

Audit Report

The Department's Infrastructure Modernization Projects under the Recovery and Reinvestment Act of 2009



(08-93)

Memorandum

DATE: March 2, 2011 Audit Report Number: OAS-RA-L-11-04

REPLY TO

ATTN OF: IG-34 (A10RA032)

SUBJECT: Report on "The Department's Infrastructure Modernization Projects under the American

Recovery and Reinvestment Act of 2009"

To: Manager, Oak Ridge Office Manager, Berkeley Site Office

INTRODUCTION AND OBJECTIVE

The American Recovery and Reinvestment Act of 2009 (Recovery Act) was enacted on February 17, 2009. The goals of the Recovery Act are to retain or create jobs, increase economic efficiency, and invest in infrastructure that will provide long-term economic benefits. The Recovery Act provided just over \$36 billion for the Department of Energy (Department), including \$198 million to be used by the Office of Science (Science) for infrastructure modernization initiatives. According to Science officials, modernization was needed to many Department laboratories, offices, and other facilities due to their age. Science's Recovery Act Infrastructure Modernization initiatives include:

- Science Laboratories Infrastructure (SLI) projects totaling \$108 million to accelerate existing construction projects under Science's Infrastructure Modernization Initiative; and,
- General Plant Projects (GPP) totaling \$90 million to improve high-priority facilities, increase economy and efficiency of laboratories, reduce safety hazards, and reduce operating costs at our national laboratories.

We initiated this audit to determine if the Department is efficiently and effectively managing its Recovery Act infrastructure modernization projects.

CONCLUSIONS AND OBSERVATIONS

During our review of six GPP and three SLI projects at the Oak Ridge National Laboratory (ORNL) and the Lawrence Berkeley National Laboratory (LBNL), we noted that project managers at both sites generally employed project management practices required by the Department. Our review also did not disclose issues with projects meeting their cost and schedule baseline estimates. In addition, supporting documentation and separate accounts were maintained to segregate and report on Recovery Act expenditures. We found that the projects we reviewed generally complied with various Recovery Act requirements, including ensuring that the requirements properly flowed down to the subcontracts, as

appropriate. Finally, we observed that the sites followed applicable guidelines in reporting jobs created through the use of Recovery Act funds within these nine infrastructure modernization projects during the fourth quarter of Fiscal Year 2010.

We did, however, identify one instance where LBNL planned to use Recovery Act funds for infrastructure improvements for which there was no immediate need.

<u>Infrastructure Modernization Projects</u>

At the time of our site visit, LBNL planned to use \$2.6 million in Recovery Act funds within the Transformer Bank modernization project at Grizzly Peak to purchase a switching station for which there was no current demand and which would not be placed into service for some time. Laboratory officials indicated that, through a technical review, they had determined there was a long-term need for the switching station. However, the LBNL 2006 Long Range Development Plan, which provides guidance on the Laboratory's physical development over the next 20 years, stated that the Laboratory's current (2006) electrical supply and distribution system has the capacity to meet current and future demand beyond what is forecast in the plan.

This occurred because LBNL did not adequately ensure that Recovery Act spending yielded the optimum benefit to the Department. The GPP Project Operating Plan stated that the Recovery Act projects would address high priority facilities. However, in its efforts to promptly spend surplus GPP Recovery Act funds, LBNL planned to purchase a switching station which would not be needed nor fully operable until future construction was completed.

Subsequent to our raising concerns over the lack of immediate need for the switching station, LBNL officials stated that they had decided to change their plan and use the \$2.6 million to expand the laboratory's Building 62 refurbishment project. The Building 62 refurbishment project was originally designed to upgrade the third floor of the building; LBNL now plans to add a second phase to the project, which will provide \$2.6 million in Recovery Act funds to upgrade first floor office and laboratory space. Prior to changing their plan, LBNL had expended about \$125,000 in Recovery Act funds on the design of the switching station. According to LBNL officials, they plan to reimburse this amount with non-Recovery Act funds.

SUGGESTED ACTIONS

To help derive the greatest benefit from Recovery Act expenditures for infrastructure modernization, we suggest that the Berkeley Site Office thoroughly review all project plans to ensure that LBNL is using Recovery Act funds to upgrade equipment, laboratory space, and office space that offers the maximum benefit to the Department.

Since no formal recommendations are being made in this report, a response is not required. We appreciate the cooperation of your staff and the various Departmental Elements that provided information or assistance.

Daniel M. Weeler

Daniel M. Weeber, Director Environment, Technology, and Corporate Audits Division Office of Inspector General

Attachment

cc: Assistant Director, Office of Risk Management, CF-80
Team Leader, Office of Risk Management, CF-80
Audit Resolution Specialist, Office of Risk Management, CF-80
Audit Liaison, Office of Science, SC-41

Attachment

SCOPE AND METHODOLOGY

This review was performed between September 22, 2010, and January 26, 2011, at the Department of Energy's (Department) Oak Ridge National Laboratory (ORNL) in Oak Ridge, Tennessee and Lawrence Berkeley National Laboratory (LBNL) in Berkeley, California. To accomplish the objective of this audit, we:

- Reviewed the American Recovery and Reinvestment Act of 2009 (Recovery Act) legislation and project management guidance;
- Reviewed Departmental policies and procedures related to Recovery Act reporting and project management practices;
- Interviewed officials from Headquarters Office of Science to gain an understanding of the roles, responsibilities, and procedures related to the infrastructure modernization projects being funded by the Recovery Act;
- Analyzed data extracted from the Department's iPortal system and identified Recovery Act infrastructure modernization projects;
- Interviewed officials from ORNL and the Oak Ridge Operations Office, as well as from LBNL and the Berkeley Site Office to gain an understanding of the controls in place to ensure Recovery Act requirements are met and sound project management practices are employed;
- Reviewed documentation supporting project management practices employed by the sites;
- Reviewed supporting documentation for selected transactions to determine compliance with Recovery Act reporting requirements; and,
- Conducted walkthroughs of the infrastructure modernization projects at both laboratories.

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 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 assessed performance measures established under the *Government Performance and Results Act of 1993* and found that targets were created to monitor the progress of infrastructure modernization projects and programs.

Finally, we did not rely on automated data processing information to accomplish our audit objective.

The Department waived an exit conference.

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