



OFFICE OF INSPECTOR GENERAL  
U.S. Department of Energy

# AUDIT REPORT

DOE-OIG-20-13

November 2019

**SUBCONTRACT MANAGEMENT AT THE  
STRATEGIC PETROLEUM RESERVE**



**Department of Energy**  
Washington, DC 20585

November 26, 2019

MEMORANDUM FOR THE PROJECT MANAGER, STRATEGIC PETROLEUM RESERVE  
PROJECT MANAGEMENT OFFICE

A handwritten signature in black ink, appearing to read "Debra K. Solmonson".

FROM: Debra K. Solmonson  
Deputy Assistant Inspector General  
for Audits and Inspections, East  
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Subcontract Management at the  
Strategic Petroleum Reserve"

BACKGROUND

The Strategic Petroleum Reserve comprises the largest stockpile of emergency crude oil in the world with, as of November 2018, over 654 million barrels. Stockpiles are stored in a series of underground salt caverns located along the coastline of the Gulf of Mexico. The Strategic Petroleum Reserve's overarching priority is to maintain the readiness of the oil stockpile for emergency use at the President's direction. Since April 1, 2014, Fluor Federal Petroleum Operations, LLC (FFPO) has managed and operated the Strategic Petroleum Reserve for the Department of Energy. To carry out its objectives, FFPO relies on subcontractors to perform a significant amount of work. For example, in fiscal year 2016, subcontracts accounted for \$81.5 million, which is more than half of FFPO's total incurred costs of \$157.6 million. As a management and operating contractor, FFPO has the responsibility to administer its subcontracts in accordance with established Federal and Department of Energy Acquisition Regulations. Accordingly, we initiated this audit to determine whether FFPO appropriately administered subcontracts.

RESULTS OF AUDIT

Based on our review of seven FFPO subcontracts, we found that FFPO had not always appropriately administered some subcontracts. Specifically, we found that none of our sampled subcontract files were fully and consistently maintained, and invoice approval was not always based on documentation sufficient to validate satisfactory subcontract performance. These issues occurred because FFPO had not established adequate guidance or sufficient training regarding its subcontract administration. During the course of our audit, FFPO Internal Audit (Internal Audit) identified similar issues while conducting its annual subcontract audits. Internal Audit's findings related to missing subcontract file documentation, inadequate or incomplete invoice support,

inconsistent rates, administrative errors, and unallowable items resulted in Internal Audit making a series of recommendations to improve FFPO's subcontract administration. While these efforts should help FFPO improve the administration of subcontracts, we have identified additional actions that can be taken to increase the likelihood that subcontract files are fully and consistently documented, and adequately establish the propriety of the transaction and the price paid. Therefore, we made a series of recommendations to help ensure that the Department properly administers subcontracts and receives the full value of contracted goods and services.

### **Subcontract File Maintenance**

For the seven subcontracts that we reviewed, FFPO had not fully and consistently maintained its subcontract files. Department of Energy Acquisition Regulation (DEAR), Part 970.5244-1, *Contractor Purchasing System*, requires contractors to employ purchasing systems and methods, and to include subcontract awards, which are fully documented and consistently applied. However, we found that FFPO's subcontract files did not always contain all required documentation. For example, in some instances, subcontract files did not include verification of all the items necessary for closeout, as prescribed in FFPO's *Procurement Procedures Manual* (PPM). FFPO's PPM implements the provisions of the prime contract, Federal Acquisition Regulation, and DEAR. Additionally, we identified several other items missing from subcontract files, including two conflict of interest reviews, approval of a modification, and an advanced notification letter to the Department for an acquisition above the simplified acquisition threshold. While FFPO subsequently completed the advanced notification letter and added it to the subcontract file, we noted that completing the notification nearly 1 year after the solicitation did not meet the requirement of providing "advanced notification" to the Department. We also found one instance in which a sole source justification was not adequately documented.

In addition to missing and inadequate documentation, we found that the location of subcontract file documentation varied greatly. According to FFPO's PPM, subcontract files can be maintained in either hard copy or electronic format consistent with the value, complexity, and storage capability of the file. The buyer is allowed to choose the method used to maintain the official file based on the nature of the acquisition and to determine the necessary amount and type of supporting documentation. However, during our review, we found that this approach may have led to inconsistencies in documentation, confusion among FFPO personnel as to what constituted the official file, and contributed to difficulties in obtaining file documentation. For example, in one subcontract file, we were unable to locate daily Subcontract Management Technical Representative (SMTR) reports used to validate work performance. Those reports were subsequently provided to us from a document management system that was not readily accessible. Federal Acquisition Regulations require sufficient contract documentation to constitute a complete history of transactions, including the ability to promptly locate files, production surveillance records, bills, invoices, vouchers, supporting documents, and other pertinent documents. Furthermore, DEAR requires that FFPO maintain support for all allowable costs incurred and specifies that records are subject to audit by the Department or its designees. Our review of the sampled subcontracts revealed that these files were incomplete, not easily retrievable, and did not always demonstrate allowable costs incurred with appropriate pertinent documentation.

## **Invoice Approval**

FFPO's invoice approval process did not adequately demonstrate that payments were made for goods and services, as contracted, and based on documentation sufficient to validate satisfactory subcontract performance. In addition to requiring purchasing systems and methods that are fully documented and consistently applied, the DEAR requires contractors to maintain file documentation that is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. However, we found that FFPO's subcontract files did not always contain adequate documentation to validate work performed or support payment consistent with subcontract terms. For example, for one reviewed time and material/labor hour subcontract, none of the timesheets were signed by the SMTR to validate labor hours billed, as required. Despite not having adequate supporting documentation, FFPO paid the associated invoice. After discussing our concerns with FFPO Internal Audit personnel, they completed a planned audit of this subcontractor and, as a result, questioned the entire \$2 million in direct labor costs related to the subcontract's Basic Ordering Agreement. Internal Audit's questioned costs included the direct labor hours associated with the subcontract in our sample; as this had since been resolved by Internal Audit, we did not question additional costs. For another fixed-price subcontract, billing was required to be submitted on a weekly basis with a signed copy of the employee timecard attached to each respective invoice. Likewise, certified payrolls were required to be submitted to the Subcontract Manager on a weekly basis. To accomplish this requirement, timesheets contained signature blocks for both the employee and FFPO Supervisor. However, we found that 136 timesheets were signed off by the SMTR, while 27 were not. Further, one of the unsigned timesheets was blank, except for the date of service. Although FFPO's PPM did not specifically require signed timesheets for fixed-price subcontracts, we confirmed with the Contracting Officer that if the verification requirement of a subcontract included the use of timesheets, then all timesheets should have been signed by the SMTR, regardless of contract type.

Additionally, we found that, in most cases, SMTR service verifications were not completed until after the invoices were received, rather than at the time the goods and services were received. The SMTR monitors subcontract performance and verifies work performed to allow for accrual and payment. Verification of work performed includes entering service verifications on a timely basis. Yet, in five of the seven subcontracts reviewed, none of the SMTR service entries were completed until after the invoice was received. For the other two subcontracts, 4 of 5 and 113 of 182, or 80% and 62%, respectively, did not have service entries completed until after the invoices were received. In some cases, we noted that SMTR service verifications were entered, anywhere from the same day work was completed to as many as 89 days after the fact. Delays in making timely service entries could lead to inaccuracies in the contract file and jeopardize the Department's reliance on both the quantity and quality of the work performed.

## **Guidance and Training**

These issues occurred because FFPO had not established and implemented policies and procedures necessary to provide personnel with specific guidance on administration of subcontract requirements. Additionally, FFPO had not ensured that personnel were properly trained to satisfactorily administer its subcontracts. During the course of our audit, Internal

Audit conducted subcontract audits and identified similar issues with FFPO's subcontract file maintenance and invoice approval, and made a series of recommendations. While Internal Audit's recommendations addressed many of our concerns, we identified additional weaknesses that need to be addressed to ensure that subcontract files are fully and consistently documented, and adequately establish the propriety of the transaction and the price paid.

### **Policies and Procedures**

FFPO had not ensured that its policies and procedures provided sufficient guidance on the location and method of subcontract file documentation or required level of detail in subcontract files. Specifically, FFPO's PPM allowed buyers to determine the method used to maintain the official file, including the amount, type, and location of supporting documentation required. For example, in outlining the minimum documentation necessary for subcontract files, PPM listed "file contents commensurate with award value." Yet, the manual provided no specific guidance on what file contents were appropriate at various award levels and instead left it to the buyer's discretion. Furthermore, PPM did not detail how the propriety of transactions would be established for certain subcontract types, including most fixed-price subcontracts. Rather, it limited subcontract types requiring buyer and SMTR approval and signed timesheets to time and material/labor hour, cost reimbursement, and construction fixed-price subcontracts. Additionally, PPM stated that all other subcontract types "may require" approval of invoices pursuant to a determination by the buyer or procurement manager. We noted that the Federal Acquisition Regulation and DEAR require adequate documentation to establish the propriety of all transactions, regardless of subcontract type. To ensure all subcontract types uniformly meet required standards, FFPO should standardize its treatment of fixed-price subcontracts. We considered the location of FFPO's subcontract file documentation to be a minor issue and consequently did not make a formal recommendation. However, we suggest that FFPO update its policies and procedures to provide additional guidance in this area.

Additionally, we found that SMTR procedures were vague as to required verification activities. For example, procedures required verification of work performed, yet they did not establish any specific time limit for that work. As a result, we found that SMTR service entries ranged from the same day goods or services were received to as long as nearly 3 months after the fact. The internal audits mentioned above included recommendations to address weaknesses in the invoice approval process, including lack of adequate supporting documentation and evidence of SMTR verification activities. In response, FFPO implemented a series of corrective actions, including a May 2018 update to its PPM. While we considered FFPO's response to Internal Audit's recommendations a positive step, we noted that it did not address our concerns regarding the lack of detail in PPM and SMTR procedures.

### **Training**

FFPO personnel did not always have adequate training to carry out subcontract administration duties. For example, only two of the five buyers assigned to the subcontracts we reviewed had any formal training in contracting to assist them in making informed decisions about required subcontract file contents. Furthermore, during the course of our audit, Internal Audit found weaknesses similar to those we found in contracting and invoice approval, and recommended

that FFPO conduct training to address these issues. In response, FFPO provided additional training for time and material/labor hour and cost reimbursement subcontracts for personnel involved in the invoice approval process, including buyers/subcontract administrators, accounts payable personnel, and SMTRs. While FFPO's approach was responsive to Internal Audit's recommendation for additional training, we found that it may not have been sufficient to fully resolve the issues noted in our report. Specifically, FFPO's training only addressed requirements for cost-type subcontracts even though many of the issues identified in this report also occurred with fixed-price subcontracts, which comprised the vast majority of FFPO's subcontracts.

### **Subcontract Risk**

Without additional improvements to its subcontract administration, there is an increased risk that FFPO, and ultimately the Department, may not be able to ensure that it receives the full value of contracted goods and services. The likelihood and impact of this risk could increase due to the ongoing and future awarding of subcontracts supporting the Strategic Petroleum Reserve's Life Extension Phase II Project. The project, which primarily addresses deferred maintenance at Strategic Petroleum Reserve sites, has a current point estimate of \$1.36 billion and is expected to continue through 2024. With such a large influx of funding, it is essential that FFPO strengthen its controls around subcontract administration, particularly as they relate to establishing the propriety and price paid for each transaction.

### RECOMMENDATIONS

We recommend that the Project Manager, Strategic Petroleum Reserve Project Management Office direct the Contracting Officer to ensure that Fluor Federal Petroleum Operations, LLC:

1. Updates its policies and procedures to include specific guidance for all subcontract types regarding required:
  - Amount and type of subcontract file documentation; and
  - Supporting documentation for invoice approval.
2. Expands training efforts for all staff involved in the invoice approval process, to include fixed-price subcontracts; thus, ensuring that costs are adequately supported and subcontractor performance is properly verified.

### SUGGESTED ACTION

In addition to the recommendations above, we suggest that Fluor Federal Petroleum Operations, LLC updates its policies and procedures to standardize the location of subcontract file documentation.

## MANAGEMENT RESPONSE

Management concurred with the report's recommendations and indicated that corrective actions are ongoing to address the issues identified in the report.

## AUDITOR COMMENTS

Management's comments and planned corrective actions are responsive to our recommendations. Management's comments are included in Attachment 3.

### Attachments

cc: Deputy Secretary  
Chief of Staff  
Under Secretary of Energy

## **OBJECTIVE, SCOPE, AND METHODOLOGY**

### OBJECTIVE

We conducted this audit to determine whether Fluor Federal Petroleum Operations, LLC appropriately administered subcontracts.

### SCOPE

The audit was performed from April 2017 through June 2019 at the Strategic Petroleum Reserve Project Management Office in New Orleans, Louisiana. The scope of the audit included subcontracts administered by Fluor Federal Petroleum Operations, LLC under Department of Energy Contract No. DE-FE0011020. The audit was conducted under Office of Inspector General project number A17OR035.

### METHODOLOGY

To accomplish the audit objective, we:

- Reviewed laws, regulations, policies, procedures, and contract requirements related to subcontract administration at the Strategic Petroleum Reserve.
- Held discussions with key Department and contractor officials to gain an understanding of the subcontract administration processes, as well as Department and contractor roles and responsibilities.
- Selected a judgmental sample of seven subcontracts administered from April 2014 through March 2017, with a total purchase order value of \$1.36 million, for file review. The sample was selected from a population of 2,929 subcontracts, with a total purchase order value of \$314.8 million, and included both fixed-price and cost-type subcontracts.
- Performed testing of key attributes related to subcontract administration throughout various stages, including contract award, post-award period of performance, and closeout.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Accordingly, the audit included tests of controls and compliance with laws and regulations necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We utilized computer-processed data to identify the population and samples of subcontracts to achieve our audit objective. Based on our comparisons of computer-processed data to supporting documentation, we determined that the data was sufficiently reliable for the purposes of our report.



An exit conference was held with the Office of Petroleum Reserves and the Strategic Petroleum Reserve Project Management Office on September 26, 2019.

**PRIOR REPORT**

Audit Report on [\*Subcontract Administration at Selected Department of Energy Management and Operating Contractors\*](#) (OAS-M-15-07, July 2015). The audit was the first in a planned series of audits focusing on management and operating contractor subcontractor administration. Nothing came to the attention of the Department of Energy's Office of Inspector General to indicate that the sites reviewed had not administered subcontracts substantially in accordance with established policies and procedures and contract terms. However, the report did note that a certain class of subcontracts had been noncompetitively awarded at one site. Specifically, 8 of the 47 subcontracts reviewed, or \$10.2 million of \$33.7 million in subcontracts, were awarded on a sole-source basis without specific justification.

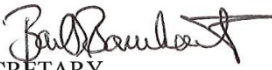
## MANAGEMENT COMMENTS



Department of Energy  
Washington, DC 20585

August 20, 2019

MEMORANDUM FOR THE DEPUTY ASSISTANT INSPECTOR GENERAL

FROM: BARTON V. BARNHART   
DEPUTY ASSISTANT SECRETARY  
OFFICE OF PETROLEUM RESERVES

SUBJECT: Management Responses to the Office of the Inspector General Draft Report, A17OR035, "Subcontract Management at the Strategic Petroleum Reserve"

Thank you for the opportunity to review and comment on the Draft Audit Report, "Subcontract Management at the Strategic Petroleum Reserve." The Office of Petroleum Reserves and the Strategic Petroleum Reserves Project Management Office (SPR PMO) offer the following comments in response to the recommendations provided in the draft report:

**OIG RECOMMENDATION 1:** *We recommend that the Project Manager, Strategic Petroleum Reserve Project Management Office direct the Contracting Officer to ensure that FFPO:*

1. *Updates its policies and procedures to include specific guidance for all subcontract types regarding required:*
  - *Amount and type of subcontract file documentation; and*
  - *Supporting documentation for invoice approval.*

**MANAGEMENT RESPONSE:** DOE concurs with recommendation one. DOE has and will continue to ensure that the SPR M&O contractor, FFPO, implements process improvement projects aimed at strengthening all phases of subcontract administration. Several of the process improvement projects were implemented in 2018, well ahead of the issuance of this report. FFPO convened a Process Improvement Team (PIT) in 2018, to address concerns related to the adequacy of subcontract file documentation. The PIT revamped the invoice review process to ensure sufficient supporting documentation is maintained with the invoice payment document that clearly describes the work being done, labor hours expended, travel, materials, etc. The Cost Reimbursable subcontracts were specifically addressed, as a result of two Internal Audit reports issued in 2018 with recommendations to strengthen the administration of Time & Material subcontracts. Both our DOE Auditor and the FFPO Internal Audit team monitored and participated in the PIT meetings on an advisory basis.



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The FFPO Procurement Procedure Manual (PPM) was updated in May 2018 to include more specific guidance regarding documenting the amount and type of contracts, including appropriate supporting documentation required for invoice approval. Additionally, the Subcontract Manager's Technical Representative (SMTR) Procedure and the Construction Management Procedure Manual (CM) have been aligned with the PPM to provide consistent guidance throughout the subcontract administration process.

In 2019, DOE will require FFPO's Internal Audit Department to perform additional audits of subcontracts, to measure the quantity and quality of subcontract file documentation for improvements as a result of the procedural changes and implemented training. Additionally, the audits will assess FFPO's corrective action plans (CAPs) for ensuring accurate subcontractor supporting documentation and will measure actions taken as a result of recommendations made by the OIG.

DOE implemented a new performance fee measure in the M&O contractor's Performance Evaluation and Measurement Plan (PEMP), to ensure that CAPs are implemented in response to all audit recommendations (e.g., internal, DOE, OIG, GAO). This significantly improves the quality of the CAPs, response time for submitting CAPs, and resolution of audit issues.

**OIG RECOMMENDATION 2:** *We recommend that the Project Manager, Strategic Petroleum Reserve Project Management Office direct the Contracting Officer to ensure that FFPO:*

2. *Expands training efforts for all staff involved in the invoice approval process, to include fixed-price subcontracts; thus, ensuring that costs are adequately supported, and subcontractor is properly verified.*

**MANAGEMENT RESPONSE:** DOE concurs with recommendation two. FFPO procurement personnel receive continuous training over specific components of the procurement process. The training is provided monthly by the Fluor Corporate Training Group, who are licensed training professionals. The training allows FFPO personnel to acquire certified training credit hours. Training for 2019 is as follows:

January: Principles of Fiscal Law and Government Contracts

February: Subcontracting and Cost Allowability

March: Accounting for Corporate Transaction Costs

April: Selected Cost Principles Part 1: Compensation, Travel, Legal and related costs

May: Selected Cost Principles Part 2: Selling, B&P, IR&D, and related costs

June: Delay and Termination Cost Recovery

September: The Cost Accounting Standards

October: Labor Compliance and Related Issues: Fair Labor Standards Act, Construction Wage Rate Requirements, and Service Contract Labor Standards

November: Developments in Cost and Pricing Issues: A Year in Review

In March 2019, another PIT was initiated, led by FFPO's Quality Assurance personnel, to review and upgrade the Purchase Request (PR) process. The focus for the PIT is to establish additional controls over FFPO's process for requesting funds from DOE to procure subcontractor services and will ensure that all necessary disciplines are involved at the front end of the procurement process.

The FFPO Procurement Department is developing a Procurement Compliance Program that includes independent reviews of various components of the subcontract administration process. A Pre-Award Compliance Review has been in place for a year and is successfully ensuring that the Pre-Award part of the process is compliant and functioning well, as was determined by a 2019 FFPO internal audit of the Pre-Award Compliance Program. The FFPO Procurement Department is also in the early stages of developing proposed enhancements to the Procurement Compliance Program. These proposed enhancements would focus on the post-award invoice review process, and proper storage and maintenance of supporting documentation required for a complete subcontract file. That enhancement will result in a standardized location of subcontract file documentation.

If you have any questions, please contact Barton Barnhart or Douglas MacIntyre at 202-586-1831.

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