## Memorandum

DATE:

August 8, 2005

Audit Report Number OAS-L-05-12

**REPLY TO** 

ATTN OF:

IG-32 (A05AL036)

SUBJECT:

Audit Report on "Limited Life Component Exchange Program"

TO:

Deputy Administrator for Defense Programs, National Nuclear Security Administration

## **INTRODUCTION AND OBJECTIVE**

The goal of the Limited Life Component Exchange (LLCE) Program is to schedule, build and deliver limited life components such as tritium reservoirs and neutron generators. In order for weapon systems to remain operational, these components must be periodically replaced. The objective of this audit was to determine whether the National Nuclear Security Administration's (NNSA) limited life component exchange program has sufficient capacity to provide all components needed to meet stockpile requirements.

## CONCLUSIONS AND OBSERVATIONS

We found that NNSA appears to have sufficient capacity to provide all components needed to meet stockpile requirements. Our comparison of NNSA's requirements with actual shipments over a three-year period showed that sufficient capacity exists for neutron generators and tritium reservoirs. However, we observed some issues, which could impact NNSA's ability to meet future requirements.

NNSA relies solely on the LLCE Program Manager's comprehensive knowledge for determining LLCE requirements. The Program Manager is the only person within the LLCE Program who has the knowledge and experience to formulate Volume III of the Master Nuclear Schedule, which authorizes and schedules the shipment of limited life components. NNSA recognized this weakness in 1997 and hired a successor to the Program Manager. However, the successor has not been fully involved due to other priorities related to the Weapons Information System. NNSA has also not developed a formal succession planning process to ensure this expert knowledge base is successfully transferred to the Program Manager's successor.

Furthermore, NNSA has not established formal procedures and methodologies for modifying component production and inventory levels within the LLCE program. The Program Manager, who will be eligible to retire within three years, uses informal procedures and methodologies for modifying component requirements. We examined component requirement records and found that the rationale for subsequent changes to requirements was not always evident. For example, hand written notes and copies of emails did not provide a formal basis for modifying levels. In addition, the Program Manager used verbal input from site managers and Department of Defense officials to develop "fudge factors" that modify component requirement levels.

The LLCE Program could be at risk of meeting its goals to schedule, build and deliver limited life components as needed. Therefore, we suggest that NNSA implement a formal succession plan for transferring knowledge to successors and ensure modifications to requirements are well documented. We discussed our concern and suggestion with the LLCE Program Manager during the course of the audit.

## **SCOPE AND METHODOLOGY**

The audit was performed from December 2004 to May 2005, at NNSA, Albuquerque; Sandia National Laboratories; and, the Kansas City Plant. The scope of the audit was limited to Fiscal Years (FY) 2002 to 2004.

To accomplish the audit objective, we:

- Reviewed the limited life component shipping requirements for FYs 2002 to 2004.
- Reviewed and compared shipping requirements based on the Volume III document to actual deliverables by Sandia National Laboratories and the Kansas City Plant, covering FY's 2002 to 2004.

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. 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 relied on information processed on automated data processing equipment to accomplish our audit objective, and therefore we verified the validity of the automated data processing systems. Finally, we reviewed the implementation of the Government Performance Results Act of 1993, as it related to the LLCE program.

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

George W. Collard

Assistant Inspector General for Performance Audits

Office of the Inspector General

cc: Director, Policy and Internal Controls Management, NA-66 Team Leader, Audit Liaison Team, ME-100