



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

# AUDIT REPORT

DOE-OIG-20-28

February 2020

**OFFICE OF SCIENCE CONTRACT  
REFORM EFFORTS AT SLAC NATIONAL  
ACCELERATOR LABORATORY**



**Department of Energy**  
Washington, DC 20585

February 18, 2020

MEMORANDUM FOR THE DIRECTOR, OFFICE OF SCIENCE

A handwritten signature in black ink, appearing to read "John E. McCoy II".

FROM: John E. McCoy II  
Deputy Assistant Inspector General  
for Audits  
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Office of Science Contract Reform Efforts at SLAC National Accelerator Laboratory"

BACKGROUND

Since 1962, Stanford University has managed and operated SLAC National Accelerator Laboratory (SLAC) for the Department of Energy's Office of Science. SLAC is 1 of the 10 Office of Science laboratories and is home to a 2-mile long particle accelerator, an x-ray laser, and a broad range of scientific research and experiments.

In August 2016, the Office of Science Director recommended that the Department implement a new model contract with Stanford University for a trial period of 3 years.<sup>1</sup> Accordingly, the Department's Office of Science, Stanford University, and SLAC jointly developed a new model contract by reevaluating, modifying, and streamlining the traditional management and operating contract. In October 2016, SLAC began the process of implementing the new model contract. In light of the contract reform efforts within the Department, and since SLAC was chosen as the initial pilot site, we initiated this audit to evaluate how the Office of Science's contract reform efforts impacted SLAC's health and safety, safeguards and security, human resources, and procurement functions.

RESULTS OF AUDIT

During our review, nothing came to our attention to indicate that the contract reform efforts have increased risk at SLAC or materially changed the Department's Federal oversight. Specifically, we found that contract reform efforts did not appear to negatively impact SLAC's operations in the areas of health and safety, safeguards and security, human resources, and procurement functions. Overall, most of the changes implemented by the contract reform efforts were administrative in nature such as the elimination of unnecessary and inconsistent requirements, and the removal of contract clauses and requirements that were not applicable to SLAC. We

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<sup>1</sup> The 3-year trial period was from fiscal years 2017 through 2019.

offer no assurance or any guarantee that similar efforts implemented at other Department sites would produce the same outcome we observed at SLAC, as each site's contract and associated reform efforts may be different.

### **Safety, Safeguards, and Security**

We found that the changes related to safety, safeguards, and security did not increase any control risks as a result of the contract reform efforts. We reviewed process control differences that existed between pre-reform and post-reform controls associated with various Department Orders and Federal Regulations. We did not identify any significant changes that could potentially result in adverse consequences.

### **Human Resources**

We found that the changes related to human resources, as part of the contract reform efforts at SLAC, neither changed the required Department oversight, nor changed the required deliverables from Stanford University. We noted in the model contract that SLAC functions under Stanford University's salary structure and annual merit program. This is because Stanford University already conducts a market analysis as part of developing its annual salary program and works with its cognizant contracting agency, the Office of Naval Research, to comply with applicable laws and regulations. This change eliminated the requirement for SLAC to duplicate this work.

### **Employee Concerns Program**

We found that Department Order 442.1A, *Employee Concerns Program*, was removed from the model contract. According to Bay Area Site Office and SLAC officials, they are relying on Stanford University's Employee Concerns Program to satisfy the Order's requirements rather than creating its own. However, the Bay Area Site Office and Stanford University are evaluating whether Department Order 422.1B should be added to the model contract.

### **Procurement**

We found that the changes related to procurement operations did not negatively affect SLAC's overall subcontracting policies and procedures. The following are the most significant changes we noted with SLAC's procurement operations as a result of the contract reform efforts:

1. Removal of Department Bay Area Site Office reviews for subcontracts between \$5 million and \$25 million; and
2. Elimination of sole source justification for contract awards under \$250,000.

Despite the above changes to SLAC's competition threshold and sole source provisions, we found that SLAC had proper controls in place for its procurement operations. To further examine the effect of the reduced Department oversight, we judgmentally selected 18 subcontracts awarded between fiscal years 2016 and 2018 that were not required to be reviewed

by the Department. During our testing, we evaluated key elements<sup>2</sup> during the pre-award stages, primarily including bid comparisons and justifications for award. Based on the results of our limited testing, we did not identify any exceptions. The Contracting Officer also stated that even though SLAC does not need to provide justification for sole source contracts under \$250,000, SLAC procurement personnel are still required to conduct a price analysis to determine cost reasonableness.

### **Implementation of Contract Reform Efforts**

In our review of the administrative changes resulting from the contract reform efforts, we concluded that the changes were risk-neutral in nature and did not yield any exceptions based on the results of our limited testing. In certain instances, we found that the reform efforts codified SLAC's reliance on Stanford University's existing policies. Further, we found no indication that the contract reform efforts have increased risk or negatively impacted SLAC operations. Finally, we noted that the success of the contract reform efforts at SLAC can be attributed, in part, to the joint and collaborative efforts of the Department, Stanford University, and SLAC, which resulted in an enhanced partnership and synergy in carrying out the implementation of the new model contract. While it is encouraging to recognize the positive results of the contract reform efforts at SLAC, it is important to note that we do not provide any assurance that similar efforts implemented at other sites would produce a similar outcome because each site is unique with its own culture, leadership, and oversight structure. Therefore, in our judgment, a careful review and examination of each site planning to implement a new contract model is fully warranted. At this time, we are not providing any recommendations.

### Attachments

cc: Chief of Staff

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<sup>2</sup> The key elements were Statements of Work, Source Selection Plans, Pricing Abstracts, Vendor Cost Breakdowns, Justifications for Award, Award Documents, and Suspension and Debarment Checks.

## OBJECTIVE, SCOPE, AND METHODOLOGY

### OBJECTIVE

We conducted this audit to evaluate how the Office of Science's contract reform efforts impacted SLAC National Accelerator Laboratory's (SLAC) health and safety, safeguards and security, human resources, and procurement functions.

### SCOPE

The audit was performed from June 2019 through January 2020 with a review of SLAC's contract reform efforts that included contract modifications and deviations from Department of Energy requirements. The audit was conducted under Office of Inspector General project number A19LL029.

### METHODOLOGY

To accomplish our audit objective, we:

- Reviewed applicable laws and Department Directives that were affected by the contract reform efforts.
- Examined changes related to Department Order 232.2A, *Occurrence Reporting and Processing of Operations Information*; Department Order 142.3A, *Unclassified Foreign Visits and Assignments Program*; Department Order 460.A, *Packaging and Transportation Safety*; and variances from 10 CFR Part 851, *Worker Safety and Health Program*.
- Reviewed the applicable SLAC policies, procedures, and contract requirements that had been changed as a result of the contract reform efforts.
- Performed testing over a sample of subcontracts between \$2.5 million and \$25 million to ensure that there were no errors that would have been caught by pre-award testing. Specifically, we judgmentally selected 18 subcontracts representing nearly 22 percent of the total contract dollar amounts awarded during fiscal years 2016 through 2018. Because the selection was based on a judgmental sample, results and overall conclusions cannot be projected to the entire population or universe of subcontracts within the scope of our audit. We examined the following attributes as part of our detailed testing:
  - Requisition/Cost Estimates/Specifications/Statement of Work;
  - Source Selection Plan;
  - Pricing Abstract;
  - Vendor Price/Cost Breakdown;
  - Justification for Award;
  - Award Documents; and
  - Suspension and Debarment Check.

- Interviewed Bay Area Site Office and contractor personnel regarding the contract reform efforts.
- Compared policies and procedures before and after the contract reform to identify increased risks for the following areas:
  - Human Resource functions;
  - Employee Concerns Program; and
  - Safety, Safeguards and Security.

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. The audit included tests of internal controls and compliance with the laws and regulations to the extent necessary to satisfy the audit objective. Additionally, we assessed the Department's implementation of the *GPRM Modernization Act of 2010* as it relates to our audit objective and found that the Department had established performance measures for the stewardship, operation, and management of SLAC. These performance measures included language specifically related to having an effective worker health and safety program, replacing adherence to 10 CFR 851, and implementing the new model contract.

Because our review was limited, it would not have necessarily disclosed all internal control deficiencies that may have existed at the time of our audit. We relied on computer-processed data specific to procurement subcontracts to satisfy the audit objective. Based on our own inquiries about technology controls relevant to SLAC's policies and procedures and subcontract population, we determined that the data was sufficiently reliable for the purposes of our audit test work.

Management waived an exit conference on January 27, 2020.

## RELATED REPORT

SLAC National Accelerator Laboratory's (SLAC) Self Assessment Report on *Evaluating the Effectiveness of the RWG Contract at SLAC* (July 2019). In 2015, the U.S. Secretary of Energy chartered the Revolutionary Working Group (RWG) to "propose a fundamentally new type of contractual arrangement." The RWG's goal was to address the many reviews of the management and operations model, concluding that national laboratories had strayed from the original intent of the "government owned-contractor operated" approach to instead become virtual "government owned-government operated" laboratories. Stanford University and SLAC developed a new Revolutionary Model Contract (RWG Contract) with review and input from stakeholders in Department Headquarters and the site office. The parties received Secretarial approval to begin a 3-year pilot at SLAC in September 2016, with an assessment due at the end of the pilot. Based on these findings, discussed and supported in greater detail in the report, the assessment team concluded that the RWG pilot had been very successful in providing the groundwork for enhancing mission support for continued scientific achievements, enabled by the strengthened partnership and RWG efficiencies between the Department, Stanford University, and SLAC.

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