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PBS Should Improve Its Oversight of the Energy Savings Performance Contract in Texas and Louisiana

Report Number A240046/P/2/R25003
July 1, 2025

Executive Summary

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Why We Performed This Audit

This audit was included in our *Fiscal Year 2024 Audit Plan*. We previously issued two audit reports outlining the risks of energy savings performance contracts (ESPCs) if they are not carefully managed with quantifiable energy conservation measures (ECMs) to determine actual savings.[1] Those audit reports showed that GSA's Public Buildings Service (PBS) did not effectively plan for achieving energy savings at the award level and could not verify and achieve energy savings once the ECMs were in place.

The objective of this audit was to determine whether PBS awarded and administered the ESPC task order in Texas and Louisiana in accordance with applicable regulations and guidance.

What We Found

Federal agencies use ESPCs to procure energy savings and facility improvements with no upfront capital costs or special appropriations from Congress. Under an ESPC, the energy service company (ESCO) finances the project, and the energy cost savings generated by the improvements are used to pay back the investment over time. The ESCO guarantees that the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract.

ESPCs are multi-year contracts, with terms not to exceed 25 years. Therefore, it is imperative that PBS properly awards and administers these contracts to protect taxpayer dollars. However, we found deficiencies in PBS's award and administration of the ESPC task order supporting 10 buildings across Texas and Louisiana. Specifically, PBS violated contract requirements and its own policy and guidance by: (1) not witnessing and verifying the ESCO's energy baseline measurements and (2) allowing operations and maintenance (O&M) contractor employees to serve as government witnesses and sign the baseline witnessing forms. As a result, PBS improperly relied on the ESCO's data to negotiate the contract's guaranteed energy savings and annual savings performance goals.

[1] *PBS National Capital Region's $1.2 Billion Energy Savings Performance Contract for White Oak Was Not Awarded or Modified in Accordance with Regulations and Policy* (Report Number A150009/P/5/R17006, August 24, 2017); and *PBS's $1.7 Billion Energy Savings Performance Contracts Are Not Achieving Energy and Cost Savings Due to Inadequate Oversight* (Report Number A180017/P/5/R20004, March 27, 2020).

We also found that PBS did not issue contract modifications that were needed to authorize and implement scope-of-work changes. In one instance, PBS incurred $71,920.47 in unnecessary costs because it did not issue a contract modification to prevent the installation of window inserts that were no longer needed at The Centre Phase 5 building in Farmers Branch, Texas. In another instance, a PBS employee improperly authorized a change to the scope of the ESPC task order for a high-efficiency transformer without obtaining the required corresponding contract modification from the contracting officer.

What We Recommend

We recommend that the PBS Commissioner ensures:

1. PBS personnel responsible for measurement and verification activities:
    a. Are adequately trained to understand how to perform their oversight responsibilities in accordance with the U.S. Department of Energy's Federal Energy Management Program guidance;
    b. Independently witness, verify, and document the ESCO's baseline measurements; and
    c. Adhere to PBS's policy to ensure O&M contractor employees do not serve as government witnesses for ESPCs.

2. The project team establishes communication protocols by developing an effective communication plan that is consistent with the *PBS Project Management Practice Guide V.2* to prevent the government from incurring unnecessary costs.

3. Contracting officers authorize contract changes and implement them through contract modifications, in accordance with the Federal Acquisition Regulation (FAR).

The PBS Commissioner partially agreed with the report recommendations. PBS's response can be found in its entirety in ***Appendix C***.

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Introduction

We performed an audit of the GSA Public Buildings Service's (PBS's) management of its energy savings performance contract (ESPC) task order supporting 10 buildings across Texas and Louisiana.

Purpose

This audit was included in our *Fiscal Year 2024 Audit Plan*. We previously issued two audit reports outlining the risks of ESPCs if they are not carefully managed with quantifiable energy conservation measures (ECMs) to determine actual savings.[2] Those audit reports showed that PBS did not effectively plan for achieving energy savings at the award level and could not verify and achieve energy savings once the ECMs were in place.

Objective

The objective of this audit was to determine whether PBS awarded and administered the ESPC task order in Texas and Louisiana in accordance with applicable regulations and guidance.

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

Background

Federal agencies use ESPCs to procure energy savings and facility improvements with no upfront capital costs or special appropriations from Congress. Under an ESPC, the energy service company (ESCO) finances the project, and the energy cost savings generated by the improvements are used to pay back the investment over time. The ESCO guarantees that the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract. Through the ESPCs, the ESCO designs, acquires, installs, and maintains energy-efficient equipment (e.g., heating, ventilation, and air conditioning [HVAC] systems; lighting upgrades; and renewable energy systems) for the agency. Once the contract ends, the agency retains all future savings.

[2] *PBS National Capital Region's $1.2 Billion Energy Savings Performance Contract for White Oak Was Not Awarded or Modified in Accordance with Regulations and Policy* (Report Number A150009/P/5/R17006, August 24, 2017); and *PBS's $1.7 Billion Energy Savings Performance Contracts Are Not Achieving Energy and Cost Savings Due to Inadequate Oversight* (Report Number A180017/P/5/R20004, March 27, 2020). These reports are summarized on page 4.

Guidance and Regulations

ESPCs began in 1986 with amendments to the National Energy Conservation Policy Act of 1978.[3] The amendments provided, 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 further amended the National Energy Conservation Policy Act of 1978, extending agencies' authority to use ESPCs for performing energy-efficiency improvements and directing the U.S. Department of Energy (DOE) to develop ESPC regulations.[4] As a result, in 1995, DOE issued implementing regulations in 10 C.F.R. 436, *Federal Energy Management and Planning Programs*.

The DOE's Federal Energy Management Program (FEMP) establishes appropriate procedures and methods for federal agencies regarding ESPCs.[5] The FEMP carries out this responsibility in part by awarding a series of ESPCs to individual ESCOs. Agencies, including GSA, can initiate ESPC projects by issuing a task order under one of these FEMP ESPCs. FEMP ESPCs provide pre-negotiated terms and conditions, allowing agencies to award task orders quicker because the competitive selection process has already been completed, and key terms of the contract have been negotiated.

Baseline Development and Measurement and Verification Activities

Before an ESPC is awarded, the ESCO conducts an investment grade audit to identify ECMs that will generate cost-saving opportunities.[6] The investment grade audit establishes an energy baseline, which serves as the foundation for measuring the total energy cost savings the ESCO guarantees to achieve by installing the ECMs. The baseline represents the amount of energy that would have been consumed annually without the implementation of ECMs. The baseline is calculated based on historical metered data, engineering calculations, sub-metering of buildings or energy consuming systems, building load simulation models, or a combination of these methods.

The ESCO calculates estimated savings by comparing the cost of utilities, operations, and maintenance associated with the new, energy-efficient equipment to the established baseline of the existing equipment. The baseline data is used to calculate savings and account for any changes that may occur during the performance period. The baseline data is included in the ESCO's proposal. It is the agency's responsibility to ensure that the baseline has been properly defined.

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[3] Pub. L. 99-272.

[4] Pub. L. 102-486.

[5] 42 U.S.C. 8287(b)(1)(A), *Implementation*.

[6] The term ECMs is defined at 42 U.S.C. 8287c(3), *Definitions*. ECMs improve energy efficiency, are life cycle cost-effective, and involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operations and maintenance, or retrofit activities.

The FEMP's ESPC ordering guide states that "the ordering agency needs to be comfortable with the accuracy and detail" of the energy baseline.[7] The FEMP's ESPC ordering guide provides that this is the ordering agency's last chance to capture its baseline energy use and associated parameters because much of the equipment that made up the baseline may be modified or removed as part of ECM installation. In almost all cases, after the ECM has been installed, it is impossible to re-create the baseline. Therefore, it is very important to properly define and document the baseline conditions.

The FEMP identifies four major measurement and verification (M&V) activities in the ESPC process: (1) determining baselines and estimated savings, (2) developing the M&V plan, (3) developing the post-installation M&V report, and (4) performing annual M&V. M&V activities occur throughout the various phases of ESPCs, and they help ensure that the legally required savings are met.[8] Accordingly, the FEMP recommends that government staff witness the M&V activities that the ESCO performs to determine whether contractually guaranteed cost savings are delivered. The ordering agency must designate a government witness to accompany the ESCO during M&V activities, and the agency must ensure that the government witness has reviewed current FEMP guidance on M&V witnessing.

Further, a critical part of the ESPC process is the ESCO's development of an M&V plan, which specifies the options, requirements, procedures, and methods that will be used for each ECM. The M&V plan ensures that the ESCO and the government agree on measurement methods and defines how energy savings will be measured and reported. The M&V plan establishes the recommended level of government witnessing for each ECM. A key step for ensuring the accuracy and reliability of the data collected by the ESCO during M&V activities is to have government personnel witness the various data collection activities, which include on-site inspections, quick spot measurements, short-term monitoring periods, and performance tests, as outlined in the M&V plan.

ESPC Task Order

On December 14, 2022, PBS awarded ESPC Task Order Number 47PH1123F0001 under FEMP ESPC Number DE-EE0008027. This 20-year ESPC task order supports 10 buildings (4 in Texas and 6 in Louisiana) and initially contained seven ECMs. PBS modified this task order in 2023 to fund new and additional ECMs at eight of the buildings, which increased the task order value from $37,870,790 to $43,519,374. See ***Appendix B*** for a list of the 10 buildings and the implemented ECMs, along with their implementation price and estimated annual cost savings.

[7] *Ordering Guide for Generation 3 Energy Savings Performance Contract (ESPC) Task Orders Under DOE's Indefinite Delivery, Indefinite Quantity (IDIQ) Multiple Award Contracts*, June 14, 2019.

[8] The five phases of ESPCs are: Phase 1 – Acquisition Planning, Phase 2 – ESCO Selection and Preliminary Assessment, Phase 3 – Project Development, Phase 4 – Project Implementation and Construction, and Phase 5 – Post-Acceptance Performance.

Prior GSA Office of Inspector General Audit Reports on ESPCs

We previously issued two audit reports outlining the risks of ESPCs if they are not carefully managed.

First, in August 2017, we issued a report that found PBS's National Capital Region did not comply with applicable laws, regulations, and guidance when awarding and administering the ESPC task order in White Oak, Maryland.[9] PBS's National Capital Region violated the Competition in Contracting Act of 1984 and the competition requirements set forth in the Federal Acquisition Regulation (FAR) by making a significant change to the contract that substantially increased the contract's scope of work for operations and maintenance (O&M). We also found that PBS's National Capital Region did not award and administer the task order in compliance with contract requirements, acquisition regulations, and internal policy. Our recommendations included several measures to strengthen and improve controls over the White Oak ESPC task order award and future ESPCs.

Second, in March 2020, we issued a report that found PBS did not realize savings to fully fund payments for two ESPC projects, and that PBS risks paying for unsupported and overstated O&M savings on other projects due to inadequate oversight.[10] In addition, we found that PBS did not provide effective oversight to verify the accuracy of ESCO savings. On multiple projects, PBS did not witness the ESCO energy M&V activities or review ESCO M&V reports; instead, PBS relied on the contractor to self-monitor and self-report whether it achieved the savings. We also identified deficiencies in PBS's ESPC contract file administration. Further, we found that PBS did not adequately oversee the administration of ESPC projects after award.

Based on our findings, we made several recommendations to improve PBS's oversight of the administration of ESPC task orders. The recommendations included improving oversight of ESPC savings evaluation; identifying, and, if possible, recovering savings shortfalls; renegotiating O&M contracts; ensuring witnessing and proper review of M&V reports; and verifying that current and future ESPCs have all required contract documents.

[9] *PBS National Capital Region's $1.2 Billion Energy Savings Performance Contract for White Oak Was Not Awarded or Modified in Accordance with Regulations and Policy* (Report Number A150009/P/5/R17006, August 24, 2017).

[10] *PBS's $1.7 Billion Energy Savings Performance Contracts Are Not Achieving Energy and Cost Savings Due to Inadequate Oversight* (Report Number A180017/P/5/R20004, March 27, 2020).

Results

ESPCs are multi-year contracts, with terms not to exceed 25 years. Therefore, it is imperative that PBS properly awards and administers these contracts to protect taxpayer dollars. However, we found deficiencies in PBS's award and administration of the ESPC task order supporting 10 buildings across Texas and Louisiana. Specifically, PBS violated contract requirements and its own policy and guidance by: (1) not witnessing and verifying the ESCO's energy baseline measurements and (2) allowing O&M contractor employees to serve as government witnesses and sign the baseline witnessing forms. As a result, PBS improperly relied on the ESCO's data to negotiate the contract's guaranteed energy savings and annual savings performance goals.

We also found that PBS did not issue contract modifications that were needed to authorize and implement scope-of-work changes. In one instance, PBS incurred $71,920.47 in unnecessary costs because it did not issue a contract modification to prevent the installation of window inserts that were no longer needed at The Centre Phase 5 building in Farmers Branch, Texas. In another instance, a PBS employee improperly authorized a change to the scope of the ESPC task order for a high-efficiency transformer without obtaining the required corresponding contract modification from the contracting officer.

Finding 1 – PBS violated contract requirements and its own policy and guidance for witnessing and verification of energy baseline measurements.

PBS did not conduct the required on-site or virtual witnessing and verification of energy baseline measurements and improperly allowed O&M contractor employees to serve as government witnesses and sign the baseline witnessing forms. These violations of contract requirements and PBS policy and guidance resulted in PBS improperly relying on the ESCO's data to negotiate the contract's guaranteed energy savings and annual savings performance goals.

Baseline measurements are critical in ESPCs because they establish the starting point for measuring energy savings over the life of the contract. Accurate baseline measurements protect the government's financial and operational interests and ensure project success. Accordingly, the ESPC task order requires that GSA personnel witness all on-site measurements taken for the purposes of baseline development. The ESPC task order states that GSA personnel shall witness the baseline measurements and review calculations, records, and other elements of those measurements to confirm accuracy; and that the measurement methods are consistent with the approved M&V plan.

In addition, the FEMP provides guidance for oversight and witnessing of M&V activities. The FEMP *Guide to Government Witnessing and Review of Measurement and Verification Activities* (FEMP guidance) recommends that agency representatives escort ESCO personnel, observe tests or observations performed, record test or measurement equipment used, record results if available on-site, and obtain any needed clarification of how tests are being performed.

Further, PBS's instructional memorandum, *Updated Instructional Memorandum Outlining Roles, Responsibilities, Administration and Reporting Requirements for Energy Savings Performance Contracts*, dated November 13, 2020, establishes guidance for PBS's baseline witnessing. Specifically, the memorandum provides that:

> PBS may use contractors for technical assistance during witnessing when appropriate, but the contractor does not have signatory authority for PBS.
>
> Virtual Witnessing may be allowed in special circumstances as a safety precaution when PBS personnel are unable to witness on site (e.g., pandemics, transformer ECMs, etc.). In these situations, virtual witnessing will be allowed in the form of photos, videos, or other electronic documentation. The Government witness shall complete the witnessing form based upon this provided information.

Baseline measurements are established to estimate energy savings and serve as the foundation for measuring actual savings. PBS is responsible for ensuring that baseline measurements are properly defined, verified, and witnessed. However, as described below, we found that PBS did not properly witness and verify baseline measurements for lighting improvements and high-efficiency transformers that required on-site and virtual witnessing.

Lighting Improvements

This ECM replaces or retrofits existing light fixtures and lamps with light-emitting diode (LED) technology in the 10 buildings covered under the ESPC task order. The ESPC estimated that the first-year savings for this ECM would be $503,263. The M&V plan establishes that baseline measurements for the lighting improvements ECM require GSA's on-site witnessing.

During our audit, we reviewed the baseline witnessing forms for the 10 buildings where the ESCO obtained the baseline measurements. The witnessing forms show various measurements that were taken using an electronic power meter.[11] The witnessing forms include signature lines for the: (1) ESCO subcontractor who took the measurements, (2) ESCO witness, and (3) government witness. However, we noted that although PBS employees signed the witnessing forms, they did not properly witness and verify the contractor's baseline measurements.

[11] A Fluke 345 Power Quality Clamp Meter was used to take the baseline measurements.

Specifically, we found the following discrepancies in the 10 buildings supported by the ESPC task order:

- **Louisiana –** For the six buildings we reviewed in Louisiana, PBS employees escorted the contractor to take baseline measurements and signed the witnessing forms; however, PBS employees did not review or verify the baseline measurements taken at the time of testing. In fact, three PBS employees who signed witnessing forms for five of the six buildings in Louisiana stated they did not review the electronic power meter readings or record their own test results.[12] Without verifying the baseline measurements, PBS has no assurance that data used to calculate the energy savings for the six buildings in Louisiana was accurate.

- **Texas –** For the four buildings we reviewed in Texas, PBS employees did not witness the ESCO's baseline measurements used to calculate the energy savings estimate. Instead, PBS violated its own policy and guidance by improperly relying on O&M contractor employees to witness and sign off as government witnesses on the baseline witnessing forms.

  We interviewed the four O&M contractor employees who signed the baseline witnessing forms for these buildings in Texas. Three of them stated they escorted the ESCO to take the baseline measurements, but did not witness or review the electronic power meter readings or record their own test results and did not know they were tasked to do so. The other O&M contractor employee did not escort the ESCO and subcontractor around the building or witness the taking of the baseline measurements.

  When we asked the PBS project manager why O&M contractor employees were used as government witnesses rather than PBS employees, they told us that they try not to put additional work requirements on the PBS building managers by having them witness the baseline measurements. Nonetheless, the PBS project manager acknowledged that PBS employees should have witnessed the baseline measurements and signed the corresponding witnessing forms. The PBS project manager also stated that PBS's witnessing guidance for baseline measurement should have been followed.

  In addition, the witnessing forms for the four buildings in Texas were digitally signed by the ESCO and the subcontractor in September 2022, physically signed by the four O&M contractor employees in November 2022, and then digitally signed by the PBS project manager in December 2022. The PBS project manager who signed the witnessing forms was not present when the ESCO and the subcontractor took the baseline measurements. The PBS project manager told us they were not certain if the four O&M contractor employees had even witnessed these measurements. Therefore, the PBS

[12] We were not able to interview one of the PBS employees who signed the witnessing form because they had left the Agency.

project manager signed the witnessing forms with no certainty on the accuracy of the data or the measurement methods.

Further, the baseline data on the witnessing forms for the buildings in Louisiana and Texas was digitally created and did not include the date the contractor took the baseline measurements. The three PBS employees and four O&M contractor employees who signed the witnessing forms for the buildings in Louisiana and Texas, respectively, could not remember when the contractor took the measurements.

The three PBS employees and three of the four O&M contractors who signed as government witnesses for the buildings in Louisiana and Texas, respectively, stated that their responsibility was to escort the ESCO and its subcontractors throughout the buildings. Because of this, they asserted that they did not review the electronic power meter readings or record their own test results for verification. Further, the PBS employees and O&M contractors who signed as government witnesses for the buildings in Louisiana and Texas stated that they had not received any training or guidance on performing witnessing tasks for ESPCs.

High-Efficiency Transformers

This ECM replaced existing transformers at four buildings in Louisiana and three buildings in Texas with high-efficiency transformers. The ESPC included an estimate of $46,196 in first-year savings for this ECM, and the M&V plan establishes that baseline measurements for the ECM require GSA's virtual witnessing. In accordance with PBS policy, the M&V plan states that photos, videos, or other electronic documentation must be submitted for the GSA virtual witness to review.

We reviewed the baseline witnessing forms for these seven buildings. The contractor's baseline witnessing forms show various measurements that were taken with a transformer monitoring system. The baseline witnessing forms also include the name of the contractor who took the baseline measurements and the signature of the PBS project manager as the GSA virtual witness.

However, we found that the PBS project manager who signed the baseline witnessing forms did not comply with the virtual witnessing requirements established under PBS policy and the M&V plan. The PBS project manager told us they did not review any photos, video, or other documentation prior to signing the witnessing forms. Although the contractor employees told us that they provided PBS with photos to support the baseline measurements, the PBS project manager could not recall if the contractor submitted any such materials. Without documentary evidence, it is unclear how the PBS project manager verified the accuracy of the contractor's baseline measurements.

It is critical for the Agency to properly witness and verify baseline measurements for ESPCs. These measurements are used to determine actual energy savings and provide the Agency with enough evidence to negotiate the contract's guaranteed energy savings and annual savings

performance goals. Once ECMs have been installed, it is usually not possible to accurately determine the preexisting baseline measurements. Without properly witnessing and verifying the ESCO's baseline measurements, PBS risks inaccurate savings calculations and overpayments.

To mitigate these risks, PBS should ensure the personnel responsible for M&V activities are adequately trained to accomplish witnessing and verification in accordance with FEMP guidance. PBS also needs to ensure that it fulfills its M&V responsibilities. Specifically, Agency representatives should escort ESCO personnel, observe tests or observations performed, record test or measurement equipment used, record results if available on-site, and obtain any needed clarification on how tests are being performed. Additionally, PBS employees should independently witness, verify, and document the ESCO's baseline measurements. Lastly, PBS should adhere to its own policy and ensure O&M contractor employees do not serve as government witnesses.

Finding 2 – PBS did not issue contract modifications that were needed to authorize and implement scope-of-work changes, resulting in unnecessary costs and noncompliance with the FAR.

PBS did not issue contract modifications that were needed to authorize and implement two scope-of-work changes in the ESPC task order. In one instance, PBS did not modify the ESPC task order to prevent the installation of unnecessary window inserts. In another instance, a PBS employee improperly authorized a change to the scope of the ESPC task order for a high-efficiency transformer without obtaining a contract modification from the contracting officer.

PBS Did Not Issue a Contract Modification to Prevent the Unnecessary Installation of Window Inserts

PBS did not issue a contract modification to prevent the unnecessary installation of 56 window inserts at The Centre Phase 5 building in Farmers Branch, Texas. As a result, PBS incurred $71,920.47 in unnecessary costs to install—and then remove—these window inserts.

The ESPC task order included the installation of 1,565 window inserts at The Centre Phase 5 building. Each insert costs $1,114.61 to install. The inserts are installed on the interior of the window and act like an additional windowpane, providing increased thermal efficiency without the expense associated with a complete window replacement. The installation project was completed in May 2024.

In September 2024, PBS issued a contract modification to remove 56 of the window inserts at a total cost of $9,502.31. According to the contract file documentation, the window inserts had to be removed because they conflicted with another project to construct a sensitive compartmented information facility (SCIF). The SCIF project incorporates radio frequency shielding essential for: (1) preventing radio frequency electromagnetic signals from interfering with electronic devices; and (2) safeguarding against electronic hacking, wiretapping, and

eavesdropping. The 56 window inserts that were previously installed in the SCIF area at a total cost of $62,418.16 were incompatible with the radio frequency shielding and had to be removed to avoid any operational impacts.[13]

In the September 2024 contract modification, PBS stated that the window insert removal work was an unforeseen condition and could not have been anticipated. However, in our review of the ESPC task order contract files, we found that this assertion was inaccurate because PBS personnel were aware that the window inserts were not to be installed in the SCIF project area as early as October 2023.

We discussed our finding with the contracting officer's representative (COR) responsible for the ESPC task order and the PBS project manager responsible for the SCIF project. They both stated that there was a miscommunication that led to the unnecessary installation of the window inserts in the SCIF project area.

According to *PBS Project Management Practice Guide V.2*, project teams are required to develop communication plans to "identify all team members and lay out a strategy for communicating with them, with technical resources and with management." PBS provided a copy of the communication plan for the project. The plan is a spreadsheet with names and phone numbers; however, it does not provide a communication strategy.

Moreover, the communication plan was not effective to prevent the breakdown in communication that led to the unnecessary installation of the window inserts. On October 23, 2023, when the PBS project manager communicated to the COR that the window inserts should not be installed in the SCIF project area, the COR should have informed the contracting officer of the issue, and a contract modification should have been issued. This would have prevented the installation and subsequent removal of the window inserts that resulted in unnecessary costs of $71,920.47.[14]

A PBS Employee Improperly Authorized a Scope-of-Work Change without an Appropriate Contract Modification

According to FAR 43.102(a), *Policy:*

> Only contracting officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Other government personnel shall not: (1) Execute contract modifications; (2) Act in such a manner as to cause the contractor to believe that they have authority to bind the Government; or (3) Direct or encourage the contractor to perform work that should be the subject of a contract modification.

[13] $1,114.61 x 56 = $62,418.16.

[14] $62,418.16 + $9,502.31 = $71,920.47.

Accordingly, only the contracting officer is authorized to amend, modify, or deviate from the contract terms, conditions, requirements, and specifications on behalf of the government. This protects the government's interests by having a contracting professional review any potential change order to ensure: (1) any changes are within the scope of the contract and (2) all applicable regulations are followed.

However, we found that a PBS general engineer who did not have contracting authority improperly "authorized" the ESCO to relocate a new high-efficiency transformer at the U.S. Custom House in New Orleans, Louisiana (New Orleans Custom House). The scope-of-work change ultimately resulted in a reduction in energy savings. The PBS general engineer did not notify or obtain approval from the contracting officer; as a result, the contracting officer did not issue a corresponding contract modification in accordance with the FAR.

Under the ESPC task order, four inefficient transformers were to be replaced with new high-efficiency transformers at the Hale Boggs Federal Building and U.S. Courthouse in New Orleans (Boggs Federal Building). However, during the installation of the high-efficiency transformers, the ESCO told the PBS project management team that it would be too risky to remove one of the old transformers. The ESCO stated that the old transformer was elevated in a small room and weighed 800 pounds. The ESCO also stated that the old transformer was in a kitchen that was not being used and would not be used in the foreseeable future. Based on the lack of utility for the new transformer and the danger workers would face to remove the old one, the ESCO only installed three of the four high-efficiency transformers at the Boggs Federal Building.

The ESCO then proposed relocating the high-efficiency transformer it did not install at the Boggs Federal Building to the New Orleans Custom House. The high-efficiency transformer would be in addition to 16 other high-efficiency transformers that were to be installed at the New Orleans Custom House under the ESPC task order. Installing the high-efficiency transformer at the New Orleans Custom House instead of at the Boggs Federal Building resulted in a $485 reduction in savings to the government for the first year of operation. Although they lacked the authority to do so, the PBS general engineer approved the ESCO's proposal.

The PBS general engineer who agreed to the relocation of the high-efficiency transformer to the New Orleans Custom House told us that they did not notify the contracting officer of the scope-of-work change. Therefore, the contracting officer could not issue the contract modification when the scope-of-work change occurred in January 2024. After our inquiry, the contracting officer issued a contract modification on January 7, 2025, to authorize: (1) the scope-of-work change to relocate the high-efficiency transformer and (2) the resultant reduction in savings.

While the reduced savings in this instance were minor, it is possible that the contracting officer might not have given after-the-fact approval. It is important that scope-of-work changes are authorized by the contracting officer through contract modifications before they are implemented to avoid potentially incurring additional costs if the change has to be reversed.

Accordingly, PBS should ensure the project team establishes communication protocols by developing an effective communication plan to prevent the government from incurring unnecessary costs. In addition, PBS should ensure contracting officers comply with the FAR requirement to issue contract modifications before scope-of-work changes are implemented.

Conclusion

ESPCs are multi-year contracts, with terms not to exceed 25 years. Therefore, it is imperative that PBS properly awards and administers these contracts to protect taxpayer dollars. However, we found deficiencies in PBS's award and administration of the ESPC task order supporting 10 buildings across Texas and Louisiana. Specifically, PBS violated contract requirements and its own policy and guidance by: (1) not witnessing and verifying the ESCO's energy baseline measurements and (2) allowing O&M contractor employees to serve as government witnesses and sign the baseline witnessing forms. As a result, PBS improperly relied on the ESCO's data to negotiate the contract's guaranteed energy savings and annual savings performance goals.

We also found that PBS did not issue contract modifications that were needed to authorize and implement scope-of-work changes. In one instance, PBS incurred $71,920.47 in unnecessary costs because it did not issue a contract modification to prevent the installation of window inserts that were no longer needed at The Centre Phase 5 building in Farmers Branch, Texas. In another instance, a PBS employee improperly authorized a change to the scope of the ESPC task order for a high-efficiency transformer without obtaining the required corresponding contract modification from the contracting officer.

To address these deficiencies, PBS should strengthen its oversight of the ESPC task order. PBS should adequately train personnel responsible for witnessing M&V activities and ensure they independently witness, verify, and document the ESCO's baseline measurements. PBS should also comply with its own policy and ensure O&M contractor employees do not serve as government witnesses. Further, PBS should ensure the project team establishes communication protocols by developing an effective communication plan that is consistent with the *PBS Project Management Practice Guide V.2* to prevent the government from incurring unnecessary costs. Lastly, PBS should ensure contracting officers approve contract changes and implement them through modifications, in accordance with the FAR.

Recommendations

We recommend that the PBS Commissioner ensures:

1. PBS personnel responsible for M&V activities:
    a. Are adequately trained to understand how to perform their oversight responsibilities in accordance with the DOE's FEMP guidance;
    b. Independently witness, verify, and document the ESCO's baseline measurements; and
    c. Adhere to PBS's policy to ensure O&M contractor employees do not serve as government witnesses for ESPCs.

2. The project team establishes communication protocols by developing an effective communication plan that is consistent with the *PBS Project Management Practice Guide V.2* to prevent the government from incurring unnecessary costs.

3. Contracting officers authorize contract changes and implement them through contract modifications, in accordance with the FAR.

GSA Comments

PBS provided a written response to our report, stating that it partially agreed with our recommendations. However, the response did not specify which recommendations it agreed with. Subsequently, we followed up with PBS officials, who clarified that they agreed with *Recommendations 1 and 3*, and disagreed with *Recommendation 2*.

PBS's response is included in its entirety in ***Appendix C***.

OIG Response

PBS's response did not affect our report findings and conclusions. We address PBS's specific comments with our audit recommendations below.

Recommendation 1: PBS agreed with *Recommendations 1(a), 1(b), and 1(c)*. However, in its response, PBS wrote that it anticipates revisions to its policy, which are intended to reflect the new organizational structure and available resources.

As we noted in our audit report, the DOE's FEMP establishes appropriate procedures and methods for federal agencies regarding ESPCs.[15] The FEMP provides guidance for oversight and witnessing of M&V activities. The FEMP establishes that the ordering agency must designate a government witness to accompany the ESCO during M&V activities. The FEMP recommends that government staff witness the M&V activities that the ESCO performs to determine whether contractually guaranteed cost savings are delivered.

In addition, PBS's policy is consistent with and refers to the FEMP guidance, *Guide to Government Witnessing and Review of Measurement and Verification Activities*. As we also noted in our audit report, the FEMP guidance recommends that agency representatives escort ESCO personnel, observe tests or observations performed, record test or measurement equipment used, record results if available on-site, and obtain any needed clarification on how tests are being performed. Accordingly, we encourage PBS management to take the FEMP guidance into account when considering revisions to its policy.

[15] 42 U.S.C. 8287(b)(1)(A), *Implementation*.

Recommendation 2: As included in our draft report, *Recommendation 2* was written as:

> Develop communication protocols between the contracting officers and project management teams to ensure the government does not incur unnecessary costs.

After issuing its comments to our draft report, PBS clarified that it disagreed with this recommendation. PBS asserted that it already has communication protocols in place and stated that "adherence to established change management practices, including effective communication protocols, would have prevented the specific incident identified involving window inserts." PBS subsequently provided its guidelines to support that it has established communication protocols.[16] Specifically, PBS provided *PBS Project Management Practice Guide V.2*, which discusses communication planning and provides that the project team should create an effective communication plan.

According to the guide:

> To create an effective Communication Plan, the project manager and team must gather input from stakeholders, including team members and customers, to determine their interests and communication preferences. Once the requirements have been identified, the project manager and team develop communication strategies and document them in the Communication Plan. Some of the requirements the project team and stakeholders should understand and include in the Plan are – how frequently information should be disseminated, the preferred means of communication (e.g., phone, email, letter), and which team members will execute each strategy.

After our inquiry, PBS submitted a spreadsheet that it indicated serves as its communication plan. However, the spreadsheet only contains the names and contact information of applicable project team members and stakeholders. It does not include any communication strategies or protocols. Additionally, the plan was not effective to prevent the breakdown in communication that led to the unnecessary installation of the window inserts.

We revised our report to reflect the follow-up comments and documentation provided by PBS. For clarity, we also revised *Recommendation 2* to the following:

> Ensure the project team establishes communication protocols by developing an effective communication plan that is consistent with the *PBS Project Management Practice Guide V.2* to prevent the government from incurring unnecessary costs.

[16] PBS's guidelines include: (1) *Global Project Management National Leadership Team*, May 2011; (2) *PBS Project Management Practice Guide V.2*; and (3) *COR Desk Guide | Construction Contracts, Contract administration for PBS Contracting Officer's Representatives*, November 2021.

Recommendation 3: PBS agreed with this recommendation. In its response, PBS stated that the issue could have been avoided through diligent adherence to existing change management and communication protocols. PBS also wrote that the specific issue was resolved via contract modification during the survey phase of this audit.

As noted in our audit report, PBS did not issue the contract modification to authorize the change to the scope of the ESPC task order until we discovered the issue and brought it to its attention—1 year after a PBS employee improperly authorized the change in the contract. We encourage management to implement corrective actions to prevent the recurrence of this issue.

PBS's response is included in its entirety in ***Appendix C***.

Appendix A – Objective, Scope, and Methodology

Objective

This audit was included in our *Fiscal Year 2024 Audit Plan*. The objective of this audit was to determine whether PBS awarded and administered the ESPC task order in Texas and Louisiana in accordance with applicable regulations and guidance.

Scope and Methodology

Our audit scope included one ESPC task order supporting 10 buildings across Texas and Louisiana. PBS awarded the ESPC task order on December 14, 2022, against a DOE FEMP ESPC contract. The period of performance is from December 16, 2022, to February 28, 2043; and the total contract value is $43,519,374.[17]

To accomplish our objective, we:

- Reviewed the background and history of the ESPC program, including legislation, executive orders, and DOE FEMP guidance;
- Reviewed DOE FEMP and PBS guidance regarding ESPC witnessing;
- Reviewed the ESPC for terms and conditions related to government witnessing;
- Reviewed prior audit reports related to ESPCs from the GSA Office of Inspector General and other federal agencies' Offices of Inspector General;
- Examined contract file documentation, including contract modifications and commissioning and post-installation reports;
- Reviewed baseline and savings calculations, including utility bills used to calculate savings;
- Performed site visits to 6 of the 10 buildings included in the ESPC task order. The site visits consisted of walk-throughs to review the ECMs installed;
- Conducted interviews with building managers, contracting officers, CORs, and personnel who signed the witnessing forms; and
- Interviewed the ESCO's subcontractors to gather information on how baseline measurements were taken and what instruments were used to take the measurements.

Sampling

Survey – The ESPC task order supports 10 buildings across Texas and Louisiana. During the survey phase of our audit, we examined a nonstatistical (judgmental) sample of four buildings. Specifically, we first selected the Earle Cabell Federal Building and U.S. Courthouse in Dallas, Texas, and the Boggs Federal Building because these buildings had higher ECM implementation prices and estimated annual cost savings than the other buildings included in the ESPC (see

[17] The period of performance totals 20 years, 2 months, 12 days.

Appendix B). In addition, during our initial plan to conduct site visits, we increased our sample selection to include the Terminal Annex Federal Building in Dallas, Texas, and the New Orleans Custom House based on location proximity to the first two buildings in our sample. For these four buildings, we examined the baseline, M&V plan, and commissioning reports.

Site Visits – We conducted site visits to observe the ECMs that were installed at 6 of the 10 buildings on the ESPC task order. To ensure adequate coverage and consideration of risk, while also limiting travel time and cost, we selected the six buildings based on: (1) higher ECM implementation price and estimated annual cost savings, (2) proximity to and between buildings, and (3) buildings with ECMs installed as of September 2024. The six buildings included:

- Earle Cabell Federal Office Building and U.S. Courthouse in Dallas, Texas;
- The Centre Phase 5 in Farmers Branch, Texas;
- Terminal Annex Federal Building in Dallas, Texas;
- U.S. Custom House in New Orleans, Louisiana;
- Hale Boggs Federal Building and U.S. Courthouse in New Orleans, Louisiana; and
- John Minor Wisdom U.S. Court of Appeals Building in New Orleans, Louisiana.

Fieldwork – Based on the results of our work during the survey phase, we determined that sampling would not be used during the fieldwork phase of the audit. During fieldwork, we examined the contract files and identified deficiencies with change orders and lack of contract modifications. In addition, we reviewed the witnessing forms for the two ECMs (lighting improvements and high-efficiency transformers) that required on-site or virtual baseline measurements for all 10 buildings covered under the ESPC task order.

Internal Controls

We assessed internal controls significant within the context of our audit objective against GAO-14-704G, *Standards for Internal Control in the Federal Government*. The methodology above describes the scope of our assessment, and the report findings include any internal control deficiencies we identified. Our assessment is not intended to provide assurance on GSA's internal control structure as a whole. GSA management is responsible for establishing and maintaining internal controls.

Compliance Statement

We conducted the audit between March 2024 and January 2025 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendix B – ESPC Buildings and ECMs

Building Name	Building Number	Address	Implementation Price ($)	Estimated Annual Cost Savings ($)
(Note 1)			(Note 2)	(Note 3)
Earle Cabell Federal Office Building and U.S. Courthouse	TX0284DA	1100 Commerce St. Dallas, TX	6,489,339	596,299
Hale Boggs Federal Building and U.S. Courthouse	LA0085ZZ	500 Poydras St. New Orleans, LA	6,144,083	295,774
The Centre Phase 5	TX0302ZZ	4050 Alpha Rd. Farmers Branch, TX	3,355,056	123,220
John M. Shaw U.S. Courthouse	LA0099ZZ	800 Lafayette St. Lafayette, LA	3,290,992	67,384
Terminal Annex Federal Building	TX0057ZZ	207 Houston St. Dallas, TX	3,212,206	90,499
Baton Rouge Federal Building and U.S. Courthouse	LA0000BT	777 Florida St. Baton Rouge, LA	2,125,210	65,614
U.S. Custom House	LA0033ZZ	423 Canal St. New Orleans, LA	1,608,114	189,566
Paul Brown U.S. Courthouse	TX0210ZZ	101 Pecan St. Sherman, TX	903,624	7,149
John Minor Wisdom U.S. Court of Appeals Building	LA0035ZZ	600 Camp St. New Orleans, LA	762,626	26,298
Allen J. Ellender Federal Building and U.S. Post Office	LA0070ZZ	423 Lafayette St. Houma, LA	318,697	15,756
		Total	**28,209,947**	**1,477,559**

Notes:

1. These are the 10 buildings that are covered under ESPC Task Order Number 47PH1123F0001.
2. Implementation price is the cost of goods, services, and delivery charges to install the ECMs, as noted in the task order.
3. Estimated annual cost savings include electric and natural gas savings, as noted in the task order.

ECM Description	LOUISIANA BUILDINGS						TEXAS BUILDINGS			
	Baton Rouge	Custom House	Wisdom	Hale Boggs	Allen J. Ellender	John M. Shaw	Terminal Annex	Paul Brown	Earle Cabell	Centre Phase 5
Chiller Improvements – 2 Chillers				CM				BA	BA	
Chiller Improvements – 3 Chillers						BA				
Building Automation Systems (BAS) Optimization	BA	BA	CM	BA	BA	BA	BA	BA	BA	BA
BAS Modernization	BA	BA	CM	BA	BA	BA	BA	BA		
BAS – Variable Air Volume Box Improvements				CM						
HVAC – Air Handling Unit	CM									
HVAC – Waterside Economizers									BA	CM
LED Lighting and Controls	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA
Window Inserts										CM
Motors and Variable Frequency Drives	BA		CM						BA	
High-Efficiency Transformers	CM	CM		CM		CM	CM		CM	CM

"BA" indicates ECMs included in the base award.
"CM" indicates ECMs added and funded via contract modification.

On March 31, 2023, PBS issued a contract modification to add new ECMs and provide funding for ECMs that were anticipated at the time the ESPC task order was awarded. As a result, the ESPC task order value increased from $37,870,790 to $43,519,374.

Appendix C – GSA Comments

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GSA

Public Buildings Service

June 2, 2025

MEMORANDUM FOR ARTHUR MAISANO
REGIONAL INSPECTOR GENERAL FOR AUDITING
NORTHEAST AND CARIBBEAN REGION AUDIT OFFICE
(JA-2)

FROM: MICHAEL P. PETERS
COMMISSIONER
PUBLIC BUILDINGS SERVICE (P)

SUBJECT: Response to the GSA Office of Inspector General's Draft report, *PBS Should Improve Its Oversight of the Energy Savings Performance Contract in Texas and Louisiana* (Report Number A240046)

Thank you for the opportunity to provide comments on the subject audit report. We have reviewed the document and partially agree with the recommendations.

We would like to highlight that the Public Buildings Service (PBS) is currently implementing significant organizational changes to enhance efficiency and ensure prudent utilization of taxpayer resources, aligning with the Administration's focus. These changes involve optimizing the federal workforce through personnel reductions, organizational restructuring, and the revision or elimination of PBS policies that may create costs and resource demands exceeding statutory requirements.

Regarding recommendations 1a., 1b., and 1c., which pertain to ensuring training and adherence to current guidance and policy for the oversight and administration of measurement and verification activities, we anticipate forthcoming revisions to the existing PBS policy. These revisions are expected to provide greater flexibility in light of reduced PBS resources following our organizational restructuring and are anticipated to specifically address witnessing requirements and other aspects currently necessitating PBS personnel oversight.

Concerning recommendation 2, which suggests developing protocols between contracting officers and project teams to prevent unnecessary costs to the government, we wish to clarify that such protocols and guides are already in place. We believe the finding that led to this recommendation was based on an isolated incident where established protocols were not followed. Adherence to established change management practices, including effective communication protocols, would have prevented the specific incident identified involving window inserts.

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Similarly, we believe that the identified incident underlying recommendation 3 could also have been avoided through diligent adherence to existing change management and communication protocols. We note that this specific issue was resolved via contract modification during the survey phase of this audit.

Should you have any questions, please do not hesitate to contact Courtney Hatchel, Acting Assistant Commissioner, Office of Facilities Management, at courtney.hatchel@gsa.gov.

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Appendix D – Report Distribution

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GSA Deputy Administrator (AD)

Commissioner (P)

Deputy Commissioner (P1)

Acting Chief of Staff (P2)

Deputy Commissioner of Enterprise Strategy (P2)

Acting Chief of Staff (PB)

Acting Deputy Chief of Staff (PB)

Regional Commissioner (7P)

Acting Assistant Commissioner (PM)

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Director (JAO)

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