

United States Government

Department of Energy

# Memorandum

DATE: August 11, 2005                      Audit Report Number: OAS-L-05-09

REPLY TO: IG-32 (A03AL042)

SUBJECT: Audit of the National Nuclear Security Administration's Deferred Maintenance

TO: Associate Administrator for Infrastructure and Environment (NA-50)

## INTRODUCTION AND OBJECTIVE

In 2003, the National Nuclear Security Administration (NNSA) reported a \$2.2 billion backlog in deferred maintenance. NNSA defines deferred maintenance as maintenance that was not performed when it should have been or was scheduled to be, and therefore, is delayed for a future period. In 2004, the Senate Committee on Appropriations, Subcommittee on Energy and Water Development, expressed concerns about the funding levels for maintenance activities and the negative impact on deferred maintenance. As a result, the Subcommittee directed NNSA to request a budget that adequately funds maintenance activities to achieve an orderly reduction of the deferred maintenance backlog.

NNSA corporate goals are to stabilize deferred maintenance by Fiscal Year (FY) 2005 and reduce deferred maintenance to within industry standards by the end of FY 2009. Both the Facilities Infrastructure Recapitalization Program (FIRP) and Readiness in Technical Base and Facilities program (RTBF) share the responsibility for meeting the NNSA goals. Part of the FIRP mission is to reduce the backlog of deferred maintenance. The RTBF program is directed at funding current year maintenance at levels sufficient to preclude the deferral of additional maintenance needs. Because of the importance of this issue, we initiated this audit to determine whether NNSA will meet its goals to stabilize deferred maintenance by FY 2005 and reduce deferred maintenance to within industry standards by FY 2009.

## CONCLUSIONS AND OBSERVATIONS

NNSA has made some progress in reducing the deferred maintenance backlog, and sites reported that they will stabilize deferred maintenance by the end of FY 2005. Livermore, for example, completed several projects between October 2003 and April

2004 reducing deferred maintenance by nearly \$16 million. However, NNSA recognized that it is unlikely that deferred maintenance will be reduced to a level within industry standards by FY 2009.

NNSA also recently contracted with an independent firm that (1) validated the deferred maintenance costs; and, (2) estimated that sustainment costs would need to be about 2 percent of the replacement plant value (RPV). Although NNSA has acted to reduce its deferred maintenance, we observed issues that may further affect whether NNSA will meet its goal. Specifically, we observed that NNSA is not:

- Fully funding annual required maintenance; and,
- Including replacement-in-kind (RIK) projects among its planned activities.

#### Unfunded Required Maintenance

NNSA is not planning to fully fund annual required maintenance at two of the three sites included in our review. Los Alamos National Laboratory (Los Alamos) estimated its required maintenance for FY 2006 to be \$113.4 million, yet NNSA only plans to fund \$104.3 million. We observed the same situation at the Y-12 National Security Complex (Y-12). According to out-year budget projections and estimated maintenance needs, we determined that NNSA would under-fund required maintenance at Los Alamos and Y-12 by more than \$243 million by FY 2014. This number may actually be understated because both Los Alamos and Y-12 calculated their required maintenance at less than the sustainment level of 2 percent of RPV, as estimated by NNSA. Between FYs 2004 and 2014, forecasted required maintenance for Y-12 and Los Alamos will average 1.26 percent and 1.82 percent of RPV, respectively.

#### Replacement-In-Kind

NNSA is not including replacement-in-kind projects in its deferred maintenance totals. NNSA defines RIK projects as the replacement of subsystems such as roofs, heating and cooling systems, electrical distribution systems, and other replacement projects costing greater than \$250,000. Similar to projects under this dollar threshold, RIK projects are maintenance projects to extend the useful life of facilities, and NNSA included them in its FY 2003 deferred maintenance baseline. However, in FY 2004, NNSA decided to separate RIK projects as a specific budget item and directed sites not to report these high dollar projects as part of their maintenance or deferred maintenance. NNSA officials told us that they intend to request separate funding for RIK projects at some future time. According to site plans, RIK projects will increase from \$15 million in FY 2005 to \$372 million in FY 2014.

## SUGGESTED ACTIONS

In order to fully address the Subcommittee's concerns to reduce the deferred maintenance backlog, and to prevent additional maintenance deferrals, NNSA and its sites should ensure that annual maintenance is funded at no less than 2 percent of replacement plant value. In addition, NNSA should reevaluate its decision to exclude RIK projects from deferred maintenance totals.

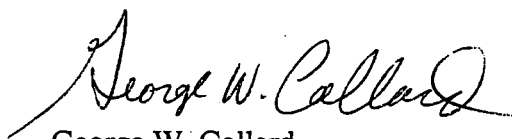
## SCOPE AND METHODOLOGY

We performed the audit from August 2003 through November 2003 and April 2004 through May 2005. We conducted our work at NNSA Headquarters in Germantown, MD; and Washington, DC; Los Alamos National Laboratory in Los Alamos, NM; Lawrence Livermore National Laboratory in Livermore, CA; and, the Y-12 National Security Complex in Oak Ridge, TN.

To accomplish the audit objective, we interviewed NNSA personnel at Headquarters, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Y-12 National Security Complex; reviewed and evaluated the Ten-Year Comprehensive Site Plans and updates; determined if performance measures had been established for stabilizing deferred maintenance; and, analyzed supporting documents related to deferred maintenance.

We conducted the audit according to 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. 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 did not rely on information processed on automated data processing equipment to accomplish our audit objectives. We held an exit conference with the Associate Administrator for Infrastructure and Environment on July 21, 2005.

Since no recommendations are being made in this Letter Report, a formal response is not required. We appreciate the cooperation of your staff throughout the audit.



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Office of Inspector General

cc: Director, NNSA Policy and Internal Controls Management (NA-66)  
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