



U.S. Department of Energy
Office of Inspector General
Office of Audit Services

Audit Report

The Department of Energy's Management of the NSLS-II Project



OAS-RA-L-10-01

April 2010

United States Government

Department of Energy

Memorandum

DATE: April 6, 2010

Audit Report Number: OAS-RA-L-10-01

REPLY TO

ATTN TO: IG-32 (A10RA006)

SUBJECT: Report on "The Department of Energy's Management of the NSLS-II Project"

TO: Manager, Brookhaven Site Office, SC-BHSO

INTRODUCTION AND OBJECTIVE

The Department of Energy's (Department) Office of Science is currently constructing the National Synchrotron Light Source II (NSLS-II) at Brookhaven National Laboratory (Brookhaven) in Upton, New York. The NSLS-II is designed to replace the existing National Synchrotron Light Source (NSLS), which began operations in 1982. Approximately 2,100 researchers utilize the NSLS each year for research in such areas as biology and medicine, chemistry and environmental sciences, physics, and materials science. Construction of the NSLS-II began in Fiscal Year (FY) 2009 and the facility is scheduled to begin operations in FY 2015.

The NSLS-II is expected to produce x-rays that are more than 10,000 times brighter than the original NSLS. At completion, the NSLS-II Project will include an electron storage ring that is approximately one half mile in circumference and 400,000 gross square feet in facilities. To help accelerate completion, the Office of Science allocated \$150 million in funding from the American Recovery and Reinvestment Act of 2009 (Recovery Act). In total, the project is estimated to cost \$912 million. Recovery Act funding is being used to accelerate the construction of office buildings around the storage ring and the facility housing the electron injector.

Due to the importance of the Office of Science's mission and the significant investment in this Project, we initiated this audit to determine whether the Office of Science implemented controls over the NSLS-II Project and its use of Recovery Act funds.

CONCLUSION AND OBSERVATIONS

Based on our audit, nothing came to our attention to indicate that NSLS-II Project Managers were not employing sound project management practices, such as preparing project execution plans, acquisition strategies, and risk analysis and mitigation plans found in Department Order 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. Except for instances where costs were not properly segregated, we found that the Project was generally in compliance with Recovery Act reporting guidelines as well as Davis-Bacon Act requirements.

Regarding the segregation of costs, Brookhaven did not always segregate Recovery Act and non-Recovery Act costs. For example, Brookhaven accrued \$1.7 million in costs for seven non-Recovery Act work activities to Recovery Act accounts. Even though the general contractor, a civil construction subcontractor to Brookhaven responsible for construction of the ring building, accurately reported these activities as non-Recovery Act funded on its August and November 2009 invoices, Brookhaven chose to accrue the costs to Recovery Act accounts. The costs were correctly charged to non-Recovery Act accounts when they were ultimately paid. Errors resulting from the improper accrual were not corrected and resulted in inaccurate information being reported to *FederalReporting.gov*. *FederalReporting.gov* is the source of information contained on *Recovery.gov* which provides information to the public on Recovery Act activities. Specifically, the \$27.6 million contained on *Recovery.gov* as of December 31, 2009, was overstated because Brookhaven did not reverse the accrual entries. As of March 2010, the overstatement for Recovery Act activities was \$1.1 million.

A Brookhaven official told us that the general contractor accelerated non-Recovery Act work and that the Laboratory did not have enough time to process the change order needed to allocate funding to the appropriate accounts, although sufficient project funds were available to cover the work performed. The accruals were not reversed because Brookhaven personnel decided to reconcile the balance in the accrual account on an annual basis, instead of performing monthly reversal entries. While expedient, this process, as noted above, results in erroneous information being reported to the public.

We also found that the general contractor did not always segregate Recovery Act and non-Recovery Act costs. Specifically, costs were not segregated on four of the nine monthly invoices between April and December 2009. The general contractor did not segregate costs at all on the April, May, and June invoices and did not correctly identify all Recovery Act activities on the July 2009 invoice. The general contractor's July invoice report claimed that the contractor spent \$1,438,140 in regular funding and \$329,377 in Recovery Act funding for two activities that Brookhaven determined should have been allocated as \$560,781 in regular funding and \$1,206,736 in Recovery Act funding. To its credit, Brookhaven correctly allocated the costs in its accounting system. According to a Brookhaven official, the general contractor did not initially segregate costs because Brookhaven did not communicate the tasks funded by the Recovery Act until July 2009 and was still making changes after the July 2009 invoice was submitted. Since we did not find these types of differences in the next five invoices, this issue appears to have been resolved.

SUGGESTED ACTIONS

To address the issue with accruals outlined above, we suggest the Contracting Officer, Brookhaven Site Office direct Brookhaven to:

- Improve coordination with the general contractor to ensure sufficient funding has been allocated for the work that will be performed ahead of schedule; and,

- Reconcile the accrual accounts periodically to ensure that the amount spent under the Recovery Act is accurately reported to *FederalReporting.gov*.

Since no formal recommendations are being made in this report, a formal response is not required. We appreciated the cooperation of your and Brookhaven's staff during our review.



David Sedillo, Director
NNSA & Science Audits Division
Office of Inspector General

Attachment

cc: Team Leader, Office of Risk Management, CF-1.2
Dianne Williams, Office of Risk Management, CF-1.2
Audit Liaison, Office of Science, SC-25
Audit Liaison, Chicago Office

SCOPE AND METHODOLOGY

This audit was performed between November 2009 and April 2010 at the Department of Energy's (Department) Brookhaven Site Office and Brookhaven National Laboratory, both in Upton, New York. To accomplish the audit objective, we:

- Reviewed and evaluated documentation related to the National Synchrotron Light Source II (NSLS-II) Project;
- Judgmentally selected the 25 largest and 5 smallest Recovery Act transactions recorded by Brookhaven through November 2009 and traced them to supporting invoices. We expanded our sample to include 15 transactions recorded through January 2010 to determine whether the cost segregation errors in our initial sample continued. Because of the errors, we reviewed all Recovery Act transactions on the nine invoices submitted by the NSLS-II Project's general contractor for costs incurred between April and December 2009; and,
- Held discussions with personnel from the Brookhaven Site Office, Brookhaven National Laboratory, and the Project's general contractor.

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 objectives. 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 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. During the audit, we assessed the Department's compliance with the Government Performance and Results Act of 1993 and found that no specific performance measures related to the NSLS-II were established. We did, however, note that there are performance measures relevant to the NSLS-II Project such as facility management. We utilized computer-processed data to identify the population of costs spent using Recovery Act funding in order to accomplish our audit objective. Based on our comparisons of computer-processed data to supporting documentation, we determined that the data were sufficiently reliable for the purposes of our report.

Management waived an exit conference.