

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

Audit Report

The Resolution of Significant Finding Investigation Recommendations (U)

This document is the unclassified memorandum attached to the classified report.



Department of Energy

Washington, DC 20585
November 18, 2008

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman

Inspector General

SUBJECT: INFORMATION: Follow-up Audit on "The Resolution of

Significant Finding Investigation Recommendations"

BACKGROUND

Maintaining and enhancing the safety, reliability and performance of the U.S. nuclear weapons stockpile is vital to national security. The Nuclear Weapons Stockpile Plan, issued annually by the President, directs the Department of Energy to ensure that the Nation's nuclear weapons inventory continues to serve its essential deterrence role. When an anomaly in the stockpile is identified which may affect its safety, security, or reliability, the National Nuclear Security Administration (NNSA) requires that a Significant Finding Investigation (SFI) be performed to identify causes and document corrective actions to be taken. According to the *U.S. Department of Energy, NNSA Development and Production Manual*, NNSA is required to formally track the resolution and closure of SFI recommendations (corrective actions). These actions form the basis for documenting the resolution of SFI corrective actions.

The reliability of the U.S. nuclear stockpile has obvious national security implications. For this reason, we initiated this audit to determine whether NNSA could account for the resolution of corrective actions that resulted from SFI's. The current review is a follow-up to a prior Office of Inspector General (OIG) audit report, *Resolution of Significant Finding Investigation Recommendations* (DOE/IG-0575, November 2002). The 2002 report disclosed that while NNSA could account for the resolution of many of the most serious SFI corrective actions related to problems affecting weapon safety, reliability, or performance, the status of a number of additional corrective actions were not tracked. In February 2003, in response to the prior report, NNSA agreed to develop and implement a corrective action tracking database by December 2003.

RESULTS OF AUDIT

NNSA could not always formally account for the resolution of corrective actions recommended in SFIs. Specifically, we reviewed a judgmental sample of 52 SFIs that contained 130 actions recommended to correct nuclear weapons anomalies or deficiencies and found that:

- Six corrective actions had not been performed; and,
- The status for two corrective actions could not be determined.

From a statistical standpoint, our review identified only a relatively small number of problems, as compared to the sample size. Yet, the statistics do not reflect the potential impact of these anomalies, which could be significant. For example, NNSA had not defined a path forward for one corrective action after the Life Extension Program for the affected weapon system was cancelled in May 2006. Officials at the Sandia National Laboratories and Lawrence Livermore National Laboratory told us that the corrective action was determined to be a lower priority than other corrective actions needed for that weapon system. We could not confirm this assertion since there was no documentation either establishing or justifying the assignment of a low priority for correcting the anomaly.

Regarding actions that were not performed, NNSA and cognizant officials at Sandia, Lawrence Livermore, and Los Alamos National Laboratories were unable to provide documentation to support their decisions not to perform the corrective actions. In addition, as noted previously, these officials were unable to determine the status of two corrective actions.

These concerns parallel the issues raised in our 2002 report. In response to the earlier report, NNSA agreed to implement a tracking database and establish performance measures to resolve corrective actions. However, NNSA had not effectively monitored contractor efforts to develop and implement a database necessary to track the status of SFI corrective actions. According to NNSA, the database was a low priority due to declining budgets. NNSA believed that since each laboratory was tracking corrective actions on its own, funding was better spent on testing/assessments of the identified anomalies. However, we found that individual laboratory SFI databases did not always contain information about whether a corrective action was implemented and/or the reasons for not implementing the actions. Thus, the efficacy of the laboratory tracking systems was in doubt.

Although they stated that the database had been a low priority, NNSA officials acknowledged that an SFI corrective action database should have been completed and functional. These officials also pointed out that corrective actions for high-risk areas identified by SFIs were being addressed through the inter-agency Project Officers Group and the Nuclear Weapons Council. These officials also stated that performance measures for high priority corrective actions were incorporated in milestones established for weapons life extensions, alterations and modifications. NNSA officials further stated that the particular corrective actions discussed in this report were of a lower priority. However, these officials, including weapons project officers, were unable to provide documentation showing an established priority level for the corrective actions.

To put this matter in context, assessments to date have determined that the U.S. nuclear stockpile is safe, secure and reliable. Nonetheless, NNSA should, in our judgment, take all responsible precautions to confirm that all SFI corrective actions are resolved. The resolution of SFI corrective actions is a vitally important performance goal, relating

directly to maintaining stockpile confidence. Accordingly, we made recommendations designed to improve NNSA's ability to ensure that corrective actions are resolved.

MANAGEMENT REACTION

Management agreed with the report and its corresponding recommendations. Management assured the OIG that it is moving in a positive direction to implement the recommendations. Management stated a major hurdle to deployment of the complexwide system was how to implement appropriate need-to-know access. Management also stated that this issue was successfully resolved, and that the full database was deployed in September 2008 and is now being used by all three weapons laboratories. Management also stated that it has established milestones to identify the priority and status of recommended corrective actions in the database, the status of which will be reviewed and updated quarterly. Finally, Management stated that the production facilities will also have access to the database by April 2009.

Management's actions are responsive to our recommendations.

Attachments

cc: Acting Deputy Secretary Administrator, National Nuclear Security Administration Chief of Staff