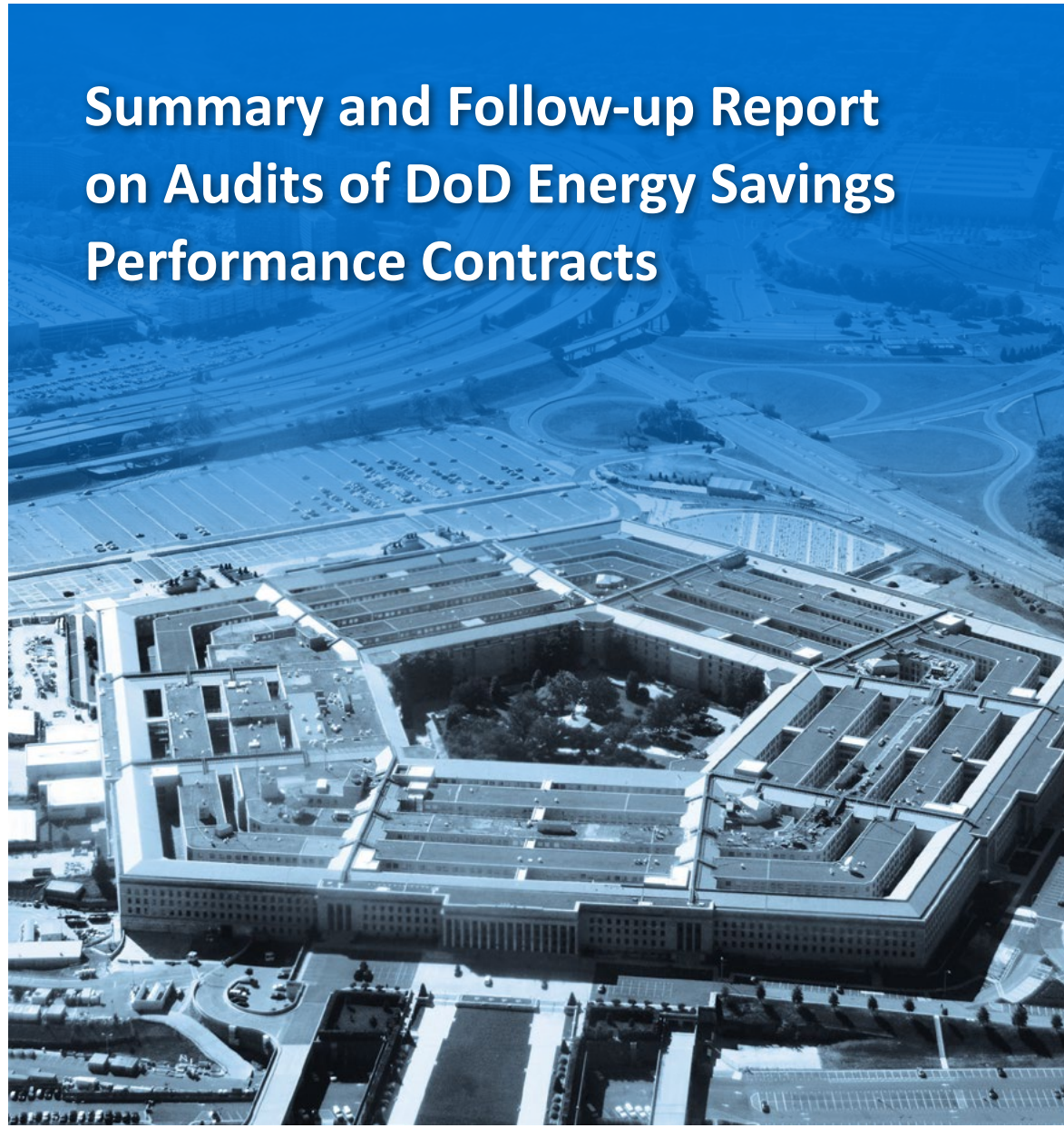




INSPECTOR GENERAL

U.S. Department of Defense

FEBRUARY 14, 2019



Summary and Follow-up Report on Audits of DoD Energy Savings Performance Contracts

INTEGRITY ★ INDEPENDENCE ★ EXCELLENCE





Results in Brief

Summary and Follow-up Report on Audits of DoD Energy Savings Performance Contracts

February 14, 2019

Objective

We summarized systemic problems with the contract administration of energy savings performance contracts (ESPCs) reported in eight Government Accountability Office (GAO), DoD OIG, and U.S. Army Audit Agency (USAAA) reports issued since 2013. We also determined whether DoD, Army, Navy, Air Force, and Defense Logistics Agency officials implemented the recommendations in the eight reports.

Background

ESPCs provide a way for the private sector to finance Federal Government energy-saving projects. The ESPC is a contract type through which an energy services contractor designs, finances, acquires, installs, and maintains energy-saving equipment and systems for a Federal agency. ESPCs allow Federal agencies to procure energy savings and facility improvements with no upfront capital costs or special appropriations from Congress. Section 8287, title 42, United States Code (42 U.S.C. § 8287 [2011]) mandates that ESPCs include an annual energy audit of contractor energy savings using measurement and verification techniques based on sound engineering and financial practices. The verification ensures that Government payments to the contractor are supported by equivalent energy savings.

Finding

Since FY 2013, the GAO, DoD OIG, and USAAA issued eight reports on the administration of the ESPCs by the DoD and the Army, Navy, Air Force,

Finding (cont'd)

and Defense Logistics Agency (the DoD Components) and identified five systemic problems. Overall, the reports found that the Government did not know whether it received contractor-claimed energy savings and whether the ESPC program was cost effective.

The five systemic problems were:

1. Contracting officers did not delegate contract administration responsibilities for the ESPCs to contracting officer representatives (CORs) because some DoD Component officials did not emphasize the need for CORs or did not have qualified staff to designate and perform contract administration functions.
2. Contracting officers did not develop and tailor quality assurance surveillance plans (QASPs) for the ESPCs because DoD Component officials did not:
 - monitor or evaluate contracting officers to ensure that contracting officers developed QASPs, or
 - emphasize the need to develop a tailored QASP specific for the ESPCs.
3. CORs and contracting officers did not review or verify annual contractor-claimed energy savings and associated Government contract payments. Instead, CORs and contracting officers relied on the contractor to self-administer and report energy savings.
4. ESPC program managers did not accumulate and use ESPC project data to determine project effectiveness. This occurred because ESPC project data was decentralized and program managers did not consistently request ESPC project data.
5. Assistant Secretary of Defense for Energy, Installations, and Environment and DoD Component ESPC program officials did not develop guidance for ESPC training, data management, contract administration, and disagreement resolution. The officials stated that they did not develop ESPC guidance because it was not their responsibility or they were not aware of ESPC statutory requirements.



Results in Brief

Summary and Follow-up Report on Audits of DoD Energy Savings Performance Contracts

Finding (cont'd)

The DoD took action to implement and close 62 of the 70 recommendations made by the GAO, DoD OIG, and USAAA to resolve the problems identified. The actions taken resulted in improved ESPC oversight. There are 8 resolved but open recommendations because the Assistant Secretary of Defense for Energy, Installations, and Environment, the Air Force, and the Navy continue to work on implementation results.

Recommendations

We reviewed the actions taken to implement six resolved but open recommendations that we made to the Navy and Air Force. We made one additional recommendation to the Commander of the Naval Facilities Engineering Command and three additional recommendations to the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (SAF/AQ). Based on SAF/AQ comments to the draft report, we revised the three recommendations to state that the SAF/AQ should coordinate with the Air Force Civil Engineer Center Commander. If the Navy and Air Force officials agree and implement these new recommendations, it will help the Navy and Air Force close the six resolved but open recommendations from our previous audit reports.

Specifically, we recommended that the:

- Commander of Naval Facilities Engineering Command direct the Navy ESPC contracting officer to obtain information required to calculate and validate currency conversions for an ESPC in Japan.
- SAF/AQ direct Air Force ESPC contracting officers to coordinate with the Air Force Civil Engineer Center Commander to identify Air Force ESPCs not previously subject to Government validation; validate contractor-claimed energy savings; and take appropriate contractual action (if necessary) based on the result of the validation.

Management Comments and Our Response

The Commander of the Naval Facilities Engineering Command did not respond to the recommendation in the report. Therefore, the recommendation is unresolved and remains open. We request that the Navy provide comments in response to this final report.

The Associate Deputy Assistant Secretary of the Air Force for Contracting, responding for the SAF/AQ, stated that the Air Force Civil Engineer Center had the responsibility to manage, oversee, and evaluate the effectiveness of ESPCs. However, the Associate Deputy acknowledged that the SAF/AQ should assist with the annual measurement and verification process and the overall execution of the ESPC program. We agree that the Air Force Civil Engineer Center has responsibility for ESPCs. However, this is a joint responsibility between contracting officers and Air Force Civil Engineer Center officials. Contracting officers are ultimately responsible for their contracts and reviewing and approving contractor-claimed energy savings is a contractual responsibility. Furthermore, the SAF/AQ can direct the actions of Air Force contracting officers. Therefore, we revised the recommendations to the SAF/AQ to recommend that the SAF/AQ coordinate with the Air Force Civil Engineer Center Commander. The recommendations are unresolved and remain open. We request that the SAF/AQ comment on the final report.

The Associate Deputy also agreed to take contractual action to implement the conclusions from the validation process. The Associate Deputy further stated that the SAF/AQ will inform the contracting officials of the systemic issues identified in this DoD OIG report. Therefore, this recommendation is resolved but open.

Please see the Recommendations Table on the next page.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Commander, Naval Facilities Engineering Command	1	None	None
Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics	2.a and 2.b	2.c	None

Please provide Management Comments by March 18, 2019.

Note: The following categories are used to describe agency management’s comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – OIG verified that the agreed upon corrective actions were implemented.





**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
4800 MARK CENTER DRIVE
ALEXANDRIA, VIRGINIA 22350-1500**

February 14, 2019

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION
AND SUSTAINMENT
ASSISTANT SECRETARY OF THE AIR FORCE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
AUDITOR GENERAL, DEPARTMENT OF THE ARMY
NAVAL INSPECTOR GENERAL
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Summary and Follow-up Report on Audits of DoD Energy Savings
Performance Contracts (Report No. DODIG-2019-058)

We are providing this report for review and comment. The Commander Naval Facilities Engineering Command did not respond to the recommendation in the draft report; however, we considered comments from the Office of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (SAF/AQ) when preparing the final report.

DoD Instruction 7650.03 requires that all recommendations be resolved promptly. Comments from the SAF/AQ partially addressed Recommendations 2.a and 2.b and we revised those recommendations. Therefore, we request that the SAF/AQ provide comments to the final report for Recommendations 2.a and 2.b. The SAF/AQ comments resolved Recommendation 2.c. Finally, we request that the Commander of the Naval Facilities Engineering Command provide comments to the final report for Recommendation 1.

Please send a PDF file containing comments to audrgo@dodig.mil by March 18, 2019. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET). Copies of your comments must have the actual signature of the authorizing official for your organization. If you have any questions or would like to meet to discuss the audit, please contact me at (703) 604-8905 (DSN 664-8905). We appreciate the cooperation and assistance received during the audit.

A handwritten signature in black ink that reads "Troy M. Meyer".

Troy M. Meyer
Principal Assistant Inspector General
for Audit

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Introduction

Objective

We summarized systemic problems with contract administration of energy savings performance contracts (ESPCs) reported in eight Government Accountability Office (GAO), DoD OIG, and U.S. Army Audit Agency (USAAA) reports issued since 2013. We also determined whether DoD, Army, Navy, Air Force, and Defense Logistics Agency officials implemented the recommendations in the eight reports. See Appendix A for our scope and methodology and Appendix B for a summary of each of the eight reports.

Background

ESPCs provide a way for the private sector to finance U.S. Government energy-savings projects. Through the ESPCs, an energy services contractor designs, finances, acquires, installs, and maintains energy-saving equipment and systems for a Federal agency. ESPCs allow Federal agencies to procure energy savings and facility improvements with no upfront capital costs or special appropriations from Congress.

An ESPC consists of two phases: the construction phase and the performance phase. During the construction phase, the energy-savings contractor constructs the energy conservation measures, such as lighting improvements and heating and air conditioning replacements.¹ At the end of the construction phase, the contractor submits a post-installation report to summarize construction phase actions and outcomes and identify any energy savings achieved during the phase. The performance phase begins once the Government accepts the contractor-installed energy conservation measures. During the performance phase, the contractor operates and maintains energy improvements, measures the energy savings, and submits annual measurement and verification reports in accordance with the ESPC contract. The measurement and verification report outlines the calculation of energy savings and any other evaluation of costs and savings needed to verify that Government payments to the contractor are supported by equivalent energy savings. The Federal agency that receives the energy-saving improvements is responsible for contract administration for the entire term of the contract.

¹ Energy conservation measures 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.

Statutory ESPC Requirement

Section 8287, title 42, United States Code (42 U.S.C. § 8287 [2011]), includes several specific mandates for Federal agencies entering into ESPCs. The statute allows Federal agencies to take on debt to acquire energy conservation measures if the overall utility costs to the agency do not increase because of the contract and if any Government-incurred debt is secured by a contractor-guarantee of energy savings. The statute also requires that aggregate annual agency payments to the contractor over the term of the ESPC—which cannot exceed 25 years—do not exceed the amount that the agency would have paid for utilities without the ESPC in place and that the contractor guarantees that energy conservation measures will generate sufficient cost savings to pay for the project. The statute further mandates that the ESPC include an annual energy audit of contractor-claimed energy savings using measurement and verification techniques based on sound engineering and financial practices.

Organizations Responsible for DoD ESPC Management Additional Background

The Department of Energy Federal Energy Management Program provides Federal agencies with ESPC training and project facilitation services, including technical assistance, legal guidance, funding guidance, and contracting support. As the Federal Government manager, Department of Energy Federal Energy Management Program officials issue Super ESPCs. Super ESPCs are indefinite-delivery indefinite-quantity contracts available for use by all Federal agencies to award the ESPCs as individual task orders.

Within the DoD, the Office of the Assistant Secretary of Defense for Energy, Installations, and Environment (ASD[EI&E]) is responsible for ESPC program management and implementing guidance. In addition, the following DoD Component organizations' officials manage and oversee their specific DoD Component ESPC programs.

- **Army:** The U.S. Army Engineering and Support Center in Huntsville, Alabama, provides ESPC project management and contracting services. Support Center officials award Army ESPCs as task orders to the Center's own multiple-award contract. The Support Center is a component of the United States Army Corps of Engineers.
- **Navy:** Naval Facilities Engineering Command (NAVFAC) manages the Navy ESPC program. The Navy ESPC Program Manager is located at NAVFAC Headquarters, Navy Yard, Washington, D.C. However, most ESPC program and contracting office functions are performed at the Naval Facilities Engineering and Expeditionary Warfare Center, Port Hueneme, California.

- **Air Force:** The officials at the Air Force Energy Office, a component of the Assistant Secretary of the Air Force for Installations, Environment, and Logistics, are responsible for Air Force energy management. The Air Force Civil Engineer Center Energy Directorate, located at Tyndall Air Force Base, Florida, acts as the Air Force ESPC Program Manager. The Air Force uses multiple contracting offices to solicit, award, and manage the ESPCs.
- **Defense Logistics Agency:** Officials at the Defense Logistics Agency Installation–Energy (DLA–Energy) contracting office solicit, negotiate, award, and administer ESPCs to support Army, Air Force, and Defense agencies. DLA–Energy contracting officers also award the ESPCs as task orders to the Department of Energy Super ESPC.

Additional Background on Prior Audit Reports of DoD Administration of ESPCs

Since FY 2013, the GAO, DoD OIG, and USAAA have issued eight audit reports outlining findings related to the administration of ESPCs within the Department.

- GAO-17-461, “Defense Infrastructure: Additional Data and Guidance Needed for Alternatively Financed Energy Projects,” June 20, 2017
- GAO-15-432, “Energy Savings Performance Contracts: Additional Actions Needed to Improve Federal Oversight,” June 17, 2015
- DODIG-2018-135, “Defense Logistics Agency Award and Administration of Energy Savings Performance Contracts,” July 6, 2018
- DODIG-2018-050, “Naval Facilities Engineering Command Administration of Selected Energy Savings,” December 19, 2017
- DODIG-2017-044, “Naval Facilities Engineering Command Management of Energy Savings Performance Contracts Needs Improvement,” January 26, 2017
- DODIG-2016-087, “Air Force Civil Engineer Center Management of Energy Savings Performance Contracts Needs Improvement,” May 6, 2016
- DODIG-2015-138, “The Air Force Did Not Monitor Energy Savings Performance at Joint Base McGuire,” June 29, 2015
- A-2015-0046-MTP, “Measurement and Verification Controls for Energy Savings Performance Contracts,” March 19, 2015

In the eight reports, the GAO, DoD OIG, and USAAA made 70 recommendations to DoD officials to address the systemic problems related to the administration of the ESPCs within the DoD. Of the 70 recommendations, 62 recommendations were considered closed as of December 31, 2018, because proposed corrective actions

were completed. The 8 remaining recommendations (all DoD OIG) are resolved but remain open until we verify that the proposed corrective actions are completed. See Appendix B for a summary of each of the eight reports and Appendix C for a summary of each of the 70 recommendations and their status.

Review of Internal Controls

DoD Instruction 5010.40 requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified internal control weaknesses in the Air Force identifying, validating, and performing higher-level review of contractor-claimed energy savings in legacy ESPCs. We also identified a Navy internal control weakness in validating and performing higher-level reviews of contractor-claimed currency fluctuation payments for the ESPCs implemented outside the United States. We will provide a copy of the report to the senior official responsible for internal controls in the Departments of the Navy and the Air Force.

Finding

DoD Officials Improved ESPC Oversight, but Additional Actions Are Needed

Since FY 2013, the GAO, DoD OIG, and USAAA issued eight reports on the administration of ESPCs by the Army, Navy, Air Force, and DLA (the DoD Components) and identified five systemic problems. Overall, the reports found that the DoD did not know whether it received contractor-claimed energy savings and whether the ESPC program was cost effective.

The five systemic problems were:

1. Contracting officers did not delegate contract administration responsibilities for ESPCs to contracting officer representatives (CORs) because some DoD Component officials did not emphasize the need for CORs or did not have qualified staff to designate and perform contract administration functions.
2. Contracting officers did not develop and tailor quality assurance surveillance plans (QASPs) for ESPCs because DoD Component officials did not:
 - monitor or evaluate contracting officers to ensure that contracting officers developed QASPs, or
 - emphasize the need to develop a tailored QASP specific for ESPCs.
3. CORs and contracting officers did not review or verify annual contractor-claimed energy savings and associated Government contract payments. Instead, CORs and contracting officers relied on the contractor to self-administer and report energy savings. In addition, the contracting officials were developing additional ESPC projects rather than managing existing ESPC projects.
4. ESPC program managers did not accumulate and use ESPC project data to determine project effectiveness. This occurred because ESPC project data was decentralized and program managers did not consistently request project data.
5. ASD(EI&E) and DoD Component ESPC program officials did not develop guidance for ESPC training, data management, contract administration, and disagreement resolution. The officials stated that they did not develop ESPC guidance because it was not their responsibility or they were not aware of ESPC statutory requirements.

The DoD took action to implement 62 of the 70 recommendations made by the GAO, DoD OIG, and USAAA to address the problems identified. The remaining eight recommendations remain in an open but resolved status.² The actions taken resulted in improved ESPC oversight, but the DoD should continue to implement the remaining recommendations to ensure compliance with statutory requirements.³

Five Systemic Weaknesses for ESPC Contract Administration

Since FY 2013, the GAO, DoD OIG, and USAAA issued eight reports on the administration of ESPCs by the Army, Navy, Air Force, and DLA. We summarized the problems identified in these eight reports into five systemic problems. Overall, the reports found that the DoD did not know whether it received contractor-claimed energy savings and whether the ESPC program was cost effective.

Contracting Officials Did Not Designate CORs

Contracting officers did not delegate contract administration responsibilities for the ESPCs to CORs because DoD Component officials did not emphasize the need for CORs or did not have qualified staff to designate and perform contract administration functions. The Federal Acquisition Regulation requires contracting officers to designate and authorize, in writing and in accordance with agency procedures, a COR for firm-fixed-price contracts and orders as appropriate, unless the contracting officer retains and executes the COR duties.⁴

In two reports, we found that the ESPCs lacked oversight because contracting officers did not designate CORs. Specifically:

- In DODIG-2017-044, we reported that NAVFAC did not appoint CORs to 31 of 38 ongoing performance-phase ESPCs, valued at \$1.43 billion.⁵ NAVFAC did not appoint CORs because NAVFAC officials and base-level public works officers did not emphasize the need to have CORs to perform contract administration duties.

² For the eight resolved but open recommendations, the ASD(EI&E), Air Force, and Navy continue to work on implementation. See Appendix C for a summary of the resolved but open recommendations as identified in the status column.

³ ESPC statutory requirements are described in section 8287, title 42, United States Code (42 U.S.C. 8287).

⁴ Federal Acquisition Regulation Part 1, "Federal Acquisition Regulations System," Subpart 1.602-2, "Responsibilities."

⁵ DODIG-2017-044, "Naval Facilities Engineering Command Management of Energy Savings Performance Contracts Needs Improvement," January 26, 2017.

- In DODIG-2015-138, we reported that the Air Force contracting officer did not appoint a COR for the \$134.7 million ESPC at Joint Base McGuire-Dix-Lakehurst, New Jersey.⁶ The contracting officer stated that she did not delegate a COR to oversee contractor performance because the 87th Contracting Squadron did not have a qualified civil engineer to perform COR duties.

Navy and Air Force Officials Took Corrective Action to Designate CORs for ESPCs

In the two reports, we made nine recommendations to the Navy and Air Force related to delegating CORs. Navy and Air Force officials' actions taken to designate CORs closed all nine DoD OIG recommendations. For a complete description of the recommendations and their status, see Appendix C.

- In response to DODIG-2017-044 recommendations, NAVFAC officials stated that they designated CORs for the 31 ESPCs and provided documentation showing the designations. As a result, we closed the six COR-related recommendations. We also performed a follow-up review for two ESPCs, valued at \$125.9 million, and determined that the COR performed oversight of maintenance and repair by annually conducting a walk-through of the ESPC project facilities with the contractor to validate the maintenance of the energy conservation measures.
- In response to DODIG-2015-138 report recommendations, the Air Force provided documentation showing that the contracting officer designated a COR at Joint Base McGuire-Dix-Lakehurst to validate contractor-claimed energy savings in contractor-produced measurement and verification reports and to provide related support. As a result of the Air Force officials' actions, we closed three COR-related recommendations.

We are making no further recommendations related to COR appointment. The Navy and Air Force implemented all nine past report recommendations regarding COR appointment. Furthermore, in response to DODIG-2018-050, the ASD(EI&E) agreed to work with the Defense Procurement and Acquisition Policy and the Military Departments to ensure that appropriate guidance or policy is in place to perform oversight of ESPCs. The ASD(EI&E) recommendation is resolved but open because the ASD(EI&E) continues to work on the recommendation and set a new target date of early February 2019 for implementation. See Appendix C for the complete wording of the recommendation to the ASD(EI&E).

⁶ Report No. DODIG-2015-138, "The Air Force Did Not Monitor Energy Savings Performance at Joint Base McGuire," June 29, 2015.

DoD Component Officials Did Not Tailor QASPs to ESPCs

Contracting officers did not develop and tailor QASPs for the ESPCs because DoD Component officials did not:

- monitor or evaluate contracting officers to ensure that contracting officers developed QASPs, or
- emphasize the need to develop a tailored QASP specific for the ESPCs.

The purpose of a QASP is to provide a systematic method to evaluate the contractor's performance. The QASP explains the evaluation criteria that the Government will use to determine whether the contractor complied with contract requirements. The Federal Acquisition Regulation requires that QASPs be prepared in conjunction with the preparation of the contract statement of work and that QASPs specify all work requiring oversight and the method of oversight.⁷ DoD guidance further requires that contracting officers ensure that the requiring activity prepares a QASP to help the COR monitor contractor performance.⁸ A tailored QASP should be specific enough to provide a methodology for how the COR should monitor contractor performance of the energy conservations measures for each ESPC.

In three reports, we found that contracting officers did not develop or tailor QASPs for the ESPCs. The USAAA had a similar finding in their report. Specifically:

- DODIG-2018-050 is the second of two reports that we issued related to NAVFAC ESPCs. In report DODIG-2018-050, we determined that QASPs for seven ESPCs were general instead of tailored to the unique and specific requirements of each of the seven ESPCs. NAVFAC officials developed QASPs as a result of the first audit of NAVFAC ESPCs (DODIG-2017-044).
- In DODIG-2017-044, we stated that, as of September 2015, NAVFAC contracting officials had not developed QASPs for any of the 38 ongoing performance-phase ESPCs. NAVFAC officials and base-level public works officers stated that they did not develop QASPs because contracting officials did not emphasize the need to have QASPs. However, during the audit, NAVFAC officials developed QASPs for each of the 38 ESPCs.
- In DODIG-2015-138, we reported that the Joint Base McGuire-Dix-Lakehurst base civil engineering officials did not create and the contracting officer did not implement a QASP for a \$134.7 million ESPC. The civil engineering officials stated they did not believe a QASP was needed because surveillance was accounted for in the contractor's measurement and verification plan.

⁷ Federal Acquisition Regulation Part 46, "Quality Assurance," Subpart 46.4, "Government Contract Quality Assurance."

⁸ "DoD Contracting Officer's Representative Handbook," March 22, 2012.

However, the contractor's measurement and verification plan was not a substitute for Government surveillance because the plan should not solely rely on the contractor's self-assessment.

- In A-2015-0046-MTP, the USAAA reported that contract surveillance methods were not fully in place or operating for ESPC projects at three of the four installations visited and that this was, in part, because of a lack of QASPs.⁹

Navy and Air Force Officials Implemented QASPs for ESPCs

In two of our three reports, we made four recommendations to the Navy and Air Force related to implementing QASPs.¹⁰ Navy and Air Force officials' actions taken to develop QASPs resolved and closed all four DoD OIG recommendations. In addition, the USAAA made a recommendation for the Army to issue policy to ensure that ESPCs have surveillance plans. The USAAA closed its recommendation after the Army issued policy for ESPCs. For a complete description of the recommendations and their status, see Appendix C.

- In response to DODIG-2018-050 recommendations, NAVFAC officials agreed to tailor QASPs to describe the specific methodology for evaluating the energy conservation measures unique to each of the seven ESPCs at three Navy locations.¹¹ As of June 30, 2018, NAVFAC officials developed tailored QASPs for the seven ESPCs. Therefore, we closed the two recommendations about tailored QASPs.
- In response to DODIG-2015-138 recommendations, Joint Base McGuire-Dix-Lakehurst officials developed and implemented a tailored QASP for their ESPC on July 2, 2018. As a result, we closed the QASP-related recommendations.
- In response to USAAA report A-2015-0046-MTP, the Army issued policy for ESPCs. As a result, the USAAA closed the recommendation.

To verify that NAVFAC implemented our recommendations, we visited Naval Air Station Great Lakes, Illinois, and reviewed two ESPCs, with a total value of \$125.9 million. Although the QASPs for the two ESPCs were not tailored for the specific energy conservation measures, the COR performed tasks, such as sampling

⁹ USAAA report A-2015-0046-MTP, "Measurement and Verification Controls for Energy Savings Performance Contracts," March 19, 2015.

¹⁰ For one of the three reports (DODIG-2017-044), we did not make any recommendations to the Navy to develop QASPs because Navy officials took action during the audit to develop QASPs for each of the 38 ESPCs.

¹¹ DODIG-2018-050, "Naval Facilities Engineering Command Administration of Selected Energy Savings Performance Contracts," December 19, 2017. The three locations were Yokosuka, Japan; Marine Corps Logistics Base-Albany, Georgia; and Naval Air Station Oceana, Virginia.

data extracted from annual measurement and verification reports, to verify the contractor-claimed energy savings. We determined that the actions taken by the COR met the intent of a tailored QASP, which is a recommendation we made in DODIG-2018-050.

We are making no further recommendations related to QASPs. The Navy and Air Force implemented all four of our past report recommendations and the Army issued policy to have surveillance plans for ESPCs. Furthermore, in response to a DODIG-2018-050 recommendation to develop tailored QASPs, the ASD(EI&E) agreed to work with the Defense Procurement and Acquisition Policy and the Military Departments to ensure that appropriate guidance or policy is in place for developing QASPs. The ASD(EI&E) recommendation is resolved but open because the ASD(EI&E) continues to work on the recommendation and set a new target date of early February 2019 for implementation. See Appendix C for the complete wording of the recommendation to the ASD(EI&E).

Review and Validation of Contractor-Claimed Energy Savings

CORs and contracting officers did not review or verify annual contractor-claimed energy savings.

CORs and contracting officers did not review or verify annual contractor-claimed energy savings and associated Government contract payments. Instead, CORs and contracting officers relied on the contractor to

self-manage and report energy savings. In addition, the contracting officials were developing additional ESPC projects rather than managing existing ESPC projects.

Section 8287, title 42, United States Code (42 U.S.C. § 8287 [2011]) mandates that ESPCs include an annual energy audit of contractor energy savings using measurement and verification techniques based on sound engineering and financial practices. The Department of Energy requires the contractor to prepare two reports, one in each phase of the ESPC.

- Post-installation report – Prepared at the end of the construction phase. The report includes contractor-claimed energy savings achieved in the construction phase and subject to Government payment to the contractor.
- Measurement and verification report – Prepared annually during the performance phase. The report quantifies the savings from the contractor's energy improvements.

In five reports, we found that base contracting officials were not validating measurement and verification reports. For example:

- In DODIG-2015-138, we reported a total absence of measurement and verification report validations of the Joint Base McGuire-Dix-Lakehurst ESPC, valued at \$134.7 million. This occurred because contracting officers were unaware of requirements to validate actual energy savings and stated that they lacked technical expertise to perform validations of actual energy savings.
- In DODIG-2016-087, we reported the Air Force did not validate contractor measurement and verification reports for the ESPC at Joint Base Charleston, South Carolina, valued at \$49 million.¹² This occurred because Air Force Civil Engineer Center officials considered program management of existing ESPC task orders to be an installation responsibility, did not believe the Air Force Civil Engineer Center could centrally manage ESPC projects with existing technical support resources, and focused on meeting Air Force goals to develop additional ESPC projects rather than manage existing ESPC projects.
- In DODIG-2018-050, we reported that NAVFAC officials did not validate contractor-claimed energy savings for one post-installation report supporting \$1.4 million in ESPC payments and 13 measurement and verification reports that supported \$15.2 million in ESPC payments. We also reported that NAVFAC officials did not validate nine contractor-proposed currency adjustments valued at \$6.7 million, resulting in \$250,000 in overpayments to the contractor.¹³ This occurred because higher-level officials and base-level public works officers did not prioritize the validation of the contractor's post-installation and measurement and verification reports. The currency validation deficiency occurred because NAVFAC contracting officials did not apply the contractual escalation clauses, which account for changes to the contract price resulting from annual changes to the Japanese yen and U.S. dollar exchange rates.

¹² DODIG-2016-087, "Air Force Civil Engineer Center Management of Energy Savings Performance Contracts Needs Improvement," May 6, 2016.

¹³ A currency adjustment is a contractual modification to account for changes in the exchange rate between the local currency and the U.S. dollar.

Navy and DLA Officials Improved Review and Validation of Energy Savings, but Additional Actions Are Needed

In the five reports, we issued 16 recommendations to perform validations of contractor-claimed energy savings for specific ESPCs. The Navy, Air Force, and DLA concurred with all 16 recommendations. As of August 10, 2018, the:

- Navy implemented 9 of 10 recommendations,
- Air Force did not implement any of its 3 recommendations, and
- DLA implemented 3 recommendations.

For a complete description of the recommendations and their status, see Appendix C.

Navy Actions

The Navy implemented 9 of the 10 recommendations we made in reports DODIG-2017-044 and DODIG-2018-050 to validate contractor-claimed energy savings or related currency adjustments totaling \$96.4 million for seven ESPCs. With the implementation of the recommendations, Navy officials have made improvements in reviewing and validating contractor-claimed energy savings. However, NAVFAC has not fully implemented one recommendation from report DODIG-2018-050. While NAVFAC has made two attempts at revalidation of contractor-claimed currency adjustments, neither attempt followed contractual requirements. The contract states:

Upon receipt of the annual contractor payment, the contractor shall furnish to the contracting officer a notice provided the following:

- a. the date the annual payment was received by the contractor;
- b. the rate of exchange on the date the payment was received, as published in a mutually agreed source;
- c. the payment that will become due for the year under the LTSA [long-term service agreement] and a calculation of either the additional payment due to the contractor or the amount of credit due to government...

The contractor stated in its proposal, which was incorporated into the contract, that it would use the Wall Street Journal as the exchange rate. Previously, NAVFAC accepted the contractor's request for payment based on the exchange rate charged to the contractor by its bank, not based on the exchange rate in the Wall Street Journal. NAVFAC did not:

- independently verify that the rate was as of the day the payment was received by the contractor, and
- question the rate used by the contractor.

In documentation provided by NAVFAC on September 11, 2018, officials calculated the currency adjustment for performance year 2 in accordance with the contract requirements because NAVFAC used the date the contractor received payment and the Wall Street Journal exchange rate. The calculation for performance year 2 resulted in an overpayment of \$32,739 to the contractor. Although NAVFAC used the correct date to calculate performance year 2, NAVFAC did not use the date the contractor received payment to calculate the currency adjustments for performance years 1 and 3 through 10. Instead, NAVFAC used the exchange rate charged to the contractor by its bank. To help NAVFAC close our previous recommendation to validate the currency adjustments using the method outlined in the contract and to close two other previous recommendations discussed in the next section of this report, we are making an additional recommendation.

Air Force Actions

As of August 31, 2018, the Air Force had yet to implement the three recommendations we made in reports DODIG-2015-138 and DODIG-2016-087 to validate contractor-claimed energy savings totaling \$34.6 million for two ESPCs. In DODIG-2016-087, we recommended that Air Force ESPC program and contracting officials validate all contractor-claimed energy savings for 52 legacy ESPCs, valued at \$849 million, and implement a management plan for Air Force Civil Engineer Center and base-level engineers to oversee legacy Air Force ESPC projects.

In response to our report, the Air Force contracted a study of the 52 legacy ESPC projects.¹⁴ The study randomly selected 13 ESPCs, valued at \$446.3 million, to perform a limited review of past measurement and verification documentation.¹⁵ The study found that only 6 of the 13 ESPC files had a copy of the measurement and verification report. However, the study did not determine whether Air Force

¹⁴ Air Force Legacy ESPC Data Collection Report, January 30, 2018. Report prepared by AGEISS Inc.

¹⁵ The contractor's limited review was not to the standards of an audit. For example, the contractor accepted ESPCs at Joint Base Charleston and Joint Base McGuire-Dix-Lakehurst as having passed documentation standards. Conversely, we found the Air Force did not validate contractor-claimed energy savings in measurement and verification reports at both locations.

officials reviewed and validated the contractor-claimed energy savings in the measurement and verification reports. The study concluded that the Air Force should perform a complete validation of all 52 legacy ESPC projects.

DLA Actions

The DLA implemented three recommendations we made in report DODIG-2018-135 to validate contractor-claimed energy savings totaling \$2.7 million for three ESPCs. The DLA validations supported contractor-claimed energy savings of \$0.5 million at Fort Hood, Texas, and \$2.2 million at Fort Hamilton, New York.¹⁶ With the implementation of the recommendations, DLA officials have made improvements in reviewing and validating contractor-claimed energy savings.

We are making one additional recommendation to NAVFAC for review and validation of currency adjustments and three recommendations to the Air Force for the review and validation of contractor-claimed energy savings.

ESPC Project Data Accumulation and Management

Program managers did not gather and use ESPC project data.

The Assistant Secretary of Defense for Energy, Installation, and Environment (ASD[EI&E]) and Navy, Air Force, and DLA ESPC program managers did not gather and use ESPC project data. This

occurred because ESPC project data was decentralized and program managers did not consistently request project performance and savings data.

According to a DoD instruction, the Military Services are required to track and store data on installation energy projects, such as ESPCs, including data on all estimated and actual costs, as well as any changes to project scope that may affect costs and savings.¹⁷ Section 8287, title 42, United States Code (2011) mandates that the ESPCs include an annual energy audit of contractor energy savings using measurement and verification techniques based on sound engineering and financial practices. To comply with this requirement to audit the contractor-claimed energy savings, ESPC program managers must maintain data on the ESPC projects.

¹⁶ DODIG-2018-135, "Defense Logistics Agency Award and Administration of Energy Savings Performance Contracts," July 6, 2018.

¹⁷ DoD Instruction 4170.11, "Installation Energy Management," December 11, 2009.

Two GAO reports and five DoD OIG reports found that ESPC program managers did not accumulate or use project data to manage their ESPCs, which resulted in the program managers not performing the required annual energy audits. For example:

- In GAO-17-461, the GAO reported that the Military Departments had not collected and provided complete and accurate data to aid in DoD and congressional oversight of alternatively financed energy projects.¹⁸ GAO reported that the DoD and the Military Departments could not provide GAO a total contract cost for 196 of 446 ESPCs in the DoD ESPC portfolio. This occurred because the Military Services did not always have complete and accurate data because authority for entering into these projects had been decentralized and not consistently maintained.
- In DODIG-2016-087, we reported that the Air Force Civil Engineer Center officials did not perform post-award program management, track project status, or verify energy savings for 52 ESPCs, valued at \$849 million. We also found that officials did not track required ESPC training as required by law or maintain an Air Force ESPC lessons-learned program, as required by Air Force guidance.¹⁹ Air Force Civil Engineer Center officials stated that this occurred because:
 - program management of ESPC task orders was an installation responsibility and training was a Department of Energy Federal Energy Management Program responsibility, and
 - they could not centrally manage ESPC projects with existing technical support resources and focused on meeting Air Force goals to develop additional ESPC projects rather than manage existing ESPC projects.

ASD(EI&E), Navy, and Air Force Officials Improved ESPC Data Accumulation and Program Management

The two GAO reports and five DoD OIG reports made 21 recommendations related to ESPC project data accumulation and management. Specifically, GAO directed three recommendations to the Secretary of Defense to gather complete and accurate data on DoD ESPCs. The ASD(EI&E) responding on behalf of the Secretary of Defense, implemented the three GAO recommendations.

In GAO-17-461, the GAO recommended that the Secretary of Defense direct the Military Services to collect complete and accurate data on their alternatively financed energy projects (which include ESPCs), including data on the Services'

¹⁸ GAO-17-461, "Defense Infrastructure: Additional Data and Guidance Needed for Alternatively Financed Energy Projects," June 20, 2017.

¹⁹ Public Law 110-140, "Energy Independence and Security Act of 2007," section 517, requires the Department of Energy Federal Energy Management Program to institute a training program to educate Federal contract negotiation and contract management personnel who enter into ESPCs. In addition, the Air Force Civil Engineer Energy Savings Performance Contracts Playbook, January 8, 2018, requires Air Force Civil Engineer Center officials to maintain a repository of lessons learned.

financial obligations and cost savings. GAO recommended that the DoD receive the data at least annually to aid departmental oversight. On July 13, 2018, the ASD(EI&E) issued guidance covering reporting requirements for the oversight of ESPCs and other energy contracts. We obtained a copy of the July 13, 2018, memorandum, "Reporting Requirements for the Oversight of Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs)." We also obtained a copy of the tracking spreadsheet referenced in this memorandum. As a result of the guidance and tracking spreadsheet, GAO closed the recommendation.

Of the 18 DoD OIG recommendations:

- Air Force Civil Engineer Center officials implemented and we closed 6 recommendations related to ESPC data and program management,
- Joint Base McGuire-Dix-Lakehurst officials implemented and we closed 5 recommendations related to base-level program management of an ESPC,
- NAVFAC officials implemented (and we closed) 4 of 6 recommendations related to ESPC data and program management, and
- DLA officials implemented one recommendation related to program management.

For a complete description of the recommendations and their status, see Appendix C.

The ASD(EI&E), Navy, and Air Force implemented 18 of the 21 recommendations, which resulted in improvements in ESPC data accumulation and program management. However, two of the recommendations to the Navy have yet to be fully implemented. In DODIG-2018-050, we made two recommendations to NAVFAC that remain open. These two recommendations suggested that NAVFAC:

- recover the unsupported currency fluctuation payments we calculated at \$250,000, and
- follow the contractually required process to calculate and approve currency adjustments in future years or modify the ESPC to establish a revised currency adjustment process.

The two recommendations to NAVFAC remain open because NAVFAC has not yet fully implemented the recommendations. On September 11, 2018, NAVFAC provided us an analysis which concluded that NAVFAC overpaid currency adjustments for performance years 1 through 10 by \$25,895. A NAVFAC official stated that they would pursue potential collection actions to recover the \$25,895 but did not indicate a target date to complete the recovery. However, the entire dollar impact is not known and may be more or less than the \$25,895 that NAVFAC calculated. Until NAVFAC performs the validation in accordance with the contract requirements, the unsupported payments cannot be recovered.

We are not making any additional recommendations for ESPC data accumulation and management because our new NAVFAC data validation recommendation mentioned in the prior section will enable the Navy to implement the two remaining data management recommendations.

Lack of Overall and DoD Component-Level ESPC Guidance

ASD(EI&E) and DoD Component ESPC project officials did not develop guidance for ESPC training, data management, contract administration, and disagreement resolution. The officials stated that they did not develop ESPC guidance because it was not their responsibility or they were not aware of ESPC statutory requirements.

ESPC project officials did not develop guidance for ESPC training, data management, and contract administration.

The Department of Energy Federal Energy Management Program provides Federal agencies with ESPC training and project facilitation services, including technical assistance, ESPC guidance, and contracting support.²⁰ The Federal agency receiving the energy-saving improvements is responsible for contract administration for the entire term of the contract. While the DoD maintains a general energy policy, it does not maintain a specific Defense-wide policy covering ESPCs. ESPC-specific policies are left to individual Military Departments. General DoD energy guidance is provided through DoD Directive 4180.01, which assigns responsibilities for energy planning, use, and management for the DoD.²¹

²⁰ Department of Energy - Federal Energy Management Program-M&V Guidelines: Measurement and Verifications for Performance Based Contracts Version 4.0, November 2015.

²¹ DoD Directive 4180.01, "DoD Energy Policy," April 16, 2014.

One GAO report, five DoD OIG reports, and one USAAA report found that at department and Component levels, DoD officials needed to establish or revise existing ESPC guidance. For example:

- In GAO-15-432, the GAO stated that the DoD did not have an overall process to systematically evaluate ESPC portfolio performance or identify savings.²² GAO stated that this occurred because contractors were not required to report this information.
- In DODIG-2018-050, which was issued 2.5 years after the GAO report, we found that the DoD still did not have overall guidance for implementing or using ESPCs. The DoD issued two energy management policies on administration, planning, programming, budgeting, material acquisition, and other activities that affect supply, reliability, and consumption of facility energy.²³ However, neither policy includes Defense-wide guidance that specifically governs administration of ESPCs.
- In DODIG-2016-087, we made recommendations that Air Force Civil Engineer Center officials revise ESPC guidance to correct five program management deficiencies: tracking ESPC project status, performing post award program management, performing ESPC training, verifying contractor-claimed energy savings, and maintaining a lessons-learned program. These deficiencies occurred because Air Force Civil Engineer Center officials considered program management of existing ESPC task orders to be an installation responsibility and training to be a Department of Energy Federal Energy Management Program responsibility. Air Force Civil Engineering Center officials stated that they could not centrally manage ESPC projects with existing technical support resources, and focused on meeting Air Force goals to develop additional ESPC projects rather than managing existing projects.

DoD and Component Officials Implemented or Improved ESPC Guidance

In the seven reports, the GAO, DoD OIG, and USAAA made 20 recommendations related to implementing or revising DoD and Component ESPC guidance. Of the 20 recommendations, the:

- ASD(EI&E) implemented 1 GAO recommendation related to establishing a process to systematically evaluate ESPC performance;
- ASD(EI&E) implemented 1 of 3 DoD OIG recommendations related to developing and implementing DoD-wide ESPC guidance (the ASD[EI&E] continues to work on the remaining two recommendations and set a new target date of early February 2019 for implementation);

²² GAO-15-432, “Energy Savings Performance Contracts Additional Actions Needed to Improve Federal Oversight,” June 17, 2015.

²³ DoD Directive 4180.01 and DoD Instruction 4170.11.

- Army implemented the 3 USAAA recommendations related to revising ESPC guidance;
- Navy implemented the 7 recommendations related to the lack of ESPC guidance;
- Air Force implemented the 3 recommendations related to the lack of ESPC guidance; and
- DLA implemented 3 recommendations related to the lack of ESPC guidance.

For a complete description of the recommendations and their status, see Appendix C.

The ASD(EI&E), Army, Navy, Air Force, and DLA implemented 18 recommendations to improve compliance with ESPC statutory requirements. Specifically, in response to the GAO report, ASD(EI&E) officials established ESPC guidance to evaluate the process of ESPC performance and provide a method for clearer reporting of savings.²⁴ The guidance directs DoD Components to collect and submit annual contractor measurement and verification to ASD(EI&E). The guidance further requires the DoD Component contracting officer or COR to review and accept the contractor measurement and verification reports before submission to ASD(EI&E). As a result of the DoD guidance, the GAO closed the recommendation.

The ASD(EI&E), Army, Navy, Air Force, and DLA also implemented guidance to address DoD OIG and USAAA recommendations. Specifically:

- In DODIG-2018-050, we recommended that the ASD(EI&E) develop and implement DoD-wide guidance to monitor ESPCs to include validating contractor-claimed energy savings included in post-installation and annual measurement and verification reports. The ASD(EI&E) implemented ESPC guidance on validating contractor-claimed energy savings. Therefore, the recommendation is closed.
- In DODIG-2017-044, we recommended that NAVFAC develop and implement a plan to manage ESPC contract administration elements. NAVFAC updated its ESPC policy on October 24, 2016, to develop and incorporate QASPs into task orders.²⁵ NAVFAC also updated its energy project management guide in January 2017, to include guidance in nominating, appointing, and training an ESPC COR and the appointment of a subject matter expert. Additionally, the updated policy included guidance for COR

²⁴ "Reporting Requirements for the Oversight of Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs)," July 13, 2018.

²⁵ Navy Acquisition Business Management System S-17.5.6, "Energy Savings Performance Contracts (ESPCs)," October 24, 2016.

validation of contractor-claimed savings included in post-installation and measurement and verification reports. Those changes met the intent of our recommendation and our recommendation is closed.

- In DODIG-2016-087, we recommended that the Air Force Civil Engineer Center revise existing internal guidance to establish and maintain an ESPC mechanism to track energy savings and project status for planned, in-process, completed, and terminated Air Force ESPC projects. The Air Force Civil Engineer Center implemented revised guidance in November 8, 2017, that addressed each of our recommended revisions. Therefore, our recommendation is closed.
- In DODIG-2018-135, we made two recommendations that the DLA consider developing standard operating procedures regarding the solicitation, competition, award, and administration of ESPCs to implement Federal Energy Management Program guidance. On September 27, 2018, the DLA implemented the recommendations by issuing a DLA-Energy ESPC Standard Operating Procedure. We also recommended that the DLA issue guidance to resolve internal Government disagreements over the contractor-claimed energy savings reported in post-installation and annual measurement and verification reports. The DLA used interagency agreements with DLA ESPC customers to implement the recommendation. The interagency agreements outline process, roles, and responsibilities and resolve disagreements. The use of the interagency agreements met the intent of our recommendation and our recommendation is closed.
- In A-2015-0046-MTP, the USAAA recommended that the Deputy Assistant Secretary of the Army (Procurement) issue policy guidance to administer the ESPCs and measure and evaluate contractor-claimed savings.²⁶ The USAAA also recommended that the Assistant Chief of Staff for Installation Management revise the 2008 Department of the Army Policy Guidance on the ESPCs. The Army implemented guidance to improve ESPC oversight, which resulted in the USAAA closing the recommendations.

Because the ASD(EI&E), Army, Navy, Air Force, and DLA implemented or are in the process of implementing all past 20 recommendations regarding ESPC guidance, we are making no further guidance-related recommendations in this report.

²⁶ A-2015-0046-MTP, "Measurement and Verification Controls for Energy Savings Performance Contracts," March 19, 2015.

Recommendations, Management Comments, and Our Response

Revised Recommendations

As a result of comments from the Office of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (SAF/AQ), we revised Recommendations 2.a, 2.b, and 2.c to state that the SAF/AQ should coordinate the recommended actions with the Air Force Civil Engineer Center Commander.

Recommendation 1

We recommend that the Commander, Naval Facilities and Engineering Command, direct the Naval Facilities and Engineering Command–Expeditionary Warfare Center Contracting Officer to obtain the date that the contractor received its annual payment from the Government for the contractor-claimed currency adjustments and apply that date to its validation calculations for performance years 1 and 3 through 10 for the Commander Fleet Activities Yokosuka energy savings performance contract.

Management Comments Required

The Commander of the Naval Facilities Engineering Command did not respond to the recommendation in the report. We request that the Commander provide comments on the final report.

Recommendation 2

We recommend that the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics direct Air Force energy savings performance contracting officers, and coordinate with the Air Force Civil Engineer Center Commander to:

- a. Identify all active legacy Air Force energy savings performance contracts with contractor-claimed energy savings not previously validated by the Government validation.**
- b. Validate all past contractor-claimed energy savings included in contractor post installation and measurement and verification reports not previously validated.**
- c. Based on the results of the validations, as mandated by law, take appropriate contractual action (if necessary), such as recovering unrealized guaranteed energy savings or buying out the remaining portion of the applicable contracts.**

Air Force Comments

The Associate Deputy Assistant Secretary of the Air Force for Contracting, responding for the SAF/AQ, stated that the Air Force Civil Engineer Center had the responsibility to manage, oversee, and evaluate the effectiveness of ESPCs. Specifically, the Associate Deputy stated that 2017 Air Force Civil Engineer Center ESPC guidance established the Air Force Civil Engineer Center's Energy Directorate as the central program manager to oversee all ESPC projects.²⁷ The Associate Deputy recommended that we revise Recommendations 2.a and 2.b to align with the requirements in the Air Force Civil Engineer Center ESPC guidance. The Associate Deputy acknowledged that the SAF/AQ needs to assist with the annual measurement and verification process and the overall execution of the ESPC program.

In addition, the Associate Deputy agreed with Recommendation 2.c. The Associate Deputy stated that the SAF/AQ will take contractual action to implement the conclusions from the validation process. The Associate Deputy also stated the SAF/AQ will inform the base contracting officials of the systemic issues identified in this DoD OIG report.

Our Response

We agree with the Associate Deputy's comments that the Air Force Civil Engineer Center has responsibility for Air Force ESPCs, as established in the 2017 Air Force Civil Engineer Energy Savings Performance Contracts Playbook. However, this is a joint responsibility between contracting officers and Air Force Civil Engineer Center officials. Contracting officers are ultimately responsible for their contracts and reviewing and approving contractor-claimed energy savings is a contractual responsibility. Furthermore, the SAF/AQ can direct the actions of Air Force contracting officers. Therefore, we revised Recommendations 2.a, 2.b, and 2.c to the SAF/AQ to recommend that the SAF/AQ coordinate with the Air Force Civil Engineer Center Commander.

The Associate Deputy's comments addressed Recommendation 2.c. Therefore, Recommendations 2.a and 2.b are unresolved and Recommendation 2.c is resolved. Recommendations 2.a, 2.b, and 2.c remain open. Once we verify that Air Force officials validated the contractor-claimed energy savings and applied appropriate contractual actions, we will close Recommendation 2.c.

We request further comments on revised Recommendations 2.a and 2.b from the SAF/AQ on the final report.

²⁷ The Air Force Civil Engineer Energy Savings Performance Contracts Playbook, January 8, 2018.

Appendix A

Scope and Methodology

We conducted this performance audit from April through November 2018 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.

We reviewed eight prior GAO, DoD OIG, and USAAA audit reports to summarize systemic problems related to the award and administration of ESPCs. We identified prior audit recommendations and DoD Component corrective actions for each systemic problem area as of June 30, 2018. We relied on the work of the eight prior audits to perform this audit and summarize findings and recommendations.

We reviewed the Navy's efforts to implement recommendations made in DODIG-2018-050, "Naval Facilities Engineering Command Administration of Selected Energy Savings Performance Contracts," December 19, 2017, and DODIG-2017-044, "Naval Facilities Engineering Command Management of Energy Savings Performance Contracts Needs Improvement," January 26, 2017, and determined whether corrective actions addressed the problems.

We visited Naval Station Great Lakes to review two ESPCs valued at \$125.9 million on their present status of COR delegation, tailored QASPs, validation of contractor-claimed energy savings, and maintenance and repair oversight. We followed up on the implementation of the recommendation to validate contractor-claimed energy savings achieved for the post-installation period and performance period of September 1, 2012, through August 31, 2013, as noted in DODIG-2017-044. In addition, we reviewed the 2 additional performance years of the original ESPC in the report to verify if the NAVFAC contracting office and base level public works officials adhered to Federal and DoD ESPC guidelines.

We reviewed the Air Force's efforts to implement recommendations made in DODIG-2016-087, "Air Force Civil Engineer Management of Energy Savings Performance Contracts," May 4, 2016, and DODIG-2015-138, "The Air Force Did Not Monitor the Energy Savings Performance Contract at Joint Base McGuire," June 29, 2015. We interviewed Joint Base McGuire-Dix-Lakehurst contracting personnel and visited the Air Force Civil Engineer Center ESPC program office at Tyndall Air Force Base, Florida, to obtain and review documentation, interview personnel, and determine whether Air Force Civil Engineer Center implemented the

recommendations in reports DODIG-2016-087 and DODIG-2015-138. We obtained and reviewed documentation to determine whether Joint Base McGuire-Dix-Lakehurst officials implemented resolved but open recommendations and to determine whether the corrective actions addressed the problems.

We reviewed Assistant Secretary of Defense for Energy, Installations, and Environment ASD(EI&E) efforts to implement DoD-wide level ESPC recommendations made in DODIG-2018-050 and two GAO reports, “Energy Savings Performance Contracts Additional Actions Needed to Improve Federal Oversight,” GAO-15-432, June 2015, and “Defense Infrastructure Additional Data and Guidance Needed for Alternatively Financed Energy Projects,” GAO-17-461, June 2017.

We interviewed USAAA officials regarding the status of Department of the Army efforts to implement guidance recommendations made in USAAA report A-2015-0046-MTP, “Measurement and Verification Controls for Energy Savings Performance Contracts,” March 19, 2015.

Status of DoD’s Implementation of Recommendations

We coordinated with the DoD OIG Audit Follow-up and Quality Assurance branch to obtain updated information on 62 recommendations closed since we, GAO, and USAAA issued the reports. We also obtained and reviewed documentation and other correspondence received to close the recommendations. We focused on the actions that the Navy and Air Force took to close the recommendations.

We interviewed Navy and Air Force ESPC program management and contracting personnel to identify how they implement corrective actions identified in the audit reports. We conducted testing, reviewed updated procedures, and verified documentation to verify that management had taken the recommended actions agreed upon. We interviewed ASD(EI&E) officials and obtained documentation regarding the status of our and GAO recommendations regarding data management and ESPC guidance. In addition, we briefed ASD(EI&E) officials on the status of our efforts to close-out recommendations to DoD Components regarding implementation of QASPs, measurement and verification validation, ESPC data management, and ESPC guidance.

We visited the Air Force Civil Engineer Center ESPC program office at Tyndall Air Force Base, Florida. We interviewed Center officials and obtained documentation to determine whether the Center implemented our recommendations for measurement and verification validation, ESPC data management, and ESPC guidance.

We interviewed Joint Base McGuire-Dix-Lakehurst contracting officials and reviewed documentation to determine whether the contracting officials implemented corrective actions to address our recommendations relating to COR appointment, QASP implementation, measurement and verification validation, and ESPC data management.

At Naval Station Great Lakes, Illinois, we performed a follow-up review of two ESPCs, with a total value of \$125.9 million. This follow-up included review of on-site monitoring and ESPC contract administration, including validation of contractor measurement and verification reports. We performed a tour of installed ESPC energy conservation measures at the base. We accessed the appointed COR's oversight of maintenance and repair for the ESPC energy conservation measures. We also obtained and reviewed contractor post-installation and measurement and verification reports and determined whether NAVFAC officials performed validations of contractor-claimed energy savings. Finally, we reviewed the implemented QASP to determine if it was tailored to specific energy conservation measures.

Use of Computer-Processed Data

We did not use computer-processed data in this audit.

Appendix B

Prior Coverage

Since FY 2013, the GAO, DoD OIG, and USAAA have issued eight audit reports outlining findings related to the administration of ESPCs within the DoD.

GAO

Report GAO-17-461, “Defense Infrastructure: Additional Data and Guidance Needed for Alternatively Financed Energy Projects,” June 20, 2017

GAO reviewed 17 contracts at 11 installations and determined that the Military Services did not collect or provide accurate measurement and verification data for ESPC projects. GAO found that some costs, such as costs for operation and maintenance and repair and replacement of equipment, add to overall project costs and may not be included in the total contract payments. The Military Services could not provide GAO a total contract cost for 196 of 446 ESPCs. GAO stated that project modifications, detrimental maintenance, and operational actions may affect the performance of the instituted ESPC measures. GAO recommended that the Military Services collect and provide to the DoD complete and accurate data on all alternatively financed energy projects. The DoD concurred with the recommendation.

Report GAO-15-432, “Energy Savings Performance Contracts: Additional Actions Needed to Improve Federal Oversight,” June 2015

GAO selected a sample of 20 ESPCs in a total of seven Federal agencies to determine whether the agencies achieved energy savings and the Government’s interests were protected. Of the 20 sampled ESPCs, 12 were related to the DoD. Four selected projects were Department of Air Force-related, three related to the Department of the Army, and five related to the Department of the Navy. GAO found that contractor-claimed energy savings overstated actual energy savings for 14 of the 20 ESPCs reviewed. GAO determined that Federal agencies were not always aware the savings that were not achieved and did not perform some oversight activities included in guidance because they were unaware of these duties or how to perform them. GAO recommended that the Secretary of Energy improve oversight of ESPC projects. GAO also recommended that the Secretaries of Defense, Energy, and Veterans Affairs, the Attorney General, and the Administrator of the General Services Administration systematically

evaluate ESPC portfolio performance, present clearer reporting of savings, and improve training. The DoD agreed or partially agreed to the GAO recommendations, stating that the DoD was developing methodologies to enable the assessment of ESPC expected savings and long-term viability.

DoD OIG

Report No. DODIG-2018-135, "Defense Logistics Agency Award and Administration of Energy Savings Performance Contracts," July 6, 2018

DLA-Energy contracting officials competitively solicited and awarded 10 ongoing ESPCs, valued at \$343.5 million. In addition, DLA-Energy contracting and base-level public works officials properly administered four of seven ESPCs we reviewed by appointing CORs and validating contractor-claimed energy savings. However, DLA-Energy contracting and base-level public works officials did not document validation of the contractor-claimed energy savings in 2 of 52 measurement and verification reports that supported a total of \$0.9 million in contract payments. DLA-Energy contracting officials and base-level public works officials disagreed about whether the contractor sufficiently supported \$1.8 million in contractor-claimed energy savings for another ESPC project. We recommended that DLA-Energy officials validate ESPC project contractor-claimed energy savings achieved for three ESPCs. We also recommended that DLA-Energy implement a standard operating procedure to resolve internal Government disagreements over contractor-claimed energy savings. DLA-Energy officials agreed or partially agreed with the recommendations.

Report No. DODIG-2018-050, "Naval Facilities Engineering Command Administration of Selected Energy Savings," December 19, 2017

NAVFAC officials did not properly administer seven ESPCs, valued at \$822.7 million. NAVFAC contracting officials did not tailor QASPs to the specifics of each implemented energy conservation measure; describe how to validate contractor-submitted energy-savings reports; and oversee contractor maintenance, repair, and replacement of energy conservation measures. Additionally, contracting and base public works officials did not validate 9 of 11 contractor-proposed currency escalation modifications, in accordance with requirements, for the ESPC at Commander Fleet Activities, Yokosuka, Japan. We recommended that the ASD(EI&E) develop and implement DoD-wide

guidance and that the ASD(EI&E) coordinate with the Defense Procurement and Acquisition Policy Director to require ESPC oversight through QASPs. We also recommended that the NAVFAC Commander:

- direct NAVFAC officials to perform all higher-level reviews of contracted energy savings worth \$22 million for validation—including the validation of currency fluctuation—in developing QASPs;
- train personnel to make manual adjustments to account for future year electronic payment revisions; and
- recover payments for unrealized energy savings and unsupported currency fluctuations.

The ASD(EI&E) agreed with the recommendations. NAVFAC officials agreed or partially agreed with the recommendations.

Report No. DODIG-2017-044, “Naval Facilities Engineering Command Management of Energy Savings Performance Contracts Needs Improvement,” January 26, 2017

NAVFAC officials did not effectively manage 38 ongoing performance-phase ESPCs, valued at \$1.55 billion. NAVFAC officials did not initially appoint CORs, did not validate post-installation or measurement and verification reports, and did not perform higher-level reviews of the contractor-claimed energy savings. This lack of review and validation of reports totaled \$67.6 million in questionable contractor-claimed energy savings. We recommended that the NAVFAC Commander direct program and contracting officials to validate and perform required reviews of the \$67.6 million contractor-claimed guaranteed energy-savings. We also recommended that the Commander direct NAVFAC officials to develop a plan to fill COR vacancies to ensure that QASPs, post-installation reviews, measurement and verification validations, and base-and higher-level reviews are completed. NAVFAC officials agreed with the recommendations.

Report No. DODIG-2016-087, “Air Force Civil Engineer Center Management of Energy Savings Performance Contracts Needs Improvement,” May 6, 2016

The Air Force Civil Engineer Center did not centrally manage 52 existing ESPCs, valued at \$849 million. Specifically, the Air Force Civil Engineer Center did not perform post-award program management, track project status, verify energy savings resulting from the projects as mandated by statute, track required ESPC training, and maintain an Air Force ESPC lessons-learned program. As a result, Air Force officials did not know whether the 52 existing ESPC projects

achieved contractor-guaranteed energy savings, which were to be the basis of payments to the project contractors and the basis of compliance with 42 U.S.C. § 8287. We recommended that the Air Force Civil Engineer Center Commander improve ESPC controls and validate energy savings for existing projects, develop an ESPC lessons-learned mechanism for Air Force ESPC projects, and develop a plan to provide post-award ESPC technical support using available Air Force or Department of Energy engineers. The Air Force agreed with the recommendations.

Report No. DODIG-2015-138, "The Air Force Did Not Monitor Energy Savings Performance at Joint Base McGuire," June 29, 2015

Air Force controls for monitoring the contractor's ESPC performance at Joint Base McGuire-Dix-Lakehurst were not effective. Specifically, the contracting officer did not delegate a COR to oversee contractor performance. Base civil engineering officials did not create, and the contracting officer did not review, a QASP. The contracting officer did not perform contractor surveillance, document contractor compliance with contract requirements, or validate actual contractor energy savings. The contracting officer did not approve the contractor's post-installation report, as required by the contract. The contracting officer and civil engineering officials directed payment of four invoices, totaling \$18.96 million, even though the contracting officer had not approved the post-installation report and subsequent annual measurement and verification reports from the contractor. Air Force Civil Engineer Center program management and civil engineering officials did not provide required ESPC training to Joint Base McGuire-Dix-Lakehurst engineering, contracting, financial, and legal staff. As a result, Air Force officials do not know whether the approximately \$19 million spent and approximately \$115 million planned for the remaining contract performance will result in energy savings. We recommended that the contracting officer delegate responsibility to the COR to inspect project deliverables, contractor vouchers, and report contractor performance information. We also recommended that the Air Force develop QASPs, hold officials accountable for lack of contract surveillance, process payment invoices, and implement ESPC training. We recommended that the Air Force validate Joint Base McGuire-Dix-Lakehurst energy savings achieved for ESPC performance years 0 through 3 and determine whether the contractor's performance warranted the energy savings paid. The Air Force agreed to the recommendations with the exception of the QASP recommendation.

U.S. Army Audit Agency

Report Number A-2015-0046-MTP, "Measurement and Verification Controls for Energy Savings Performance Contracts," March 19, 2015

The USAAA reviewed measurement and verification controls supporting the ESPCs at four Army bases. Multiple contracting agencies awarded the ESPCs from January 2009 through May 2011. At three of four sites reviewed, the USAAA concluded that, although the ESPCs resulted in some reduction in energy usage, measurement and verification controls sometimes were not in place or operating. These controls included, but were not limited to, commissioning of installed equipment, surveys and inspections, and validation of post-installation reports and annual measurement and verification reports. The controls were not in place or operating because Army guidance for ESPC implementation conflicted on when post-installation reports were due; key personnel did not have sufficient ESPC training; the Army did not sufficiently develop measurement and verification plans to ensure proper government monitoring; and the ESPCs were not properly administered. As a result, as of December 10, 2013, two of the four installations paid approximately \$13.3 million with little assurance that they achieved 100 percent of their guaranteed savings. The USAAA concluded that, unless the two installations strengthened their controls, they could continue to pay about \$127.4 million over the life of the ESPCs and not have assurance that they will achieve the future guaranteed saving. The USAAA recommended that the Deputy Assistant Secretary of the Army (Procurement) issue policy guidance to reference ESPC-specific training and ensure the ESPCs contain QASPs. The USAAA also recommended that the Assistant Chief of Staff for Installation Management revise the Department of the Army Policy to implement ESPC validation report due dates, develop a measurement and verification template, and provide additional data on ESPC training. The Deputy Assistant Secretary agreed with the report's recommendations.

Appendix C

Status of Prior GAO, DoD OIG, and USAAA Recommendations

The eight GAO, DoD OIG, and USAAA audit reports made a total of 70 recommendations to the OSD, Army, Navy, Air Force, and DLA. As of December 31, 2018:

- 62 of the 70 recommendations were closed, and
- 8 of the 70 recommendations were resolved but open pending implementation of the agreed-to action.

The recommendations are broken out into the five systemic issues:

1. **CORs** – Contracting officers either did not designate a COR for a specific ESPC or did not delegate contract administration responsibilities for the ESPCs to CORs. We made nine recommendations related to this systemic issue.
2. **QASPs** – Contracting officers did not develop and tailor QASPs for ESPCs. We made four recommendations related to this systemic issue.
3. **Savings Verification** – CORs and contracting officers did not review or verify annual contractor-claimed energy savings and associated Government contract payments. We made 16 recommendations related to this systemic issue.
4. **Project Data** – ESPC program managers did not accumulate and use ESPC project data to determine project effectiveness. We made 21 recommendations related to this systemic issue.
5. **Guidance** – ASD(EI&E) and DoD Component ESPC program officials did not develop guidance for ESPC training, data management, contract administration, and disagreement resolution. We made 20 recommendations related to this systemic issue.

The following table identifies each of the 70 recommendations and their status.

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
GAO-17-461 “Defense Infrastructure Additional Data and Guidance Needed for Alternately Financed Energy Projects”			
1	Project Data	1. To assist the DoD and Congress in their oversight of the DoD’s alternately financed energy projects, we recommend that the Secretary of Defense direct the Military Services to collect complete and accurate data on their alternately-financed energy projects, including data on the Services’ financial obligations and cost savings, and provide the data to the DoD at least annually to aid departmental oversight.	Closed
GAO-15-432 “Energy Savings Performance Contracts Additional Actions Needed to Improve Federal Oversight”			
2	Project Data	9. To help ensure that agencies have sufficient information on ESPC performance to oversee whether future and current contracts are achieving their expected savings, the Secretaries of Defense and Energy should specify in the scheduled revisions to their ESPC contract vehicles or in guidance to agencies that measurement and verification reports for future projects are to include estimates of cost and energy savings that were not achieved because of agency actions. Additionally, the Department of Energy may wish to consider periodically analyzing data on other factors that may affect savings, such as utility prices, to provide information on how savings achieved by ESPCs awarded through its contract vehicle have been affected by changing utility prices since its prior study in 2007.	Closed
3	Project Data	11. To help ensure that agencies have sufficient information on ESPC performance to oversee whether future and current contracts are achieving their expected savings, the Secretaries of Defense, Energy, and Veterans Affairs; the Attorney General; and the Administrator of the General Services Administration should work with contractors to determine the best way to obtain estimates of cost and energy savings that are not achieved because of agency actions and to include these estimates in future measurement and verification reports for existing contracts, in accordance with Department of Energy guidance, and where economically feasible.	Closed
4	Guidance	2. To help ensure that agencies have sufficient information on the effects of changing circumstances on the performance of their ESPC portfolios, the Secretaries of Defense, Energy, and Veterans Affairs; the Attorney General; and the Administrator of the General Services Administration should establish a process to systematically evaluate their ESPC projects--including baseline assumptions about facilities’ energy use, utility prices, and interest rates--to determine how their ESPC portfolios are performing and the extent to which they are achieving expected savings. Agencies could consider conducting such evaluations either after a certain number of years or in response to events, such as changes in utility prices or market interest rates or appropriations becoming available that could be used for modifications or terminations.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
DODIG-2018-135 “Defense Logistics Agency Award and Administration of Energy Savings Performance Contracts”			
5	Verify Savings	1.a.1. DLA–Energy Commander direct DLA–Energy contracting officials to validate ESPCs contractor-claimed energy savings achieved for Fort Hood Delivery Order Number 1 (SPO600-03-F-8274) performance year 1 (September 1, 2005, through August 31, 2006).	Closed
6	Verify Savings	1.a.2. DLA–Energy Commander direct DLA–Energy contracting officials to validate ESPCs contractor-claimed energy savings achieved for Fort Hamilton Delivery Order Number 1 (SPO600-02-F-8257) performance year 1 (October 1, 2002, through September 30, 2003).	Closed
7	Verify Savings	1.a.3. DLA–Energy Commander direct DLA–Energy contracting officials to validate ESPCs contractor-claimed energy savings achieved for Fort Hamilton Delivery Order Number 2 (SPO600-15-F-8001) post-installation period completed August 17, 2017, and performance year 1 (August 18, 2017, through August 17, 2018).	Closed
8	Project Data	1.b. DLA–Energy Commander direct DLA–Energy contracting officers, based on the result of the validation, as mandated by law, to take appropriate contractual action (if necessary), such as recovering unrealized guaranteed energy savings or buying out the remaining portion of the applicable contracts.	Closed
9	Guidance	1.c.1. DLA–Energy Commander consider developing standard operating procedures regarding the solicitation, competition, award, and administration of ESPCs to implement Federal Energy Management Program guidance regarding developing and implementing energy savings performance projects.	Closed
10	Guidance	1.c.2. DLA–Energy Commander consider developing standard operating procedures regarding the solicitation, competition, award, and administration of ESPCs to implement Federal Energy Management Program guidance regarding validating contractor-claimed energy savings reported in post-installation and annual measurement and verification reports.	Closed
11	Guidance	1.d. DLA–Energy Commander develop and implement a standard operating procedure regarding resolving internal Government disagreements over the contractor-claimed energy savings reported in post-installation and annual measurement and verification reports.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
DODIG-2018-050 “Naval Facilities Engineering Command Administration of Selected Energy Savings Performance Contracts”			
12	QASPs	A.2.d.1. The Commander, NAVFAC Direct the NAVFAC–Expeditionary Warfare Center contracting officer to develop tailored QASPs for ESPCs at Commander Fleet Activities Yokosuka, Naval Air Station Oceana, and Marine Corps Logistics Base Albany to include methods for ESPCs on how to validate periodic contractor-claimed energy savings in post-installation and annual measurement and validation reports.	Closed
13	QASPs	A.2.d.2. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center Contracting Officer to develop tailored QASPs for ESPCs at Commander Fleet Activities Yokosuka, Naval Air Station Oceana, and Marine Corps Logistics Base Albany to include methods on how to monitor the specifics of the individual energy conservation measures listed in the ESPC to aid in properly monitoring the onsite performance of ESPCs.	Closed
14	Verify Savings	A.2.a. The NAVFAC Commander direct NAVFAC–Expeditionary Warfare Center and base Public Works officials to validate ESPCs contractor-claimed energy savings achieved for: <ul style="list-style-type: none"> • Naval Air Station Oceana (Main Base Delivery Order #1) for performance years 0, 1, 2, 3, 4, 5, 6, 9, 10, and 11; and • Marine Corps Logistic Base Albany (Delivery Order #1) performance years 1, 2, 3, 4, 5, 6, 8, and 9. 	Closed
15	Verify Savings	A.2.c. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center program and contracting officials to perform higher-level review of ESPCs contractor-guaranteed energy savings achieved for: <ul style="list-style-type: none"> • Naval Air Station Oceana (Delivery Order #1) performance period years 9 and 10; and • Marine Corps Logistics Base Albany (Delivery Order #1) performance years 8 and 9. 	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
16	Verify Savings	<p>B.1.a. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center Contracting Officer to validate contractor-proposed currency adjustments for the Commander Fleet Activities Yokosuka performance of September 1, 2008, through August 31, 2017 (performance years 1, 2, 3, 4, 5, 6, 7, 8, and 9).</p> <p><u>Reason Recommendation Remains Open:</u> On September 11, 2018, the Navy provided us a NAVFAC analysis that concluded the Navy overpaid currency adjustments of approximately \$25,895. The NAVFAC analysis was not based on the contractually-compliant methodology of using the date the contractor received payment and the rate published in the Wall Street Journal for calculating the currency adjustments for performance years 1 and 3 through 10. NAVFAC officials used the correct methodology to calculate the currency adjustment for performance year 2.</p> <p>We will close this recommendation when the Navy provides documentation showing that NAVFAC officials validated the currency adjustments in accordance with contract requirements.</p>	Resolved But Open
17	Project Data	A.2.b. The NAVFAC Commander direct NAVFAC–Expeditionary Warfare Center contracting officers, based on the result of the validation, as mandated by law, to take appropriate contractual action (if necessary), such as recovering unrealized guaranteed energy savings.	Closed
18	Project Data	<p>B.1.b.1. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center Contracting Officer to recover the unsupported currency fluctuation payments calculated by the audit at \$250,000.</p> <p><u>Reason Recommendation Remains Open:</u> On September 11, 2018, the Navy provided us a NAVFAC analysis that concluded the Navy overpaid currency adjustments of approximately \$25,895. A Navy official stated they would pursue potential collection actions to recover the \$25,895 but did not indicate a target date to implement the recommendation. However, the analysis for performance years 1 and 3 through 10 was not done in accordance with the contractual requirements.</p> <p>We will close this recommendation when the Navy provides documentation showing that NAVFAC officials validated the currency adjustments in accordance with contract requirements and pursued collection of over payments, if any, identified during the validation.</p>	Resolved But Open

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
19	Project Data	<p>B.1.b.2. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center Contracting Officer to follow the contractually required process to calculate and approve currency adjustments in future years or modify contract Clause H-27 and the detailed energy survey to establish a revised process.</p> <p><u>Reason Recommendation Remains Open:</u> We determined that as of September 11, 2018, the Navy had partially implemented this recommendation. Navy officials stated that, going forward, NAVFAC had modified yen-dollar exchange contractual language for new contracts in Japan and provided support of that change. However, Navy officials also stated that the contractor had verbally refused to accept a bilateral revision to the contract that was the subject of our recommendation. Navy officials stated that they would continue to pursue methods to change the task order that the contractor would accept.</p> <p>We will close this recommendation when the Navy provides documentation showing that NAVFAC officials validated the currency adjustments in accordance with contract requirements and when the Navy agrees to continue to use this methodology to validate currency adjustments for the remaining performance years of this ESPC.</p>	Resolved But Open
20	Project Data	B.1.b.3. The NAVFAC Commander direct the NAVFAC–Expeditionary Warfare Center Contracting Officer to modify the contract to reduce contract price and de-obligate \$760,000 to the Commander Fleet Activities Yokosuka ESPC.	Closed
21	Project Data	B.1.d. The NAVFAC Commander direct the NAVFAC-Expeditionary Warfare Center Director to provide training to all ESPC contracting officials on adjustments to the electronic accounting systems to record and account for future year payment revisions created by contractual currency rate adjustments.	Closed
22	Guidance	B.1.c. The NAVFAC Commander issue guidance to adjust electronic accounting systems to record and account for future year payment revisions created by contractual currency rate adjustments.	Closed
23	Guidance	A.1.a. The ASD(EI&E) develop and implement DoD-wide guidance to monitor ESPCs to include validating contractor-claimed energy savings included in post-installation and annual measurement and verification reports.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
24	Guidance	<p>A.1.b.1. The ASD(EI&E) coordinate with the Director for Defense Procurement and Acquisition Policy to require oversight of the ESPCs by the development of quality assurance surveillance plans tailored to the specific energy conservation measures in the ESPCs.</p> <p><u>Reason Recommendation Remains Open:</u> The DoD implementation date was November 27, 2018. On December 19, 2018, ASD(EI&E) officials stated they were still working to implement the recommendation and set a new target of early February 2019.</p>	Resolved But Open
25	Guidance	<p>A.1.b.2. The ASD(EI&E) to coordinate with the Director, Defense Procurement and Acquisition Policy to monitor ESPC programs to ensure consistent award and administration throughout the Department.</p> <p><u>Reason Recommendation Remains Open:</u> The DoD implementation date was November 27, 2018. On December 19, 2018, ASD(EI&E) officials stated they were still working to implement the recommendation and set a new target of early February 2019.</p>	Resolved But Open
DODIG-2017-044 “Naval Facilities Engineering Command of Energy Savings Performance Contracts Needs Improvement”			
26	CORs	1.a.1. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Commander Fleet Activity Yokosuka (N47408-00-D-8117-0002).	Closed
27	CORs	1.a.2. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Joint Base Anacostia-Bolling (F44650-99-D-0001-0001).	Closed
28	CORs	1.a.3. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Naval Air Station Oceana (Main Base N47408-03-F-5114).	Closed
29	CORs	1.a.4. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Naval Air Station Oceana (Main Base N62583-09-F-0104).	Closed
30	CORs	1.a.5. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Naval Air Station Oceana (Dam Neck Annex N62473-07-F-4005).	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
31	CORs	1.a.6. The NAVFAC Commander direct base-level public works officers to identify and nominate qualified CORs, and the NAVFAC Expeditionary Warfare Center contracting officers to appoint qualified CORs for ESPCs at Naval Station Newport (N62583-08-F-0095).	Closed
32	Verify Savings	1.b.1. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center officials to document the validity of prior year ESPCs' contractor-claimed energy savings achieved for Commander Fleet Activity Yokosuka post-installation period completed on November 14, 2008, and performance periods of September 1, 2008, through August 31, 2009, and September 1, 2009, through August 31, 2010.	Closed
33	Verify Savings	1.b.2. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center officials to document the validity of prior year ESPCs' contractor-claimed energy savings achieved for Naval Air Station Oceana (Dam Neck Annex) post-installation period completed on September 30, 2008, and performance periods of October 1, 2008, through September 30, 2009, and October 1, 2009, through September 30, 2010.	Closed
34	Verify Savings	1.b.3. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center officials to document the validity of prior year ESPCs' contractor-claimed energy savings achieved for Naval Air Station Oceana (Main Base) post-installation period completed on December 17, 2010.	Closed
35	Verify Savings	1.b.4. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center officials to document the validity of prior year ESPCs' contractor-claimed energy savings achieved for Naval Station Great Lakes post-installation period completed on August 31, 2011, and performance period of September 1, 2012, through August 31, 2013.	Closed
36	Verify Savings	1.b.5. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center officials to document the validity of prior year ESPCs' contractor-claimed energy savings achieved for Marine Corps Logistic Base Albany post-installation period completed on February 29, 2012, and performance periods of May 1, 2012, through April 30, 2013, and May 1, 2013, through April 30, 2014.	Closed
37	Verify Savings	1.d.1. The NAVFAC Commander direct NAVFAC officials to perform NAVFAC-required higher-level reviews of the ESPCs' contractor-claimed energy savings achieved for Naval Air Station Oceana (Dam Neck Annex) for performance period of September 1, 2012, through August 31, 2013.	Closed
38	Verify Savings	1.d.2. The NAVFAC Commander direct NAVFAC officials to perform NAVFAC-required higher-level reviews of the ESPCs' contractor-claimed energy savings achieved for Naval Air Station Oceana (Main Base) for performance periods of February 1, 2012, through January 31, 2013, February 1, 2013, through January 31, 2014, and February 1, 2014, through January 31, 2015.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
39	Project Data	1.c. The NAVFAC Commander direct NAVFAC Expeditionary Warfare Center contracting officers, based on the results of the validation and as statutorily mandated, to take appropriate contractual action (if necessary), such as recovering unrealized guaranteed energy savings or canceling the remaining portion of the contract.	Closed
40	Guidance	1.e.1. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of NAVFAC Expeditionary Warfare Center and base-level public works personnel properly conducting contract administration of all ongoing energy performance services contracts, regardless of the contract phase.	Closed
41	Guidance	1.e.2. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of base-level public works personnel notifying the NAVFAC Expeditionary Warfare Center contracting officer of vacancies in contracting officer's representative positions.	Closed
42	Guidance	1.e.3. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of base-level public works personnel maintaining continuity of contracting officer's representative duties until the contracting officer's representative vacancies are filled.	Closed
43	Guidance	1.e.4. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of NAVFAC Expeditionary Warfare Center contracting officers implementing quality assurance surveillance plans to monitor ongoing performance-phase energy performance services contracts.	Closed
44	Guidance	1.e.5. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of NAVFAC Expeditionary Warfare Center and base-level public works personnel completing validation of contractor-provided post-installation and measurement and verification reports and completing higher-level reviews of those validations.	Closed
45	Guidance	1.e.6. The NAVFAC Commander develop and implement a plan to manage ESPCs that addresses the importance of NAVFAC Expeditionary Warfare Center officials, base-level public works personnel, and NAVFAC subject-matter experts resolving disputes related to the methods for validation of post-installation and measurement and verification.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
DODIG-2016-087 “Air Force Civil Engineer Center Management of Energy Savings Performance Contracts Needs Improvement”			
46	Verify Savings	<p>1.c. The Air Force Civil Engineer Center Director validate Joint Base Charleston ESPC savings achieved for performance years 2 through 8 as statutorily mandated and recommend the contracting officer take appropriate contractual action, such as recovering unrealized guaranteed energy savings or buying out the remaining portion of the contract.</p> <p><u>Reason Recommendation Remains Open:</u> The Air Force could not provide documentation to show that officials validated performance years 2 through 8. Air Force officials stated that the validation consisted of an e-mail opinion of a contracted subject matter expert. Air Force officials stated that they are now in the process of documenting and approving the validation. We will close the recommendation once we receive the documentation showing the validation.</p>	Resolved But Open
47	Project Data	1.b. The Air Force Civil Engineer Center Director conduct a review of existing electronic data management systems to determine if there is a system capable of tracking energy savings and project status.	Closed
48	Project Data	1.d. The Air Force Civil Engineer Center Director develop and maintain a process to distribute and coordinate Department of Energy–Federal Energy Management Program ESPC training for Air Force stakeholders.	Closed
49	Project Data	1.e. The Air Force Civil Engineer Center Director coordinate with the Department of Energy-Federal Energy Management Program to obtain Air Force ESPC training data.	Closed
50	Project Data	1.f. The Air Force Civil Engineer Center Director maintain lessons learned for ESPCs for the Air Force.	Closed
51	Project Data	1.g. The Air Force Civil Engineer Center Director develop and implement a management plan for Air Force Civil Engineer Center and Base Civil Engineer oversight of existing Air Force ESPC projects.	Closed
52	Project Data	1.h. The Air Force Civil Engineer Center Director develop a plan to provide post-award ESPC technical support using available engineers and resource-efficiency managers.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
53	Guidance	1.a. The Air Force Civil Engineer Center Director revise existing Engineering Technical Letters to establish and maintain an ESPC mechanism to track energy savings and project status for planned, in-process, completed, and terminated Air Force ESPC projects. The database should include, but not be limited to, appropriate contract references, validated baselined energy savings achieved, payments made, and related primary ESPC documents, such as preliminary assessments, investment-grade audits, measurement and verification plans, post-installation reports, annual measurement and verification reports, and Government technical analyses and validation documentation of such reports.	Closed
54	Guidance	1.i. The Air Force Civil Engineer Center Director revise Engineering Technical Letters to require the Air Force Civil Engineer Center to coordinate with the Department of Energy–Federal Energy Management Program regarding Federal Energy Management Program post-award technical review support services if Air Force resources are not available.	Closed
DODIG-2015-138 “The Air Force Did Not Monitor the Energy Savings Performance Contract at Joint Base McGuire”			
55	QASPs	1.d. The Joint Base McGuire Commander require the 87th Civil Engineering Squadron to develop a QASP that includes procedures to survey, observe, test, sample, evaluate, and validate contractor-reported energy savings for performance years 0 through 3 and maintenance activities.	Closed
56	QASPs	2.c. The 87th Contracting Squadron Commander direct the contracting officer to review the QASP developed by program officials to determine whether the plan sufficiently addresses monitoring and documenting contractor performance.	Closed
57	CORs	1.c.1. The Joint Base McGuire Commander require the contracting officer to delegate the COR appropriate responsibility to perform periodic reporting to the contracting officer.	Closed
58	CORs	1.c.2. The Joint Base McGuire Commander require the contracting officer to delegate the COR appropriate responsibility to report contractor performance information in the Contractor Performance and Assessment Reporting System.	Closed
59	CORs	1.c.3. The Joint Base McGuire Commander require the contracting officer to delegate the COR appropriate responsibility to review and certify contractor vouchers and related support.	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
60	Verify Savings	<p>2.a. The 87th Contracting Squadron Commander direct the contracting officer to validate actual energy savings achieved for contract performance years 0 through 3 before approving additional contract payments.</p> <p><u>Reason Recommendation Remains Open:</u> The Air Force could not provide documentation to show that officials validated performance years 0 through 3. Air Force officials stated that the validation consisted of an e-mail opinion of a contracted subject matter expert. Air Force officials stated that they are now in the process of documenting and approving the validation. We will close the recommendation once we receive the documentation showing the validation.</p>	Resolved But Open
61	Verify Savings	<p>2.b. The 87th Contracting Squadron Commander should direct the contracting officer to review payments made for performance years 0 through 3 and determine whether the contractor’s performance warranted the energy savings paid to the contractor.</p> <p><u>Reason Recommendation Remains Open:</u> The Air Force could not provide documentation to show that officials validated performance years 0 through 3. Air Force officials stated that the validation consisted of an e-mail opinion of a contracted subject matter expert. Air Force officials stated they are in the process of documenting and approving the validation. We will close the recommendation once we receive the documentation showing the validation.</p>	Resolved But Open
62	Project Data	<p>1.a. The Joint Base McGuire Commander review the contracting officer actions to monitor the performance of the Joint Base McGuire delivery order and initiate management or other actions, as appropriate, concerning contracting officer’s actions.</p>	Closed
63	Project Data	<p>1.b. The Joint Base McGuire Commander review 87th Contracting Squadron and 87th Civil Engineering Squadron officials’ actions to direct payment of four contractor invoices, totaling \$18.96 million, and initiate management or other actions, as appropriate, regarding these payments to determine whether to hold the officials accountable.</p>	Closed
64	Project Data	<p>1.f. The Joint Base McGuire Commander, in coordination with Air Force Civil Engineer Center, implement ESPC training to Joint Base McGuire engineering, contracting, financial, and legal staff, as required by Air Force Civil Engineer Center Engineering Technical Letter 13-13.</p>	Closed
65	Project Data	<p>2.d. The 87th Contracting Squadron Commander direct the contracting officer to suspend plans to modify the delivery order until the project is determined to be life-cycle cost effective and actual savings generated from the project have been validated in accordance with contract requirements.</p>	Closed

Status of Prior GAO, DoD OIG, and USAAA Recommendations (cont'd)

Systemic Issue		Recommendation Number and Reason Recommendation is Open	Status
66	Project Data	2.e. The 87th Contracting Squadron Commander direct the contracting officer to ensure that proposals for work outside the scope of the delivery order are properly competed in accordance with contracting and completion regulations.	Closed
67	Guidance	1.e. The Joint Base McGuire Commander require the 87th Civil Engineering Squadron to develop and implement base-level controls covering contract voucher analysis and certification responsibilities.	Closed
A-2015-0046-MTP "Measurement and Verification Controls for Energy Savings Performance Contracts"			
68	Guidance	1. The Deputy Assistant Secretary of the Army (Procurement) issue policy guidance to refer contracting officers assigned to administer ESPCs to the Federal Energy Management Program's website (http://apps1.eere.energy.gov/femp/training) for additional ESPC-specific training as needed.	Closed
69	Guidance	2. The Deputy Assistant Secretary of the Army (Procurement) issue policy to ensure that ESPCs contain performance surveillance plans that have sufficient government surveillance techniques (surveys, inspections, and so forth) to measure and/or validate reported savings.	Closed
70	Guidance	3. The Assistant Chief of Staff for Installation Management revise the Department of the Army policy guidance for implementation of an ESPC as follows: <ul style="list-style-type: none"> Clarify the timing of when post-installation reports are due, when energy managers should review them, and when energy managers should accept the reports. Within the guidance and the template for the measurement and verification plan, specify government requirements for witnessing and documenting the commissioning and post-installation activities. Require that activities write performance surveillance plans toward the intent of Government monitoring with a detailed surveillance checklist stating what, when, and how energy managers will check energy conservation measures. Provide additional detail on ESPC training resources, such as directing personnel to use the Federal Energy Management Program's Web site (http://apps1.eere.energy.gov/femp/training) for additional training as needed, and include directions for navigating to ESPC-specific training. Require personnel to maintain training records. 	Closed

Management Comments

Office of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics Comments



DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

OFFICE OF THE SECRETARY

28 January 2019

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

FROM: SAF/AQC
1060 Air Force Pentagon Suite 4C149
Washington, DC 20330

SUBJECT: DoDIG Draft Report, Summary and Follow-up Report on Audits of DoD Energy Savings Performance Contracts (ESPC) (Project D2018-D000RK-0121.000)

1. SAF/AQC non-concurs with recommendation 2a, concurs with comment to recommendation 2b, and concurs with recommendation 2c. Please see the attached management comments for additional details.
2. If you have any questions or concerns with our comments, please contact [REDACTED]

Handwritten signature of Scott A. Kiser in black ink.

SCOTT A. KISER, SES, DAF
Associate Deputy Assistant Secretary (Contracting)
Assistant Secretary of the Air Force
(Acquisition, Technology & Logistics)

Attachment:
Management Comments

Office of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics Comments (cont'd)

Department of Defense Inspector General
Follow-up Report on Audits of DoD Energy Savings Performance Contracts (ESPC)
(Project D2018-D000RK-0121.000)

RECOMMENDATION 2a: The DODIG recommends that SAF/AQ identify all active legacy Air Force energy savings performance contracts with contractor-claimed energy savings not previously validated by the Government validation.

SAF/AQC RESPONSE: Non-Concur. In the 2016 DoDIG audit 2016-087, 4 May 2016, AFCEC Management of Energy Savings Performance Contracts Needs Improvement, AFCEC was to develop and implement a management plan for Air Force Civil Engineer Center and Base Civil Engineer oversight of existing Air Force energy savings performance contract projects. Specifically, recommendation 1g, required a management plan by AFCEC and base civil engineers for existing AF ESPC projects. AFCEC's management comments stated, since publication of ETL 11-24, July 2011, AFCEC has maintained a process for oversight of ESPCs and they would evaluate the effectiveness of its process with regard to performance of existing (legacy) ESPCs. Prior to 2011, the base-level contracting officer had the oversight responsibility for individual ESPCs.

However, recommendation 2a requires SAF/AQ to identify all legacy contracts, to include those with claimed energy savings, but not independently validated by the government. The 2016 audit and the 2017, AF Civil Engineer Saving Performance Contracts (ESPC) Playbook, establishes AFCEC, and AFCEC/CND specifically, as the central Program Management Office (PMO) that oversees all ESPC projects. Therefore, it would not be within SAF/AQ's ability, nor responsibility to execute recommendation 2a. However, AQ concedes we need to assist with the annual measurement and validation (M&V) process and the overall execution of the ESPC program.

As a result, SAF/AQ recommends DOD IG revise the recommendation to align with the 2017 AF Civil Engineer ESPC Playbook under ESPC Playbook roles and responsibilities.

RECOMMENDATION 2b: Validate all past contractor-claimed energy savings included in contractor post installation and measurement and verification reports not previously validated.

SAF/AQC RESPONSE: Concur with comment. Under the 2017, AF Civil Engineer ESPC Playbook, AFCEC, Base Civil Engineers, Base Energy Managers, Contracting Officer Technical Representative (COTR) and contracting officers have shared responsibilities for portions of the annual M&V process. Since our Base Civil Engineers (BCEs) have overall responsibility to annually verify and ensure that the Energy Service Company (ESCO) are complying with the terms and guaranteed savings of the M&V plan, SAF/AQ will need to work with these partners to complete a review of past contractor claimed energy savings, not previously validated.

Therefore, SAF/AQ recommends the DOD IG revise the recommendation to read, SAF/AQ and the AF Civil Engineer will validate all past...not previously validated.

RECOMMENDATION 2c: Based on the result of the validations, as mandated by law, take appropriate contractual action (if necessary), such as recovering unrealized guaranteed energy savings or buying out the remaining portion of the applicable contracts.

AIR FORCE RESPONSE: Concur. SAF/AQ will take appropriate contractual action to implement the conclusion of the M&V validation process as outlined in recommendation 2b. Additionally, we will share audit findings with our base contracting professionals to address post award administration concerns outlined in the DOD IG findings.

**Final
Report Reference**

**Revised
Recommendation 2.a**

**Revised
Recommendation 2.b**

**Revised
Recommendation 2.c**

Acronyms and Abbreviations

ASD(EI&E)	Assistant Secretary of Defense for Energy, Installations, and Environment
COR	Contracting Officer's Representative
DLA	Defense Logistics Agency
DoD OIG	Department of Defense Office of Inspector General
ESPC	Energy Savings Performance Contract
NAVFAC	Naval Facilities Engineering Command
QASP	Quality Assurance Surveillance Plan
SAF/AQ	Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics
USAAA	United States Army Audit Agency

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