



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

# Special Report

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The National Nuclear Security  
Administration's Implementation of  
the 2003 Design Basis Threat

DOE/IG-0705

October 2005




## Department of Energy

Washington, DC 20585

October 7, 2005

MEMORANDUM FOR THE SECRETARY

FROM:

  
Gregory H. Friedman  
Inspector General

SUBJECT:

INFORMATION: Special Report on "The National Nuclear Security Administration's Implementation of the 2003 Design Basis Threat"

### BACKGROUND

The Department of Energy develops and periodically updates a "Design Basis Threat" analysis, which reflects the most credible threats posed by adversary types to Departmental assets and operations. The resulting Design Basis Threat (DBT) document provides senior decision makers and site managers with the policy information needed to plan permanent safeguards and security upgrades; identify needed resources; and, implement improved programs to successfully protect sensitive Department of Energy assets against defined threats, including terrorism. In the aftermath of the events of September 11, 2001, the Department updated its DBT to reflect the new threat environment. As part of this process, the Department established the end of Fiscal Year (FY) 2006 as the goal for fully implementing permanent security changes to site protection programs. In October 2004, the Department again revised the DBT, with implementation of the changes to be in effect by the end of FY 2008. Both DBT revisions represent an increase in Departmental security requirements and the implementation of the latest revision builds upon the foundation of security program changes to be completed by the end of FY 2006.

Accordingly, in 2003, the Secretary of Energy directed that sites implement permanent security changes that were to be "well thought-out, effective, and efficient." To achieve the goal of addressing the new DBT threat assessment, he emphasized the need to make maximum use of innovative security technology. Additionally, Department sites were directed to move away from heavy reliance on increasing protective force numbers and other costly temporary measures. Timely implementation of the 2003 DBT is critical for the protection of Departmental assets and operations. Department orders require that security systems, including those designed to meet DBT requirements, are evaluated and tested for effectiveness.

Given the importance of protecting Department of Energy national security assets, we initiated this audit to evaluate the status of the National Nuclear Security Administration's (NNSA) efforts to implement the 2003 DBT by the end of FY 2006. Our review emphasized the implementation of permanent and technologically advanced upgrades.



## RESULTS OF AUDIT

NNSA has experienced delays in implementing changes, including new technologies, to meet the safeguards and security performance requirements contained in the 2003 DBT. Specifically, we found that:

- NNSA will not meet its original FY 2005 target of completing 25 percent of its planned upgrades to meet the 2003 DBT threat and has established a new target of 12.5 percent;
- Sites relied on costly interim measures, such as increased protective force overtime, to meet safeguards and security requirements. The high rates of overtime may lessen protective force effectiveness, lower morale, and limit training;
- As of June 2005, the Department had not fully evaluated the effectiveness of either the interim measures it had implemented or planned measures to meet the DBT requirements; and,
- Since May 2003, the Department had not completed comprehensive inspections of the security posture at all of the NNSA sites that have special nuclear material.

Delays in implementing the planned upgrades for the 2003 DBT occurred primarily because NNSA did not have sufficient time to fully integrate security planning and budgeting and execute a coordinated effort to identify and evaluate cost-effective permanent upgrades, including new technologies. Additionally, NNSA did not have sufficient access to analytical tools to fully test and evaluate the effectiveness of interim and planned measures. The Office of Safety and Security Performance Assurance (SSA) acknowledged that delays in completing Department-wide security inspections were caused by competing priorities, such as assisting sites in assessing technologies and strategies for meeting future DBT requirements. Until NNSA fully integrates security planning and budgeting, and implements and evaluates the effectiveness of permanent upgrades and interim security measures, it lacks assurance that the Departmental assets and operations for which it is responsible are protected in the most cost-effective manner against the threats defined in the 2003 DBT.

During the audit, we found that NNSA sites increased the level of security through a number of measures, including adding additional barriers and limiting personnel access to key areas. To their credit, a number of sites also improved planning and budgeting processes for security upgrades by integrating long-term security and program requirements. As a result, some sites included in our review identified or realized savings in security expenditures through improved coordination of site infrastructure and security

upgrade plans. However, more needs to be done to ensure that interim measures are replaced with permanent solutions. Consequently, we made recommendations to improve the planning, budgeting, and evaluation of safeguards and security upgrades to meet future DBT requirements.

Due to security considerations, the report does not make a direct correlation between the findings and the related sites.

### MANAGEMENT REACTION

Both NNSA and SSA officials concurred with the audit recommendations. NNSA believes that it has made significant progress toward meeting the intent of our recommendations and that the Department's weapons, materials, and facilities are secure. The challenge lies in the implementation of the enhanced security requirements. SSA shares many of the Office of Inspector General's concerns and advised that site inspections performed after the end of FY 2006 will place special emphasis on reporting the implementation status of the 2003 DBT. Both NNSA and SSA believe that the 2003 DBT will generally be met. Management comments are included in their entirety in Appendix 3.

Attachment

cc: Deputy Secretary  
Under Secretary for Energy, Science and Environment  
Administrator, National Nuclear Security Administration  
Chief of Staff  
Deputy Administrator for Defense Programs

# SPECIAL REPORT ON THE NATIONAL NUCLEAR SECURITY ADMINISTRATION'S IMPLEMENTATION OF THE 2003 DESIGN BASIS THREAT

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## TABLE OF CONTENTS

### **Implementation of the Design Basis Threat**

Details of Finding .....	1
Recommendations.....	9
Comments .....	10

### **Appendices**

1. Objective, Scope, and Methodology.....	11
2. Prior Reports.....	13
3. Management Comments .....	15

## Implementation of the 2003 Design Basis Threat

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### 2003 Design Basis Threat Progress

The National Nuclear Security Administration (NNSA) has experienced delays in implementing permanent upgrades, including new technologies, to meet the increased threat identified in the 2003 Design Basis Threat (DBT). Instead, NNSA is relying on more costly interim measures to meet the requirements of the DBT by the end of Fiscal Year (FY) 2006. The Department has not, however, fully evaluated the effectiveness of either the interim measures or the planned permanent upgrades for all sites that possess special nuclear material.

#### Permanent Upgrades and Use of New Technologies

In February 2005, NNSA reported that it would not meet its original FY 2005 performance goal to complete 25 percent of its DBT implementation plans and thus reduced its goal to 12.5 percent. Each of the five sites included in our review had not completed all permanent security upgrades scheduled for FYs 2004 and 2005, such as:

- completing designs of facilities intended to reduce vulnerabilities;
- constructing permanent upgrades to protective force training facilities; and,
- hiring and training additional permanent protective forces.

Also included in the delayed permanent upgrades were measures for the procurement and implementation of detection technologies and basic equipment needed to support protective force operations. Technologies, which would enhance system effectiveness but had not been procured, included such items as thermal imaging, laser detection, ground surveillance, Doppler radar, and remote cameras and sensing equipment. Basic equipment that sites were forced to delay included items such as protective vests, weapons, ammunition, specialized training ammunition for new weapons, and armored vehicles.

As a result of these delays, NNSA sites will now have to implement, in one year, approximately 87 percent of the upgrades scheduled to be completed by the end of FY 2006. Since several sites reported that the FY 2006 budget request does not cover their implementation needs nor fully

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fund maintaining the measures already in place, it is questionable whether the remaining upgrades can be implemented by the end of FY 2006.

In addition to the delays in meeting the 2005 performance goal, the audit also disclosed that the majority of planned upgrades included in NNSA site plans focused on providing for permanent protective force personnel increases and related equipment and not permanent infrastructure upgrades and technologies. For example, at three of five sites visited, we found that between 68 and 92 percent of the projected cost of the site's approved implementation plans through FY 2006 was attributable to protective forces and their equipment. In some cases, however, those permanent security infrastructure upgrades that were planned were not scheduled to be completed until after September 30, 2006. This is contrary to the Secretary's intent to focus on permanent changes that emphasized the use of innovation and technology.

#### Reliance on Interim Measures

Despite the delays experienced in implementing permanent upgrades, NNSA expects to meet the threat established in the 2003 DBT, in part, through the continued use of interim measures. While these interim measures help sites address some of the threats facing the Department, they may not be the most cost-effective alternatives. To illustrate, until permanent upgrades can be implemented, sites:

- Temporarily expanded their protective force capacity;
- Changed security procedures; and,
- Rescheduled some mission operations.

As an interim measure to meet the DBT requirements, four sites included in our review temporarily expanded protective force capacity through increased use of overtime. These sites incurred significant rates of overtime. For example, in FY 2004 there was an overtime rate of 42 percent at Sandia National Laboratories in New Mexico; 39 percent at the Nevada Test Site; 28 percent at the Y-12 National Security Complex; and, 17 percent at the Pantex Plant. These sites also reported that they suspended or

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reduced training and performance testing to ensure that protective force personnel were available for critical duties.

During our audit, Department officials acknowledged that the current rates of protective force overtime and mission impacts are costly to the Department and are not tenable long-term solutions to meeting the enhanced security requirements contained in the 2003 DBT. This conclusion is consistent with the finding of our report on *Protective Force Training at the Department of Energy's Oak Ridge Reservation* (DOE/IG-0694, June 2005). In that report, we found evidence that working excessive overtime negatively impacted the ability or willingness of some protective force personnel to complete required physical fitness training.

NNSA has taken some actions to address protective force overtime by hiring additional personnel, reducing delays in processing clearances for new hires, and meeting with labor unions to discuss cross-cutting issues and concerns. Nevertheless, NNSA believes that the sites' hiring of additional protective force personnel is needed to meet the increased threat in the 2003 DBT policy. While we recognize that hiring additional protective force personnel is necessary, our concern is that the limited time frame for implementation caused sites to rely on protective force enhancements rather than allowing time for them to identify the most cost-effective alternatives.

Other interim measures sites implemented included procedural changes in security, such as increasing stand off distances around facilities and sites, and increasing personnel and vehicle checks, each of which required the use of additional protective forces. Finally, we noted that one site temporarily changed how it scheduled mission activities to meet the 2003 DBT requirements. Specifically, the site rescheduled tests using special nuclear material because it did not have the capability to protect operations at multiple locations simultaneously.



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### Evaluation of Interim Measures and Plans

Although NNSA believes it will meet the threat established in the 2003 DBT, neither the Department nor NNSA have fully analyzed or evaluated the operational effectiveness of interim measures and implemented upgrades. According to security policy, the Office of Independent Oversight and Performance Assurance (OA) is responsible for conducting inspections to test the sites' actual performance in meeting Departmental security requirements, including DBT implementation measures.

Since May 2003, OA had conducted comprehensive inspections of the security posture at only three of the seven NNSA sites that have special nuclear material. However, two of the sites that had comprehensive inspections were not tested against the full 2003 DBT requirements, but only against progress made at the time of the inspection. Guidance from the Deputy Secretary required that inspections test security against progress rather than the full DBT requirement because full implementation was not scheduled until the end of FY 2006. At three of the remaining four sites, OA conducted a special review of protective force management and capabilities and found that Departmental site offices did not always provide effective oversight of contractor safeguards and security programs. Contractors also did not always have effective self-assessment programs.

OA had not conducted comprehensive inspections at all NNSA sites that have special nuclear materials because it focused attention on conducting comprehensive inspections at three NNSA sites that were facing major challenges in implementing the 2003 DBT and providing assistance with identifying and evaluating technologies. OA officials stated that they stopped conducting all inspections from September 2004 through March 2005 in order to visit sites and assist them in assessing technologies and strategies for meeting future DBT requirements. OA tentatively plans to conduct comprehensive inspections at two additional sites during FY 2006, as well as to continue site assistance visits. Based on current plans, two sites will not have had comprehensive inspections by the end of FY 2006 to evaluate their security postures. OA has not scheduled comprehensive inspections to be conducted in FY 2007.

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Similarly, NNSA security officials at several sites had not fully analyzed the effectiveness of interim measures and planned upgrades. For example, two sites had not completed vulnerability analysis of special nuclear material convoy operations. Five sites had not analyzed all of the facilities that will require upgrades to meet the 2003 DBT, although analysis of additional facilities was scheduled for completion during FY 2005. Finally, each site will need to conduct analysis and testing to ensure that measures work as expected after upgrades are completed. Such oversight and self-assessment programs are critical for evaluating the Department's progress in meeting DBT requirements.

**Planning, Budgeting,  
and Evaluation for the  
Design Basis Threat**

NNSA experienced delays in implementing changes and using new technologies because the FY 2006 implementation date required sites to focus on short-term solutions. Specifically, sites 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, including new technologies. Additionally, site plans for meeting DBT security requirements have not been fully evaluated and tested due to the lack of analytical tools and competing priorities.

Integration of Planning and Budgeting

Due to time constraints, planning and budgeting for the 2003 DBT was not fully integrated to ensure that funding was available to support sites' approved implementation plans. To illustrate, site DBT plans were approved in February 2004, which was too late for costs to be included in the 2004 budget or the 2005 budget request. Consequently, funding for DBT requirements was provided in FY 2004 through a reprogramming action, but was not available for expenditure until late in the fiscal year. FY 2005 funding for new DBT implementation activities was also delayed because of the continuing budget resolution at the beginning of the fiscal year. Also the funding received was less than what sites estimated was needed to implement scheduled security upgrades. Specifically, NNSA sites estimated approximately \$203 million was needed in FYs 2004 and 2005, but received only \$141 million of this amount. The delay and reduction in funding caused some upgrades to be delayed. For example, NNSA officials indicated that sites missed a major military

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procurement for items needed to upgrade protective force equipment, which resulted in further postponing some implementation activities, even after funding was available.

Future upgrades could also be affected by reduced funding. During FY 2006, sites estimate they will need about \$148 million to implement the remaining DBT upgrades, but only \$122 million has been requested in the current budget for this purpose.

NNSA recognizes that full integration between security planning and budgeting will help ensure timely receipt of funding and implementation of the DBT in a cost effective manner and has taken steps to improve the process. For example, we noted that the safeguards and security program began using NNSA's formal planning, programming, budgeting, and evaluation process for the FY 2006-2010 planning period, including DBT upgrades. Additionally, from September 2004 through March 2005, the site assistance visits focused on helping sites determine what should be done to meet the 2004 DBT by the end of FY 2008. The benefits of integrated planning were demonstrated at one site that estimated it could avoid approximately \$100 million in costs through improved coordination of security upgrades with long-term plans for site modernization and special nuclear material consolidation.

The actions NNSA has taken to improve its planning and budgeting are commendable, however, more needs to be done to meet the DBT threat in a cost-effective manner. For example, the Department recognizes the need to improve integration of long-term security plans with sites' programmatic needs and, in its response to the draft report, provided examples of efforts it plans to undertake to improve coordination between the security and weapons program.

#### Planning and Evaluation of Permanent Upgrades and Technologies

Officials at several of the sites informed us that the FY 2006 implementation target date limited their ability to identify and evaluate more cost-effective approaches to

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implementing the DBT. Specifically, sites claimed that they did not have sufficient time to (a) plan and implement permanent upgrades and new technology, including conducting the necessary safety reviews, providing training, and developing operating procedures, and (b) acquire data on operational performance of new technologies. Our analysis of site plans and implementation schedules, including those on performance testing of new technologies, support management's observations on the target date's impact on planning.

Several sites told us that they were interested in deploying improved technologies but faced a number of challenges. For example, sites were interested in improved technologies for distinguishing between "friend or foe" but, as of March 2005, the technology had not been sufficiently developed for immediate deployment. SSA advised that this technology is now firmly scheduled for deployment in the field by the end of FY 2006.

In yet another example of challenges faced by sites in deploying technologies, one site was interested in deploying a remotely operated weapon system; however, the Defense Nuclear Facilities Safety Board raised safety concerns about the technology. The site worked with the Department's technology development programs to obtain data on the operational and safety aspects of using this technology. Subsequent to our field visit, NNSA and Office of Security and Safety Performance Assurance (SSA) officials reported that the site operationally deployed the system in late June 2005. However, Department officials pointed out that other sites interested in deploying the remotely operated weapon system will also have to conduct operational and safety tests and analyses before deploying it.

We noted that some sites that had begun long-term planning prior to the issuance of the 2003 DBT were able to incorporate solutions in their plans, such as infrastructure upgrades and technologies, which should constrain security costs. For example, one site identified technology options that, if successfully implemented, are expected to cut protective force hiring by about half, which could result in a savings of about \$15 million per year.

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In recognition of the difficulties that sites had in identifying, evaluating, and implementing technologies, NNSA and SSA partnered to compile information on technologies that are or will be available for implementation in the next few years. For example, two NNSA sites are working on an advanced armored vehicle. During the vehicle's demonstration deployment, the sites are developing performance information and identifying the strengths and weaknesses of the design. This information will be used to further improve the design. Other sites are piloting technologies such as enhanced explosive detection equipment, chemically hardened patrol vehicles, and long-range detection systems, such as unmanned aerial vehicles.

### Analytical Tools

In order to evaluate changes in security measures, sites need to run simulations and exercises to determine their effectiveness in countering security threats. Three of the five sites we visited informed us that they did not have sufficient access to analytical tools to fully evaluate the effectiveness of their planned upgrades and interim measures in meeting the 2003 DBT requirements. For example, one site which did not have on-site simulation capability reported that it was unable to obtain sufficient time at another site's simulation laboratory because of the high demand for the laboratory's resources and lack of timely funding.

Department officials acknowledged that sites had not performed enough analysis to provide NNSA's Administrator with an analytical basis for selecting among the proposed activities that would yield the greatest enhancement to site security and be the most cost-effective. Similarly, NNSA relied primarily on professional judgment to approve the 2003 DBT site implementation plans and did not have the formal analytical capability to identify the most cost-effective options. NNSA is currently working with the Idaho National Laboratory to develop this capability for approving future DBT plans. The need for analytical tools will increase as sites plan and implement the 2004 DBT policy, making it critical for NNSA to continue to address these issues in a timely manner.

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**Future DBT  
Implementation**

The national security mission at NNSA's nuclear weapons production and research facilities includes the protection of nuclear weapons and special nuclear material, which can be used to make nuclear weapons. As noted by the Secretary, these critical national defense assets "simply put, must not be allowed to fall into the wrong hands." Consequently, it is critical that NNSA provides a robust safeguards and security system at its sites that possess special nuclear material. However, to avoid the risk of making security investment decisions that are not cost effective in the long term, NNSA must ensure that permanent security upgrades are part of a strategic approach that integrates security with program and infrastructure planning. Additionally, NNSA must fully implement and evaluate the operational effectiveness of the upgrades and interim measures sites are installing to meet the threat defined in the 2003 DBT. Until NNSA fully completes these actions, it lacks assurance that its national security assets and mission operations are being sufficiently protected in the most cost-effective manner.

**RECOMMENDATIONS**

Since NNSA has experienced delays in implementing changes, including new technologies, it is critical that sites maintain momentum towards meeting the 2003 DBT security requirements in order to protect national security assets and operations, as well as to provide a foundation for meeting the more rigorous requirements of the 2004 DBT. Accordingly, we recommend that the Administrator, NNSA:

1. Ensure that the Office of Defense Nuclear Security makes better use of the planning, programming, budgeting and evaluation process by:
  - a) Developing a long-term strategic approach that includes long-term plans for infrastructure upgrades; and,
  - b) Coordinating security with programmatic plans, including material consolidation plans.
2. Make available analytical simulation tools to evaluate the effectiveness of security upgrades.

We also recommend that the Director, SSA conduct comprehensive inspections after FY 2006 of all NNSA sites with special nuclear material to determine whether they have met the requirements of the 2003 DBT.

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**MANAGEMENT  
REACTION**

Both NNSA and SSA management concurred with the recommendations. NNSA believes it has made significant progress in achieving the intent of the recommendations and provided examples of efforts to improve coordination between the security and weapons program. NNSA believes it can achieve its goal to implement the 2003 DBT by the end of FY 2006 as originally planned. NNSA further stated that the Department's weapons, materials and facilities are secure and that the challenge lies in the implementation of the enhanced security requirements.

SSA shared many of the OIG's concerns regarding the slower than expected progress towards implementation of the 2003 DBT and greater than expected emphasis on increasing protective force numbers. However, officials believe that a number of sites will succeed in meeting the date. Inspections performed after the end of FY 2006 will place special emphasis on reporting the implementation status of the 2003 DBT.

**AUDITOR  
COMMENTS**

Management's comments are responsive to our recommendations. We made changes to the report, as appropriate, to address NNSA's and SSA's technical comments.

## Appendix 1

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### OBJECTIVE

The objective of this audit was to evaluate the status of NNSA's effort to implement the May 2003 DBT by the end of FY 2006, using permanent upgrades that are both cost-effective and technologically advanced.

### SCOPE

The audit was performed between August 2004 and August 2005. The audit examined the May 2003 Design Basis Threat Implementation Plan activities. Audit work was performed at the National Nuclear Security Administration, including Headquarters, the Nevada Test Site, the Office of Secure Transportation, the Pantex Plant, Sandia National Laboratories, and the Y-12 National Security Complex. In addition, work was performed at the Office of Security and Safety Performance Assurance.

### METHODOLOGY

To accomplish the audit objective, we:

- Reviewed applicable Public Laws, Department orders, other departmental guidance, related correspondence and contracts;
- Analyzed prior OIG and Government Accountability Office reports;
- Reviewed compliance with the *Government Performance and Results Act of 1993*;
- Analyzed key documents related to the NNSA sites May 2003 Design Basis Threat Implementation Plans, including the sites quarterly implementation reports;
- Reviewed Office of Security and Safety Performance Assurance activities related to the implementation of the Design Basis Threat, including Office of Independent Oversight and Performance Assurance inspections that were conducted after May 2003 for the NNSA sites; and,
- Interviewed key headquarters, field, and contractor personnel.



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 objective of the audit. Accordingly, we assessed the significant internal controls and performance measures established under *The Government Performance and Results Act of 1993* and found that there were measures related to overall safeguards and security performance. With the exception of NNSA's programmatic measure, few of the measures were specifically related to the implementation of the May 2003 Design Basis Threat. 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 conduct a reliability assessment of computer-processed data because we did not consider such data critical to achieving our audit objective. Management waived the exit conference.

### **PRIOR REPORTS**

#### **OFFICE OF INSPECTOR GENERAL REPORTS**

- *Management of the Department's Protective Forces* (DOE/IG-0602, June 2003). The audit disclosed that a number of improvements had been made in the management of the protective force program; however, the Department still faces a number of challenges that could adversely affect the program. Among the challenges are morale and potential retention problems due to mandatory overtime and declining training opportunities and significant increases in unscheduled overtime costs. The Department has taken a number of actions to reduce the impact of heightened security on overtime costs; however, additional actions are required to improve the Department's workforce.
- *Protective Force Response to a Security Incident at Sandia National Laboratory, California* (DOE/IG-0658, August 2004). A one-ton utility truck, dragging a chain link fence, entered a Federal Property Protection Area. The Office of Inspector General discovered that the vehicle arrest systems (pop-up barriers) were not energized and could not deploy due to the lack of prior approval. NNSA Federal and contractor security officials later approved the activation procedures in May 2004; approximately ten months after the installation of the barriers was completed. No satisfactory explanation was given for the delay of approval. In addition, once the vehicle was stopped, Department/NNSA security procedures were not followed.
- *Physical Security Improvement Recommendations at Los Alamos National Laboratory* (INS-L-04-02, June 2004). The inspection was conducted to determine whether the laboratory took action to address identified physical security related recommendations. The inspection found that final resolution of the recommended actions is dependant upon full implementation of the laboratory's DBT Implementation Plan.
- *The Department's Basic Protective Force Training Program* (DOE/IG-0641, March 2004). The audit disclosed that the core basic training curriculum had been applied inconsistently throughout the complex. A significant and relatively large number of modifications were identified during the audit which raised concern as to the curriculum's validity and its usefulness as a benchmark for evaluating the performance of protective force training.

#### **GOVERNMENT ACCOUNTABILITY OFFICE (GAO) REPORTS**

- *DOE Needs to Resolve Significant Issues Before It Fully Meets the New Design Basis Threat* (GAO-04-623, April 2004). GAO found that the Department has taken a series of actions in response to the terrorist attacks of September 11, 2001,

## Appendix 2 (continued)

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but must take additional actions to ensure a timely and cost effective defense. The Department has been slow to resolve significant issues or their efforts have been expensive. The Department's deadline to meet the requirements of the new DBT is the end of fiscal year 2006, which is not realistic for some sites.

- *DOE Faces Security Challenges in the Post September 11, 2001, Environment* (GAO-03-896TNI, June 2003). The audit reported that NNSA has not been fully effective in managing its safeguards and security program in four key areas. These areas are: (1) NNSA has not fully defined clear roles and responsibilities for headquarters and site operations, (2) inconsistencies have emerged among NNSA sites on how they assess contractors' security activities, (3) analysis plans are completed inconsistently in preparing for corrective action plans, and (4) NNSA falls short at its site offices in the number of staff and in expertise. As a result, NNSA cannot be assured that its contractors are working to maximum advantage to protect critical facilities and materials from adversaries seeking to inflict damage.
- *NNSA Needs to Better Manage Its Safeguards and Security Program* (GAO-03-471, May 2003). GAO found that NNSA has not been fully effective in managing its safeguards and security program in areas such as defining clear roles and responsibilities and allocating staff. As a result, NNSA cannot be assured that its contractors are working to maximum advantage to protect critical facilities and material from individuals seeking to inflict damage.

### **OTHER REPORTS**

- *Strengthening NNSA Security Expertise: An Independent Analysis* (DE-AD26-02NT41465, March 2004). The study team found that NNSA needed to develop a comprehensive program for hiring and training federal personnel to oversee its contractors security programs. The report also recommends that NNSA revise its Safeguards and Security Strategic Plan to identify priorities in the near, mid, and long-term and incorporate a proactive risk management approach that pays particular attention to the contribution of emerging technologies.




Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



AUG 30 2005

MEMORANDUM FOR George W. Collard  
Assistant Inspector General  
for Performance Audits

FROM: Michael C. Kane   
Associate Administrator  
for Management and Administration

SUBJECT: Comments to Draft Audit Report on DBT  
Implementation, A04AL038

The National Nuclear Security Administration (NNSA) appreciated the opportunity to have reviewed the Inspector General's (IG) draft special report, "The National Nuclear Security Administration's Implementation of the 2003 Design Basis Threat." NNSA understands that this audit was conducted to evaluate the status of our efforts to implement the 2003 Design Basis Threat (DBT) by the end of Fiscal Year 2006.

As the report states, there has been a lot of work accomplished, and progress made, by NNSA and the Office of Safety and Security Performance Assurance (SSA) to meet the future requirements. We appreciate the IG acknowledging that one of the significant reasons for the delays in implementing the planned upgrades for the 2003 DBT occurred because the plan was not approved in time to be included in the FY 2004 and FY 2005 budgets. Thus: (1) there was not sufficient time to fully integrate security planning and budgeting; and (2) there was not sufficient time to execute a coordinated effort to identify and evaluate cost-effective permanent upgrades. Although the reprogramming process has delayed some implementation, we believe NNSA can achieve its goal to implement the 2003 Design Basis Threat by the end of FY 2006 as originally planned.

NNSA generally agrees with the report's recommendations to make better use of the Planning, Programming, Budgeting and Evaluation processes and to make the analytical simulation tools available to evaluate security effectiveness. Regardless of the perception of the report, NNSA believes that there has been significant progress made in achieving the intent of the recommendations as well as implementing processes, procedures, and technology to meet the DBT. Our weapons, materials, and facilities are secure. Our challenge lies in the implementation of the enhanced security requirements.

As you are aware, the inter-relationship between NNSA's Weapons Program element and Security Program element have gone through multiple changes related to the DBT, modernization activities of the weapons complex, and the consolidation of materials. These changes require an integrated programmatic and security approach to implementation in order to achieve a cost-effective, efficient security solution. The integration began, and continues today, with a collaboration of the programmatic and security elements following receipt of the 2003 DBT Implementation Plans. A discreet element of this collaboration is the increased formality of validating proposed security enhancements to further improve the quality of security solutions being implemented to meet the DBT.

NNSA remains committed to achieving cost-effective, efficient solutions to meet the challenges of implementing enhanced security processes, procedures, and technology in order to meet today's DBT in a manner that is responsive to national security interests.

As part of this memorandum, we have attached comments of a technical nature that we believe provide additional insight into the program and might be considered for inclusion in the IG's report. Should you have any questions related to this response, please contact Richard Speidel, Director, Policy and Internal Controls Management. He may be contacted at 202-586-5009.

#### Attachment

cc: William Desmond, Associate Administrator for Defense Nuclear Security  
Karen Boardman, Director, Service Center  
Director, Office of Security and Safety Performance Assurance



Department of Energy  
Washington, DC 20585

August 15, 2005

MEMORANDUM FOR GREGORY H. FRIEDMAN  
INSPECTOR GENERAL

FROM: GLENN S. PODONSKY  
DIRECTOR  
OFFICE OF SECURITY AND SAFETY  
PERFORMANCE ASSURANCE

SUBJECT: Comments on the Draft Report on "The National Nuclear Security Administration's Implementation of the 2003 Design Basis Threat"

The Office of Security and Safety Performance Assurance (SSA) appreciates this opportunity to provide comments on your draft report entitled "The National Nuclear Security Administration's Implementation of the 2003 Design Basis Threat." SSA accepts the recommendation regarding the conduct of inspections after FY 2006 to determine whether sites have met the requirements of the 2003 Design Basis Threat (DBT). While progress toward meeting DBT implementation requirements is normally a part of a comprehensive inspection, those inspections performed after the end of FY 2006 at both NNSA and other DOE facilities will place special emphasis on reporting the implementation status of the 2003 DBT.

SSA believes that the draft report would be improved by clarifying a number of points. Specific comments directed toward this clarification are attached. However, these comments do not detract from the importance of the draft report. SSA shares many of your concerns regarding the slower than expected progress toward implementation of the 2003 DBT and the greater than expected emphasis on increasing protective force numbers. We believe that the DBT Site Assistance Visits, jointly conducted by SSA, field management, and Program Offices, represent a very important first step toward addressing these concerns, but a continued effort to promote a Departmental view of security (rather than a site by site perspective) will be necessary to achieve cost effective protection against the increased threat described in the 2004 DBT. SSA continues to work in cooperation with the Administrator, National Nuclear Security Administration, and the Under Secretary for Energy, Science, and Environment toward achieving a corporate vision of safety and security that will transcend the narrow perspectives that have been all too common in the past.



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## Appendix 3 (continued)

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If you have any questions or concerns regarding this memorandum, please contact me at (301) 903-3777.

Attachment

cc:

A. Ingols, S-2

R. Walsh, S-3

W. Desmond, NA-70

## **CUSTOMER RESPONSE FORM**

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We wish to make our reports as responsive as possible to our customers' requirements, and, therefore, ask that you consider sharing your thoughts with us. On the back of this form, you may suggest improvements to enhance the effectiveness of future reports. Please include answers to the following questions if they are applicable to you:

1. What additional background information about the selection, scheduling, scope, or procedures of the inspection would have been helpful to the reader in understanding this report?
2. What additional information related to findings and recommendations could have been included in the report to assist management in implementing corrective actions?
3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?
5. Please include your name and telephone number so that we may contact you should we have any questions about your comments.

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