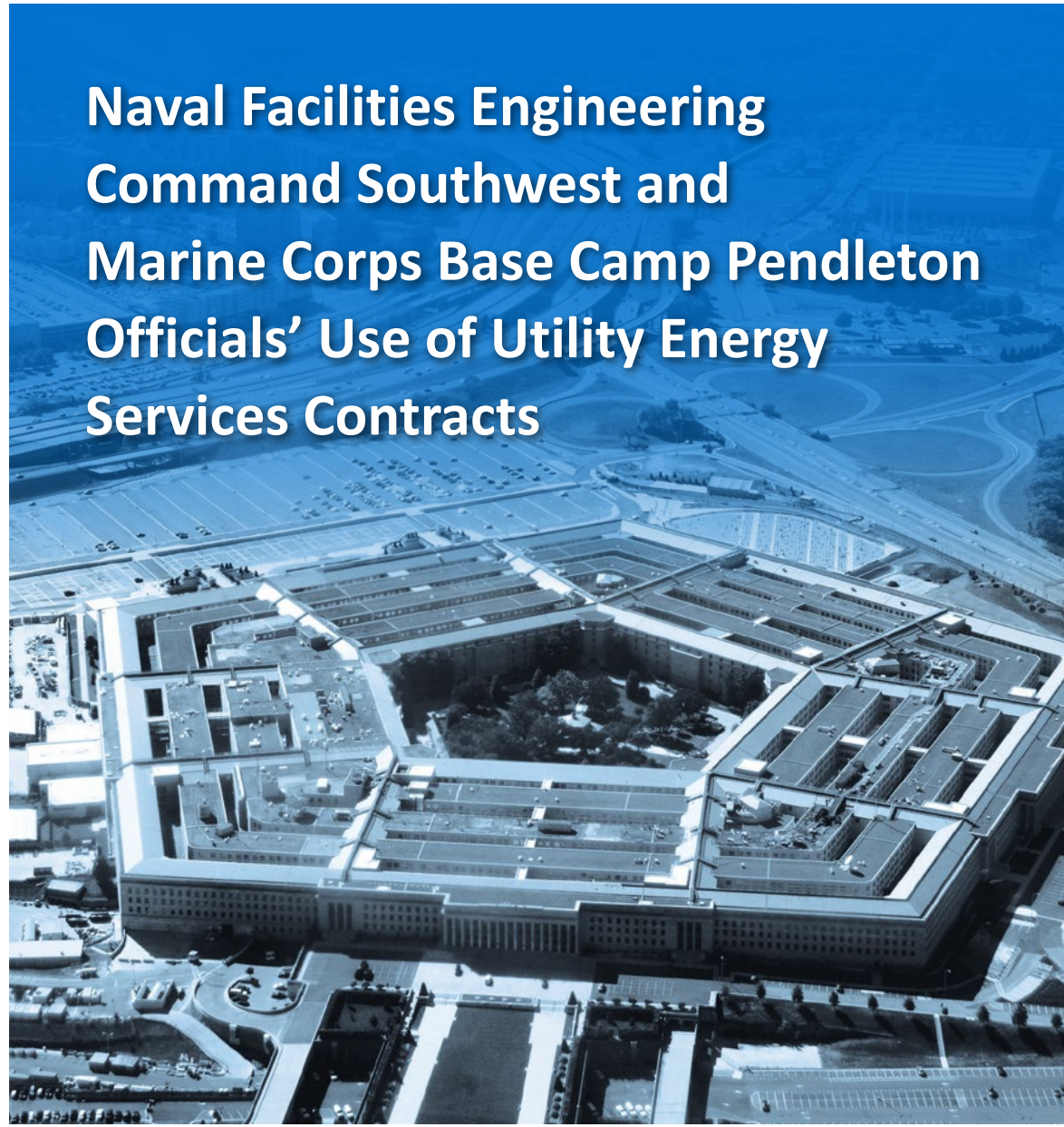




INSPECTOR GENERAL

U.S. Department of Defense

SEPTEMBER 28, 2017



Naval Facilities Engineering Command Southwest and Marine Corps Base Camp Pendleton Officials' Use of Utility Energy Services Contracts

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Results in Brief

Naval Facilities Engineering Command Southwest and Marine Corps Base Camp Pendleton Officials' Use of Utility Energy Services Contracts

September 28, 2017

Objective

We determined whether the contracts and task orders related to the Utility Energy Services Contracts (UESCs) were properly awarded and administered. This is the third in a series of audits related to the DoD's use of UESCs. UESCs allow Federal agencies to contract with utility companies to reduce energy consumption. DoD Components are authorized to manage energy demand or conserve energy by participating in programs provided by any gas or electric utility company. We are conducting this audit in response to allegations made to the Defense Hotline. The allegations stated that Marine Corps Base (MCB) Camp Pendleton, California, Energy Office officials did not have adequate internal controls in place to ensure the proper award and administration of UESCs implemented at MCB Camp Pendleton. We reviewed 10 UESCs implementing energy projects at Camp Pendleton, valued at \$44.6 million, awarded between FY 2009 and FY 2015.

Findings

Naval Facilities Engineering Command (NAVFAC) Southwest contracting officials properly awarded and justified the 10 UESCs reviewed. Specifically, contracting officials appropriately solicited and evaluated proposals for the implementation of energy conservation measures at MCB Camp Pendleton. However, NAVFAC Southwest contracting officials did not adequately administer the 10 UESCs.

- For 6 of the 10 UESCs, valued at \$25.9 million, the NAVFAC Southwest contracting officers did not approve

Findings (cont'd)

scope of work changes before the contractor implemented the changes and did not modify the UESCs to reflect the scope of work changes.

- For 9 of 10 UESCs, valued at \$39.8 million, NAVFAC Southwest contracting officers did not appoint contracting officer's representatives to monitor contractor performance and provide contract surveillance during the contract period of performance.

This occurred because NAVFAC Southwest contracting officers relied solely on the NAVFAC Southwest project manager and Facilities Engineering and Acquisition Division officials to monitor contractor performance and perform quality assurance but did not have controls in place to identify potential changes to scope of work or concerns about the contractor's performance. In addition, NAVFAC Southwest contracting officers did not appoint contracting officer's representatives for the UESCs because the NAVFAC Southwest contracting officers' understanding was that they were not required to appoint contracting officer's representatives for utility service contracts.

As a result, NAVFAC Southwest contracting officials and MCB Camp Pendleton Energy Office officials did not have reasonable assurance that changes in scope of work were in the best interest of the Government and provided the best alternative to the original scope of work. In addition, the officials did not have reasonable assurance that the Government and contractor received fair consideration for the changes in the scope of work and that the contractor met the contract terms and conditions.

Moreover, for the 10 UESCs we reviewed, MCB Camp Pendleton Energy Office officials did not have an existing process to track the savings generated by individual energy conservation measures or by individual UESC. MCB Camp Pendleton Energy Office officials' stated that they did not track energy savings for the individual UESCs or energy conservation measures because their understanding of UESC guidance was that they were not required to track the generated energy savings. As a result, MCB Camp Pendleton officials could not support that they achieved sufficient energy savings to pay back their \$44.6 million investment in energy conservation measures.



Results in Brief

Naval Facilities Engineering Command Southwest and Marine Corps Base Camp Pendleton Officials' Use of Utility Energy Services Contracts

Recommendations

We recommend that the Commanding Officer, NAVFAC Southwest:

- direct the NAVFAC Southwest contracting officers to approve all future scope of work changes before the contractor begins performance, and reemphasize and hold training sessions to implement the existing process for notifying and approving minor scope of work changes for the MCB Camp Pendleton UESCs;
- initiate a review of the contracting officers' and other Government officials' actions when they inappropriately approved or did not approve changes in the scope of work before the contractor began work and did not modify the UESCs to reflect the changes in the scope of work, and, if appropriate, initiate administrative actions; and
- establish a detailed written agreement with the organizations that NAVFAC Southwest contracting officers rely on to perform contract administration and quality assurance duties to clearly outline each organization's duties, roles, and responsibilities; documentation and retention requirements; procedures for providing contractor performance; and procedures for requesting and obtaining approval for scope of work changes.

We recommend that the Commanding General, Marine Corps Installation West–MCB Camp Pendleton, direct MCB Camp Pendleton Energy Office officials to develop and implement a system to convert energy usage to cost and realized energy savings for each UESC.

Management Comments and Our Response

The Assistant Secretary of the Navy (Energy, Installations, and Environment) responding for the Commanding Officer, NAVFAC Southwest, agreed with our finding and recommendations. Specifically, the Navy agreed to:

- amend basic ordering agreements to eliminate ambiguity related to the contracting officer duties related to the approval of minor change request through a contract modification;

- develop a memorandum of agreement between the NAVFAC Southwest contracting office, Marine Corps Utility Energy Manager, and Facilities Engineering and Acquisition Division Camp Pendleton to clearly define each organization's roles and responsibilities related to UESCs;
- designate the Facilities Engineering and Acquisition Division Camp Pendleton personnel as the contracting officer's representatives for UESCs;
- evaluate the actions of the contracting officer and other Government officials to determine appropriate accountability actions, if necessary;
- train the contracting officer on oversight and administration of UESCs; and
- adopt the contract administration plan to outline and address required actions, duties, and responsibilities for all persons and offices administering UESCs.

The Navy will implement these recommendations between September 30, 2017, and January 31, 2018. Therefore, these recommendations are resolved but will remain open. We will close these recommendations once we verify that the Navy has amended the basic ordering agreements; developed the memorandum of agreement; designated the contracting officer's representative; evaluated the action of the contracting officer and Government officials; trained the contracting officer; and adopted the contract administration plan.

In addition, the Assistant Secretary of the Navy (Energy, Installations, and Environment) responding for the Commanding General, Marine Corps Installation West–MCB Camp Pendleton, disagreed with our recommendation to develop and implement a system to convert energy usage to cost and realized energy savings for each UESC. The Assistant Secretary stated that the DoD disagreed with a similar recommendation cited in a Government Accountability Office audit report. The Assistant Secretary used the same context for his disagreement with our recommendation, stating that there is no statutory requirement for annual measurement and verification of the energy, water, or cost savings or contractual guarantee of the savings. He concluded that UESCs are for utility services and the only financial requirement is the obligation of the annual costs for the UESC. In addition,



Results in Brief

Naval Facilities Engineering Command Southwest and Marine Corps Base Camp Pendleton Officials' Use of Utility Energy Services Contracts

Comments (cont'd)

he stated that the MCB Camp Pendleton would implement the use of performance assurance plans as recommended by the Department of the Energy Federal Energy Management Program. Furthermore, as the command responsible for developing policy, instruction, and guidance on UESCs for the Marine Corps, the Commander, Marine Corps Installations Command, will issue guidance that will incorporate steps recommended by the Department of the Energy Federal Energy Management Program for developing and implementing performance assurance plans for UESCs.

Comments from the Assistant Secretary of the Navy (Energy, Installations, and Environment) did not address the specifics of the recommendation. We agree there is no statutory requirement for annual measurement and verification of the savings or a contractual agreement of those savings; however, we disagree that there is no requirement to track energy savings achieved through UESCs. Specifically, Section 2912, title 10, United States Code states an amount of appropriated funds for the fiscal year equal to the amount of energy cost savings realized by the DoD shall remain available for obligation until spent.¹ In addition, Federal Energy Management Program guidance requires that an agency pay for the cost of the UESC from savings generated from the ECMs during the contract period.² Finally, DoD Instruction 4170.11 requires tracking the estimated and verified energy savings generated by implementing energy projects.³ In order for a UESC to comply with Section 2912, title 10, United States Code, the Federal Energy Management Program guidance, and DoD Instruction 4170.11, MCB Camp Pendleton Energy officials would need to track energy savings generated from the individual ECMs.

In addition, performance assurance plans alone are not sufficient to comply with applicable UESC guidance. According to the Department of the Energy Federal Energy Management Program guidance, performance assurance plans define actions to be taken during the contract to achieve the expected performance of the energy conservation measures implemented under the UESC. By developing and implementing performance assurance plans, MCB Camp Pendleton officials assert a commitment in reaching the estimated savings of a UESC; however, they do not measure actual energy savings achieved after implementation of energy conservation measures. Therefore, by using the performance assurance plans, MCB Camp Pendleton Energy officials cannot clearly determine whether the energy conservation measures implemented through UESCs achieved sufficient savings. Therefore, the recommendation is unresolved and remains open.

We request that the Assistant Secretary of the Navy (Energy, Installations, and Environment) provide comments on the final report that specifically address the issue of MCB Camp Pendleton Energy Office officials not supporting whether energy conservation measures achieved sufficient energy savings. We request that the Assistant Secretary of the Navy (Energy, Installations, and Environment), provide comments to the final report by October 30, 2017. Please see the Recommendations Table on the next page for status of the recommendations.

¹ Section 2912, title 10, United States Code, "Availability and Use of Energy Cost Savings."

² Department of Energy Office of Energy Efficiency and Renewable Energy Federal Energy Management Program, "Utility Energy Services Contracts: Enabling Documents," May 2009 and June 2013.

³ DoD Instruction 4170.11, "Installation Energy Management," December 11, 2009. Change 1 effective March 16, 2016.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Commanding Officer, Naval Facilities Engineering Command Southwest		A.1.a, A.1.b, A.1.c	None
Commanding General, Marine Corps Installation West - Marine Corps Base Camp Pendleton	B.1		

Please provide Management Comments by October 30, 2017.

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**

September 28, 2017

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY AND LOGISTICS
NAVAL INSPECTOR GENERAL

SUBJECT: Naval Facilities Engineering Command Southwest and Marine Corps Base
Camp Pendleton Officials' Use of Utility Energy Services Contracts
(Report No. DODIG-2017-125)

We are providing this report for review and comment. Naval Facilities Engineering Command Southwest contracting officials properly awarded and justified the 10 Utility Energy Services Contracts; however, they did not adequately administer the contracts. In addition, Marine Corps Base Camp Pendleton Energy Office officials did not track the savings generated by the contracts.

We considered management comments on a draft of this report when preparing the final report. Comments from the Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding Officer, Naval Facilities Engineering Command Southwest, on Recommendations A.1.a, A.1.b, and A.1.c conformed to the requirements of DoD Instruction 7650.03; therefore, we do not require additional comments. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Comments from the Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding General, Marine Corps Installation West – Marine Corps Base Camp Pendleton, did not address the recommendation. Therefore, we request the Assistant Secretary of the Navy (Energy, Installations, and Environment) reconsider his position and provide additional comments on Recommendation B.1 by October 30, 2017.

Please send a PDF file containing your comments to audcmp@dodig.mil. Copies of your comments must have the actual signature of the authorizing official for your organization. We cannot accept the /Signed/ symbol in place of the actual signature.

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9312 (DSN 664-9312).

A handwritten signature in black ink, reading "Theresa Hull", is positioned above the typed name.

Theresa Hull
Deputy Assistant Inspector General
Contract Management and Payments

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Introduction

Objective

We determined whether the contracts and task orders related to the Utility Energy Services Contracts (UESCs) were properly awarded and administered. This is the third and final in a series of audits related to the DoD's use of UESCs.

We are conducting this audit in response to allegations made to the Defense Hotline. The allegations stated that Marine Corps Base (MCB) Camp Pendleton, California, Energy Office officials did not have adequate internal controls in place to ensure the proper award and administration of UESCs implemented at MCB Camp Pendleton. In addition, the allegations stated that MCB Camp Pendleton officials were not following UESC guidance or validating savings for the UESCs. We did not substantiate the allegation that the MCB Camp Pendleton Energy Office officials have inadequate internal controls in place to ensure the proper award of UESCs implemented at MCB Camp Pendleton. However, we did substantiate that adequate internal controls were not in place to ensure the proper administration of UESCs implemented at MCB Camp Pendleton. We partially substantiated the allegations that stated the MCB Camp Pendleton officials were not following UESC guidance or validating savings for the UESC.

Background

According to the U.S. Department of Energy, the Federal Government is the largest energy consumer in the United States. Legislation and presidential executive orders require and enable Federal agencies to implement energy efficiency, water conservation, and renewable energy projects. Federal agencies are eligible to use utility incentive programs to procure financing for comprehensive energy projects.⁴ DoD Components are authorized to manage energy demand or conserve energy by participating in programs provided by any gas or electric utility company.⁵ Therefore, the heads of executive departments and agencies have the contracting flexibility to use UESCs to complete energy savings projects when appropriated funds are not available. The Department of Energy's Federal Energy Management Program provides comprehensive support to Federal agencies, including the DoD, and establishes guidance relating to the use of UESCs throughout the Federal Government.

⁴ Section 8256, title 42, United States Code, "Incentives for Agencies."

⁵ Section 2913, title 10, United States Code, "Energy Savings Contracts and Activities."

UESCs allow Federal agencies to contract with utility companies to reduce energy consumption. To fund project capital costs, agencies may arrange all financing through the utility company, use congressional appropriations, or choose a combination of both. The Federal agency repays the utility company over the contract term from the energy cost savings generated by the project, plus interest, when a project is financed through the utility company. For a project to qualify as a UESC, the project must demonstrate that the expected energy savings will at least pay back the investment.

When a UESC is used, the utility company and the Government work together to identify projects that will reduce energy consumption for the Federal agency. Energy conservation measures (ECMs) may include replacing or updating older heating and air conditioning units and boilers, installing more efficient or motion-activated lighting, as well as other projects. Figure 1 displays a solar panel ground mounted system, one of the installed ECMs at MCB Camp Pendleton.



Figure 1. Solar Panel Ground Mounted System
Source: MCB Camp Pendleton Energy Office Manager.

If the utility company and the Federal agency agree to implement one or more of these measures, the contracting officer issues a task order under a basic ordering agreement (BOA) to complete the energy project.⁶ Task orders placed under the BOA detail the services the contractors are to provide.

Marine Corps Base Camp Pendleton

MCB Camp Pendleton covers more than 125,000 acres of Southern California and has over 2,600 buildings and structures.⁷ MCB Camp Pendleton strives to achieve energy security at all of its facilities in the most cost-effective manner possible.⁸ The MCB Camp Pendleton Energy Office manages the energy program at MCB Camp Pendleton and uses UESCs and other contracting vehicles to install and fund various ECMs throughout the base.

Naval Facilities Engineering Command Southwest

The Naval Facilities Engineering Command (NAVFAC) Southwest Utilities and Energy Management team provides contract and technical support to award and administer UESCs for MCB Camp Pendleton. NAVFAC Southwest Utilities and Energy Management contracting officials receive technical assistance from other members of the Utilities and Energy Management team. As of November 2016, these technical officials also serve as project managers and contracting officer's representatives (CORs) for UESCs.⁹ NAVFAC Southwest contracting officers rely on the project manager and the COR to provide contract oversight. The project manager and the COR rely on NAVFAC Southwest's Facilities Engineering and Acquisition Division (FEAD) officials, located at MCB Camp Pendleton, to provide quality assurance of UESCs.

MCB Camp Pendleton UESCs Reviewed

Between FY 2009 and FY 2015, NAVFAC Southwest contracting officials awarded 10 firm-fixed-price UESCs, valued at \$44.6 million, under three BOAs for MCB Camp Pendleton. The 10 UESCs authorized the installation of various ECMs, such as photovoltaic installations, lighting retrofits, boiler retrofits, and installation of meters in various MCB Camp Pendleton buildings. We reviewed the 10 UESCs to determine whether NAVFAC Southwest contracting officials properly awarded and

⁶ A BOA establishes general terms and conditions applying to future orders between the parties. A task order creates the contract.

⁷ MCB Camp Pendleton is a part of Marine Corps Installations West – Marine Corps Base Camp Pendleton.

⁸ Energy security includes having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs by providing uninterrupted power.

⁹ NAVFAC Southwest contracting officials appointed a COR before contract award for only one of the 10 contracts, Phase 21. Current processes include appointing a COR for future UESCs.

administered the UESCs. In addition, we reviewed whether MCB Camp Pendleton Energy Office officials tracked actual energy savings for implemented ECMs under the 10 UESCs. Table 1 outlines the 10 UESCs we reviewed. Appendix B includes additional details about each UESC, such as the ECMs installed.

Table 1. MCB Camp Pendleton UESCs Reviewed by Award Date

Basic Ordering Agreement	Task Order	Phase	Award Date	Value at Award
N68711-05-G-8620	0017	10	February 24, 2009	\$4,651,205
N62473-08-G-0601	0003	12	September 15, 2009	4,982,091
N62473-08-G-0601	0004	13	September 14, 2010	4,919,796
N62473-08-G-0601	0005	14	August 30, 2011	4,967,865
N62473-08-G-0601	0006	15	May 1, 2012	4,182,901
N62473-08-G-0601	0007	17	September 24, 2012	4,945,778
N62473-08-G-0601	0008	18	September 24, 2012	4,156,572
N62473-13-G-1403	0001	19	September 27, 2013	3,935,611
N62473-13-G-1403	0002	20	September 27, 2013	3,046,125
N62473-13-G-1403	0003	21	September 15, 2015	4,827,168
Total				\$44,615,112

Source: DoD OIG.

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.¹⁰ We identified internal control weaknesses related to the administration and tracking of energy savings of UESCs implemented at MCB Camp Pendleton. Specifically, NAVFAC Southwest contracting officers did not approve scope of work changes before the contractor implemented the changes, did not modify the UESCs to reflect the scope of work changes, and for 9 of the 10 UESCs did not appoint CORs in writing prior to the contract period of performance. In addition, MCB Camp Pendleton Energy Office officials did not track the savings generated by the UESCs. We will provide a copy of the report to the senior official responsible for internal controls in the Navy and Marine Corps.

¹⁰ DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013.

Finding A

NAVFAC Southwest Contracting Officials Properly Awarded and Justified the MCB Camp Pendleton UESCs; However UESC Administration was not Adequate

NAVFAC Southwest contracting officials properly awarded and justified the 10 UESCs reviewed, valued at \$44.6 million. Specifically, contracting officials appropriately solicited and evaluated proposals for the implementation of ECMs at MCB Camp Pendleton. However, NAVFAC Southwest contracting officials did not adequately administer the 10 UESCs.

- For 6 of 10 UESCs, valued at \$25.9 million, the NAVFAC Southwest contracting officers did not approve scope of work changes before the contractor implemented the changes and did not modify the UESCs to reflect the scope of work changes.
- For 9 of 10 UESCs, valued at \$39.8 million, NAVFAC Southwest contracting officers did not appoint CORs to monitor contractor performance and to provide contract surveillance during the contract period of performance.

This occurred because NAVFAC Southwest contracting officers relied on the NAVFAC Southwest project manager and FEAD officials to monitor contractor performance and perform quality assurance, but did not have controls in place to identify potential changes to scope of work or concerns about the contractor's performance. In addition, contracting officers did not appoint CORs for the UESCs because their understanding was that CORs were not required for utility service contracts.

As a result, NAVFAC Southwest contracting officials and MCB Camp Pendleton Energy Office officials did not have assurance that changes in scope of work were in the best interest of the Government and provided the best alternative to the original scope of work. In addition, the contracting officials did not have assurance that the Government and the contractor received fair consideration for the changes and that the contractor met the contract terms and conditions.

Contracting Officials Properly Awarded 10 UESCs for MCB Camp Pendleton

NAVFAC Southwest contracting officials properly awarded the 10 UESCs, valued at \$44.6 million. For the 10 UESCs, NAVFAC Southwest contracting officials properly justified the use of the UESC and the use of other than full and open competition. In addition, NAVFAC Southwest contracting officials properly solicited and evaluated proposals for the implementation of ECMs at MCB Camp Pendleton.

For each of the 10 UESCs, NAVFAC Southwest contracting officers ensured MCB Camp Pendleton Energy Office officials completed a life-cycle cost analysis (LCCA) demonstrating that the projected energy savings-to-investment ratio made implementation of the ECMs a cost-effective decision.¹¹ The Federal Energy Management Program requires the use of an LCCA to support the feasibility of the ECMs.¹² The LCCA computes a savings-to-investment ratio showing the expected potential savings in dollars estimated to be generated by the ECMs compared to the total planned investment. If the savings-to-investment ratio is equal to or greater than 1.0, then the savings matches or exceeds the proposed cost of the project, and the project is a cost-effective and valid project for a UESC.

NAVFAC Southwest contracting officers ensured that the 10 UESCs reviewed had a proper justification and approval.

Furthermore, NAVFAC Southwest contracting officers ensured that the 10 UESCs reviewed had a proper justification and approval supporting the use of other than full and open competition when awarding the UESCs, as required by the Federal Acquisition Regulation (FAR).¹³ In the justification and approval for each UESC, the contracting officials outlined the exemption from the Competition in Contracting Act as implemented by the FAR, allowing other than full and open competition when a statute expressly authorizes or requires an acquisition through a specified source.¹⁴ In addition, each justification explained that the utility company was the only one authorized by the California Public Utilities Commission to provide the rebates and financial incentives authorized by section 2913, title 10, United States Code. The NAVFAC Southwest contracting officials properly certified, and the competition advocates approved, the justifications.

¹¹ An LCCA is a method of evaluating projects by considering the costs of owning, operating, and maintaining a project as well as the potential reduction in future costs.

¹² Department of Energy Office of Energy Efficiency and Renewable Energy Federal Energy Management Program "Utility Energy Services Contracts: Enabling Documents."

¹³ FAR Part 6, "Competition Requirements," Subpart 6.3, "Other Than Full and Open Competition," 6.303, "Justifications."

¹⁴ FAR Part 6, "Competition Requirements," Subpart 6.2, "Full and Open Competition After Exclusion of Sources," 6.302, "Circumstances Permitting Other Than Full and Open Competition," 6.302-5, "Authorized or Required by Statute."

For the 10 UESCs reviewed, contracting officials properly solicited and evaluated proposals for the implementation of ECMs at MCB Camp Pendleton, in accordance with the BOAs. NAVFAC Southwest contracting officials provided requests for proposals to the contractor defining the planned ECMs. Once the contractor responded to the request for proposal, NAVFAC Southwest contracting officials evaluated the proposal to determine whether the offers were technically acceptable and the pricing was fair and reasonable.

Contracting Officials Need to Improve Administration of the UESCs for MCB Camp Pendleton

NAVFAC Southwest contracting officials did not properly administer the 10 UESCs because they did not:

- approve changes to the scope of work before the contractor performed the work and modify the UESC to reflect changes to the scope of work performed by the contractor; and
- appoint CORs to monitor contractor performance.

Changes to Scope of Work on UESCs Not Properly Approved

For 6 of 10 UESCs, valued at \$25.9 million, the NAVFAC Southwest contracting officers did not approve scope of work changes before the contractor began implementing the changes. In addition, the contracting officers did not modify the UESC to reflect the changes implemented. Table 2 shows examples of the changes to the scope of work on the six UESCs that contracting officers did not approve before the contractor began work and did not modify the UESC to reflect the changes.

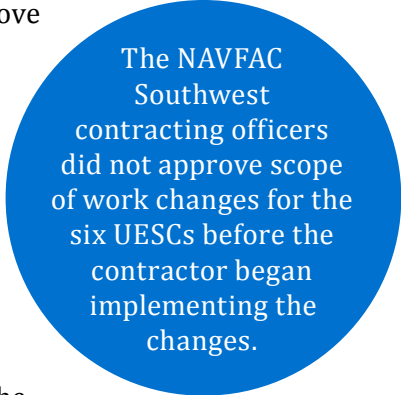
*Table 2. Examples of Changes to Scope of Work Without Prior Approval or Modifications**

Basic Ordering Agreement	Task Order	Phase	Examples of Scope of Work Changes*
N62473-08-G-0601	0005	14	Removed space and water heater for Building 210706
N62473-08-G-0601	0007	17	Removed air compressor for Building 2296
N62473-08-G-0601	0008	18	Energy Management Systems replaced Booster Pump Retrofit in four buildings
N62473-13-G-1403	0001	19	Removed unit heater for Building 2230
N62473-13-G-1403	0002	20	Removed hot water heater for Building 410371
N62473-13-G-1403	0003	21	129 of the 269 smart meters identified were not installed according to the delivery order

Source: DoD OIG.

* This list is not a comprehensive list of the changes to scope of work, only examples of planned ECMs removed from the scope of work and new ECMs added to the scope of work.

The NAVFAC Southwest contracting officers did not approve scope of work changes for the six UESCs before the contractor began implementing the changes. The three BOAs each included a section allowing expedited minor changes and providing the requirements and appropriate process to obtain the proper authorization for such changes. According to each BOA, the contractor should notify the Government in writing to request approval to proceed with the change to the scope of work. Specifically, the contracting officer may approve the contractor's written change of scope requests that are less than or equal to \$25,000 and should maintain a copy of the approved request in the official UESC contract file. In addition, the BOAs outlined that the contracting officer should execute a final modification to incorporate the expedited minor changes into the contract requirements. While this process for requesting and approving scope of work changes that are less than \$25,000 was clearly outlined in each agreement, the contracting officer did not require the contractor provide a written change of scope request before implementing changes. In addition, the contracting officers did not determine whether the value of the changes met the threshold for the expedited minor change process. According to a NAVFAC Southwest contracting officer, she was unsure of why the contractor did not provide written change of scope requests before implementing changes.



The NAVFAC Southwest contracting officers did not approve scope of work changes for the six UESCs before the contractor began implementing the changes.

The FAR states that only contracting officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Furthermore, other Government officials must neither execute contract modifications nor direct or encourage the contractor to perform work that should be subject to contract modification.¹⁵ The NAVFAC Southwest contracting officer did not modify the six UESCs to reflect the scope of work changes even when MCB Camp Pendleton Energy Office officials notified them of changes in the scope of work through documents. The contracting officer did not complete a modification for the Phase 18 UESC removal of a booster pump in exchange for several advanced meters installed in four buildings. The NAVFAC Southwest contracting officer did not modify the Phase 18 UESC even though she had documentation to show the contractor completed work outside the contracted scope of work. Figure 2 shows the difference between a booster pump and an advanced meter. In another example, for the Phase 21 UESC, MCB Camp Pendleton Energy Office officials approved the changes in the scope of work during progress meetings with the contractor while no contracting officers were present. MCB Camp Pendleton Energy Office officials did not notify NAVFAC Southwest

¹⁵ FAR Part 43, "Contract Modifications," Subpart 43.1, "General," 43.102, "Policy."

contracting officers of the changes or the need for a modification. According to the NAVFAC contracting officer, she is processing the modification for the Phase 21 UESC. The Commanding Officer, NAVFAC Southwest, should direct the NAVFAC Southwest contracting officers approve all future scope of work changes before the contractor begins performance, and reemphasize and hold training sessions to implement the existing process for notifying and approving minor expedited changes for the MCB Camp Pendleton UESCs. Furthermore, the Commanding Officer, NAVFAC Southwest, should initiate a review of the contracting officers' and other Government officials' actions when they inappropriately approved or did not approve changes in the scope of work before the contractor began the work and did not modify the UESCs to reflect the changes in the scope of work, and, as appropriate, initiate administrative actions.



Figure 2. Booster Pump and Installed Advanced Meter
Source: DoD OIG.

CORs Not Designated During the UESC Period of Performance

For 9 of 10 UESCs, valued at \$39.8 million, NAVFAC Southwest contracting officers did not appoint CORs to monitor contractor performance or to conduct adequate contract surveillance during the period of performance. The FAR and the DoD COR Handbook both state that contracting officers must designate and authorize in writing a COR to monitor contractor performance and provide the contracting officer with documentation identifying contractor compliance or noncompliance with the terms and conditions of the

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period of
performance.

contract.¹⁶ In addition, a NAVFAC Instruction outlines the duties, responsibilities, and limitations of CORs appointed by a NAVFAC contracting officer.¹⁷ The appointment of CORs during the UESC period of performance is important to ensure contractor compliance. Table 3 outlines when NAVFAC Southwest contracting officers appointed CORs for the 10 UESCs.

Table 3. UESCs' Period of Performance and COR Appointment Dates

Basic Ordering Agreement	Task Order	Phase	UESC Period of Performance	Date of COR Appointment
N68711-05-G-8620	0017	10	February 24, 2009, through January 30, 2011	No COR Appointed
N62473-08-G-0601	0003	12	September 15, 2009, through July 30, 2011	No COR Appointed
N62473-08-G-0601	0004	13	September 14, 2010, through March 31, 2013	No COR Appointed
N62473-08-G-0601	0005	14	August 30, 2011, through October 31, 2013	No COR Appointed
N62473-08-G-0601	0006	15	May 1, 2012, through October 31, 2014	April 22, 2015
N62473-08-G-0601	0007	17	September 24, 2012, through May 30, 2014	April 22, 2015
N62473-08-G-0601	0008	18	September 24, 2012, through January 31, 2014	April 22, 2015
N62473-13-G-1403	0001	19	September 27, 2013, through January 31, 2015	April 22, 2015
N62473-13-G-1403	0002	20	September 27, 2013, through September 27, 2014	April 22, 2015
N62473-13-G-1403	0003	21	September 15, 2015, through March 29, 2017	September 14, 2015

Source: DoD OIG.

The NAVFAC Southwest contracting officers did not appoint a COR for four of the nine UESCs because they considered the UESCs to be utility contracts that do not require a COR.¹⁸ For these four UESCs, contracting officials included documentation in the contract file stating that management oversight of service contracts was not required for construction or utility contracts. Therefore, the NAVFAC Southwest contracting officer did not appoint CORs for the four UESCs due to their misinterpretation of the type of contract and the requirement to appoint a COR. In June 2014, a NAVFAC Headquarters Acquisition official sent an e-mail clarifying that

¹⁶ FAR Part 1, "Federal Acquisition Regulations System," Subpart 1.6, "Career Development, Contracting Authority, and Responsibilities," 1.602-2, "Responsibilities" and Director, Defense Procurement and Acquisition Policy, "Department of Defense COR Handbook," March 22, 2012.

¹⁷ NAVFAC Instruction 4200.1, "Contracting Officer's Representative," September 18, 2013.

¹⁸ Phases 10, 12, 13, and 14.

a COR is required for utility contracts because they are considered services and do not meet any exceptions for the appointment of a COR. The June 2014 e-mail was issued after the period of performance for these four UESCs.

For the next five UESCs, a NAVFAC Southwest contracting officer did not appoint a COR until after the period of performance was completed.¹⁹ When NAVFAC Southwest contracting officers started to implement the NAVFAC Instruction guidance and appoint CORs, the action was stopped because of the worker's union concerns with the additional duties required of personnel appointed as a COR. As a result, NAVFAC Southwest contracting officers were directed not to appoint any new CORs until the union negotiations were completed. After the conclusion of the union negotiations in April 2015, a contracting officer appointed CORs for the five UESCs after the UESC period of performance was completed.

With the September 15, 2015, award of the Phase 21 UESC, the NAVFAC Southwest contracting officers appointed a COR before awarding the UESC. As of October 2016, the Phase 21 UESC was the most recently awarded UESC, and NAVFAC Southwest contracting officers stated that they would appoint CORs to oversee the contractors' performance on UESCs. In addition, NAVFAC Southwest officials have implemented guidance requiring the appointment of CORs for utility contracts and resolved the union issues that stopped the appointment of CORs for a period. Therefore, we are not making a recommendation related to NAVFAC Southwest contracting officers appointing CORs.

Contracting Officials Relied on Project Manager and FEAD to Administer UESCs

NAVFAC Southwest contracting officials did not properly administer the 10 UESCs because they relied solely on the NAVFAC Southwest UESC project manager and FEAD officials to monitor contractor performance and perform quality assurance. Additionally, the NAVFAC Southwest contracting officers did not have controls in place to identify potential changes to the scope of work and concerns or issues with the contractor's performance. For example, for the Phase 18 UESC, the NAVFAC Southwest contracting officer did not clearly define the roles and responsibilities for the UESC project manager and FEAD for monitoring the contractor's performance and providing observations to the contracting officer. Therefore, the contracting officer was unaware of changes in the scope of work and the contractor performance on the UESC. In addition, for the Phase 21 UESC, the contracting officer had a support agreement with FEAD that outlined quality assurance expectations. Although the support agreement clearly defined quality assurance expectations, it did not require FEAD to provide any documentation to the contracting officer on the contractor's performance.

¹⁹ Phases 15, 17, 18, 19, and 20.

Even though the NAVFAC Southwest contracting officials relied on the NAVFAC Southwest project manager and FEAD officials to monitor contractor performance and perform quality assurance, contracting officials did not establish written agreements detailing each organizations' roles and responsibilities in contract administration or quality assurance for 9 of the 10 UESCs. In addition, the NAVFAC Southwest contracting officials did not clearly define the types of documentation the project manager and FEAD officials would provide to the COR and contracting officer to show the quality and sufficiency of the contractor's performance. NAVFAC Southwest contracting officers should establish a written agreement with each organization that they rely on to perform contract administration or quality assurance duties. The agreement should clearly and fully outline each organizations' duties, roles, and responsibilities; documentation and retention requirements; procedures for providing contractor performance information to NAVFAC Southwest contracting officials; and procedures for requesting and obtaining approval for scope of work changes from the NAVFAC Southwest contracting officer.

Contracting Officials Risk Contractor Not Meeting Contract Terms

NAVFAC Southwest contracting officials did not properly administer the 10 UESCs for MCB Camp Pendleton; therefore, neither NAVFAC Southwest contracting officials nor MCB Camp Pendleton Energy Office officials had assurance that changes in the scope of work were in the Government's best interest. In addition, they did not have assurance that changes in the scope of work provided the best alternative to the original scope of work, and that the contractor met the contract terms and conditions. The contracting officials also do not have assurance that the Government and the contractor received fair consideration for the changes to scope since officials did not analyze whether the changes would require adjustments to the contract price. For example, on the Phase 18 UESC, MCB Camp Pendleton Energy Office officials directed the removal of a booster pump in one building from the planned scope of work and replaced it with the installation of Energy Management Systems in multiple buildings without fully knowing whether this change in scope of work was in the best interest of the Government. In addition, the officials did not verify the price reasonableness, whether the work was within the contract, and did not change the terms of the UESC. Finally, neither NAVFAC Southwest contracting officials nor MCB Camp Pendleton Energy Office officials could support whether the changes would generate enough energy savings to cover the cost of the investment.

Other Matters of Interest on the Use of Utility Rates for Life-Cycle Cost Analysis

To determine the estimated energy cost savings, MCB Camp Pendleton Energy Office officials completed an LCCA. An LCCA takes into account all dollar costs related to owning, operating, maintaining, and disposing of a project over the appropriate study period. The LCCA determined the savings-to-investment ratio, which demonstrated whether the energy cost savings exceeds the proposed project cost and shows the savings for each investment dollar. According to the DoD Energy Manager's Handbook, if the LCCA results in a projected savings-to-investment ratio equal to or greater than 1.0, then the savings match or exceed the proposed cost of the project, and the project is determined to be cost-effective.²⁰

When developing the LCCAs to support the award of the 10 UESCs, MCB Camp Pendleton officials used an inconsistent method to estimate the energy cost savings for the ECMs. Navy officials provided conflicting statements about determining the utility rate. For example in November 2016 MCB Camp Pendleton Energy Office officials stated that they used utility rates charged to MCB Camp Pendleton tenants. In May 2017 the MCB Camp Pendleton Energy Office Manager stated they used the tenant rate to determine the basic validity of the project, but for Phases 18 through 21, they develop another rate once the projects were determined to be cost-effective. In June 2017 Navy officials stated that they initially used tenant rates, but then changed the rates to reflect the actual costs to purchase electricity as well as the transmission and distribution charges.

In reviewing the LCCAs within the contract files, the utility rates on the LCCAs did not match the tenant rates MCB Camp Pendleton Energy Office officials stated they used. Federal, DoD, and Navy and Marine Corps guidance provides clear direction on how to determine and support the utility rates for an LCCA. Utility rates should be based on actual energy prices effective at the building site rather than on regional or national averages, and in most cases would be the rate when purchasing the utility from the local utility company, not the rate charged to tenants. In addition, the guidance states that in cases where determining the utility rate may be difficult, an average cost of the utility may be used. The method for calculating that average rate needs to be detailed in the project files along with a sample calculation to fully document the cost savings for the projects.²¹

²⁰ "DoD Energy Manager's Handbook, August 25, 2015.

²¹ The U.S. Department of Commerce Technology Administration National Institute of Standards and Technology Handbook 135, "Life-Cycle Costing Manual for the Federal Energy Management Program," 1995 Edition; DoD Instruction 4170.11; and The Navy and Marine Corps Energy Project Management Guide.

By using an inconsistent methodology to determine the utility rates, MCB Camp Pendleton Energy Office officials completing the LCCA could get an inaccurate estimated energy cost savings. If the estimated savings are higher, officials may implement ECMs that will not create sufficient energy cost savings to cover the project cost. If the estimated savings are lower, officials might not implement a valid project that would benefit the base by reducing energy consumption and costs. In addition, if projects are ranked by the savings-to-investment ratio to determine what projects to complete first, using an inconsistent methodology to select the utility rate will create unreliable estimates that are not comparable. MCB Camp Pendleton Energy Office officials may then rank the projects improperly, leading to selection of projects that might not produce the highest savings per dollar invested.

Recommendations, Management Comments, and Our Responses

Recommendation A.1

We recommend that the Commanding Officer, Naval Facilities Engineering Command Southwest:

- a. **Direct the Naval Facilities Engineering Command Southwest contracting officers approve all future scope of work changes before the contractor begins performance, and reemphasize and hold training sessions to implement the existing process for notifying and approving minor expedited changes for the Marine Corps Base Camp Pendleton Utility Energy Services Contracts.**

Assistant Secretary of the Navy (Energy, Installations, and Environment) Comments

The Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding Officer, NAVFAC Southwest, agreed with the recommendation, stating that NAVFAC Southwest officials will amend BOAs to eliminate ambiguity related to the contracting officer's roles and emphasize that all expedited minor change requests, regardless of value, will be approved through contract modification. In addition, NAVFAC Southwest officials will develop a memorandum of agreement to define their roles and responsibilities as well as the roles and responsibilities of the Marine Corps Utility Energy Manager and FEAD Division Camp Pendleton. Finally, the NAVFAC Southwest contracting office will designate the FEAD Construction Manager as the contracting officer's representative instead of the program manager. The target completion date is January 31, 2018, for all actions except for modification of BOAs. The target completion date to amend the BOAs is September 30, 2017.

- b. Review the Naval Facilities Engineering Command Southwest contracting officers' and other Government officials' actions when they inappropriately approved or did not approve changes in the scope of work before the contractor began the work and did not modify the Utility Energy Services Contracts to reflect the changes in the scope of work, and, as appropriate, initiate actions to hold the contracting officers and other government officials accountable.**

Assistant Secretary of the Navy (Energy, Installations, and Environment) Comments

The Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding Officer, NAVFAC Southwest, agreed with the recommendation, stating that NAVFAC Southwest officials had reviewed the actions of the contracting officer and determined that the contracting officer was not aware that inappropriate modifications were made. Therefore, NAVFAC Southwest officials will not take any accountable actions against her. However, NAVFAC Southwest officials will review the actions of other personnel involved in the reviewed projects to determine their involvement and appropriate action will be taken. Furthermore, the NAVFAC Southwest contracting officer will receive additional training on oversight and administration. In addition, NAVFAC Southwest officials will amend BOAs to define the contracting officer's roles and emphasize that all expedited minor change requests will be approved through contract modification. The target completion date is December 31, 2017.

- c. Establish a written agreement with each organization that the contracting officers rely on to perform contract administration or quality assurance duties. The agreement should clearly outline each organization's:**
- **duties, roles and responsibilities;**
 - **documentation and retention requirements;**
 - **procedures for providing contractor performance information to Naval Facilities Engineering Command Southwest contracting officials; and**
 - **procedures for requesting and obtaining approval for scope of work changes from the Naval Facilities Engineering Command Southwest contracting officers.**

Assistant Secretary of the Navy (Energy, Installations, and Environment) Comments

The Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding Officer, NAVFAC Southwest, agreed with the recommendation. The Assistant Secretary stated that NAVFAC Southwest officials will implement a memorandum of agreement between them and the Marine Corps

Utility Energy Manager and FEAD Camp Pendleton to define each organization's roles and responsibilities. In addition, NAVFAC Southwest officials will adopt the contract administration plan that will outline and address required actions, duties, and responsibilities for all persons and offices administering UESCs. NAVFAC Southwest officials will implement the memorandum of agreement and contract administration plan prior to award of new UESCs. Also, NAVFAC Southwest officials will train Navy and Marine Corps customers and NAVFAC Southwest contract administration personnel on the contracting officer's authority to direct the contractor to make any changes to the contract price, scope, and period of performance. Finally, NAVFAC Southwest officials will submit the contract administration plan for review and approval for incorporating into the NAVFAC Business Management System Process for UESC Contracting. The target completion date is January 31, 2018.

Our Response

Comments from the Assistant Secretary of the Navy (Energy, Installations, and Environment) addressed all specifics of the recommendations; therefore, the recommendations are resolved but will remain open. We will close the recommendations once we verify that NAVFAC Southwest officials have:

- amended BOAs to eliminate ambiguity related to the contracting officer's roles and emphasize that all expedited minor change requests, regardless of value, will be approved through contract modification;
- implemented memorandum of agreements to define the Marine Corps Utility Energy Manager and FEAD Division Camp Pendleton roles and responsibilities for UESCs;
- appointed FEAD Construction Manager as contracting officer representatives on UESC projects;
- conducted a review of other personnel involved in oversight and administration and have taken appropriate action;
- provided training to the contracting officer on contract oversight and administration; and
- submitted the contract administration plan for review and approval for incorporating into the NAVFAC Business Management System Process for UESC Contracting.

Finding B

Energy Office Officials Could Not Support Whether ECMs Achieved Sufficient Energy Savings

For the 10 UESCs we reviewed, MCB Camp Pendleton Energy Office officials did not have an existing process to track the savings generated by individual ECMs or UESC. MCB Camp Pendleton Energy Office officials stated that they did not track energy savings for the individual ECMs and UESCs because their understanding of UESC guidance was that they were not required to track the generated energy savings. As a result, MCB Camp Pendleton officials could not support that they achieved sufficient energy savings to pay back the \$44.6 million investment in ECMs.

Energy Office Officials Unable to Support Claim of Energy Savings for Implemented UESCs

For the 10 UESCs we reviewed, MCB Camp Pendleton Energy Office officials did not have an existing process to track the savings generated by individual ECM or UESC. Federal Energy Management Program guidance states that the agency pays for the cost of the UESC from savings generated from the ECMs during the contract period.²² Section 2912, title 10, United States Code (10 U.S.C. § 2912 [2006]), requires that an amount of appropriated funds for the fiscal year equal to the amount of energy cost savings realized by the DoD remain available for obligation until spent. This remaining amount of appropriated funds should be used by splitting the funds evenly between:

- implementing additional ECMs and energy security measures; and
- use at the installation where the savings were realized, for improvements to housing units, minor construction projects enhancing the quality of life, or morale, welfare, or recreation facilities and services.²³

Appendix C includes the full statutory language further defining the availability and use of achieved energy cost savings.

For the 10 UESCs we reviewed, MCB Camp Pendleton Energy Office officials did not have an existing process to track the savings generated by individual ECM or UESC.

²² Department of Energy Office of Energy Efficiency and Renewable Energy Federal Energy Management Program, "Utility Energy Services Contracts: Enabling Documents," May 2009 and June 2013.

²³ Section 2912, title 10, United States Code, "Availability and Use of Energy Cost Savings."

In addition, DoD Instruction 4170.11 requires tracking the estimated and verified energy savings generated by implementing energy projects.²⁴ To show that the UESCs met these requirements, MCB Camp Pendleton Energy Office officials would need to track energy savings generated from the individual ECMs or UESC. Without tracking energy savings, the officials cannot show whether the UESCs generated enough energy savings to cover the investment. According to the MCB Camp Pendleton Comptroller, MCB Camp Pendleton did not have any remaining funds available after implemented UESC projects were paid because its utility budgets were reduced over the years. Figure 3 displays an ECM involving solar thermal re-piping implemented on the MCB Camp Pendleton UESCs.



However, without tracking the achieved energy savings, MCB Camp Pendleton officials cannot show how the remaining appropriated funds should be split between additional ECMs and energy security measures and installation improvements, as described in 10 U.S.C. § 2912 (2006).

MCB Camp Pendleton Energy Office officials explained that they were able to calculate energy usage on the installation by buildings, but not by the ECMs within the buildings. However, the officials were not able to convert the energy usage into energy cost savings for the ECMs; therefore, they did not track achieved energy

²⁴ DoD Instruction 4170.11, "Installation Energy Management," December 11, 2009. Change 1 effective March 16, 2016.

savings by individual ECMs or UESCs. To determine the savings generated by the ECMs, MCB Camp Pendleton Energy Office officials would need to track generated energy savings using another method or conduct additional analysis of the energy usage data. Because MCB Camp Pendleton Energy Office officials calculate energy usage at the installation by building without converting to energy savings, officials cannot ensure that each UESC was a cost-effective investment and achieved sufficient energy savings to pay back the UESC investment.

Energy Office Officials' Misunderstanding of Guidance on Requirement to Track Energy Savings

MCB Camp Pendleton Energy Office officials stated that they did not track energy savings for the individual UESCs or ECMs because their understanding of UESC guidance was that they were not required to track the generated energy savings. Specifically, several MCB Camp Pendleton and NAVFAC Southwest officials stated that they were not aware of any DoD or Navy guidance requiring them to track the energy savings achieved through implementing ECMs on UESCs. As a result, they did not track achieved energy savings by individual ECMs or UESCs. DoD Instruction 4170.11 requires DoD Components to track estimated and verified energy savings generated by implementing energy projects. In addition, 10 U.S.C. § 2912 (2006), requires the use of remaining funds equal to achieved energy savings to implement additional ECMs and other installation improvements. Finally, according to the Navy and Marine Corps Energy Project Execution Team's "Navy and Marine Corps Energy Management Guide," September 2012, verification of savings is critical to energy projects to verify the projects achieve the expected results and to maintain support for the energy program from higher headquarters. UESCs implement energy projects; therefore, MCB Camp Pendleton personnel should track the energy savings of the implemented ECMs.

Furthermore, Assistant Secretary of the Navy (Energy, Installation and Environment) Office officials and NAVFAC Headquarters officials stated that to meet the requirements of the DoD Instruction 4170.11 and Navy and Marine Corps Energy Management Guide, the MCB Camp Pendleton followed the Department of Energy's Federal Energy Management Program recommendation to use performance assurance plans and stipulations. Specifically, Federal Energy Management Program guidance states that performance assurance plans are used to assure the specified performance and efficiency of the ECMs installed, and the expected level of operations and maintenance necessary to assure achievement of the annual estimated savings throughout the contract period.²⁵

²⁵ Department of Energy Office of Energy Efficiency and Renewable Energy Federal Energy Management Program, "Utility Energy Services Contracts: Enabling Documents," May 2009 and June 2013.

Furthermore, additional Federal Energy Management Program guidance states that using stipulations is a practical, cost-effective way to reduce measurement and verification cost and allocate risk.^{26,27} The Navy and Marine Corps Energy Project Management Guide acknowledges stipulation as a form of measurement and verification but states it must be avoided for most projects. Even though, the Navy and Marine Corps Energy Project Management Guide outlines projects where stipulation may be acceptable, it recommends visual verification that the projects are still functioning properly.

Neither the performance assurance plans nor stipulations directly address the determination of actual achieved energy cost savings for the implemented projects under the UESC. By only using these tools, the MCB Camp Pendleton Energy officials cannot make a clear determination on whether the ECMs implemented under the 10 UESCs achieved sufficient savings to pay back the UESC investment. Therefore, MCB Camp Pendleton Energy Office officials should develop and implement a process that tracks realized energy savings for the individual UESCs.

Achieving Sufficient Savings on Individual UESCs Uncertain

Over 8 years, MCB Camp Pendleton officials invested \$44.6 million for 10 UESCs to implement ECMs that may not have achieved sufficient energy savings to pay back the UESC investment.²⁸

Over 8 years, MCB Camp Pendleton officials invested \$44.6 million for 10 UESCs to implement ECMs that may not have achieved sufficient energy savings.

When asked how the MCB Camp Pendleton Energy Office officials knew that the UESCs were achieving energy savings, MCB Camp Pendleton officials stated that over the last decade, MCB Camp Pendleton has grown in size, but the energy usage has remained the same. In addition, NAVFAC Southwest officials stated that they were unsure whether MCB Camp Pendleton Energy Office officials could verify savings for each ECM.

Because MCB Camp Pendleton Energy Office officials were only tracking energy usage and did not convert that energy usage into achieved energy savings, they could not support whether the implemented ECMs are achieving sufficient energy savings to pay back the investment. In addition, MCB Camp Pendleton Energy Office officials continue to implement similar ECMs without knowing whether the ECMs have previously achieved sufficient energy savings. For example, MCB Camp Pendleton officials had ECMs, such as solar

²⁶ Stipulation is simply assuming that savings have been achieved.

²⁷ Department of Energy, Federal Energy Management Program, "Measurement and Verification Guidelines Version 4.0," November 2015.

²⁸ This is the investment value at the time the UESC was awarded.

panel roof mounted systems and updated lighting, installed through multiple task orders. However, MCB Camp Pendleton officials did not track savings to determine whether the ECMs installed in earlier phases achieved enough energy cost savings to cover the investment cost, and continued to install similar ECMs in additional buildings. Finally, without tracking the achieved energy savings from the UESCs, MCB Camp Pendleton officials would not be able to determine what funds are available for use in accordance with 10 U.S.C. § 2912 (2006), put those funds to proper use, and support the effectiveness of implemented ECMs.

Recommendation, Management Comments, and Our Response

Recommendation B.1

We recommend that the Commanding General, Marine Corps Installation West–Marine Corps Base Camp Pendleton, direct the Installation Energy Manager, Marine Corps Base Camp Pendleton Energy Office, develop and implement a process to track realized energy savings for Utility Energy Services Contracts.

Assistant Secretary of the Navy (Energy, Installations, and Environment) Comments

The Assistant Secretary of the Navy (Energy, Installations, and Environment), responding for Commanding General, Marine Corps Installation West–Marine Corps Base Camp Pendleton, did not agree with the recommendation. The Assistant Secretary stated that the DoD disagreed with a similar recommendation cited in Government Accountability Office (GAO) Audit Report No. GAO-17-461.²⁹ The Assistant Secretary used the same context for his disagreement with our recommendation, stating, “there is no statutory requirement for annual measurement and verification of the energy, water, or cost savings, or a contractual guarantee of those savings as there is for energy savings performance contracts in Section 801 of the [Energy Policy] Act of 1992 or in 10 [U.S.C.] § 2913.” He concluded that UESCs are for utility services under Section 201 of the Federal Property and Administrative Services Act of 1949 and the only financial requirement on Federal agencies is the obligation of the annual costs for the UESC. Furthermore, he stated that implementing performance assurance plans that are practical and appropriate based on the technical complexity, potential savings magnitude, and other factors as recommended by Department of Energy Federal Energy Management Program, satisfies the requirements established by the Office of Management and Budget in Addendum to Office of Management and Budget Memorandum M-98-13. Finally, according to the Assistant Secretary a

²⁹ Government Accountability Office Audit Report No. GAO-17-461, “Defense Infrastructure: Additional Data and Guidance Needed for Alternatively Financed Energy Projects,” June 20, 2017.

reasonable hypothesis can be made that the \$45 million UESC investment played a significant factor in mitigating utility cost increases because both annual energy consumption and cost for MCB Camp Pendleton have remained relatively flat, despite the square footage during the same period has increased 25 percent, since FY 2009.

The Assistant Secretary stated that the Marine Corps Installations Command is responsible for developing policy, instruction, and guidance pertaining to the application of UESCs within the Marine Corps; therefore, the Commander, Marine Corps Installations Command, will issue guidance that will incorporate steps recommended by the Department of Energy Federal Energy Management Program for developing and implementing performance assurance plans. Specifically, the guidance will include requirements for the:

- verification of performance at the installations and end of the warranty periods of the ECMs;
- training on operation and maintenance of installed ECMs in conjunction with continuing training throughout the contract period; and
- inspection and verification of operation and maintenance performance followed up with performance discrepancy resolution.

The target completion date for the Commander, Marine Corps Installations Command, to issue the guidance requiring performance assurance plans for UESCs is January 31, 2018.

Our Response

Comments from the Assistant Secretary of the Navy (Energy, Installations, and Environment) did not address the specifics of the recommendation; therefore, the recommendation is unresolved and remains open. We agree with the Assistant Secretary that there is no statutory requirement for annual measurement and verification of the energy, water, or cost savings, or a contractual guarantee of those savings. However, we disagree that there is no requirement to track energy savings achieved through UESCs. Specifically, 10 U.S.C. § 2912 (2006) states, “an amount of appropriated funds for the fiscal year equal to the amount of energy cost savings realized by the DoD remain available for obligation until spent. This remaining amount of appropriated funds should be used by splitting the funds evenly between:

- implementing additional ECMs and energy security measures; and
- use at the installation where the savings were realized, for improvements to housing units, minor construction projects enhancing the quality of life, or morale, welfare, or recreation facilities and services.”

In addition, Federal Energy Management Program guidance requires that an agency pay for the cost of the UESC from savings generated from the ECMs during the contract period.³⁰ DoD Instruction 4170.11 also requires tracking the estimated and verified energy savings generated by implementing energy projects.³¹ In order for a UESC to comply with 10 U.S.C. § 2912 (2006), the Federal Energy Management Program guidance, and DoD Instruction 4170.11, MCB Camp Pendleton Energy officials would need to track energy savings generated from the individual ECMs.

Furthermore, performance assurance plans may meet the requirements stated in the Addendum to Office of Management and Budget Memorandum M-98-13, but performance assurance plans alone are not sufficient to comply with 10 U.S.C. § 2912 (2006), other Federal Energy Management Program guidance, and DoD Instruction 4170.11. Performance assurance plans are for continued action during the contract to assure accomplishment of expected performance. By developing and implementing performance assurance plans, MCB Camp officials provide assurance in reaching the estimated savings of a UESC, but do not measure actual energy savings achieved after implementation of energy conservation measures. Therefore, by using this tool, MCB Camp Pendleton Energy officials cannot clearly determine whether the ECMs implemented through UESCs achieved sufficient savings.

In June 2017, the GAO issued GAO-17-461, which recommended that the Office of the Assistant Secretary of Defense (Energy, Installations, and Environment) update its guidance on UESCs and clarify the requirements for verifying the savings from UESCs.³² The Office of the Assistant Secretary of Defense (Energy, Installations, and Environment) disagreed. The GAO explained that while UESCs do not include guaranteed cost savings, repayments for UESCs may commit the DoD to a contract term for a period of up to 25 years, and repayments to the contractor are based on the estimated cost savings generated by the ECMs. Therefore, verification of the savings is necessary to ensure that the projects are meeting expected energy and cost savings required to fulfill the requirement that these projects be paid for entirely through the projects' generated cost savings. The Assistant Secretary of the Navy (Energy, Installations, and Environment) used the same context for his disagreement with our recommendation. We agree with the GAO's point that verification of savings is necessary. The Assistant Secretary of the Navy (Energy, Installations, and Environment) cannot affirmatively state that the UESCs generated savings. The Assistant Secretary of the Navy (Energy, Installations,

³⁰ Department of Energy Office of Energy Efficiency and Renewable Energy Federal Energy Management Program, "Utility Energy Service Contracts: Enabling Documents," May 2009 and June 2013.

³¹ DoD Instruction 4170.11, "Installation Energy Management," December 11, 2009, Change 1 effective March 16, 2016.

³² GAO-17-461, "Defense Infrastructure: Additional Data and Guidance Needed for Alternately Financed Energy Projects," June 2017.

and Environment) instead relied on a reasonable theory that the UESCs may have been a significant factor in keeping MCB Camp Pendleton's energy budget relatively flat. However, the Assistant Secretary of the Navy (Energy, Installations, and Environment) could not provide evidence that shows that the 10 UESCs reviewed generated the energy savings to pay back MCB Camp Pendleton's \$44.6 million investment in the UESCs.

We request that the Assistant Secretary of the Navy (Energy, Installations, and Environment) provide comments on the final report addressing the issue of MCB Camp Pendleton Energy Office officials not supporting whether UESCs achieved sufficient energy savings. We will close this recommendation once we verify that the information provided and actions MCB Camp Pendleton Energy Office officials take fully address the recommendation.

Prior DoD Office of the Inspector General (DoD OIG) reports identified findings related to DoD organizations improperly tracking savings related to UESCs. Specifically, Fort Knox officials did not have a method in place to identify how much energy was saved from the individual UESC task orders, and could not support whether the projects achieved sufficient energy savings to pay back the cost of the project.³³ Also, the Army did not have guidance in place related to measuring and verifying savings related to UESCs.³⁴ Because the DoD OIG made recommendations to address the identified problems in each report, and the GAO has a recommendation to address DoD-wide policy issues relating to documenting UESC savings realized, we are not making an additional recommendation at this time related to the DoD policy.

³³ DODIG-2014-107, "Fort Knox and the Army Need to Improve Internal Controls for Utility Energy Services Contracts," September 8, 2014.

³⁴ DODIG-2016-077, "San Antonio MICC and POM Personnel Properly Awarded and Administered the POM UESC, but Improved Procedures and Guidance are Needed," April 8, 2016.

Appendix A

Scope and Methodology

We conducted this performance audit from October 2016 through July 2017 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.

According to NAVFAC Southwest contracting officials, from FY 2009 through FY 2016, the NAVFAC Southwest contracting office awarded 10 UESCs under three BOAs, valued at \$45 million, for the implementation of ECMs at MCB Camp Pendleton. We reviewed each of the 10 UESCs to determine whether NAVFAC Southwest contracting officials properly awarded them and whether NAVFAC Southwest and MCB Camp Pendleton energy and public works officials properly administered the UESCs. See Appendix B for details on the 10 UESCs we reviewed.

We conducted site visits to NAVFAC Southwest, San Diego, California, and MCB Camp Pendleton, San Diego, California. We reviewed various contracting and quality assurance documents maintained by NAVFAC Southwest contracting officials, NAVFAC Southwest Utility and Energy Management technical officials, MCB Camp Pendleton's Energy Office officials, and NAVFAC Southwest FEAD officials.

To determine whether the 10 UESCs were awarded properly, we evaluated whether NAVFAC Southwest contracting officials and MCB Camp Pendleton Energy Office officials properly identified the requirements for each UESC, justified and approved the use of a UESC, developed the LCCA to identify the potential energy savings for each UESC, and determined the price reasonableness of using the UESCs. We reviewed and analyzed contract file documentation, such as justification and approvals, LCCAs, statements of work, independent Government estimates, proposals and solicitations, and business clearance memoranda.

To determine whether the 10 UESCs were properly administered, we evaluated whether NAVFAC Southwest contracting officials, MCB Camp Pendleton Energy Office officials, and NAVFAC Southwest FEAD officials properly designated a COR for each UESC, provided oversight of the contractor's performance, and tracked the achieved energy savings for each UESC. We reviewed and analyzed support agreements, quality assurance reports, contractors' quality control reports, Government inspection records, measurement and verification reports, and COR designations letters.

Criteria

To determine whether NAVFAC Southwest contracting officials and MCB Camp Pendleton Energy Office officials properly awarded and administered UESCs in accordance with Federal and DoD regulations and policies, we referenced the following primary acquisition and contracting regulations and policies during the review:

- Section 2912, title 10, United States Code, “Availability and Use of Energy Savings”
- Section 2913, title 10, United States Code, “Energy Savings Contracts and Activities”
- Section 8256, title 42, United States Code, “Incentives for Agencies”
- FAR Subpart 1.6, “Career Development, Contracting Authority, and Responsibilities”
- FAR Part 6, “Competition Requirements”
- FAR Part 43, “Contract Modifications”
- DoD Instruction 4170.11, “Installation Energy Management”
- DoD Contracting Officer’s Representative Handbook, March 22, 2012.

Use of Computer-Processed Data

We did not use computer-processed data to support our findings, conclusions, and recommendations.

Prior Coverage

During the last 5 years, the GAO, the DoD OIG, and the Naval Audit Service issued four reports discussing DoD use of UESCs. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/pubs/index.cfm>. Naval Audit Service reports are not available over the Internet.

GAO

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

The DoD has used alternative financing arrangements to improve energy efficiency, save money, and meet energy goals through contracting from 2005; however, the DoD has not collected complete and accurate data, such as total contract costs and savings. In addition, the GAO reviewed 13 operational alternatively financed energy projects that were reported as achieving their expected savings. However, the Military Services have varying approaches to

verifying whether project savings are achieved for all UESCs. Without clear guidance on how to verify savings for UESC projects, the Military Services will continue to take inconsistent approaches to verifying the savings of UESC projects that may potentially span a 25-year duration.

DoD OIG

DODIG-2016-077, "San Antonio MICC and POM Personnel Properly Awarded and Administered the POM UESC, but Improved Procedures and Guidance are Needed," April 8, 2016

Contracting personnel at San Antonio Mission and Installation Contracting Command personnel and U.S. Army Garrison Presidio of Monterey program personnel properly awarded and administered the U.S. Army Garrison Presidio of Monterey UESC. However, personnel at the Assistant Chief of Staff for Installation Management, U.S. Army Installation Management Command, San Antonio Mission and Installation Contracting Command, and Presidio of Monterey did not have standard operating procedures or sufficient guidance in place over the UESC program. Although current personnel have awarded and administered the UESC appropriately, without documenting adequate and appropriate procedures and guidance, Army officials may not be able to effectively award UESC contracts and administer the UESC program in the future.

DODIG-2014-107, "Fort Knox and the Army Need to Improve Internal Controls for Utility Energy Services Contracts," September 8, 2014

Fort Knox officials did not properly award and administer 108 task orders, valued at about \$270 million. In addition, Fort Knox officials could not support the claim that projects achieved the projected energy savings. As a result, Fort Knox officials spent millions on projects that may not have achieved sufficient energy savings to repay the utility company's investment as required. This means the projects might not meet DoD financing requirements for energy savings projects using UESCs, and Fort Knox officials do not have assurance that they paid fair and reasonable prices. Furthermore, the lack of adequate internal controls increases the risk of fraud, waste, and abuse.

Navy

N2013-0031, "Follow-up on Internal Controls Over Department of the Energy Funding and Financing Tools," June 13, 2013

Report No. N2011-0023, "Internal Controls Over Department of the Navy Energy Funding and Financing Tools," identified opportunities to improve the management of Department of the Navy energy projects in the areas of performance assurance, validation and reporting processes, and project documentation. Department of the Navy organizations took actions to address all of the recommendations made in the audit report, except one. The Commanding Officer, NAVFAC, had not fully implemented corrective actions to strengthen controls and oversight over the Procurement Performance Management and Assistance Program and Inspector General Inspection process to ensure acquisition personnel conduct reviews of UESC projects; obtain and update required contract documentation, and retain required contract documentation in the UESC contract files.

Appendix B

MCB Camp Pendleton Utility Energy Service Contracts Reviewed*

Basic Ordering Agreement	Task Order	Phase	Date of Award	End of Period of Performance	Services Provided	Value at Award	Final Contract Value
N68711-05-G-8620	0017	10	February 24, 2009	January 30, 2011	Boiler plant modifications, solar power system, lighting retrofits, ¹ and water conservation improvements	\$4,651,205	\$5,149,084
N62473-08-G-0601	0003	12	September 15, 2009	July 30, 2011	HVAC and Boiler Retrofits, EMS and DDC retrocommissioning ² with network integration, EMS analyst, solar powered signs and bus shelters, and AMR system and network	4,982,091	4,982,091
N62473-08-G-0601	0004	13	September 14, 2010	March 31, 2013	EMS Controls, EMS analyst, AMR system and network, HVAC and boiler retrofits, and solar power applications	4,919,796	4,919,796
N62473-08-G-0601	0005	14	August 30, 2011	October 31, 2013	EMS Controls retrocommissioning, AMR system, HVAC and boiler retrofits, lighting retrofits, and solar power system	4,967,865	4,967,865
N62473-08-G-0601	0006	15	May 1, 2012	October 31, 2014	Lighting retrofits, water booster pumps, and EMS analyst	4,182,901	4,182,901
N62473-08-G-0601	0007	17	September 24, 2012	May 30, 2014	Variable Frequency Drives, ³ AMR water and gas meters, repair air compressors, and retrocommissioning of EMS and DDC and solar power systems	4,945,778	4,945,778

* Acronyms and technical terms used throughout Appendix B are defined on the last page of Appendix B.

MCB Camp Pendleton Utility Energy Service Contracts Reviewed (cont'd)

Basic Ordering Agreement	Task Order	Phase	Date of Award	End of Period of Performance	Services Provided	Value at Award	Final Contract Value
N62473-08-G-0601	0008	18	September 24, 2012	January 31, 2014	Booster pump station upgrade, EMS and DDC, cool roof technology, solar panels and thermal, and lighting	4,156,572	4,156,572
N62473-13-G-1403	0001	19	September 27, 2013	January 31, 2015	Boiler retrofits and installation of EMS and DDC	3,935,611	3,935,611
N62473-13-G-1403	0002	20	September 27, 2013	September 27, 2014	Replace boilers, DDC, and lighting	3,046,125	3,046,125
N62473-13-G-1403	0003	21	September 15, 2015	March 29, 2017	Install HVAC and DDC, solar thermal heating systems retrocommissioning, lighting, electric smart meters, and replace boiler system	4,827,168	4,827,168
					Total	\$44,615,112	\$45,112,991

Source: DoD OIG.

¹ Retrofit – Installing an alternative system into an existing building.

² Retrocommissioning is a process to identify possible energy savings by determining whether existing facility systems perform in accordance with the design and intent, meet the needs of the owners and users, and can be operated and maintained during their life cycle.

³ Variable Frequency Drives vary the flow rate and the speed of pumps and fans on systems to match the building conditions resulting in savings by operating at reduced speeds.

Legend

- AMR** Automated Meter Reading
- DDC** Direct Digital Control
- EMS** Energy Management System
- HVAC** Heating, Ventilation, and Air Conditioning

Appendix C

Section 2912, Title 10, United States Code, “Availability and Use of Energy Cost Savings”

(a) Availability. An amount of the funds appropriated to the Department of Defense for a fiscal year that is equal to the amount of energy cost savings realized by the Department, including the financial benefits resulting from shared energy savings contracts entered into under section 2913 of this title, shall remain available for obligation under subsection (b) until expended, without additional authorization or appropriation.

(b) Use. The Secretary of Defense shall provided that the amount that remains available for obligation under subsection (a) and the funds made available under section 2916(b)(2) of this title shall be used as follows:

(1) One-half of the amount shall be used for the implementation of additional energy conservation and energy security measures at buildings, facilities, or installations of the Department of Defense or related to vehicles and equipment of the Department, which are designated, in accordance with regulations prescribed by the Secretary of Defense, by the head of the department, agency, or instrumentality that realized the savings referred to in subsection (a).

(2) One-half of the amount shall be used at the installation at which the savings were realized, as determined by the commanding officer of such installation consistent with applicable law and regulations, for –

(A) improvements to existing military family housing units;

(B) any unspecified minor construction project that will enhance the quality of life of personnel; or

(C) any morale, welfare, or recreation facility or service.

(c) Treatment of Certain Financial Incentives. Financial incentives received from gas or electric utilities under section 2913 of this title shall be credited to an appropriation designated by the Secretary of Defense. Amounts so credited shall be merged with the appropriation to which credited and shall be available for the same purposes and the same period as the appropriation with which merged.

(d) Congressional Notification. The Secretary of Defense shall include in the budget material submitted to Congress in connection with the submission of the budget for a fiscal year pursuant to section 1105 of title 31 a separate statement of the amounts available for obligation under this section in that fiscal year.

Management Comments

Assistant Secretary of the Navy (Energy, Installations, and Environment)



DEPARTMENT OF THE NAVY
THE ASSISTANT SECRETARY OF THE NAVY
(ENERGY, INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

August 25, 2017

MEMORANDUM FOR THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: OFFICIAL MANAGEMENT RESPONSES: NAVAL FACILITIES
ENGINEERING COMMAND SOUTHWEST AND MARINE CORPS BASE
CAMP PENDLETON OFFICIALS USE OF UTILITY ENERGY SERVICES
CONTRACTS (Project No. D2017-D000CI-0005.000)

Department of the Navy comments on the subject draft report are attached, NAVFAC response to recommendation A.1 and HQMC response to recommendation B.1. Thank you for the opportunity to comment on the subject draft report. My point of contact is [REDACTED]

A handwritten signature in black ink, appearing to read "Steven Iselin", is centered below the main text.

Steven Iselin

Attachments:
As stated

cc:
NAVINGEN
NAVFAC
HQMC

Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
1322 PATTERSON AVENUE, SE SUITE 1000
WASHINGTON NAVY YARD DC 20374-5065

5041
Ser 09IG/012
23 Aug 2017

From: Commander, Naval Facilities Engineering Command
To: Department of Defense Inspector General
(Attn: Program Director, Contract Management and Payments)
Via: Assistant Secretary of the Navy (Energy, Installations and Environment)
Subj: OFFICIAL MANAGEMENT RESPONSES: NAVAL FACILITIES ENGINEERING
COMMAND SOUTHWEST AND MARINE CORPS BASE CAMP PENDLETON
OFFICIALS USE OF UTILITY ENERGY SERVICES CONTRACTS (Project No.
D2017-D000CI-0005.000)
Ref: (a) DoDIG Draft Audit Report 2017-0005 dated 26 Jul 2017
Encl: (1) NAVFAC Official Management Responses

1. Per reference (a), enclosure (1) is submitted in response to the subject draft audit report. The NAVFAC Headquarters is providing official management responses to the Draft Report in coordination with the Naval Facilities Engineering Command Southwest.
2. The NAVFAC Headquarters' point of contact is [REDACTED] can be reached at [REDACTED] or via email at [REDACTED]

KARLSON,ERIKJON [REDACTED]
ERIK J. KARLSON
Captain, CEC, U.S. Navy
Inspector General

Copy to:
OASN (EI&E)
NAVFAC PW
NAVFAC AQ
NAVFAC OOC
NAVFAC SW
EXWC

Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)

**Department of Defense Inspector General (DoDIG) Draft Report D2017-D000CI-0005.000
of 26 July 2017:**

**NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST AND MARINE
CORPS BASE CAMP PENDLETON OFFICIALS USE OF UTILITY ENERGY
SERVICES CONTRACTS**

We recommend that the Commanding Officer, Naval Facilities Engineering Command Southwest:

Recommendation A.1.a. Direct the Naval Facilities Engineering Command Southwest contracting officers approve all future scope of work changes before the contractor begins performance, and reemphasize and hold training sessions to implement the existing process for notifying and approving minor expedited changes for the Marine Corps Base Camp Pendleton Utility Energy Services Contracts.

NAVFAC Response: Concur with recommendation.

NAVFAC SW held a meeting with SDG&E on 19 June 2017 to discuss handling of field changes under UESC and Basic Ordering Agreement (BOA) requirements and discussed Contracting Officers' roles and responsibilities. NAVFAC SW will amend BOA to remove any ambiguity regarding the contracting officer's roles and incorporate expedited minor changes/field change requests that will be approved via contract modification regardless of dollar value.

NAVFAC SW held a meeting with UEM Core (technical and acquisition) and the Facility Engineering and Acquisition Division (FEAD) Camp Pendleton on 01 Aug 2017 to discuss roles and responsibilities for UESCs. Previously, roles and responsibilities were outlined at the kick off meeting and annotated in the meeting minutes. New implementation is to define roles and responsibilities in the Memorandum of Agreement (MOA), which will be signed by the customer command representative and NAVFAC SW as part of the project request and authorization for implementation. Further, roles and responsibilities will be emphasized at the kick-off meeting with the contractor and monitored by the Contracting Officer Representative (COR) and contracting officer as a collaborative team. It was also agreed that the COR's role will reside with the FEAD in the field versus with the Project Manager (PM) from the UEM Core team in downtown San Diego. The FEAD Construction Manager (CM) will be the COR as they reside where the work is being performed and will have the proper courses and training to ensure the processes and procedures of the program are followed properly. The COR assignment letter will identify the roles and responsibilities of which he/she will sign in agreement.

Target Completion Date: 31 January 2018,

BOA modification language target date: 31 August 2017 (or at Next Option year), whichever is first.

ENCLOSURE (1)

Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)

MOA, kick off meeting, and COR target date: there are currently no active UESCs at Camp Pendleton. However, we will conduct training prior to the award and start of all projects coming up at all southwest Navy and Marine Corps installations, as well as, MCB Camp Pendleton (e.g., MCRD San Diego, NAS Lemoore, NAWS China Lake, and MCAS Miramar are all locations with UESC contracts currently planned).

NAVFAC SW Planned UESC Award Schedule:

- MCRD San Diego – 22 AUG 2017.
- NAS Lemoore – 29 SEP 2017.
- MCAS Miramar – 16 NOV 2017.
- NAWS China Lake – 15 DEC 2017.

Recommendation A.1.b.: Review the Naval Facilities Engineering Command Southwest contracting officers' and other government officials' actions when they inappropriately approved or did not approve changes in the scope of work before the contractor began the work and did not modify the Utility Energy Services Contracts to reflect the changes in the scope of work, and, as appropriate, initiate actions to hold the contracting officers and other government officials accountable.

NAVFAC Response: Concur with Recommendation.

NAVFAC SW has reviewed the actions of the contracting officer and determined she was not aware of inappropriate modifications. Consequently, no action will be taken other than to train her on oversight and administration. We will review the actions of other personnel involved in the projects to determine any level of involvement and appropriate action to be taken.

Additional steps to be taken: NAVFAC SW will amend BOA to remove any ambiguity regarding the approval of scope of work changes and incorporate expedited minor changes/field change requests that will be approved via contract modification by Contracting Officer.

Target Completion Date: 31 December 2017.

Recommendation A.1.c.: Establish a written agreement with each organization that the contracting officers rely on to perform contract administration or quality assurance duties. The agreement should clearly outline each organization's:

- Duties, roles and responsibilities
- Documentation and retention requirements;
- Procedures for providing contractor performance information to Naval Facilities Engineering Command Southwest contracting officials; and

ENCLOSURE (1)

Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)

- **Procedures for requesting and obtaining approval for scope of work changes from the Naval Facilities Engineering Command Southwest contracting officers.**

NAVFAC Response: Concur with Recommendation.

New Implementation is to define roles and responsibilities in the MOA, which will be signed by Customer Command Representative and NAVFAC SW as part of project request and authorization for implementation. Further, roles and responsibilities will be emphasized at the kick-off meeting with the contractor and monitored by the COR and contracting officer as a collaborative team.

In addition, NAVFAC SW will adopt the Contract Administration Plan (CAP) currently in use by the NAVFAC Engineering and Expeditionary Warfare Center (EXWC) for Energy Savings Performance Contracts and tailor it to use for UESC contract administration. This plan will outline and address required actions, duties, and responsibilities for all persons and offices administering UESCs. The UESC Contracting Officer will meet with all specific project parties to train on its contents and will have all parties (FEAD CM COR, UEM Core PM, CS & KO) sign the agreement at the UESC kick off meeting. NAVFAC SW will submit a Corrective Action Request (CAR) for review and approval to incorporate the CAP into the NAVFAC Business Management System (BMS) process for UESC Contracting.

Target Completion Date: 31 January 2018.

- MCRD San Diego – 22 AUG 2017.
- NAS Lemoore – 29 SEP 2017.
- MCAS Miramar – 16 NOV 2017.
- NAWS China Lake – 15 DEC 2017.

During the planning stages, but prior to project award, NAVFAC SW will have a MOA and CAP in place for each UESC, and will train personnel and obtain signatures on the agreements. Post award, NAVFAC SW will train the contractor on processes and procedures to comply with new BOA requirements as well.

Revised MOA provisions will be implemented with all newly initiated UESC projects. Currently planned UESC projects (as listed above) will not have MOAs revised, but customer command personnel as well as NAVFAC SW contract administration personnel will be trained and advised that only the NAVFAC SW Contracting Officer has the authority to direct the contractor to make any changes to the contract price, scope, or performance period.

ENCLOSURE (1)

Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)

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**INSPECTOR GENERAL, U.S. DEPARTMENT OF DEFENSE DRAFT REPORT DATED
26 JULY 2017
D2017-D000CI-0005.000**

**“NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST AND MARINE
CORPS BASE CAMP PENDLETON OFFICIALS USE OF UTILITY ENERGY
SERVICES CONTRACTS”**

**U. S. MARINE CORPS COMMENTS
TO INSPECTOR GENERAL, U.S. DEPARTMENT OF DEFENSE
RECOMMENDATIONS**

RECOMMENDATION B.1.: Office of the Inspector General, Department of Defense recommend that the Commanding Officer, Marine Corps Installation West – Marine Corps Base Camp Pendleton, direct the Installation Energy Manager, Marine Corps Base Camp Pendleton Energy Office, develop and implement a process to track realized energy savings for Utility Energy Services Contracts.

USMC RESPONSE: The Marine Corps non-concurs with the recommendation.

The correct legislative authority for Utility Energy Services Contracts (UESC) is provided for in Section 152(f) of the Energy Policy Act (EPA) of 1992– Public Law 102-486. Additionally, 10 U.S. Code § 2913 and 10 U.S. Code § 2866 (a) authorize and encourage defense facilities to participate in utility programs for the management of electricity demand, and energy and water conservation. Since these contracts are for utility services under Section 201 of the Federal Property and Administrative Services Act of 1949, the only financial requirement on Federal agencies is the obligation of the annual costs for such contracts during each year that the contract is in effect. There is no statutory requirement for annual measurement and verification of the energy, water, or cost savings, or a contractual guarantee of those savings as there is for energy savings performance contracts in Section 801 of the EPA of 1992 or in 10 U.S. Code § 2913. Instead, the Department of Energy (DOE) Federal Energy Management Program (FEMP) recommends “performance assurance plans” that are practical and appropriate based on the technical complexity, potential savings magnitude, and specific situations. The utilization of performance assurance plans is in-line with requirements established by the Office of Management and Budget (OMB), Addendum to OMB Memorandum M-98-13 on Federal Use of Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs) (Washington, D.C.: Oct. 3, 2012).

DODI 4170.11, Installation Energy Management, requires tracking the estimated and verified energy savings generated by implementing energy projects. However, in response to a similar recommendation made in GAO-17-461, Defense Infrastructure: Additional Data and Guidance Needed for Alternatively Financed Energy Projects, June 20, 2017, DoD non-concurred to a similar recommendation which had language identical to above.

The responsibility for developing policy, instruction, and guidance pertaining to the application of UESCs within the Marine Corps resides with Marine Corps Installations Command (MCICOM), not regional or installation commands. To achieve compliance with the references cited above and to ensure a consistent application across all Marine Corps regional and installation commands, the United States Marine Corps (USMC), through Commander, MCICOM (COMMCICOM), will issue instruction/guidance no later than 31 January 2018 which specifically adopts language contained in

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Assistant Secretary of the Navy (Energy, Installations, and Environment) (cont'd)

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current DOE FEMP publications to ensure consistent implementation of these contracting mechanisms across all USMC Installation Commands. Specifically, COMMCICOM will institute DOE FEMP recommendations requiring performance assurance plans that are practical and appropriate based on the technical complexity, potential savings magnitude, and specific situations. The minimal performance assurance plan recommended by MCICOM for UESC energy conservation measures will include:

- Start-up performance verification (based on measured data).
- Performance verification at the end of the warranty period (based on measured data).
- Operations and Maintenance (O&M) Training (required in the more common instance where the agency continues to operate and maintain the installed equipment).
- Provision for continuing training throughout the contract period as specified in the contract as determined by the needs of the facility.
- Periodic inspections and verification of appropriate O&M performance.
- Performance discrepancy resolution.

ADDITIONAL TECHNICAL COMMENTS:

- (1) Per published instruction/guidance from DOE FEMP, there is no statutory requirement for annual measurement and verification for UESC projects as there is for ESPC projects. FEMP recommends performance assurance plans that are practical and appropriate based on the technical complexity, potential savings magnitude, and specific situations. The minimal performance assurance plan recommended by FEMP for UESC energy conservation measures are:
 - (2)
 - Start-up performance verification (based on measured data).
 - Performance verification at the end of the warranty period (based on measured data).
 - O&M training (required in the more common instance where the agency continues to operate and maintain the installed equipment).
 - Provision of continuing training throughout the contract period as specified in the contract as determined by the needs of the facility.
 - Periodic inspections and verification of appropriate O&M performance.
 - Performance discrepancy resolution.
- (3) The Assistant Secretary of Defense (EI&E) provided a non-concur response, dated 3 May 2017, to a similar recommendation made in GAO-17-461, Additional Data and Guidance Needed for Alternatively Financed Energy Projects stating: "As these contracts are for utility services under Section 201 of the Federal Property and Administrative Services Act of 1949, the only financial requirement on Federal agencies is the obligation of the annual costs for such contracts during each year that the contract is in effect. There is no statutory requirement for annual measurement and verification of the energy, water, or cost savings, or a contractual guarantee of those savings as there is for energy savings performance contracts in Section 801 of the EPAct, or in 10 U.S.C. Section 2913."
- (4) Since FY2009, both annual energy consumption and cost aboard MCB Camp Pendleton have remained relatively flat. However, square footage during that time period increased roughly 25%. A reasonable hypothesis is that the \$45M UESC investment played a significant factor towards mitigating the potential utility budget increases that would have resulted due to a very substantial increase in square footage.

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- (5) The MCB Camp Pendleton (MCBCP) Energy Office (EO) tracks and validates energy savings from energy projects with contractor-supplied measurement and verification (M&V) reports in accordance with DOE FEMP guidelines during construction and execution of the projects. MCBCP EO performs spot checks after project completion, per FEMP, to validate performance.
- (6) MCBCP EO utilizes an energy accounting software called EnergyCap to track building-level energy cost and usage based on actual meter readings compiled by the advanced metering infrastructure. This software has a cost avoidance module that can demonstrate savings at the building level.
- (7) MCBCP EO plans and executes projects only with proven energy conservation equipment and technology to save the USMC in terms of utility consumption and costs, and O&M costs. The UESC between Naval Facilities (NAVFAC) and San Diego Gas and Electric (SDG&E) requires the purchase of energy efficient equipment that:
 - Meets DOE and Environmental Protection Agency criteria for use of the Energy Star trademark label; or
 - Is in the upper 25 percent of efficiency for all similar products as designated by the DOE FEMP.

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Acronyms and Abbreviations

BOA	Basic Ordering Agreement
COR	Contracting Officer's Representative
ECM	Energy Conservation Measure
FAR	Federal Acquisition Regulation
FEAD	Facilities Engineering and Acquisition Division
GAO	Government Accountability Office
LCCA	Life-Cycle Cost Analysis
MCB	Marine Corps Base
NAVFAC	Naval Facilities Engineering Command
UESC	Utility Energy Services Contract

Whistleblower Protection

U.S. DEPARTMENT OF DEFENSE

The Whistleblower Protection Ombudsman's role is to educate agency employees about prohibitions on retaliation and employees' rights and remedies available for reprisal.

The DoD Hotline Director is the designated ombudsman.

For more information, please visit the Whistleblower webpage at www.dodig.mil/programs/whistleblower.

For more information about DoD OIG reports or activities, please contact us:

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