Reforming the Department of Energy: Safeguarding America’s Nuclear Secrets

The Department of Energy (DOE) is responsible for the development and maintenance of the U.S. nuclear arsenal. Much of this important work occurs at the Lawrence Livermore, Los Alamos, and Sandia nuclear laboratories in California and New Mexico and involves the most sensitive American nuclear secrets. For many years, the adequacy of security measures at these facilities has been subject to criticism, and in 1994, background checks on foreign visitors to the Los Alamos and Sandia weapons laboratories were suspended. At the same time that the number of foreign visitors from sensitive countries increased from 500 to more than 1,600 between 1988 and the mid-1990s, DOE’s counterintelligence budget was declining. A series of reports by the General Accounting Office documented serious security risks inherent in DOE’s foreign visitors program.

Starting in 1995, DOE intelligence officials became aware of evidence suggesting that China had obtained U.S. nuclear secrets from the Los Alamos laboratory. In 1996, the Deputy Secretary of Energy recommended improvements to enhance security, but they were not implemented until 1998 when the Administration acknowledged the magnitude of the problem and initiated actions to address it.

In response to allegations of lax security at the nation’s nuclear weapons laboratories, on March 18, 1999, the President directed his Foreign Intelligence Advisory Board (PFIAB), headed by former Senator Warren Rudman, to undertake an inquiry on the security situation at DOE’s weapons laboratories. In June 1999, the PFIAB issued its report to the President and the Congress.

The PFIAB report was highly critical of the Department of Energy’s failure to adequately protect the nation’s nuclear secrets. In an unusually blunt report, “Science at its Best, Security at its Worst,” the President’s advisors concluded that DOE was, “saturated with cynicism, an arrogant disregard for authority, and a staggering pattern of denial.” They found that, “DOE and the weapons laboratories have a deeply rooted culture of low regard for and, at times, hostility to security issues.” The PFIAB maintained that these problems have endured for 20 years — virtually — continued on page 2 —
since the creation of DOE – and concluded that, “the Department of Energy is incapable of reforming itself—bureaucratically or culturally....”

DOE's nuclear security problems had also been highlighted earlier in 1999 by the bipartisan House Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China (the so-called "Cox committee"), headed by Representatives Chris Cox (R-CA) and Norm Dicks (D-WA). The Cox committee unanimously concluded in its unclassified report that China, “has stolen design information on the United States’ most advanced thermonuclear weapons.” China’s theft of classified secrets includes information on, “every currently deployed thermonuclear warhead in the U.S. ballistic missile arsenal.” The stolen information also includes, “classified design information for an enhanced radiation weapon (commonly known as the ‘neutron bomb’), which neither the United States, nor any other nation, has yet deployed.”

While the theft of such secrets began in the 1970s, the committee noted that, “significant secrets are known to have been stolen as recently as the mid-1990s” and that, “such thefts almost certainly continue to the present.” Furthermore, according to press reports, secret U.S. nuclear weapons computer codes – more valuable in some respects than nuclear weapons design information – have also been compromised.

In response to the Cox committee’s recommendation that the Administration conduct a comprehensive damage assessment of the strategic implications of the loss of these secrets, George Tenet, Director of Central Intelligence, established an independent panel to review the damage to U.S. national security resulting from Chinese nuclear espionage. The CIA report, which was independently reviewed by an outside panel headed by retired four-star Admiral David Jeremiah, concluded that China’s successful nuclear espionage, “probably accelerated its program to develop future nuclear weapons” by allowing Chinese scientists, “to focus successfully down critical paths and avoid less promising approaches to nuclear weapons designs.” In addition, the CIA report noted that China has also obtained from the United States, “at least basic design information on several modern U.S. nuclear reentry vehicles, including the Trident II sea-launched ballistic missile.

The Administration has acknowledged that it was slow to react to DOE’s serious security problems. It was not until February 1998 that President Clinton issued a directive to tighten security and undertake counterintelligence measures at the labs. Nevertheless, on May 30, 1999, Secretary of Energy Bill Richardson stated on Meet the Press that security reforms were not instituted until Fall 1998. In March 1999, the President’s National Security Advisor Samuel Berger acknowledged, “There’s no question that [China has] benefited from this” transfer of nuclear weapons information. In May 1999, Secretary Richardson conceded, “There have been damaging security leaks. The Chinese have obtained damaging information... during past administrations and the current administration.”

The PFIAB report praised Secretary Richardson’s recent efforts to improve security at the nation’s weapons labs and DOE has indeed begun to take some corrective actions. A DOE employee at Los Alamos laboratory suspected of passing nuclear weapons information to China in the late 1980s, and the subject of an FBI investigation since late 1997, was fired in March 1999. Secretary Richardson called the employee’s transfer of classified information to an unclassified computer system, “a serious security breach that is unconscionable.” Secretary Richardson also asked Dr. John McTague, former Vice President of Technical Affairs at Ford Motor Company, to review DOE’s...
foreign visitors program at the labs to assess, “the balance between national security and science.” Earlier this year, Secretary Richardson ordered a two-week suspension of classified computer activity at DOE’s weapons labs in order to assess and improve the security of the computer networks. Employee polygraphs were also ordered. However, despite some of these initial steps, it seems clear that they will not be sufficient to address many of the underlying causes of DOE’s security problems.

According to the Cox report, “...the new counterintelligence program at the Department of Energy will not be even minimally effective until the year 2000.” Although Secretary Richardson proclaimed that, “our nation’s nuclear secrets are today safe and secure,” PFIAB Chairman Rudman testified that the Secretary, “overstated the case.” Further, the PFIAB notes that, “the core of the Department’s bureaucracy is quite capable of undoing Secretary Richardson’s reforms, and may well be inclined to do so if given the chance.” More fundamental and permanent changes are needed.

The PFIAB finally concluded that, “organizational disarray, managerial neglect, and a culture of arrogance – both at DOE headquarters and the labs themselves – conspired to create an espionage scandal waiting to happen.... Reorganization is clearly warranted to resolve the many specific problems with security and counterintelligence in the weapons laboratories, but also to address the lack of accountability throughout the entire Department.” Indeed, on NBC’s Meet the Press on June 20, 1999, Senator Rudman referred to a complex wiring chart depicting the structure of DOE’s nuclear programs management (see chart on page 2), “the organization [of DOE] is dysfunctional... I refer to [this chart] as the wiring diagram of Frankenstein’s brain.” On June 29, 1999, Rudman further explained to the House Committee on Science that his “Frankenstein’s brain” description was particularly appropriate, “because only a mad man could put together that kind of a chart.” The need for organizational reform of DOE is unquestioned.

### Congress Responds

The PFIAB’s conclusions and the inability of DOE to institute and sustain needed reforms are consistent with the findings of many other studies that, over the years, have highlighted DOE’s organizational and bureaucratic problems. The most recent of these studies include, “The Organization and Management of the Nuclear Weapons Program” by the Institute for Defense Analyses in 1997, and the 1999 report of the Commission on Maintaining U.S. Nuclear Weapons Expertise chaired by retired Navy Admiral Henry G. Chiles. Both reports were critical of confused lines of authority and a lack of mission focus within the Department’s weapons activities.

The failure to correct chronic security and counterintelligence problems led the PFIAB to conclude that the Department, “is a dysfunctional bureaucracy that has proven incapable of reforming itself” and to recommend the creation of a new agency — either independent or semi-autonomous — within the Department to manage nuclear weapons activities.

Recognizing security and wider organizational problems, the House Armed Services Committee earlier this year included a provision in the House-passed defense authorization bill (H.R. 1401) to clarify lines of authority and responsibility within DOE’s Office of Defense Programs. However, continuing revelations of espionage and the June 1999 PFIAB report made evident the need for more fundamental reform.

The PFIAB recommended creation of a new semi-autonomous agency within DOE to oversee all nuclear weapons and nonproliferation-related matters, streamline the management structure for these activities, and mandate that the director of the new agency be appointed by the President subject to the Senate’s approval.

Consistent with the PFIAB’s recommendations, on August 4, 1999, Congress on H.R. 1059, the FY 2000 defense authorization bill, agreed to the creation of a new semi-autonomous agency, the National Nuclear Security Administration (NNSA), within DOE with responsibility for nuclear weapons research and production (see chart on page 3 and table on page 4). The head of the semi-autonomous agency works directly for and reports directly to the Secretary of Energy — again, as recommended by the PFIAB. The Secretary of Energy will retain all policy making authority for the Department, while the NNSA Administrator (who will also be an Undersecretary) will be charged with executing the nuclear weapons program. The nuclear weapons laboratories and production facilities will report directly to the Administrator, providing unambiguous lines of authority and responsibility.
sibility — and with it, substantially improved accountability. Intelligence and counterintelligence policy will be established by the Secretary, while intelligence and counterintelligence offices within the NNSA will be responsible for executing those policies.

These reforms will help ensure that DOE develops a clearer mission focus on nuclear weapons research and production and nonproliferation matters and that previously confused lines of authority and responsibility are simplified and streamlined. Such reform will establish conditions to help change the bureaucratic culture that permeates the Department of Energy and the national security laboratories identified by the PFIAB. Without such change, longstanding management, security, and counterintelligence problems are unlikely to be solved. As the PFIAB report concluded, the culture of the entrenched DOE bureaucracy will continue to work against significant reform.

As additional details about the damaging consequences of DOE’s security shortfalls continue to be revealed, it is clear that the time for reorganization and reform is now. Working with the Administration, Congress will play an active role in ensuring that U.S. nuclear secrets are protected.

**From the Chairman...**

Energy Bill Richardson conceded the point when he stated that DOE, “could have been dramatically more energetic and conscious of the security problem.”

In the context of recent events and revelations, it is difficult to argue that the Cox committee’s conclusions reflect a “worst-case scenario.” In fact, what is particularly troubling to me is not just what we know about Chinese espionage at our nuclear weapons labs, but what we don’t know. It is not unreasonable to conclude, given the scope and magnitude of past and present PRC espionage efforts, that the Cox committee’s findings may represent only the tip of the iceberg.

Unfortunately, DOE has proven itself institutionally unable to properly protect the nation’s sensitive nuclear secrets. In this regard, the PFIAB report concluded that DOE is, “incapable of reforming itself.” The Department’s organization and culture is not well suited to protecting the nation’s nuclear secrets. Accordingly, the conference report on S. 1059, the FY 2000 National Defense Authorization Act, contains significant common sense organizational reforms to ensure that similar security breaches are not repeated in the future. These actions are an overdue step toward more effective safeguarding of America’s vital nuclear secrets and deserve the support of the Congress and the President.

**Reforming the Department of Energy**


1) creates a semi-autonomous agency within DOE, the National Nuclear Security Administration (NNSA);

2) focuses within the NNSA the responsibility to assure the safety, reliability, and effectiveness of U. S. nuclear weapons and the promotion of nonproliferation of weapons of mass destruction;

3) establishes an Administrator for the NNSA (also an Undersecretary), and grants the Administrator responsibility for programs and activities of the NNSA;

4) provides that the NNSA Administrator works directly for, and is subject to the authority, direction, and control of the Secretary of Energy;

5) establishes dramatically clearer lines of authority and responsibility with respect to DOE national security programs not only by insisting that the NNSA Administrator work directly for the Secretary of Energy, but also by specifically requiring the directors of the nuclear weapons laboratories to report directly to the NNSA Administrator through the NNSA Deputy Administrator for Defense Programs;

6) establishes DOE offices of intelligence and counterintelligence necessary to implement policies to safeguard U.S. nuclear weapons secrets;

7) requires continued full compliance by the NNSA with all environmental, safety, and health laws, regulations and requirements;

8) requires improved budgeting and contracting practices for the NNSA; and

9) provides the NNSA Administrator with authorities necessary to better shape his work force to attract and retain high quality technical personnel.

The National Security Report is archived on the House Armed Services Committee website at: [http://www.house.gov/hasc/](http://www.house.gov/hasc/). Additional background information may be obtained from the committee staff (x54151).