energy savings calculated by the energy service company (energy company) are accurate.

Background

The federal government has introduced several environmental initiatives to reduce its carbon footprint. These initiatives have led to widespread reductions in energy use across the government; however, these energy reductions come with funding challenges. In 1986, Congress provided agencies with an alternative mechanism for obtaining energy efficiency improvements when it authorized agencies to use ESPCs. An ESPC is a type of performance contract that privately finances the improvements from the financial benefits derived from contract performance. In performance-based contracting, the agency specifies the desired result and allows the contractor to determine how to achieve it.

Under an ESPC, GSA enters into a long-term contract with an energy company that arranges private financing and installs energy efficiency improvements. GSA then makes payments to the energy company until the improvements have been paid off. The annual payment schedule for the ESPC cannot exceed the value of the annual utility savings created by the installed energy-efficiency improvements.

As part of an ESPC, GSA and the energy company collaborate to develop the annual energy and financial savings and to create a plan that will assess and verify the projected savings. This is known as a Measurement and Verification Plan. ESPCs are designed to shift performance risk associated with energy-efficiency improvements from GSA to the energy company. The performance risk is transferred by requiring verification that the energy-efficiency improvements achieved the expected financial savings before GSA makes payments to the energy company. If the project does not

achieve the expected savings, then the agency can suspend payments until the conditions are corrected.

Guidance and Regulations

ESPCs began in 1986 with amendments to the National Energy Conservation Policy Act (42 U.S. Code 8287, issued in 1978). The amendments stated in part that, “The head of a Federal agency may enter into contracts ... solely for the purpose of achieving energy savings and benefits ancillary to that purpose” for a term not to exceed 25 years. The Energy Policy Act of 1992 (Public Law No. 102-486) further extended agencies’ authority to use ESPCs for performing energy-efficiency improvements and directed the Department of Energy (DOE) to develop ESPC regulations. As a result, in 1995, DOE issued implementing regulations in Title 10 of the Code of Federal Regulations Part 436, *Federal Energy Management and Planning Programs*.

Energy reduction goals for federal buildings have evolved over time, from 10 percent per square foot in 1988 to 35 percent in 2010. Also, Executive Order 13123, *Greening the Government Through Efficient Energy Management*, issued June 3, 1999, required an allocation of additional funds to install energy-efficiency improvements. To help meet these goals, DOE was tasked with using ESPCs to offset initial costs associated with energy efficient improvements.

To help simplify and shorten the ESPC award process, DOE’s Federal Energy Management Program (FEMP) negotiated “super” ESPCs with pre-qualified energy companies. FEMP’s super ESPCs are umbrella contracts awarded nationwide that comply with Federal Acquisition Regulation competition requirements. Agencies, including GSA, have the option to use the super ESPCs to take advantage of some pre-negotiated terms and conditions. GSA can implement task orders more quickly using the super ESPCs because the competitive selection process has already been completed and key terms of the contract have been negotiated. An agency may develop its own ESPC; however, doing so can be a difficult process. Consequently, most agencies seek assistance through either FEMP or the Department of Defense, which also negotiated its own super ESPCs.

Super ESPCs were awarded to assist in accomplishing the goals of Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, issued in January 2007. The Executive Order detailed the following goals:

- Reduce federal facility energy use per square foot by 3 percent per year, from 2006 to 2015, as compared to the baseline year of 2003 (or by a total of 30 percent by the end of 2015).
- Reduce water use by 2 percent per year, from 2008 to 2015, as compared to the baseline year of 2007 (or by a total of 16 percent by the end of 2015).

Presidential Memorandum *Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings*, dated December 2, 2011,

mandated implementation of \$2 billion of ESPCs government-wide within 24 months from the date of the memorandum. GSA initially responded by committing \$175 million to this mandate. This commitment prompted GSA’s Office of Federal High-Performance Green Buildings to launch the National Deep Energy Retrofit program in March 2012. According to GSA’s *360° Perspective on Federal Deep Energy Retrofits*, the goal of this program was to demonstrate best practices to achieve significant energy savings through self-financing projects, such as ESPCs, within the federally accepted financing term of 25 years or less. GSA’s objectives were to use innovative, renewable energy technologies to move buildings toward “net zero energy consumption.”¹

From September 2013 to April 2014, GSA awarded 14 ESPC task orders with an overall value of approximately \$201 million. The task orders were divided into two categories - National Deep Energy Retrofit and Non-National Deep Energy Retrofit (see *Figure 1*).

Figure 1: ESPC Categories

ESPC Category	Number of Task Orders	Total Funding (in millions)
National Deep Energy Retrofit	10	\$172
Non-National Deep Energy Retrofit	4	29
Total	14	\$201

Energy Savings

FEMP defines energy savings as a reduction in the cost of energy, water, and wastewater treatment relative to a pre-project baseline cost. These savings are generally “recurring” savings that occur annually. Savings are calculated as the difference between the baseline and the energy cost after the ESPC’s energy-efficiency improvements are in place. Agencies may keep some or all of any annual savings available after the agencies made required contractual payments to the energy company. Currently, GSA may retain and use 100 percent of all savings without further action by congressional appropriators.

The key components of energy savings are the cost baseline and measurement and verification. Energy-related savings are also included in DOE’s regulatory definition of energy savings.

Baseline and Measurement and Verification. As part of contracting for ESPCs, GSA and the energy company must agree on a baseline, which is the cost for energy consumption the government would have incurred without the ESPC project.

$$\text{Baseline} = (\text{Energy Use} \times \text{Energy Cost}) + (\text{Operations \& Maintenance} + \text{Repair \& Replacement})$$

¹ Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (October 2009), defines “net zero energy consumption” as a site producing at least as much renewable energy as it consumes over a year.

Baseline costs are established as part of the measurement and verification methodology the energy company and customer agree upon when awarding a task order. Measurement and verification is the method of quantifying the energy and cost savings resulting from improvements in energy-consuming systems. After the installation of the energy improvements, energy and cost figures are compared to the baseline, which may be adjusted to reflect changing operating conditions or utility rates. The federal ESPC authority requires the energy company to undertake measurement and verification activities and provide documentation to demonstrate if projected savings have been met.

Proper determination of savings includes adjusting the savings figures for post-installation changes that affect energy use but that are outside the energy company's responsibility, such as changes in weather or occupancy.

There are different measurement and verification options to help determine baseline and performance period energy use. These options allow energy companies and federal agencies to apply a range of techniques for a variety of situations. The degree of accuracy required in the savings calculation determines which option is used. The selection is also dependent on the complexity of the ESPC, the potential for changes in performance, each energy conservation measure's proportion of total savings, and the project's risk. Agencies are advised to choose the most appropriate option for measuring and verifying operations and maintenance (O&M) and repair and replacement costs.

Energy-Related Savings. DOE defines this as a reduction in expenses (other than energy cost savings) related to energy-consuming equipment and equipment operations, maintenance, renewal, replacement, or repair expenses. One-time energy-related cost savings can result from avoided expenditures of O&M or repair and replacement funds, or from avoided capital expenditures for projects (e.g., equipment replacement) that, because of the ESPC project, will no longer be required.²

Funding

According to *FEMP's Practical Guide to Savings and Payments*, payments to the energy company are fixed for the term of the contract and are generally not subject to change. However, payments may be modified if the energy company must compensate for shortfalls in meeting the savings guarantee or changes in the baseline are needed. The task order, which details the types and amounts of anticipated cost savings, directs the allocation of funds to specific energy and energy-related (for example, O&M) accounts.

Agencies are able to ensure payment to the energy company under an ESPC since projects are structured such that savings exceed payments each year. The annual

² Department of Energy, *Indefinite Delivery Indefinite Quantity, Multiple Award, Energy Savings Performance Contract* (December 2008).

savings generated by the ESPC project during the term of the task order are applied to payments to the energy company. Payments to the energy company terminate at the end of the contract, and the subsequent savings accrue to the agency.³

See **Appendix A** – Scope and Methodology for additional details.

³ *FEMP's Practical Guide to Savings and Payments in FEMP ESPC Task Orders*. Rev. 3, January 2009.

Results

PBS awarded 14 ESPC task orders valued at over \$200 million to improve energy efficiency and reduce greenhouse gas emissions. However, PBS may not be able to achieve these goals because it did not take the proper steps while procuring the task orders. We found that PBS:

- Risks paying for unrealized energy savings because it did not comply with guidelines for witnessing energy baseline measurements;
- Did not achieve energy-related savings on one ESPC task order because it overestimated savings and was unable to renegotiate the O&M contract to achieve the remaining savings;
- Did not comply with requirements for establishing fair and reasonable pricing;
- Awarded a task order for a building that may be sold, transferred, or otherwise disposed of before planned savings can offset its costs; and
- Awarded a stand-alone ESPC that had no approved Measurement and Verification Plan for achieving energy savings.

Strengthening oversight will allow PBS to award future and administer current ESPC task orders more effectively and help ensure the agency achieves its energy saving goals. See **Appendix B** for a detailed list of the task orders examined.

Finding 1 – PBS risks paying for unrealized energy savings because it did not comply with guidelines for witnessing energy baseline measurements.

PBS has little assurance that energy companies took accurate baseline measurements, and as a result, risks paying for energy savings that were not realized. Establishing energy savings is at the core of an ESPC. For this reason, FEMP guidance requires that agencies witness and confirm baseline measurements. However, for 10 of the 14 task orders we reviewed, PBS either did not comply with or could not provide evidence that it complied with witnessing requirements.

FEMP's *Guide to Government Witnessing and Review of Measurement and Verification Activities* lists contract administration requirements for the agency Contracting Officer Representative for ESPC task orders. Among those requirements is the following: "Prior to [energy conservation measure] installation, witness measurements and review calculations, records (e.g. utility bills), and other elements of baselines to confirm accuracy and consistency with the approved [Measurement and Verification] plan." Some examples of witnessing measurements include observing room by room water audits measuring the time it takes a fixture to discharge a known volume, lighting audits to measure lighting illumination level and fixture counts, or data logging for chillers to measure consumption levels.

According to PBS officials, the baselines are established and presented in the Investment Grade Audit that the energy company submits to PBS prior to award.⁴ PBS officials stated they consider the primary witnessing of baseline parameters to be the project team's meetings with the energy company, consultants, and DOE project facilitators to discuss baselines after the energy company's initial measurements. However, PBS does not require having a GSA representative on-site to observe the actual measurements.

Baseline measurements are established to estimate energy savings and are the basis for measuring actual savings. It is GSA's responsibility to ensure that the baseline has been properly defined, verified, and witnessed. Oversight of the baseline measurements would ensure the accuracy of the measurements and thus the accuracy of the savings calculations; thereby protecting the government's interest in achieving the estimated savings. Should a disagreement about unrealized savings arise during the post-installation measurement and verification process, GSA's independent verification and witnessing of the baseline would be critical in resolving the issue.

GSA must perform its due diligence and mitigate its risks by witnessing the baseline measurements. However, for 10 of the 14 task orders, PBS has no assurance that they reduced their risks. We found:

- For two task orders, PBS officials did not witness initial baseline measurements. The officials stated that witnessing was only required for measurement and verification purposes after energy conservation measures were installed;
- For four task orders, file documents show that PBS witnessed baseline measurements for some, but not all, of the energy conservation measures included in the task order; and
- For four task orders, there was insufficient documentation to demonstrate that the government observed baseline measurements.

For example, on a National Capital Region task order, the energy company's proposal strongly recommended that the agency witness baseline measurements. However, there was no evidence to support that PBS actually witnessed the measurements. According to PBS officials, "The GSA property management and O&M staff accompanied the [energy company] on many walks but there is not specific documentation in the file." Similarly, on a Southeast Sunbelt Region task order, PBS officials were unable to provide documentation other than a log of meetings held prior to award. We do not consider either example sufficient evidence of witnessing or observing measurements.

Given the importance of the baseline measurements to the computation of estimated savings and verification of actual savings, compliance with FEMP requirements for

⁴ An Investment Grade Audit, performed prior to contract or task order award, is a comprehensive assessment of a facility's energy and water use characteristics to identify and analyze energy conservation measures.

baseline measurement witnessing, supported by documentation in the contract file, is the best way to protect the government's investment in ESPCs going forward.

Recommendation 1

We recommend that the Commissioner, Public Buildings Service:

1. Ensure PBS officials responsible for measurement and verification activities:
 - A. Witness and independently verify baselines developed by the energy company.
 - B. Document their witnessing of the energy company's on-site baseline measurements.

GSA Comments

PBS management concurred with our finding and recommendations. However, PBS stated in part in their response that "Additionally, task order GS-P-02-14-P1-0005 should be removed from the finding as there were no on-site measurements taken for this project. This task order is option C (Whole building utility data) for M&V for the entire term." PBS comments are included in their entirety as **Appendix C**.

OIG Response

In addition to measurement and verification (*i.e.*, M&V) for option C, the task order also lists measurement and verification for some energy conservation measures under options A and B. Those measures using option A require on-site measurements. Since we did not find evidence of such measurements, we have retained this task order in the finding.

Finding 2 – PBS did not achieve energy-related savings on one ESPC task order because it overestimated savings and was unable to renegotiate the O&M contract to achieve the remaining savings.

Besides energy cost savings, ESPCs may result in savings for non-energy expenses, such as reductions in O&M and other building costs. These are known as energy-related cost savings. These savings may contribute toward the overall savings in federal ESPCs, but only realized savings may be applied to contractor payments.

O&M savings is the difference between the maintenance costs under the prior contract, adjusted for inflation, and the current maintenance costs. The general rule for estimating O&M savings is that any savings claimed from O&M activities must result in an actual decrease in expenditures. Savings due to redirected labor or O&M efforts that do not reduce real expenditures cannot be claimed as savings attributable to the ESPC program. This also applies to recurring O&M savings.

Of the 14 ESPC task orders we reviewed, two listed energy-related savings that constituted 10 percent or more of the total annual estimated savings. However, for one of these task orders, from the Great Lakes Region, we found that the basis for the energy-related savings figure was not sufficiently supported. On this task order, PBS estimated energy-related savings of \$325,800 in the first year of the performance period based on a calculation of reduced O&M costs. However, PBS could not support the computation of its estimate, overstating the potential savings.

One energy conservation measure on this task order claimed O&M savings resulting from replacing the current high-pressure boiler plant with a new, energy-efficient low-pressure boiler plant. The total estimated savings shown for the first year of the task order were \$325,800 (\$100 hourly rate x 3,258 reduced hours). The \$100 hourly rate was attributed to staffing of the boiler plant by a qualified Operating Engineer. However, we compared the \$100 rate used to calculate the savings to the documentation provided by PBS and found support for only \$83.37. We concluded the remaining \$16.63 of the rate to be unsupported. This resulted in overstated savings of \$54,180 (\$16.63 x 3,258) in the first year of the performance period and \$1,007,689 over the 15-year contract term (using the annual labor rate escalation of 3 percent from the task order).

Further, after audit fieldwork, PBS officials informed us they could not achieve any O&M savings for the first year of the performance period because they were unable to successfully renegotiate the existing O&M contract to obtain the \$325,800 savings listed in the task order award. In addition, PBS officials informed us that the O&M cost associated with the project had increased. As a result, PBS will not realize any initial O&M savings and will have to pay an additional \$170,773 for the first year of the performance period with the current O&M contract.

PBS officials stated that they intend to re-procure the O&M services before December 2017 and provided us with an Independent Government Estimate with updated costs and savings calculations based on the proposed re-procurement. This estimate claimed annual savings of \$197,151 instead of the original \$325,800. The resulting shortfall is \$128,649 per year. PBS officials estimate they could obtain the \$197,151 savings contingent upon a successful re-procurement of O&M services. They also told us that if that re-procurement does not result in savings, they would maintain the current O&M contract. Finally, PBS officials informed us they may need to restructure the ESPC contract in the future in order to remove the unrealized O&M savings and adjust the payments accordingly, costing the Agency a 5 percent penalty.

This task order underscores the inherent risk of relying on O&M savings in ESPCs – such reliance transfers the responsibility for the savings from the energy company back to GSA, and therefore GSA, not the energy company, becomes liable for any shortfalls in energy savings.

Recommendation 2

We recommend that the Commissioner, Public Buildings Service:

2. A. Ensure all components of the energy-related savings calculations, including O&M savings, are accurate and can be reconciled to the task order schedules.
- B. Renegotiate O&M contracts to achieve the estimated savings on existing ESPCs with O&M savings.
- C. Develop and implement policy and procedures to confirm savings from GSA-managed O&M contracts are achievable at time of award for future ESPCs.

GSA Comments

PBS management generally concurred with our finding and recommendations. . However, they did not concur with Recommendation 2C, stating:

GSA and all Federal agencies are authorized (per 10 CFR 436 Subpart B) to use O&M savings in ESPC contracts. O&M savings can produce a valuable revenue stream which, in turn, can be used to obtain needed improvements in GSA facilities. GSA does recognize that O&M savings need a high bar for inclusion in ESPCs based on the requirement these savings represent an actual revenue stream – not just an avoided additional cost.

PBS comments are included in their entirety as **Appendix C**.

OIG Response

We agree that GSA and all federal agencies may use O&M savings in ESPC contracts based on the cited authority. However, as stated in the finding, we are concerned when GSA claims savings on GSA-managed O&M contracts, but is unable to successfully renegotiate the contract to realize the savings. In these cases, GSA still has the financial responsibility for paying the energy company, although no savings are available to fund the payments. Therefore, we adjusted the wording to recommend developing and implementing policies and procedures to ensure the savings are achievable at time of award for future ESPCs.

Finding 3 – PBS did not always comply with fair and reasonable pricing regulations or guidance.

ESPCs are a unique contract vehicle because of the long-term commitment that they require of the government and the complex financial terms they entail. Compliance with regulations and guidance related to fair and reasonable pricing is therefore essential to mitigate risk.

We found multiple examples of non-compliance, including:

- The award of two modifications above the simplified acquisition threshold without independent government estimates;
- Inadequate price reasonableness determinations for energy conservation measures; and
- Inaccurate or incomplete price reasonableness determinations.

As a result, the government is at risk of inflated pricing for these projects.

One Great Lakes Region ESPC task order had two modifications awarded above the \$150,000 simplified acquisition threshold with no independent government estimates. Federal Acquisition Regulation 36.203(a) requires that:

An independent Government estimate of construction costs shall be prepared and furnished to the contracting officer at the earliest practicable time for each proposed contract and for each contract modification anticipated to exceed the simplified acquisition threshold.

Great Lakes Region PBS officials stated that before they could compile independent government estimates, the energy company provided pricing for these modifications. Therefore, regional officials analyzed the energy company's pricing rather than retroactively creating independent government estimates. However, evaluation of contractor pricing does not take the place of, or serve as equivalent evidence for, an independent government estimate. Additionally, we could not determine that this pricing analysis was done before award of either modification. Independent pricing analysis before award would have protected the government's financial interests, an important consideration since the two modifications had a combined value of over \$1 million. As a result of failing to comply with the independent government estimate requirement, the government may have paid more than necessary on this contract.

Additionally, FEMP guidance recommends that price reasonableness determinations be required for all ESPC price components, including energy conservation measures, performance-period services (including measurement and verification), and financing. However, PBS's New England Region did not complete adequate price reasonableness determinations for four of the eight energy conservation measures in one ESPC task order. A pre-award quality review conducted by a New England Region PBS official found that a lack of oversight and a rushed procurement, as well as the use of an outdated Price Negotiation Memorandum template, caused this problem. As a result, PBS cannot demonstrate that pricing for these energy conservation measures was fair and reasonable.

Two other ESPC task orders also contained inaccurate or incomplete price reasonableness determinations. The price reasonableness determination for a National Capital Region task order did not match the final, awarded contract pricing and contained inaccurate task order escalation rates. A Southeast Sunbelt Region's task

order's price reasonableness determination included inaccurate information regarding subcontract competition. PBS officials stated that, due to time sensitivity of the awards arising from third party financing interest rate locks and the complexity of the pricing itself, they overlooked finalizing the price reasonableness determination on the first task order. They also stated that the inaccurate information in the second order was due to the erroneous cutting and pasting of information from an unrelated task order into the price reasonableness determination. As a result, the price reasonableness determinations do not provide an accurate history of the award or support contract pricing or terms.

Federal Acquisition Regulation 4.801 requires that contract file documentation contain all contractual actions and be sufficient to constitute a complete history of the transaction. Incomplete or inadequate contract file documentation could indicate a flawed award process and hinders the ability of contracting officers to perform administrative oversight duties. This is especially true when multiple contracting officers administer the same contract during its term, as happened with the three task orders discussed in this finding.

Recommendation 3

We recommend that the Commissioner, Public Buildings Service:

3. Implement training on price reasonableness determinations for ESPC contracting, including the development and use of independent government estimates, to improve compliance with regulations and guidance.

GSA Comments

PBS management agreed with our finding and recommendation. PBS comments are included in their entirety as **Appendix C**.

Finding 4 – PBS awarded a task order for a building that may be sold, transferred, or otherwise disposed of before planned savings can offset its costs.

PBS awarded an ESPC task order for a building that it has categorized as a transition asset. GSA considers the future of transition assets to be uncertain and as such, the assets are assigned a 6 to 15-year holding period. However, the ESPC had a 19-year term and if PBS sells, transfers, or otherwise disposes of the building before the term is completed, the energy savings may not be sufficient to offset the financed installation costs.

PBS's portfolio strategy includes an annual core asset analysis of its entire inventory, segmenting the assets into core, transition, or disposal categories.⁵ Core assets have a long-term holding period of over 15 years. Transition assets have a mid-term holding period of 6 to 15 years due to uncertainty surrounding the asset, typically driven by

⁵ PBS's *FY 2014 State of the Portfolio*, dated September 30, 2014.

uncertain customer demand or reinvestment funding. Assets fall into the disposal category if PBS plans to sell, transfer, or otherwise dispose of them within 5 years. PBS's portfolio strategy states that PBS will fund projects for transition assets that meet basic needs but will avoid any major reinvestments unless they contribute to moving the asset to a core holding period.

We reviewed the buildings associated with the 14 ESPC task orders and determined that one building, the Alexander Pirnie Federal Office Building in Utica, New York, is classified as a transition asset in PBS's Asset Business Plan database. The ESPC project in this building cost over \$580,000. If PBS decides to sell, transfer, or otherwise dispose of this building within its 6 to 15-year holding period, the building could be disposed of before generating the energy savings sufficient to pay off the energy company debt service. Nevertheless, PBS may still be liable for continued payments to the energy company under the ESPC but may not be able to use energy savings to offset the costs.

PBS officials informed us that they decided to implement an ESPC project in the Utica building because they felt the project would improve the building's financial performance and overall value. As noted above, the portfolio strategy allows major investments if they will result in the asset moving from the transition to the core category. However, since the ESPC project was awarded in September 2013, the Asset Business Plan has indicated that PBS is starting a Retention and Disposal study on this building to establish a planned disposition of the asset.⁶ The Asset Business Plan cited limited federal presence in Utica and the poor financial performance of the building as reasons for the study.

According to ESPC guidance, agencies may enter into contracts to finance energy conservation measures only if guaranteed savings exceed the overall cost.⁷ PBS's decision to enter into an ESPC contract with a 19-year term for an asset with a holding period of 6 to 15 years is contrary to this guidance.

Recommendation 4

We recommend that the Commissioner, Public Buildings Service:

4. Align each ESPC task order term with the PBS Portfolio Strategy holding period for the asset.

⁶ A retention and disposal study is a report which discusses various retention or disposal alternatives (including sales or transfers) for a building in GSA's inventory. Retention and disposal studies must discuss the asset's financial performance, current and future occupancy plans, physical condition, and significant architectural or historical aspects. Retention and disposal recommendations must align with the PBS Portfolio Strategy to restructure the owned portfolio so that it consists primarily of strong income producing properties.

⁷ Department of Energy's *National Energy Conservation Policy Act of 1978*, as amended by *The Energy Policy Act of 1992*.

GSA Comments

PBS management agreed with our recommendation and in part with our finding. PBS comments are included in their entirety as **Appendix C**.

Finding 5 – Procurement of a stand-alone ESPC by Regional PBS staff led to multiple issues, including award delays, failure to emphasize energy savings, and lack of competition.

Agencies may enter into stand-alone ESPCs with energy companies or use DOE super ESPCs to take advantage of pre-negotiated terms and conditions. PBS Pacific Rim Region officials issued a stand-alone ESPC solicitation for five Los Angeles area buildings, rather than using the DOE super ESPC. The Los Angeles area ESPC solicitation presented a list of mandatory energy conservation measures with preliminary energy savings. Offerors were to propose these measures and savings. Further, the region also chose to include in the contract the full building O&M for three of the buildings, rather than just the O&M for the specific energy measures installed. PBS awarded the contract based on a best value decision, considering price and non-price factors.

However, the regional procurement led to multiple contracting and program issues that did not occur on task orders awarded under the DOE Super ESPC. These issues included delays, lack of emphasis on energy savings, lack of competition, and lack of approvals, as discussed below:

Procurement Delays: The Los Angeles area ESPC solicitation was published in February 2012, and award was made almost two years later in December 2013. From May 29, 2012, to the time of award there were seven major scope changes and several changes to the award evaluation factors, all of which contributed to project delays. These changes included multiple amendments to revise the number and type of the price and non-price evaluation factors, to change the software used to evaluate the offers, and to stipulate a standard contract term.

Lack of Emphasis on Energy Savings: During the procurement, PBS changed the project scope to include full building O&M. This scope change was of such significance that regional PBS officials awarded an energy contract to the offeror that proposed the most favorable O&M price, rather than the one that proposed the most energy savings. The contract award documentation reflects the lack of emphasis on energy savings by noting that the successful offer was “significantly less expensive for O&M services, which is a virtually certain savings as the O&M pricing is fixed” while energy savings are “less likely to be achieved than the O&M savings.”

Limited Competition for O&M Services: PBS did not meet the requirement for full and open competition for the full building O&M services awarded in the stand alone ESPC. PBS awarded the ESPC under the *National Energy Conservation Policy Act*, (42 US Code 8287) which requires that ESPCs be awarded to firms on a DOE pre-

qualified list. However, O&M services are procured based on the general authority of the Property Act. Limiting the O&M services to the DOE prequalified list is in conflict with the requirement for full and open competition. The federal statute *Use of Non-Competitive Procedures* allows for exceptions to competition in some cases, but only with the approval of the head of the executive agency and notice to Congress.⁸

PBS officials told us they believe an exception to competitive procedures was not required because it was a competitive solicitation among the over 100 firms on the DOE list and that the solicitation was well publicized and PBS received no objections from the industry. However, we believe that PBS did not obtain full and open competition for full building O&M services because competition was restricted to firms on the DOE list of ESPC providers.

Acquisition Plan Lacked Proper Approval: The Pacific Rim Region did not comply with the regulation for approval of the acquisition plan. GSA Acquisition Manual 507.105 requires acquisition approval by the Head of Contracting Activity if: (a) the acquisition is complex, critical to agency strategic objectives and mission, or (b) it is an acquisition in which GSA has little or no experience. The Pacific Rim Region's award of its stand-alone ESPC met the criteria for Head of Contracting Activity approval. The award process was complex, due to the nature of an ESPC. The award was critical to the agency strategic objective of energy sustainability. Further, regional PBS personnel had little precedent from which they could work. Given all of these factors, the Head of Contracting Activity should have reviewed and approved the acquisition plan. However, this contract was not submitted to the Head of Contracting Activity for the required approval.

The region may have avoided these issues by using the DOE super ESPC, which provides pre-qualified contractors and templates to streamline the award process. PBS and DOE presentations and workshops have noted that best practices in the ESPC area include centralized contracting and resources, the use of consistent practices between national and regional offices, and a thorough audit process to identify energy measures. While using a stand-alone contract is an option, using the pre-established DOE super ESPC would have likely been more efficient and with fewer issues.

Recommendation 5

We recommend that the Commissioner, Public Buildings Service:

5. A. Require written justifications for not using the DOE super ESPC if GSA awards stand-alone ESPCs in the future. The ESPC Program Management Office should review and approve all such justifications.
- B. Ensure future ESPCs comply with competition requirements for added O&M services or receive management approval for non-competitive procedures.
- C. Ensure acquisition plans for future stand-alone ESPCs are reviewed by the Head of Contracting Activity.

⁸ 41 U.S. Code 3304.

GSA Comments

PBS Management did not entirely concur with the finding, stating in part:

As ESPC contracts can only be held by contractors listed on the DOE list of qualified energy companies (*i.e.*, ESCOs) by statute, combining O&M services with ESPC provisions necessarily restricted competition to firms on the energy company (*i.e.*, ESCO) list. However, there are over 100 companies on this list and DOE has procedures which permit firms to be added on a continual basis. GSA evaluated multiple offerors for this requirement.”

PBS comments are included in their entirety as **Appendix C**.

OIG Response

GSA is required to satisfy all procurement regulations, including the requirement for full and open competition on the O&M component. Although it followed the ESPC competition requirements, GSA did not meet the competition requirements for the O&M portion of the procurement. Therefore, we maintain that the procurement did not comply with Federal Acquisition Regulation requirements for full and open competition.

Additionally, while there may be benefits to having the same contractor in a federal building for the building's general O&M as well as the O&M of the energy conservation measures, these benefits do not override the requirement for full and open competition of federal contracts. A justification for use of other than competitive procedures, submitted to PBS management, and approved by the head of GSA and with notice to Congress, could have cited these benefits in this particular case and satisfied the Federal Acquisition Regulation requirements.

Finding 6 – Regional PBS staff awarded an ESPC without a final Measurement and Verification Plan, which could lead to an inaccurate assessment of actual energy savings.

Pacific Rim Region PBS officials awarded the stand-alone ESPC discussed in *Finding 5* without having a final Measurement and Verification Plan with the energy company. PBS stated that this requirement was not applicable since it had included a list of mandatory energy conservation measures in the solicitation. However, guidance states that a Measurement and Verification Plan should be agreed upon in contract award negotiations.⁹

Measurement and verification refers to the activities aimed at determining whether a contract's energy savings guarantee is being met. These activities include site surveys, metering of energy, engineering calculations, and other variables. Energy companies

⁹ DOE's *M&V Guidelines: Measurement and Verification for Federal Energy Projects, Version 3.0*, dated April 2008.

must guarantee a level of energy savings that will pay for the project within the contract period. The contractor is required to undertake measurement and verification activities and provide documentation to show that the guarantee has been met, since energy savings must exceed payments for each year of the contract.

Pacific Rim Region officials said that, at the time of award, they did not ask for this plan and left it to be developed during the implementation phase.¹⁰ They noted that this regional award differed from a DOE super ESPC task order where the energy company proposes energy measures. In this regional ESPC award, the contract solicitation was issued with a list of mandatory energy conservation measures pre-determined by PBS from its energy studies. PBS provided the baseline and energy savings estimate.

However, guidelines state that developing the plan should occur prior to project implementation. The guidance further states that:

It is important that the agency and the [energy company] agree upon general [measurement and verification] approaches to be used prior to starting the Investment Grade Audit. The [measurement and verification] method(s) chosen will determine to a large extent what activities are conducted during the audit, and will affect the cost and duration of the audit.

Because the goal of the measurement and verification process is to reduce risk to the agency by providing an agreed upon mechanism to verify the project performance, the plan should be agreed to during contract negotiations. A national PBS review identified the lack of a plan as an area of concern.

Recommendation 6

We recommend that the Commissioner, Public Buildings Service:

6. Require solicitations for future stand-alone ESPCs to state that Measurement and Verification Plans must be approved prior to contract award.

GSA Comments

PBS management agreed with our finding and recommendation. PBS comments are included in their entirety as **Appendix C**.

¹⁰ The implementation phase is the design, construction, and acceptance of the energy conservation measure.

Other Observation

We also noted that the ESPC discussed in *Finding 5* and *Finding 6* was awarded using a net present value method for the price evaluation portion of the best value award. This method evaluates the energy price by determining net present value of the difference between energy finance payments and guaranteed energy savings. This method resembles life cycle cost analysis. FEMP guidance entitled *Determining Price Reasonableness in Federal ESPCs* discourages the use of life cycle methodologies to assess price reasonableness because these methods focus more on the energy savings generated. Rather, it recommends the use of price analysis techniques listed in Federal Acquisition Regulation 15.404-1 to better ensure that agencies obtain fair and reasonable prices.

Conclusion

PBS awarded 14 ESPC task orders valued at over \$200 million to improve energy efficiency and reduce greenhouse gas emissions. However, PBS may not be able to achieve these goals because it did not take the proper steps while procuring the task orders. We found that PBS:

- Risks paying for unrealized energy savings because it did not comply with guidelines for witnessing energy baseline measurements;
- Did not achieve energy-related savings on one ESPC task order because it overestimated savings and was unable to renegotiate the operations and maintenance contract to achieve the remaining savings;
- Did not comply with requirements for establishing fair and reasonable pricing;
- Awarded a task order for a building that may be sold, transferred or otherwise disposed of before planned savings can offset its costs; and
- Awarded a stand-alone ESPC that had no approved Measurement and Verification Plan for achieving energy savings.

Strengthening oversight will allow PBS to award future and administer current ESPC task orders more effectively and help ensure the agency achieves its energy saving goals. See **Appendix B** for a detailed list of the task orders examined.

Audit Team

The audit was managed out of the Great Lakes Region Audit Office and conducted by the individuals listed below:

Michael Lamonica	Audit Manager
Dana Johnson	Auditor-In-Charge
Gary Vincent	Auditor
Anita Griffin	Auditor
Sherese Shy-Holmes	Auditor

Appendix A – Scope and Methodology

Scope and Methodology

We assessed the economy and efficiency of PBS's 14 ESPCs awarded from September 2013 to April 2014. These ESPCs were comprised of ten National Deep Energy Retrofit projects and four non-National Deep Energy Retrofit projects, with a combined value of approximately \$201 million.

To accomplish our objectives, we:

- Reviewed the background and history of the ESPC program, including legislation, Executive Orders, and DOE and FEMP guidance;
- Completed an online training course on ESPCs sponsored by FEMP;
- Reviewed the background and history of the National Deep Energy Retrofit program;
- Evaluated and analyzed previous audit reports issued by the U.S. Government Accountability Office, as well as the Inspectors General of GSA, DOE, National Aeronautics and Space Administration, and the National Archives and Records Administration;
- Examined contract file documentation, including proposals, awards, price reasonableness determinations, and independent government estimates;
- Searched gBUILD and the Federal Procurement Data System-Next Generation database for information on American Recovery and Reinvestment Act of 2009 projects in buildings with ESPC task orders;
- Searched PBS's Asset Business Plan database for building profiles, holding periods, investments, and long-term building strategy;
- Compiled and analyzed data on energy conservation measures for the 14 ESPC task orders in our audit;
- Assessed the training and qualifications of ESPC officials and contracting officers;
- Researched the Federal Acquisition Regulation and General Services Administration Acquisition Manual for procedures related to ESPCs; and
- Interviewed ESPC program officials, contracting officers, and other PBS officials about the ESPC program and specific ESPC task orders.

We conducted the audit between April and August 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Internal Controls

Our assessment of internal controls was limited to those necessary to address the objectives of the audit. Identified internal control issues are discussed in the Results section of this report.

Appendix B – Projects and Findings

Our audit universe consisted of the 14 ESPC task orders awarded from September 2013 to April 2014, valued at approximately \$201 million. The table below details the task orders we examined and the report finding(s) associated with each task order.

Project Number	Task Order Number	Region	Award Date	Implementation Expense	Finding(s)
Note A				Note B	Note C
1	GS-P-01-14-BW-0006	1	01/03/2014	\$ 3,470,114	1, 3
2	GS-P-02-13-PW-0011	2	09/26/2013	6,372,000	None
3	GS-P-02-13-PW-0009	2	09/26/2013	1,853,067	4
4	GS-P-08-13-JE-0038	4	09/30/2013	4,358,579	1, 3
5	GS-P-08-13-JE-0039	4	09/27/2013	4,251,738	1
6	GS-P-05-13-GA-0004	5	09/27/2013	37,219,112	1
7	GS-P-05-14-GA-0004	5	12/13/2013	52,956,330	1, 2, 3
8	GS-P-05-13-GA-0018	5	09/27/2013	7,487,165	1
9	GS-P-06-13-GZ-0005	6	09/27/2013	9,121,413	1
10	GS-P-11-14-MK-0021	11	12/13/2013	44,633,045	1, 3
11	GS-P-08-13-JA-0065	8	09/27/2013	10,796,287	1
12	GS-09P-14-KS-C-0003	9	12/13/2013	6,766,557	5A, 5B, 5C, 6
13	GS-P-02-14-PI-0005	2	02/27/2014	9,435,599	1
14	GS-P-03-14-DX-0013	3	04/10/2014	2,219,360	None
Totals				\$200,940,366	

NOTES

- A. All task orders except project number 12 were awarded under DOE's super ESPCs. Project number 12 was awarded as a stand-alone GSA ESPC contract. Project numbers 1 through 10 were National Deep Energy Retrofit projects and numbers 11 through 14 were not.
- B. According to DOE, the implementation expense is the sum of the direct and indirect costs of all tasks required to install ECMs. These figures were derived from the task order schedules for each project.
- C. The findings are summarized as follows:
 1. Insufficient support for government witnessing.
 2. Unrealized energy-related savings.
 3. Non-compliance with fair and reasonable pricing regulations and guidance.
 4. Transition asset.
 5. A. Regional award of a stand-alone ESPC resulted in award delays and not emphasizing energy savings.
B. Insufficient acquisition plan approval.
C. Limited competition for O&M services.
 6. Measurement and Verification Plan not approved before award.

Appendix C – GSA Comments

GSA Responses to Draft OIG Audit Report A150009

Finding 1 – PBS risks paying for unrealized energy savings because it did not comply with guidelines for witnessing energy baseline measurements.

GSA concurs with this finding.

The OIG recommendation states:

OIG recommends the Commissioner, Public Buildings Service:

1. Ensure PBS officials responsible for measurement and verification activities:
 - A. Witness and independently verify baselines developed by the energy company.
 - B. Document their witnessing of the energy company's on-site baseline measurements.

Response: GSA concurs that witnessing for on-site baseline measurements should be better documented. The Department of Energy (DOE), Federal Energy Management Program (FEMP) has issued new guidance on measurement and verification, (M&V Guidelines: and Verification for Performance-Based Contracts Version 4.0), which allows agencies to define requirements for witnessing of measurements during baseline development. The ESPC Project Management Office (PMO) will provide guidance in the future on the witnessing requirements for baseline development to all appropriate GSA teams. GSA requested the Energy Services Companies (ESCO) include witnessing verification in the investment grade audit (IGA). The IGA is the document that contains the scope and process information of the project. ESCOs complied with various levels of specificity.

However, GSA did review the baseline data with the assistance of the DOE project facilitators and modeling experts. GSA relied on the DOE project facilitators as the experts on the program requirements. The project facilitators focused on verifying the key performance parameters. The baseline was also verified with a fully calibrated energy model through eQuest or other modeling software. Baseline review meetings provided the Government an opportunity to review the information and process used by the ESCOs to establish the baseline and calibrate the energy models. During these meetings the ESCOs demonstrated to the GSA teams their modeling process in detail, including the data that was used, and the modeling assumptions. Additionally, task order GS-P-02-14-P1-0005 should be removed from the finding as there were no on-site measurements taken for this project. This task order is option C (whole building utility data) for M&V for the entire term. Meter reading data was utilized to determine the baseline on the respective building.

Finding 2 – PBS did not achieve energy-related savings on one ESPC task order because it overestimated savings and was unable to renegotiate the Operation and Maintenance (O&M) contract to achieve the remaining savings.

Appendix C – GSA Comments (cont.)

GSA concurs in part with this finding.

OIG recommends that the Commissioner, Public Buildings Service:

- A. Ensure all components of the energy-related savings calculations, including O&M savings, are accurate and can be reconciled to the task order schedules.
- B. Renegotiate O&M contracts to achieve the estimated savings on existing ESPCs with O&M savings.
- C. Refrain from using savings from GSA-managed O&M contracts in negotiating future ESPCs.

Response A. GSA concurs with this recommendation. As indicated in an email dated July 13, 2016, from PBS's [REDACTED]¹¹ to Dana Johnson of the GSA OIG, The GSA ESPC PMO will implement a second level review of all components of energy-related savings calculations, including O&M savings, for future task orders.

Response B. GSA concurs with this recommendation. GSA is in the process of competitively procuring a new O&M contract to determine if the estimated savings are achievable.

Response C. GSA does not concur with the recommendation.

GSA and all Federal agencies are authorized (per 10 CFR 436 Subpart B) to use O&M savings in ESPC contracts. O&M savings can produce a valuable revenue stream which, in turn, can be used to obtain needed improvements in GSA facilities. GSA does recognize that O&M savings need a high bar for inclusion in ESPCs based on the requirement these savings represent an actual revenue stream - not just an avoided additional cost.

In the case of the Chicago task order, the location and type of boiler were both changed after task order award. Although there were good reasons for GSA to accept this change, it contributed to the current inability to obtain the anticipated O&M reductions. This incident is a task order specific situation and should not drive a limitation of utilizing O&M savings in future contracts.

Additionally, GSA has utilized O&M savings in other locations successfully. Although the O&M savings ultimately came from a reduction of Government personnel, in the HDI task order in Battle Creek, Michigan, the Government created an independent estimate of the savings and estimated it would attain \$150,112 annually which would be escalated at 2.1%. The actual O&M savings achieved is \$352,012, (\$201,900 in excess of the estimate). The contractor was able to restructure its workforce to allow GSA to reduce additional personnel from what was anticipated. This cost escalated over the 20 year term of the performance period is an additional savings amount of \$4,954,785.49.

¹¹ Redaction made by OIG in accordance with Freedom of Information Act Exemption (b)(6).

Appendix C – GSA Comments (cont.)

Finding 3 – PBS did not always comply with fair and reasonable pricing regulations or guidance.

GSA concurs with this finding.

OIG recommends that the Commissioner, Public Buildings Service:

3. Implement training on price reasonableness determinations for ESPC contracting, including the development and use of independent government estimates, to improve compliance with regulations and guidance.

Response: GSA concurs with this recommendation. GSA will develop and implement the recommended training.

GSA provides the following context to the statements in the report:

Statement 1. *“However, PBS’s New England Region did not complete adequate price reasonableness determinations for four of the eight energy conservation measures in one ESPC task order. A pre-award quality review conducted by a New England Region PBS found that a lack of oversight and a rushed procurement, as well as the use of an outdated Price Negotiation Memorandum template, caused this problem. As a result, PBS cannot demonstrate that pricing for these ECMs was fair and reasonable.”*

Response: *GSA performed an overall price reasonableness review. The project was found to be reasonably priced, but the determination process did not follow the DOE guidance of reviewing each individual element of the proposal. GSA established a requirement to centralize contracting for new ESPCs by memorandum dated October 16, 2014, issued by the Assistant Commissioner for the Office of Facility Management and Services Programs to ensure the DOE guidance is consistently applied.*

Statement 2: *“Two other ESPC task orders also contained inaccurate or incomplete price reasonableness determinations. The price reasonableness determination for a National Capital Region task order did not match the final, awarded contract pricing and contained inaccurate task order escalation rates.”*

Response: *Price reasonableness was determined for the referenced project prior to obtaining a final price reduction from the ESCO which resulted in a lower price for the task order of approximately \$227,000. GSA did not update this information in the Price Reasonableness Determination. This oversight did not adversely affect the price reasonableness of the task order.*

Statement 3: *“Southeast Sunbelt Region’s task order’s price reasonableness determination included inaccurate information regarding subcontract competition. The contracting documents were reviewed by the Contract Management Review Panel which failed to detect the errors.”*

Appendix C – GSA Comments (cont.)

Response: This price reasonableness determination listed an incorrect subcontractor for the Building Automation System ECM. This error did not adversely affect the price reasonableness of the task order.

Finding 4 – PBS awarded a task order for a building that may be sold, transferred, or otherwise disposed of before planned savings can offset its costs.

GSA concurs in part with this finding.

OIG recommends that the Commissioner, Public Buildings Service:

4. Align each ESPC task order term with the PBS Portfolio Strategy holding period for the asset.

Response: GSA concurs with this recommendation. The term of the task order should align with the holding period of the facility. It should be noted, however, that holding period designations are not static in nature, but subject to change as information such as rental rates, vacancies, and investment needs fluctuate. GSA intended to keep the asset for the length of the ESPC task order and the purpose of doing the work was to move the building into a long-term hold status. Per GSA's portfolio strategy, GSA funds projects for transition assets that meet basic needs, but will avoid any major reinvestments unless they contribute to moving the asset to a core holding period. The asset was moved to a long-term hold status in the Asset Business Plan due to the investment in the facility through this task order and is anticipated to realize all the anticipated energy savings.

The ESPC task order for the Pirnie Building included 3 ECMs at a cost of \$580,054 with estimated savings of \$45,620 for a simple payback of 12.7 years. The ECMS included were upgrading building controls, upgrading HVAC – VAV retrofit, and interior and exterior lighting retrofits. The building controls upgrades were an immediate need to maintain operations. The Pirnie Building was classified as a mid-term hold facility (6 – 15 years) at the beginning of this process. GSA provided the OIG with documentation that the status of the building was discussed and a decision to proceed with the 3 ECMs was made by GSA.

The current Asset Business Plan states the following: "The R&A strategy is to invest in this asset to address the most essential building needs first. This will keep this facility operating at a functional level."

Appendix C – GSA Comments (cont.)

Holding Period: *The Alexander Pirnie Federal Office Building in Utica New York is a 1920s vintage asset. It is currently a Tier 3 core under-Performing Asset with a long term hold status. This building is eligible for listing on the National Register. The Utica area does not have a strong Federal presence and rents are projected to remain low in the near future. Established in the FY-16 Tiering report, the holding period for this asset is long term. This decision is based on the presence of the Judiciary and the projected investment by the Social Security Administration. Should the Judiciary vacate the building; the holding period for this asset will be re-evaluated, as there are limited backfill opportunities.*

Additionally, although the Asset Business Plan indicated a retention and disposal study was underway, that statement was not accurate. The Asset Business Plan has been updated to accurately reflect the Pirnie building's long term hold classification.

The investment of the ECMs in this task order reduces operating expenses. This reduction helps to either move the building toward a longer holding period. The BAS ECM was also a requirement of the building to maintain the operations at an acceptable level. Again, GSA reviewed this information prior to including this building in the project. Documentation was provided to the OIG to demonstrate this issue was addressed prior to making this decision.

Finding 5 – Procurement of a stand-alone ESPC by Regional PBS staff led to multiple issues, including award delays, failure to emphasize energy savings, and lack of competition.

GSA concurs in part with this finding.

OIG recommends that the Commissioner, Public Buildings Service:

- A. Require written justifications for not using the DOE super ESPC if GSA awards stand-alone ESPCs in the future. The ESPC Program Management Office should review and approve all such justifications.
- B. Ensure future ESPCs comply with competition requirements for added O&M services or receive management approval for non-competitive procedures.
- C. Ensure acquisition plans for future stand-alone ESPCs are reviewed by the Head of Contracting Activity.

Finding 5A. GSA concurs with this finding. GSA currently requires all new ESPC projects (exclusive of projects utilizing the DOE FEMP ENABLE program) be procured through the ESPC Project Management Office. Exceptions may be granted, but GSA agrees a review and approval process should be employed for all ESPC projects not utilizing the DOE IDIQ procurement vehicle.

Finding 5B. GSA does not concur with this finding. GSA disputes the contention that this is not a competitive procurement for reasons noted in the following Statement B, Limited Competition for O&M Services.

Appendix C – GSA Comments (cont.)

Finding 5C. GSA concurs with this finding. GSA agrees that for future procurements, the use of stand-alone ESPCs should be fully addressed in the acquisition plan, and reviewed by the Head of the Contracting Activity. Since GSA has centralized procurement of all new (non-DOE ENABLE) ESPCs, this will ensure the use of stand-alone ESPCs is fully addressed in acquisition plans.

GSA provides the following context to the statements in the report:

Statement A: O&M savings.

During the procurement, PBS changed the project scope to include full building O&M. This scope change was of such significance that regional PBS officials awarded an energy contract to the offeror that proposed the most favorable O&M price, rather than the one that proposed the most energy savings. The contract award documentation reflects the lack of emphasis on energy savings by noting that the successful offer was “significantly less expensive for O&M services.”

GSA comment: This project was a hybrid contract, containing an ESPC component and an O&M component. The O&M price difference between the awardee and the other offerors is a concrete difference in what the Government will actually pay.

GSA wanted to protect its ESPC investment by linking it to operations and maintenance of the major buildings in the contract. Having a single contractor responsible for the performance of these buildings prevented a breakdown in accountability from having multiple contractors with overlapping responsibilities.

*The inclusion of O&M does not mean there was a lack of focus on energy savings – rather there was a focus on **both** energy savings and O&M savings in the aggregate.*

Statement B: Limited Competition for O&M Services.

PBS did not meet the requirement for full and open competition for the full building O&M services awarded in the stand alone ESPC. PBS awarded the ESPC under the National Energy Conservation Policy Act, (42 US Code 8287) which requires that ESPCs be awarded to firms on a DOE pre-qualified list. However, O&M services are procured based on the general authority of the Property Act. Limiting the O&M services to the DOE prequalified list is in conflict with the requirement for full and open competition. The federal statute Use of Non-Competitive Procedures allows for exceptions to competition in some cases, but only with the approval of the head of the executive agency and notice to Congress.

Appendix C – GSA Comments (cont.)

PBS officials told us they believe an exception to competitive procedures was not required because it was a competitive solicitation among the over one hundred firms on the DOE list and that the solicitation was well publicized and PBS received no objections from the industry. However, we believe that PBS did not obtain full and open competition for full building O&M services because competition was restricted to firms on the DOE list of ESPC providers.

GSA comment: The report states that O&M services were not obtained on the basis of full and open competition because aggregating O&M with ESPC provisions effectively restricted offerors to those on the Department of Energy list of ESCOs. The report further states this action requires a deviation approved from the head of the agency and with notice to Congress, and cites a provision on non-competitive procedures from the Competition in Contracting Act (CICA).

In this case, there was no exception sought for the O&M services because this procurement was a competitive solicitation which did not trigger CICA restrictions. No exception was required as explained in the following:

As ESPC contracts can only be held by contractors listed on the DOE list of qualified ESCOs by statute, combining O&M services with ESPC provisions necessarily restricted competition to firms on the ESCO list. However there are over 100 companies on this list and DOE has procedures which permit firms to be added on a continual basis. GSA evaluated multiple offerors for this requirement.

GSA's statement of minimal need was well publicized and there was ample time for any objections from industry. The solicitation was amended August 17, 2012, to add O&M for the central plant and water-side HVAC systems at the Roybal and 300 N. Los Angeles Street buildings (which share a central plant), as the central plant was the core of the ESPC Phase 1 work. After substantial internal discussion GSA decided this was impractical to have two separate O&M contractors as it would result in a very complex interface between two O&M contractors in the same facility, would make assignment of performance responsibility and liability difficult, and likely would increase costs above those of a unified contract. Therefore on January 10, 2013, GSA posted a notice saying revised O&M requirements would follow, and extended the offers due date to February 15, 2013, (subsequently extended to March 27, 2013). On January 19, 2013, GSA posted the O&M requirements covering the full O&M for the three buildings (the SSA building is very small, and has traditionally been managed with the Roybal and 300 N. Los Angeles Street buildings). On January 30, 2013, additional O&M information was posted. Accordingly, the market was provided with a nearly 10 week notice of time to submit offers on the contract with the increased O&M requirements and GSA received no objections.

Furthermore, there were a number of reasons we believed adding full O&M requirements to be the most efficient approach:

Appendix C – GSA Comments (cont.)

1. As described above, we initially attempted to only include the central plant and water-side systems for the Roybal and 300 N. Los Angeles Street buildings in the ESPC, but found this to be impractical.
2. The relatively comprehensive Phase 2 was to be developed during O&M performance. Having O&M with the same contractor in a combined effort led to a more comprehensive Phase 2 development process, with more operational information available to the contractor.
3. Contractually separate O&M contractors can inadvertently undermine conservation efforts due to a lack of coordination with other contractors, lack of technical understanding of how systems operate, or due to tendencies of contractors with overlapping responsibilities to attribute blame to the other for performance problems. Therefore, merging the ESPC effort with the O&M effort protects the Government's savings anticipated from the ESPC effort.

Finding 6 – Regional PBS staff awarded an ESPC without a final Measurement and Verification Plan, which could lead to an inaccurate assessment of actual energy savings.

GSA concurs with this finding.

We recommend that the Commissioner, Public Buildings Service:

6. Require solicitations for future stand-alone ESPCs to state that Measurement and Verification Plans must be approved prior to contract award.

Response: GSA concurs with the recommendation that M&V plans must be approved prior to contract award. However, the M&V plan included in the contract or task order award may be amended with details to be added during the post-award design process. GSA centralized the contracting for new (non-DOE Enable) ESPC contracts to ensure that DOE guidance is followed. The report correctly states the contract did not contain a final M&V plan and cites the Department of Energy guidance:

“It is important that the agency and the [energy company] agree upon general [measurement and verification] approaches to be used prior to starting the Investment Grade Audit. The [measurement and verification] method(s) chosen will determine to a large extent what activities are conducted during the audit, and will affect the cost and duration of the audit.”

The solicitation and contract did specify the general approaches for M&V which is consistent with the DOE standard and guidance cited.

The Task Order RFP language which becomes part of the contract is below:

C.4.1 Measurement and Verification Plan

Appendix C – GSA Comments (cont.)

Measurement and Verification standards are established by FEMP “M&V Guidelines: Measurement and Verification for Federal Energy Projects” (version 3.0), and ASHRAE Guideline 14.

To the greatest extent possible continuous trending should be used to support M&V. The Government has licensed DataEye (a Tridium add-on) as a data management tool. Data interchange between systems such as Delta and Siemens to the DataEye database can be arranged. Therefore use of this tool is recommended but not required.

The 300 N. Los Angeles Street/Roybal facility is currently licensed for PACRAT, but needs reconfiguration due to project work. When the building is migrated into the network and data collection begins, PACRAT must be reconfigured and be incorporated into the M&V protocol for this facility. The Government will be responsible for periodically collecting the data and having it processed by Facility Dynamics Engineering (the PACRAT vendor). The Contractor is responsible for additional configuration to match work under this contract and for incorporating PACRAT results into the M&V Plan.

The Contractor must submit for approval an M&V Plan. The 300 N. Los Angeles Street/Roybal chiller plant project, and the controls optimization at the Hawthorne and Corman buildings, must use Option B. Continuous trending must be established to demonstrate that the HVAC water-side systems operate at the designated efficiencies under various load conditions. The SSA Building work, and the garage VFDs and domestic water measures may use Option A.

The M&V Plan must define in detail the trends, polling rates and calculations to be used to verify performance. M&V methodologies for Phase 2 ECMs are subject to negotiation and approval by the Government. The solicitation and contract referenced did in fact specify the general approaches for M&V, consistent with the DOE standard and guidance cited.

Appendix D – Report Distribution

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