Intelligence Reform at the Department of Energy:
Policy Issues and Organizational Alternatives

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Summary

Concerned by reported security and counterintelligence (CI) lapses at the Department of Energy (DOE), Congress in 1999 established a semi-autonomous agency — the National Nuclear Security Administration (NNSA) — to oversee DOE’s national security-related programs. Within NNSA, Congress established the Office of Defense Nuclear Counterintelligence to implement NNSA’s counterintelligence program. Although DOE’s existing Office of Counterintelligence develops CI policy for both agencies, it implements policy only at non-NNSA facilities. Some studies have questioned the effectiveness of a dual office structure in combating foreign espionage and have urged the adoption of an alternative structure. Several alternative organizational approaches have been discussed, including the following.

One approach, which DOE has initiated, merges under the control of a new DOE Office of Intelligence and Counterintelligence DOE’s Office of Intelligence, which assesses foreign nuclear weapons programs, and DOE’s CI office. Under an anticipated second phase, which would require congressional approval, the new office would absorb NNSA’s CI program. Proponents assert that consolidation would improve command, control, and communication. Opponents argue that consolidation would dilute the focus on counterintelligence at DOE’s weapons labs.

Under a second approach, the DOE and NNSA CI programs could be consolidated under the control of the NNSA administrator. Proponents argue that a semi-autonomous agency such as NNSA, by virtue of its independence, is better able to implement CI measures than is DOE. Opponents contend that such a consolidation would undermine the effectiveness of a counterintelligence program, which they argue requires a consolidated DOE-wide program that includes NNSA and is under the direct control and supervision of the Energy Secretary.

Under a third approach, DOE could integrate its Office of Intelligence and CI office under a new DOE intelligence agency, but allow NNSA’s CI office to remain as a separate entity. Proponents argue that such an approach would not eliminate the current bifurcated structure — a preferred outcome — but would enhance overall communication and coordination between the two existing programs. Opponents counter that only way to resolve coordination and communication problems is to consolidate the two CI programs within DOE.

A fourth approach would be to completely separate the DOE and NNSA counterintelligence programs. Proponents suggest that such an approach would clarify the chain of command. Opponents assert that separation could further undermine coordination and communication.

A final approach would be to maintain the status quo. Proponents suggest that the current structure is required for counterintelligence to receive focused attention at the weapons labs. Opponents counter that dual offices are inefficient and ultimately ineffective. This report will be updated as warranted.
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Introduction

Lapses in the Department of Energy’s (DOE’s) security and counterintelligence programs have plagued DOE since 1977, when the department was established by merging 40 government organizations, including the Energy Research and Development Administration and the Federal Energy Administration. The purpose in establishing the new agency was to focus the government’s research centers on finding solutions to the energy crisis then confronting the United States. The view, according to some, is that DOE’s establishment represented an unsuccessful attempt to merge more than 40 different government agencies and organizations, an event from which DOE arguably has never recovered.

Congress created the semi-autonomous National Nuclear Security Administration (NNSA) in 1999 in the wake of a recommendation by the President’s Foreign Intelligence Advisory Board (PFIAB) that DOE’s weapons research and stockpile management functions should be placed wholly within a new semi-autonomous agency within DOE “that has a clear mission, streamlined bureaucracy, and drastically simplified lines of authority and accountability.” Since then, however, some observers have questioned whether the current dual counterintelligence (CI) office structure established by Congress — with DOE operating one counterintelligence office and NNSA a second, independent one — is the most effective structure to combat foreign espionage. Or, as some have warned, does such a bifurcated structure expose both agencies to the possibility of future counterintelligence missteps because it contributes to coordination and communications problems?

One of DOE’s legacies has been its continuing struggle to strike an acceptable balance between open scientific inquiry and the need to protect highly sensitive and classified information that comprises many of those inquiries. In the past, this inherent tension led many observers to question whether the security of DOE’s highly classified information was adequate. The recent spate of foreign espionage at DOE has heightened concern that the department is not doing enough to protect this information.
classified weapons-related program, particularly with regard to CI, has received sufficient attention. These and other concerns prompted the Clinton Administration to issue a Presidential Decision Directive (PDD-61) in which he ordered DOE to fundamentally restructure its counterintelligence program. PDD-61 called for a number of changes, including one that placed the Federal Bureau of Investigation (FBI) in charge of DOE’s counterintelligence program. In 1999, Congress went further by establishing the semi-autonomous National Nuclear Security Administration (NNSA) and giving it control over DOE’s national security-related programs, including the department’s sensitive weapons laboratories. It also established a separate counterintelligence office within NNSA — one separate and independent of the DOE’s Office of Counterintelligence. This new office was given responsibility for developing and implementing counterintelligence programs within NNSA. Although representing separate organizations, the two CI offices share resources, funds, and personnel for some programs.5

This partially bifurcated counterintelligence structure, and its long-term effectiveness, continues to generate concern in some quarters, particularly given that DOE and NNSA facilities are expected to remain major espionage targets of foreign intelligence services.7

DOE CI Management Prior to the 1999 Reorganization

In 1998, President Clinton issued PDD-61 out of concern about intelligence evidence indicating that the People’s Republic of China (PRC) had stolen secrets from DOE’s weapons laboratories. Aimed at strengthening DOE’s counterintelligence program,8 the President’s directive mandated the establishment of an independent counterintelligence office — known as the Office of Counterintelligence (OCI) — within the department and placed it under the supervision of a senior FBI official.9 Previously, DOE’s counterintelligence program had been highly decentralized and, according to some observers, grossly underfunded.10

The President’s directive also mandated that the head of the new office report directly to the Energy Secretary and that existing DOE lab contracts be amended to

5 Those CI programs sharing resources, funds, and personnel include analysis, cyber-counterintelligence, evaluations, inspections, investigations, polygraph, and training.
7 Ibid., pp. 1-2.
8 For a comprehensive review of this issue, see CRS Report RL30143, China: Suspected Acquisition of U.S. Nuclear Weapon Secrets, by Shirley Kan.
9 The FBI has primary responsibility for domestic counterintelligence.
10 See President’s Foreign Intelligence Advisory Board, Foreword, Science At Its Best/Security At Its Worst, June 1999, p. 15.
take into account counterintelligence goals and compliance measures. The directive consolidated under the OCI Director’s control counterintelligence oversight functions previously assigned to DOE operations and field offices. As part of a follow-on implementation plan issued in 1999, the Director also assumed programming, funding, and personnel authority over counterintelligence activities at all DOE field offices and laboratories. Despite these changes, a majority in Congress decided that DOE’s counterintelligence reforms were insufficient.

The Turning Point

March 1999 marked a turning point in DOE’s counterintelligence program. That month Los Alamos National Security Laboratory scientist Wen Ho Lee was fired after allegedly failing a polygraph exam.11 (Lee had also allegedly failed to notify DOE officials about certain contacts with individuals in the PRC, to properly safeguard classified material, and to cooperate with authorities with regard to certain security matters. He pleaded guilty to one felony count of unlawful retention of national defense information; the government dropped 58 additional counts.12) In May of that same year, a bipartisan House Select Committee charged in a report that was declassified that the PRC had stolen U.S. nuclear weapons secrets. In June, the President’s Foreign Intelligence Advisory Board (PFIAB) criticized DOE for the “worst” security record on secrecy that panel members said they had ever encountered.13 The criticism was contained in a PFIAB report, the first of its kind to be publicly released in the panel’s 38-year history. Although the PFIAB dismissed assertions of wholesale losses of nuclear weapons technology as a result of espionage, the panel did concur, on balance, with the U.S. intelligence community’s assessment that the PRC had stolen classified U.S. nuclear weapons information that probably enabled the PRC to accelerate its development of nuclear weapons.14

11 The most recent alleged espionage case with a DOE connection involves alleged PRC spy Katrina M. Leung, who the FBI said was a 20-year Bureau informant they now suspect was a “double agent” who provided classified material to the PRC. Leung allegedly had affairs with two former FBI agents, William Cleveland Jr., who, until he resigned his post on April 10, 2003, was Director of Security at DOE’s Lawrence Livermore National Laboratory, and James Smith. Leung received probation after pleading guilty to a tax charge and lying. Smith pleaded guilty to a felony false statement charge in 2004 and was sentenced to probation and three months home confinement. Cleveland was never charged with a crime. See Josh Gerstein, “Court Hears Arguments Over FBI Agent Accused of Exposing Probe,” New York Sun, Mar. 8, 2006. FBI officials reportedly have said that every PRC counterintelligence case investigated by the Bureau since 1991 may have been compromised by Leung, including that involving Wen Ho Lee. See Susan Schmidt and Dan Eggen, “FBI Assesses Potential Damage From Spy Scandal,” Washington Post, Apr. 13, 2003, p. A04.


13 See President’s Foreign Intelligence Advisory Board, Science At Its Best/Security At Its Worst, June 1999, p. 1.

14 Ibid., p.4.
Congress and the President responded to the panel’s report by establishing NNSA\textsuperscript{15} and placing it charge of DOE’s national security-related nuclear programs.\textsuperscript{16}

In restructuring DOE and establishing NNSA, Congress created dual counterintelligence offices in DOE and NNSA, respectively. Within DOE, the already-existing Office of Counterintelligence was codified and made responsible for establishing counterintelligence policy for both DOE and NNSA. The department further directed that the office be responsible for implementing CI programs at non-NNSA facilities. Within NNSA, the Office of Defense Nuclear Counterintelligence was created by statute to implement DOE counterintelligence policy, but only at NNSA facilities. Conferees further stipulated that a presidentially appointed, Senate-confirmed Under Secretary for Nuclear Security be designated to serve as NNSA Administrator, and that the Administrator report directly to the Energy Secretary.

In approving this reorganization, conferees cited the PFIAB’s report, which blamed DOE’s counterintelligence failures on poor organization and a failure of accountability. Conferees also noted the PFIAB’s criticism of the DOE bureaucracy for being dysfunctional with regard to security matters, and incapable of reform.\textsuperscript{17}

Over time, this partially bifurcated CI structure has produced debate over its effectiveness. Critics warn that there is a lack of communication and coordination between the two offices that could undermine delicate counterintelligence investigations. Supporters of the dual office structure argue, however, that a separate, dedicated CI office within NNSA is necessary if counterintelligence protection of DOE’s national security laboratories is to receive the focus it warrants.

\section*{Policy Issues For Congress}

In assessing the current debate over DOE counterintelligence policy, observers have generally focused on two interrelated questions. First, are DOE and NNSA effectively managing their CI programs? And second, is the current dual office organizational structure within DOE and NNSA flawed?

\textsuperscript{15} NNSA facilities include the national security laboratories (Los Alamos National Laboratory, Los Alamos, NM; Lawrence Livermore National Laboratory, Livermore, CA; and Sandia National Laboratories, Albuquerque, NM, and Livermore, CA); nuclear weapons production facilities (the Pantex Plant, Amarillo, TX; Kansas City Plant, Kansas City, MO; the Y-12 Plant, Oak Ridge, TN; the tritium operations facilities at the Savannah River Site, Aiken, S.C.; and the Nevada Test Site, NV); and a service center at Albuquerque, NM. Naval reactor facilities also fall within the NNSA.


\textsuperscript{17} See FY2000 conference report, H.Rept. 106-301, p. 927, which accompanied S. 1059.
Are DOE and NNSA Effectively Managing Counterintelligence?

In a 2002 report, the Commission on Science and Security blamed dysfunctional management at DOE for deficiencies in DOE’s security and counterintelligence programs, including a lack of clarity, consistency, and broad strategic planning. The commission criticized DOE for failing to systematically assess the espionage risk to its programs and establish appropriate protection priorities. It also said that DOE’s investments in counterintelligence technology were inadequate and that its focus on cybersecurity threats was insufficient.

Authors of a second study issued in January 2003 concluded that both agencies were making progress in accomplishing their basic CI missions. The Office of the National Counterintelligence Executive (NCIX) reported that DOE and NNSA were working cooperatively, particularly in the areas of strategic planning, operating procedures, and creating joint information-sharing systems.

Both studies, however, contained expressions of concern about the current CI organizational structure.

Is the Bifurcated Structure Most Effective?

With regard to the current bifurcated structure, two views generally prevail. According to the first view, articulated by the PFIAB in its 1999 report, real and lasting CI reform is “unworkable within DOE’s current structure and culture. To achieve the kind of protection that these sensitive labs (DOE’s national security laboratories) must have, they and their functions must have their own autonomous operations structure free of all the other obligations imposed by DOE management.” Accordingly, the PFIAB advocated the establishment within DOE of a semi-autonomous agency, with its own separate and coherent counterintelligence program and structure.

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21 See President’s Foreign Intelligence Advisory Board, Foreword, Science At Its Best/Security At Its Worst, June 1999, p. 46.

22 Ibid., p. 47.
The Commission on Science and Security summed up the opposing view in its 2002 report, concluding:

Counterintelligence must be an enterprise-wide function, responsible for counterintelligence issues anywhere within the DOE complex. Furthermore, counterintelligence investigations, analysis, and all other counterintelligence information must be developed within a unified organization and provided to the Secretary and other senior officials without bureaucratic delays. This vital function necessitates one organization with one chief of counterintelligence reporting to the office of the Secretary.\(^{23}\)

The commission went on to warn that the current bifurcated counterintelligence structure will inevitably cause counterintelligence responsibilities to fragment, thereby preventing the establishment of a single, strong department-wide counterintelligence program.\(^{24}\)

NCIX appeared to concur with the commission’s view, noting in its own study that “this partial bifurcation’ of CI responsibilities at DOE not only served to further complicate the formidable challenge of managing CI at DOE, but also endangered the goals and implementation of an effective CI program.”\(^{25}\) The NCIX further stated in its report that, “[i]n light of the history of CI investigations that foundered because of mis-communications within well-established agencies, the two-office arrangement has raised the odds of missteps and problems.”\(^{26}\)

NCIX blamed the current dual-office structure for numerous day-to-day problems, including duplicative and at times contradictory messages to field sites; mis-routing of sensitive CI information related to investigations; uncoordinated communications to the FBI and the intelligence community; and dual, sometimes inconsistent, program tasking.\(^{27}\)

According to one law enforcement officer cited by NCIX, the two-office configuration “might some day lead the department to miss a serious CI breach or prevent the conduct of an effective investigation.”\(^{28}\) The Directors of Central Intelligence and the Federal Bureau of Investigation (FBI) endorsed the NCIX findings in separate letters to the SSCI Chairman and Vice Chairman.\(^{29}\)

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\(^{24}\) Ibid., p. 26.


\(^{26}\) Ibid., p. 2.

\(^{27}\) Ibid., p. 10.

\(^{28}\) Ibid., p. 13.

\(^{29}\) See letters from Director of Central Intelligence George Tenet, June 9, 2003, and from (continued...
NCIX recommended in its report that the two CI offices be consolidated under one senior counterintelligence officer who would report directly to the DOE Secretary and who would be responsible for department-wide counterintelligence program.\textsuperscript{30}

**DOE Secretary Also Expresses Concern About Bifurcated CI Structure**

As part of his own review, former DOE Secretary Spencer Abraham concluded in 2003 that the bifurcated structure was “not optimal.” He proposed to Congress that the department’s two CI programs be consolidated under DOE’s control, and that the combined office report directly to the Energy Secretary.\textsuperscript{31} Instead, however, the Senate Armed Services Committee, in the FY2005 Defense authorization bill, authorized the DOE Secretary to consolidate the two offices, but under the control of the NNSA administrator.\textsuperscript{32} The House disagreed, and the Senate receded to the House’s position. In agreeing to retain the bifurcated structure, conferees stated in their conference report:

> The conferees note that the NNSA was originally set up as a semi-autonomous agency, in large part, to ensure that there would be adequate focus and priority placed on counterintelligence activities. The conferees urge the counterintelligence offices at DOE and NNSA to work together to ensure security of both DOE and NNSA programs and facilities.\textsuperscript{33}

**Possible Organizational Alternatives**

Congress, of course, could choose to maintain the current organizational structure.\textsuperscript{34} If Congress, however, ultimately decides to modify the structure, a number of organizational approaches have been proposed. The range of alternatives currently being discussed include the following: (1) consolidate the two counterintelligence programs under the control of a new DOE intelligence agency; (2) consolidate the two counterintelligence programs under the control of NNSA; (3)

\textsuperscript{29}(...continued)

FBI Director Robert Mueller, July 11, 2003. Both letters were introduced into the record during a July 13, 2004, hearing on DOE counterintelligence consolidation conducted by the House Energy and Commerce Subcommittee on Energy and Air Quality.

\textsuperscript{30} Ibid., p. 3.

\textsuperscript{31} For a more complete discussion of DOE’s position on the issue of CI bifurcation, see testimony presented by Linton Brooks, Administrator, National Nuclear Security Administration, before the House Energy and Commerce Committee, Energy and Air Quality Subcommittee, July 13, 2004.

\textsuperscript{32} Section 3119, S. 2400, FY2005 Defense authorization bill.

\textsuperscript{33} The 108\textsuperscript{th} Congress voted to retain the current bifurcated CI structure. See H.Rept. 108-767, p. 897, accompanying H.R. 4200, the FY2005 Defense authorization bill.

\textsuperscript{34} Congress in 2004 decided to leave the current bifurcated CI structure in place. See H.Rept. 108-767, p. 897, accompanying H.R. 4200, the FY2005 Defense authorization bill.
establish a new DOE intelligence agency but maintain a separate NNSA counterintelligence program; (4) completely sever DOE’s and NNSA’s counterintelligence programs; and (5) maintain the status quo.

**Alternative One: Consolidate DOE and NNSA CI Programs Under New DOE Intelligence Agency**

One approach, which the DOE Secretary has initiated, integrates DOE’s Office of Intelligence, whose principal task is to assess other countries’ nuclear weapons programs, and DOE’s CI office under a newly created DOE Office of Intelligence and Counterrorelligence. The new office contains separate directorates responsible for intelligence and counterintelligence, respectively. In a second phase, NNSA’s CI office would be consolidated under the new intelligence agency’s counterintelligence directorate. Such a change would require congressional approval. The House of Representatives has approved a measure as part of the FY2007 Defense Authorization Act that would abolish NNSA’s CI office and reintegrate its functions into DOE’s new intelligence and counterintelligence office. The Senate’s version of the legislation is silent on the issue, and House and Senate conferees will likely address the matter.

Proponents assert that such a consolidation would produce a more efficient bureaucratic structure, one that would better serve DOE’s broader intelligence needs and responsibilities. Specifically, they suggest that by creating a new intelligence agency, DOE will be able to improve coordination and communication between those responsible for assessing foreign intelligence and those in charge of the department’s counterintelligence programs. Proponents also contend that by merging DOE’s and NNSA’s CI programs under a new DOE intelligence agency, the department will be able to clarify roles and missions and to improve coordination and communication.

Opponents believe the current bifurcated CI program — with DOE and NNSA splitting responsibilities for counterintelligence — is the program’s principal weakness, and favor consolidating the two CI offices within a single office in DOE. They question, however, the advisability of placing such an integrated CI program under the control of a new intelligence agency within DOE. Doing so, they contend, will weaken the authority and effectiveness of those in charge of counterintelligence by superimposing a new bureaucratic layer between them and the DOE Secretary. Currently the counterintelligence leadership has direct access to the Energy Secretary. Opponents also question DOE’s commitment, and Congress’s willingness, to

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35 The Department of Energy describes its Office of Intelligence as the intelligence community’s premier technical intelligence resource in four core areas: nuclear weapons and nonproliferation; energy security; science and technology; and nuclear energy, safety, and waste. See DOE’s Office of Intelligence web page at [http://www.intelligence.gov/1-members_energy.shtml].

36 Although both proponents and opponents generally agree that merging NNSA’s CI program under a new DOE intelligence agency would likely require congressional approval, some opponents also assert that the authority of the DOE Secretary to establish a new intelligence agency without Congress’s approval is unclear.

37 H.R. 5122, Sec. 3117.
eliminate the current bifurcated CI structure, which, in their view, is the principal reason that counterintelligence efforts are not effective. Failing to eliminate program bifurcation and leaving NNSA’s CI program in place while permitting DOE’s new intelligence agency to absorb the department’s CI program would only worsen matters, according to these opponents.

Alternative Two: Consolidate DOE and NNSA CI Programs Under NNSA

The second approach consolidates all DOE CI implementation under NNSA. Proponents suggest that this approach would improve coordination because NNSA would be able to focus its resources on program implementation, while leaving DOE’s counterintelligence office to concentrate on formulating CI policy. They also assert that NNSA is best suited to implement DOE’s overall CI program, because it already is responsible for overseeing DOE’s most sensitive classified activities by virtue of overseeing the department’s weapons labs. Opponents counter that leaving in place two CI offices, one responsible for policy and the other for operations, will contribute to continuing confusion over roles and missions.

Alternative Three: Establish New DOE Intelligence Agency but Maintain Separate NNSA CI Program

This approach would integrate the DOE’s Office of Intelligence and counterintelligence office under a new DOE intelligence agency that would develop CI policy for DOE and NNSA, but would implement it only at non-NNSA facilities. NNSA’s CI office would continue to function separately and remain responsible for implementing CI policy at NNSA facilities. Proponents concede that this approach would fall short of a preferred goal, which would be to consolidate DOE and NNSA counterintelligence programming, but argue that it nevertheless would enhance counterintelligence efforts by improving communication and coordination between the two existing programs.

Some opponents counter the department can eliminate problems of program fragmentation, coordination, and communication only by eliminating the current bifurcated structure.

Alternative Four: Sever DOE and NNSA CI

This approach is a complete separation of DOE and NNSA counterintelligence programs, with DOE’s new intelligence agency providing CI support to DOE through its CI directorate, and NNSA’s program operating independently. Proponents suggest that this approach would clarify lines of authority for CI within DOE and

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38 The Senate Armed Services Committee approved a provision that authorized the Secretary of Energy to consolidate DOE’s and NNSA’s counterintelligence offices within NNSA. In the meeting of conferees, the Senate receded to the House bill, which contained a similar provision. See Sec. 3119 of S. 2400, the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005. See also H.Rept. 108-767, 108th Cong., 2nd sess., p. 897 (2004).
NNSA, thereby improving communication and coordination. Opponents counter that such an arrangement would produce chaos in the field; could lead to future problems of redundancy, coordination, and communications; and could undermine relations with law enforcement.39

**Alternative Five: Maintain Status Quo**

Under this approach, DOE’s Office of Counterintelligence would continue to be responsible for developing CI policy across DOE (including the NNSA) but implementing that policy only at non-NNSA facilities. NNSA’s counterintelligence office would continue to implement CI policy at NNSA facilities.

Proponents of the status quo point to congressional concern in 1999 that DOE was failing to focus necessary and appropriate attention on counterintelligence. The semi-autonomous NNSA and its counterintelligence office, they argue, were established for the express purpose of having one entity outside of DOE focus on, and be held accountable for, implementing CI policy at DOE’s sensitive nuclear and national security programs, including its weapons labs. The current structure, they assert, accomplishes that goal while maintaining a reasonably close integration of program activities with DOE’s counterintelligence office. Opponents counter that the current bifurcated structure produces “inefficiency, confusion, unnecessary contention, and mis-communication.”40 They also suggest that, “In some areas, the NNSA structure within DOE has exacerbated the general problem of too many layers in DOE.”41

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40 Ibid., p. 1.