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NUCLEAR SECURITY

Security Issues At DOE  
and Its Newly Created  
National Nuclear  
Security Administration

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Mr. Chairman and Members of the Subcommittees:

We are pleased to be here today to provide our observations on the Department of Energy's (DOE) and the National Nuclear Security Administration's (NNSA) security programs to protect against theft, sabotage, espionage, terrorism, and other risks to national security at its facilities. As you know, the Congress established NNSA on March 1, 2000, as a semi-autonomous agency within DOE with responsibility for the nation's nuclear weapons, nuclear nonproliferation activities, and naval reactors programs. NNSA was established to correct long-standing management and security problems at DOE's nuclear facilities. Our testimony today focuses on (1) oversight of safeguards and security programs at DOE and (2) security issues with NNSA. Our testimony is based on our numerous reviews of security at DOE--in particular, our recently issued report to the full Committee entitled "Improvements Needed in DOE's Safeguards and Security Oversight"--and testimony presented earlier this month before the House Armed Services Special Oversight Panel on Department of Energy Reorganization.<sup>1</sup>

In summary, Mr. Chairman, sound management and independent oversight of security at DOE's nuclear facilities is critical to ensure that security problems are identified, raised to the attention of the highest levels in DOE, and corrected. DOE has recently made a number of improvements to its security oversight. However, our February report to the Committee discussed several areas where security oversight could be further strengthened. In particular,

- DOE needs a comprehensive tracking system for safeguards and security findings at its nuclear facilities,
- all security findings and/or problems identified need to be fully analyzed and appropriately closed, and

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<sup>1</sup>See *Nuclear Security: Improvements Needed in DOE's Safeguards and Security Oversight*, (GAO/RCED-00-62, Feb. 24, 2000) and *Department of Energy: Views on DOE's Plan to Establish the National Nuclear Security Administration*, (GAO/T-RCED-00-113, Mar. 2, 2000).

- safeguards and security ratings should be consistent among the various security organizations within DOE.

In addition, as security responsibilities shift, it is not clear how DOE's oversight at nuclear facilities will relate to the newly created NNSA. Specifically,

- while NNSA was to be distinct from DOE, the security office within NNSA may have duplicative and overlapping functions with DOE's security office, and
- significant questions remain about how the DOE security oversight organization will oversee NNSA operations.

We recognize that NNSA's creation, as outlined by DOE's Implementation Plan for NNSA, is an evolving process. However, we believe the best time to address past problems is when the organization and systems are being laid out for the first time, before commitments to old ways harden. Timely implementation of our prior recommendations for improving security at DOE and clarifying the role of DOE security organizations, such as NNSA, will be important. Changing the culture may be more difficult. NNSA will, at least initially, be made up of DOE and contractor employees that have worked in a DOE culture that has led to many security problems. For the newly created NNSA to be more effective, it must break out of the culture and mindset that permeates DOE. Otherwise, security problems inherent in DOE may continue in NNSA.

## **Background**

DOE has numerous contractor-operated facilities and laboratories that carry out various DOE programs and missions. The laboratories conduct some of the nation's most sensitive activities, including designing, producing, and maintaining the nation's nuclear weapons; conducting efforts for other military or national security applications; and performing research and development in advanced technologies for potential defense

and commercial applications. Because of these sensitive activities, these facilities--especially the laboratories--are targets of foreign espionage efforts.

Security concerns and problems have existed at many of these facilities since they were created, and recent years have been no different. In 1997, DOE's Office of Security Affairs issued a report that rated safeguards and security at some facilities and laboratories as marginal and identified problem areas that included physical security and accountability for special nuclear material.<sup>2,3</sup> In April 1999, all computer networks (except for those performing critical safety or security functions) at the laboratories were shut down because of concerns about inadequate security. During that same month, we testified before this Committee on numerous long-standing safeguards and security problems, including ineffective controls over foreign visitors, weaknesses in efforts to control and protect classified and sensitive information, lax physical security controls, ineffective management of personnel security clearance programs, and weaknesses in tracking and controlling nuclear materials.<sup>4</sup> In December 1999, a scientist at the Los Alamos National Laboratory was indicted on 59 felony counts of mishandling classified information. The scientist was accused of transferring files from Los Alamos' secure computer system to computer tapes, most of which cannot be accounted for. The Secretary of Energy has taken several steps to improve security at DOE's facilities, including restructuring the headquarters safeguards and security organization, appointing a "Security Czar," elevating the security oversight organization to report directly to the Secretary, upgrading computer security, and instituting counterintelligence measures.

To a larger extent, to resolve organizational and managerial weaknesses that have been identified by ourselves and others as the causes of these security problems, several options for reorganizing DOE have been proposed and studied. For example, in June

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<sup>2</sup>See *Status of Safeguards and Security for 1996* (Jan. 27, 1997).

<sup>3</sup>The Office of Security Affairs is a DOE headquarters organization whose functions include establishing safeguards and security policies and providing advice and assistance concerning safeguards and security programs.

<sup>4</sup>See *Department of Energy: Key Factors Underlying Security Problems at DOE Facilities*, (GAO/T-RCED-99-159, Apr. 20, 1999).

1999, the President's Foreign Intelligence Advisory Board proposed a semi-autonomous nuclear agency within DOE with a streamlined management structure and field operations. On October 5, 1999, the President signed the National Nuclear Security Administration Act, which was included in Public Law 106-65. This act created NNSA, a separately organized agency within DOE. In January 2000, DOE issued its Implementation Plan to create NNSA. As envisioned by the law, the Implementation Plan calls for three program offices within NNSA—Defense Programs, Defense Nuclear Nonproliferation, and Naval Reactors. The Plan also sets up a statutorily required security support office--the Office of Defense Nuclear Security. Overall, the Statute and Implementation Plan establish a structure quite similar to DOE's.

DOE has overall responsibility for a security program that effectively protects against theft, sabotage, espionage, terrorism, and other risks to national security at its facilities. DOE has policies and procedures to protect its facilities, classified documents, data stored in computers, nuclear materials, nuclear weapons, and nuclear weapons components. The operating contractors at DOE's facilities are responsible for implementing these safeguards and security policies and procedures. To ensure that these policies and procedures are followed and implemented, DOE's field operations offices and the Office of Independent Oversight and Performance Assurance (the Independent Oversight Office) provide oversight of the effectiveness of safeguards and security policy and its implementation. These offices play a critical role in the early detection of safeguards and security problems and can play a major role in the timely resolution of those problems.

DOE's field operations offices are the line organizations accountable for evaluating the laboratories' safeguards and security activities. The operations offices are required to conduct an annual survey of the adequacy of the operating contractors' safeguards and security programs. The Independent Oversight Office provides oversight of laboratory safeguards and security activities from DOE's headquarters. The Independent Oversight Office is an "independent" oversight organization that is separate from the line management structure and conducts safeguards and security inspections of DOE

facilities and issues reports. The Independent Oversight Office reports directly to the Secretary of Energy.

### **Improvements Needed in DOE's Security Oversight**

In February 2000, we reported to this Committee that DOE's oversight of security at its national laboratories needs improvements. Specifically, improvements are needed in DOE's security management information system, corrective action process, and performance rating activities.

#### Security Management Information System

DOE's Office of Security and Emergency Operations--DOE's headquarters safeguards and security policy organization--maintains a centralized management information system to track and monitor safeguards and security findings and the related corrective actions. However, findings developed between 1995 and 1998 by DOE's Independent Oversight Office are not included in this system nor are findings and recommendations developed by us and other outside organizations, such as congressional committees and special review teams. In addition, the system is not directly accessible by security staff at DOE's area offices and the laboratories. Each laboratory has developed its own information system containing data on findings that relate to their laboratory. As a result, information about problems at one location is not available to security staff at other locations. DOE's centralized security management information system would be of more value if it contained information on all security findings. Such information would help them avoid similar problems and improve their safeguards and security.

#### Corrective Action Processes

DOE requires that the laboratories conduct a risk assessment, a root cause analysis, and a cost-benefit analysis as part of their process to correct safeguards and security problems found by DOE's oversight activities. These analyses help to ensure that

safeguards and security problems are corrected in an economic and efficient manner. Despite their importance, these assessments and analyses have not always been conducted. For example, at the Los Alamos National Laboratory, we found that root cause analyses had been performed for only about two-thirds of the security findings we reviewed. Risk assessments and cost-benefit analyses had not been performed for any of the Los Alamos National Laboratory findings we reviewed. The Los Alamos National Laboratory began requiring root cause analyses in 1998, and, according to laboratory officials, began requiring risk assessments since we completed our review. Formal cost-benefit analyses are still not conducted. As a result, Los Alamos National Laboratory cannot determine whether correcting a security risk is worth the cost of the corrective action.

In addition, the Independent Oversight Office is not required to and, in the past, has generally not worked with the laboratories to develop corrective action plans for its safeguards and security findings. Also, this office is not required to and has not been formally involved in validating the corrective action, verifying that the problem was corrected, and certifying that its findings were closed. During the past year, the Independent Oversight Office has worked with the laboratories to develop corrective action plans and has conducted follow-up reviews of its findings that are being corrected, validated, verified, or closed by the operations offices. However, the Independent Oversight Office still has not become involved in validating and verifying corrective actions and certifying that findings are closed. Therefore, the Independent Oversight Office has no assurance that the problems were adequately corrected and closed.

#### DOE Performance Ratings Activities

From 1994 through 1999, DOE's nuclear laboratories have received many different assessments of the effectiveness of their safeguards and security programs. For example, in 1998 Los Alamos National Laboratory received ratings ranging from marginal to excellent depending on the DOE organization conducting the assessment. Likewise,

in 1996 Lawrence Livermore National Laboratory received ratings ranging from marginal to far exceeds expectations. This inconsistency can send a mixed and/or erroneous message to policy makers and managers. At least partially, this inconsistency results from various organizations' use of different criteria and the timing of the rating. DOE has changed the rating criteria for the year 2000 safeguards and security contract performance rating. These changes could decrease rating inconsistency in future years.

### **Security Issues With NNSA**

Now I would like to discuss security issues related to NNSA. NNSA was established as a semi-autonomous agency that was to be distinct from DOE. To clearly show the separation of NNSA management from DOE's organization, the Act laid out chains of command in both DOE and NNSA that would insulate NNSA from DOE management and decisionmaking, except at the level of the NNSA Administrator. This is because the Administrator is under the immediate authority of the Secretary. We have two concerns. First, the Implementation Plan fills numerous key positions within NNSA with DOE officials--thus, these officials have DOE and NNSA responsibilities and have been dubbed "dual-hatted." Second, the relationship of the existing DOE organization that provides safeguards and security oversight to NNSA is unclear.

### **Dual-hatted Positions**

The Implementation Plan calls for dual-hatting of virtually every significant statutory position, including the Deputy Administrators for Defense Programs and Nuclear Nonproliferation. In addition, the Director of NNSA's Office of Defense Nuclear Security will also be a dual-hatted position.<sup>5</sup> The Implementation Plan explains that the "dual-hatted" positions were established to ensure consistent policy implementation and to ensure seamless DOE and NNSA responses to emergencies. However, in our view, officials holding similar positions concurrently in DOE and NNSA is contrary to the

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<sup>5</sup>Other dual-hatted positions include the Directors of the Office of Defense Nuclear Counterintelligence, the Office of Emergency Operations, the General Counsel and Deputy General Counsel, and Field Office Managers in charge of the Oak Ridge, Savannah River, and Oakland offices.



legislative intent behind the creation of NNSA as a separate entity within DOE. Moreover, to reinforce the two separate channels of management, the Act states that no NNSA officer or employee shall be responsible to, or subject to the authority, direction, or control of any DOE officers or employees other than the Secretary and the Administrator.

Whether DOE and NNSA have dual-hatted managers or not, the Implementation Plan does not clearly define how officials that are responsible for both NNSA and DOE activities will operate. Furthermore, whether NNSA security officials will establish their own set of policies and procedures or use existing DOE security policies and procedures is not clear. A Congressional Research Service memo commented that, in some areas, such as counterintelligence, both DOE and NNSA have authority to develop policy and procedures. This raises the prospect of two different sets of security policy and procedures, DOE's and NNSA's, being implemented at DOE's facilities that perform both DOE and NNSA missions.

#### Security Oversight of NNSA

Significant questions remain in the Implementation Plan's discussion of the role of the Independent Oversight Office. The Implementation Plan states that this oversight organization will remain in DOE. According to the Implementation Plan, the Independent Oversight Office will review all DOE and NNSA sites and activities and will report its findings and recommendations to the Secretary. How the recommendations are to be handled by NNSA, however, is not discussed. The Independent Oversight Office has raised concerns that, unless specifically directed by the Secretary, NNSA is not required to act on oversight findings and recommendations and thus might take no action. The Independent Oversight Office is attempting to change DOE Order 470.2, "Safeguards and Security Independent Oversight Program," to require NNSA to correct safeguards and security problems identified during its inspections. However, depending on how the order is changed, this could set up a relationship which would be inconsistent with the provisions in the Act that prohibit NNSA personnel from being

subject to the authority, direction, or control of any DOE staff other than the Secretary and the Administrator. In addition, while amending the order may require NNSA to act on findings and recommendations from the Independent Oversight Office, it will not fix the same problem for other oversight offices, such as the office that oversees environment, safety, and health.

The day-to-day working relationship between the Independent Oversight Office and NNSA is also unclear. For example, the Independent Oversight Office inspects DOE facilities and when safeguards and security problems are found, works with the operating contractor at the facility in developing a corrective action plan. DOE's Implementation Plan provides no guidance on whether such relationships between oversight organizations and NNSA should continue to exist.

In summary, DOE's Implementation Plan establishes a framework for the creation of NNSA and its security program, but it is not really a detailed roadmap and significant questions remain about the relationship between NNSA and DOE's security organizations.

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Our work on DOE's oversight of safeguards and security was performed from June through December 1999, and our work on the establishment of NNSA was performed during February 2000 in accordance with generally accepted government auditing standards. Mr. Chairman, this concludes my testimony. We would be happy to respond to any questions that you or Members of the Subcommittees may have.