Memorandum

OFFICE OF INSPECTOR GENERAL

DATE:

NOV 04 2002

REPLY TO ATTN OF:

IG-34 (A02CG032)

Audit Report Number: OAS-L-03-02

SUBJECT:

Audit of Project Management Practices in the Office of Science

TO:

Acting Associate Director, Office of Laboratory Operations and Environment, Safety and Health, SC-80

The purpose of this report is to inform you of the results of our audit of Office of Science (Science) project management practices. This audit was initiated in June 2002 and fieldwork was conducted through September 2002 at Departmental Headquarters, Oak Ridge National Laboratory (ORNL), and Fermi National Accelerator Laboratory (Fermi). The audit scope and methodology is described in an attachment to this report.

INTRODUCTION AND OBJECTIVE

The Department of Energy (Department) funded over \$1 billion in ongoing capital asset acquisition projects in Fiscal Year 2002, with over \$400 million dedicated to Science construction and equipment projects. Science programs are currently managing over 30 projects at more than seven laboratories, representing almost \$3 billion in total project costs.

Historically, the Department has experienced difficulties in managing its major projects. Cost overruns, schedule slippages, and other project management problems have adversely affected the credibility in the Department's ability to build new facilities and upgrade existing systems. In light of these concerns, the objective of our audit was to determine whether Science has implemented sound project management practices.

CONCLUSION AND OBSERVATIONS

Based on the results of our limited review, nothing came to our attention to indicate that Science had not implemented sound project management practices. Our survey work identified minor concerns in the areas of contingency, status verification and reporting, cost estimating, and management teams. These areas were discussed with officials from Science's Construction Management Support Division.

We appreciate the cooperation of your staff during our review. If you have any questions regarding our audit, please contact Brian Boos at (301) 903-3858 or Kevin Majane at (301) 903-4065.

Rickey R. Hass, Director Science, Energy, Technology, and Financial Audits Office of Audit Services Office of Inspector General

cc: Director, Construction Management Support Division, SC-81
Director, Office of Engineering and Construction Management, ME-90
Audit Liaison, Office of Science, SC-62
Audit Liaison, Office of Executive Operations and Support, ME-2.1

SCOPE AND METHODOLOGY

To accomplish the audit objective we:

- Reviewed Departmental project management requirements and guidance;
- Held discussions with Headquarters officials from the Office of Engineering and Construction Management and the Office of Science to gain understanding of Departmental and Science project management practices;
- Identified a universe of Science construction and equipment upgrade projects and selected four projects for detailed review:
 - o Laboratory for Comparative and Functional Genomics at ORNL;
 - o Fire Protection System Upgrade at ORNL;
 - o U.S. Large Hadron Collider Accelerator at Fermi; and
 - o Main Injector Neutrino Oscillation Search at Fermi;
- Reviewed pertinent project documentation and discussed the projects with Federal and contractor project management officials;
- Assessed corrective actions on Neutrinos at the Main Injector;
- Reviewed performance related information to determine compliance with the Government Performance and Results Act of 1993.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Accordingly, we assessed controls related to the projects selected for review. 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. Since computer processed data was not the primary support used to meet our audit objective, we performed a limited assessment of data reliability. An exit conference was held on October 7, 2002.