



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

Follow-Up Audit of the National
Nuclear Security Administration's
Implementation of the 2003
Design Basis Threat Policy

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June 2007



Department of Energy

Washington, DC 20585

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MEMORANDUM FOR THE ASSOCIATE ADMINISTRATOR FOR DEFENSE

NUCLEAR SECURITY

FROM:

George W. Collard
George W. Collard
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SUBJECT:

INFORMATION: Audit Report on "Follow-Up Audit of the National Nuclear Security Administration's Implementation of the 2003 Design Basis Threat Policy"

BACKGROUND

The National Nuclear Security Administration has seven sites that possess Category I special nuclear material (SNM), which requires the highest level of protection under the Department of Energy's Design Basis Threat (DBT) policy. The DBT policy reflects the most credible threats to Departmental assets and operations. In May 2003, the Department revised the DBT to reflect the threat environment existing after the attacks of September 11, 2001, including terrorism. Changes to site protection programs to implement the 2003 DBT were to be completed by the end of Fiscal Year (FY) 2006.

The current DBT policy was issued in November 2005 and further increased security requirements for sites possessing Category I SNM. NNSA sites are in the process of making additional changes to their security programs to meet the 2005 DBT requirements. A key component of planning to meet changing security requirements is a process known as vulnerability analysis that assesses site-specific conditions and forms the basis for selecting upgrades.

In October 2005, we reported that the National Nuclear Security Administration did not have sufficient time to fully integrate security planning and budgeting and to execute a coordinated effort to identify and evaluate cost-effective permanent upgrades to meet the 2003 DBT requirements. Additionally, NNSA did not have sufficient access to analytical tools to fully test and evaluate the effectiveness of upgrades. As a result, NNSA did not have analytical information to ensure that the upgrades selected would yield the greatest enhancements to site security and be the most cost-effective alternatives. We initiated this audit to follow-up on NNSA's implementation of the 2003 DBT.

RESULTS OF AUDIT

NNSA sites certified that they met the 2003 DBT policy by the end of FY 2006 as required by the Department's policy. As part of policy implementation, NNSA Headquarters validated site



by site security programs. Nothing came to our attention during this review to question whether NNSA sites had met the 2003 DBT policy requirements.

Our review showed that sites used widely varying strategies to meet the goal. Three of the seven sites used permanent upgrades to facilities and protective force capabilities to meet all Departmental requirements by the established target date of September 30, 2006. Three additional sites were able to meet the requirements through a combination of permanent and interim measures. Interim measures included strategies such as repositioning protective forces or temporarily suspending certain operations. The final site received approval to defer meeting a portion of the requirements but met the remaining requirements by the target date.

Additionally, the Office of Defense Nuclear Security (Defense Nuclear Security) made significant progress toward implementing recommendations we made in 2005 to improve its use of NNSA's planning, programming, budgeting, and evaluation (PPBE) process.

Changes to Planning and Oversight

During this audit, we found that Defense Nuclear Security had implemented a number of improvements to its planning and oversight functions. For example:

- Defense Nuclear Security established and staffed a formal Headquarters program structure to provide oversight of site activities, including implementation of the DBT policies, planning, budgeting, and program execution.
- Site security programs have begun participating in the PPBE process through preparation of Annual Operating Plans, which are approved by Defense Nuclear Security, including specific performance measures for each site.
- Defense Nuclear Security instituted a programming process that supports complex-wide balancing of security resources through the application of a risk management process.
- Finally, Defense Nuclear Security has begun holding annual budget reviews and quarterly security program reviews.

Actions to Support Implementation of the 2005 DBT

In addition, Defense Nuclear Security made other improvements to implement the 2005 DBT policy as a result of its experience in working to meet the 2003 DBT. For example, the Defense Nuclear Security:

- Established a single, complex-wide DBT project plan to manage site implementation of the requirements;
- Developed a risk management strategy for implementation of the 2005 DBT;
- Required sites to develop a series of options, including estimates of protection system effectiveness for each option;

- Used site analyses to determine how each site should address the requirements, with a goal of balancing risk and resources across the complex;
- Provided extra assistance to sites and Site Offices that lacked sufficient access to analytical tools and expertise in several technical safeguards and security areas; and,
- Provided support to sites to investigate new simulation tools that can provide better information than the current approved models.

Finally, Defense Nuclear Security established the Security Systems Engineering Team in FY 2005 that provided (a) a focal point for interaction with other federal agencies; (b) funding for initial testing and deployment of security technologies that can reduce growth in manpower requirements; and, (c) a vehicle for sharing information on technologies among sites.

We are not making any recommendations at this time. However, during this audit, we noted opportunities for program improvements in the areas of technology use, protective force training, and materials consolidation. We plan to report on each of these areas in separate reports in the future. Since no formal recommendations are being made in this report, a formal response is not required. We appreciate the cooperation of your staff throughout the audit.

Attachment

cc: Deputy Secretary
Acting Administrator, National Nuclear Security Administration
Chief of Staff
Director, Policy and Internal Controls Management, NA-66

OBJECTIVE

The objective of our audit was to follow-up on NNSA's implementation of the 2003 DBT.

SCOPE

We performed the audit between October 2006 and May 2007 at NNSA Headquarters and the following sites: Nevada Test Site (Las Vegas, NV); Office of Secure Transportation (Albuquerque, NM); Pantex Plant (Amarillo, TX); Lawrence Livermore National Laboratory (Livermore, CA); Los Alamos National Laboratory (Los Alamos, NM); Sandia National Laboratories (Albuquerque, NM); and, Y-12 National Security Complex (Oak Ridge, TN).

To accomplish the audit objective, we:

- Interviewed Headquarters and site federal and contractor security officials;
- Analyzed changes in Office of Defense Nuclear Security programmatic oversight, including planning, internal controls, and performance measurement;
- Observed upgrades in technology and protective force weapons and equipment installed at the six sites;
- Reviewed plans for future upgrades; and,
- Observed demonstrations of security technologies being tested for future use at NNSA sites.

In addition, we reviewed the following documentation:

- Site plans for implementing the 2003 DBT;
- Estimated and actual costs of implementation at each site;
- Site Office and the Office of Secure Transportation validation activities;
- Site DBT implementation quarterly progress reports;
- NNSA's November 15, 2006, "2003 Design Basis Threat Implementation Report;" and,
- Site Annual Operating Plans.

METHODOLOGY

The audit was conducted 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. During the audit, we assessed the Department's compliance with the Government Performance and Results Acts of 1993 and found that NNSA had performance measures associated with the audit objective. We did not rely extensively on computer-processed data to support our analyses and, therefore, we did not verify the validity of the automated data processing systems.

We discussed the contents of this report with Policy and Internal Controls Management and Office of Defense Nuclear Security officials on March 29, 2007, and May 14, 2007, and they waived an exit conference.

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