

Rebranding the nuclear weapons complex won't reform it

Robert Alvarez

Several years ago, my daughter brought her future husband home for the first time for dinner. He was then a uniformed officer in the Office of Naval Reactors, housed in the Energy Department. I was serving in the Energy Department at that time as well and was more than curious about what this prospective son-in-law did there. Over dessert, in the tradition of Adm. Hyman Rickover, father of the nuclear navy, he politely insisted that Naval Reactors runs itself, in *de facto* isolation from DOE management, as codified by law. Unlike Energy Department management, which he spoke of *disparagingly*, his main responsibility was to make sure contractors report and fix their mistakes. “If our contractors don’t flog themselves sufficiently,” he said, in all seriousness, “we do.”

Although it is also technically under the aegis of the Energy Department, the US nuclear weapons complex has operated for decades on an entirely different philosophy. Called “*least interference*,” it is a philosophy based on an “undocumented policy of blind faith in its contractors’ performance,” in the words of a 1996 Government Accountability Office report. Despite several attempts at reform, the Energy Department's management of the weapons complex was widely conceded to be an extraordinary and expensive mess.

In late November of last year, with little fanfare, the latest in a long line of advisory panels recommended ways to fix the dysfunctional administration of the nuclear weapons research and production complex, which commands more than 40 percent of the Energy Department’s budget. The Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise calls for elimination of the semi-autonomous National Nuclear Security Agency, which Congress established within the Energy Department in 1999, and for the nuclear weapons program to be placed under the direct control of a rebranded Energy Department, henceforth be known as the *Department of Energy and Nuclear Security*.

Given that the panel was dominated by members with ties to weapons contractors, it comes as no surprise that the panel's report advocates a reduction in federal oversight of

contractors that run the complex, in effect doubling-down on the least-interference policy that is at the heart of so many weapons complex problems.

And by focusing on branding and protection of contractors, this latest panel to examine the US nuclear weapons complex diverts attention from the thorny problem repeatedly raised by other expert panels: The nuclear weapons production and laboratory system created during the Cold War is simply far too large for the current military situation and needs drastic consolidation that includes the closing of labs and other facilities.

NNSA: A failed management fix. Wide latitude granted to nuclear weapons contractors, bolstered by national security secrecy, have enabled widespread problems in the handling and disposal of radioactive materials—problems that now constitute the largest and most expensive environmental mess in the United States. There were regular and frightening nuclear safety and safeguard lapses. Efforts to fix old weapons facilities and to build new ones became all-but-endless money-devouring boondoggles.

In response to these problems, Congress established the National Nuclear Security Agency (NNSA) in 1999, giving it semi-autonomous status within the Energy Department and a bureaucracy separate from the department's. Within this new structure, the NNSA was expected to improve oversight of a variety of activities associated with the weapons complex, including maintenance and modernization of the US nuclear warhead stockpile; operation of national research laboratories; and direction of nuclear and non-nuclear weapons production sites. It was also tasked with carrying out nuclear non-proliferation activities and housing—but not interfering with—the Office of Naval Reactors. "The new organization should focus on reducing bureaucratic red tape to free scientists to spend more time with experiments and less time filling out forms," said then-Sen. Pete Domenici, a New Mexico Republican who led the effort to create the NNSA.

Under the NNSA, however, management problems in the weapons complex not only continued but worsened. By November 2011, the Energy Department inspector general recommended elimination of “duplicative, redundant National Nuclear Security Administration functions” while calling for a process to downsize the Energy Department's national laboratory complex.

To counteract this threat, the NNSA, its contractors, and Congressional supporters set into motion an effort to gain unfettered authority. By June of 2012, the House of Representatives

passed a defense spending bill that, over the objection of the White House, granted unprecedented oversight of budgets to lab contractors and eliminated the Energy Department's oversight and enforcement of health, safety, security, and financial standards. But the NNSA's effort was punctured in late July, when three peace activists, one an 82-year-old Catholic nun, penetrated several security barriers to stage a non-violent protest at the nation's largest nuclear explosive storage facility, inside the Y-12 plant in Tennessee.

Apparent conflicts of interest. After this embarrassing episode, a compromise was reached in Congress, establishing an advisory committee that would make recommendations about the fate of the NNSA. The Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise was charged with recommending options for the “appropriate governance structure” of the nuclear weapons complex. Congressional leaders appeared to pay little attention to appearances of conflict-of-interest as they appointed panel members who had remarkable connections to contractors that run the sites overseen by the NNSA—the agency whose leadership the panel was to review. The panel appointees with questionable connections include:

- Panel co-chairman Norm Augustine, former chairman and CEO of the **Lockheed Martin Corporation**, a major member of consortia running the Y-12 nuclear weapons plant in Tennessee, the Pantex weapons assembly and disassembly facility in Texas and the **Sandia National Laboratory in New Mexico**.
- Panel co-chairman **Richard W. Mies**, a retired US Navy admiral who is a member of the board of directors of the Babcock and Wilcox Corporation (B&W). B&W operates the NNSA's Y-12 plant. Mies is also a board member for a consortium managing Lawrence Livermore and Los Alamos National Laboratories.
- Michael R. Anastasio, the former director of the Los Alamos National Laboratory and former president of Los Alamos National Security LLC, the company that operated the laboratory until 2011. He is also the former director of Lawrence Livermore National Laboratory.
- **Kirkland H. Donald**, a former commander of US naval submarine forces and NNSA deputy administrator who's now president and chief executive of Systems Planning and Analysis (SPA). SPA holds several contracts with the NNSA.
- **Franklin C. Miller**, a former special assistant to President George W. Bush who is a member of the board of directors of the **Sandia Corporation**, a wholly owned subsidiary of Lockheed Martin Corporation, which also runs the Y-12 and Pantex plants.

- Former California congresswoman **Ellen O. Tauscher**, who is on the board of governors for Lawrence Livermore National Security, LLC, and Los Alamos National Security LLC, the consortia that run the corresponding national labs.
- Former New Mexico Congresswoman Heather A. Wilson, who, according to the Energy Department inspector general, received nearly \$450,000 in questionable payments, mostly from the Los Alamos and Sandia laboratories; **the inspector general found** that the Sandia lab paid Wilson to engage in an impermissible attempt to have the federal government extend the lab management contract held by the Sandia Corporation.

The WIPP leak: Another embarrassment. In February 2014, in the midst of the panel’s deliberations, another major mishap involving NNSA and its contractor at the Los Alamos National Laboratory occurred. At least one drum containing a potentially explosive mixture of plutonium waste burst open at the Waste Isolation Pilot Project (WIPP) geologic repository in New Mexico. The wastes shot up about a half-mile through the ventilation system to the surface, contaminating 22 workers. The Energy Department estimates it may take years before it can restore operation at the nation’s only operating high-hazard radioactive waste geological disposal site, at an expense of more than \$550 million.

The NNSA, was removed from its transuranic waste management responsibilities at Los Alamos and, in an unusual “management alert,” the **Energy Department’s inspector general warned** that contractors at the lab—the source of the compromised waste drum—“failed to ensure that changes to waste treatment procedures were properly documented, reviewed, and approved, and that they incorporated all environmental requirements.” Recently, the State of New Mexico levied a fine of more than \$54 million against the contractor running Los Alamos, which the Energy Department **is contesting**. At the same time, the Energy Department has **cut the Los Alamos contractor’s award fee by \$57 million**, a 90 percent reduction.

About a month after the accident at WIPP, the advisory panel informed Congress in its interim report that the NNSA had to go.

The contractor point of view. Since its creation, the NNSA has overseen the **nuclear weapons complex**, eight facilities that are government-owned, but contractor-operated. There are three national laboratories (Los Alamos, Lawrence Livermore, and Sandia), four production plants (Pantex, Y-12 Plant, Kansas City Plant, and Savannah River), and the Nevada National Security Site.

To a large extent, the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise has chosen to see the problems facing the weapons complex mostly through the eyes of the contractors who run its facilities, which include huge for-profit firms like the Lockheed Martin Corporation and Bechtel Corp., among many others. As a result, the report decries the loss of status and importance of the nuclear weapons complex after the end of the Cold War. “Every aspect of the enterprise is colored by the fact that bluntly stated, nuclear weapons have become *orphans* in both the executive and legislative branches... Nowhere is this more evident than among those working in the nuclear enterprise, many of whom feel that they are in a declining career field... The panel has found there is no actionable direction and little agreement on priorities across the government regarding the roles of the nuclear enterprise.”

The panel says the White House bears responsibility for this esteem problem and recommends that “the President should provide guidance and oversight sufficient to direct and align nuclear security policies, plans, programs, and budgets across departments.” This should be done through an “expanded stockpile guidance.” It appears that the president’s [June 2013 stockpile guidance](#), which calls for “significant investments to modernize the nuclear enterprise and maintain a safe, secure, and effective arsenal” falls short in the eyes of the panel.

The recommendation for increased White House attention to the weapons complex is an odd one, given the executive attention the complex has already received. In the Obama administration, the weapons labs have had remarkably direct access to the White House. For instance, in December 2009, the heads of the three national laboratories under NNSA control met with [Vice President Joe Biden](#) to complain about the “dangerous impact” of reduced spending, saying the reductions were a “threat to our security.” Since that meeting, the nuclear weapons complex budget was increased to \$8.6 billion per year over the next decade—nearly 70 percent more in constant dollars than the Cold War average of \$5.1 billion per year.

Shooting the messenger. But the panel's report repeatedly views the problems of the weapons complex as being imposed by outside forces on the contractors that run it. For example, although the weapons complex has long been plagued by serious safety-related problems, in the recent report those problems are discussed mostly in the context of how the nuclear weapons program can better push back against the findings of the Defense Nuclear Facility Safety Board (DNFSB). Created in 1989, the board has no regulatory

authority; Congress has charged it with determining whether the Energy Department has complied with its own safety requirements and, if not, with making recommendations as to how they can be met. This advisory level of oversight apparently has proven to be too much to bear for the nuclear weapons program. The panel concludes that the safety board "exerts a dominant influence over the Energy Department's risk management in nuclear safety policies and programs. In essence, it becomes a de facto regulatory arm. Even when the DNFSB engages informally, it exerts enormous influence, which can cause Energy Department staff to overreact."

By making the Defense Nuclear Facility Safety Board a major source of the supposedly "risk-averse" culture plaguing the system, the panel is "shooting the messenger" while ignoring a very real problem: the near absence of the Energy Department's own safety oversight and enforcement system. In 2006, the Office of Environment, Safety and Health was abolished under Energy Secretary Samuel Bodman, who scattered its functions. During the Obama Administrations, Energy Secretaries Steven Chu and Ernest Moniz have further downgraded these programs, which are designed to ensure safe operation of the government's largest high-hazard enterprise.

Although the Energy Department has the most stringent occupational safety and health standards in the United States, it has done little to enforce them. For example, after several hundred workers required medical attention from exposure to toxic vapors, the State of Washington recently took the unprecedented step of serving notice it would sue the Energy Department for knowing endangerment of workers at the Hanford Site, once the world's largest producer of nuclear weapons plutonium and now the location of a massive effort to stop leaking nuclear waste tanks from poisoning the Columbia River. "If [the Energy Department] bothered to enforce its own safety standards," a congressional staff member with years of experience in the area has told me, "cobwebs would form around the [safety board]."

In addition to its criticisms of the Defense Nuclear Facility Safety Board, the panel recommends that the Energy Department seek to reduce its staff, particularly those associated with "transactional oversight and contract compliance." Transactional oversight involves direct evaluation and interaction with contractors and direct observation of physical conditions; it is particularly important to ensuring safety in the Energy Department's large and antiquated nuclear infrastructure.

Instead of such direct oversight, the panel recommends "performance-based, risk-informed guidelines" that reflect "best industry practices" of the commercial nuclear industry. But such a system simply could not work for the nuclear weapons complex, which has remained isolated from the mainstream of a commercial nuclear industry that does not, after all, operate one-of-a-kind, high-hazard facilities where roofs are falling in.

Rather than eliminating the marginal safety oversight that now occurs, the Energy Department could at least start fixing its safety culture by restoring the Office of Environment, Safety and Health, headed by an assistant energy secretary. The country shouldn't wait for major lapses in safety and security to occur before the Energy Department takes action.

Too big to succeed. Perhaps the most significant aspect of management reform in the nuclear weapons complex is coming to terms with its size. From the start, this newest review panel was directed to place the thorny problem of downsizing the weapons complex—an issue raised by several expert panels over some 20 years—off the table. By focusing on organizational boxes, Congress made sure that the panel would not tackle a most obvious problem: The nuclear weapons production and laboratory system is simply too large for the nation's current needs.

Lab overcapacity, in particular, contributes to an inflated weapons complex cost structure, within which the average full time employee is two to three times as expensive as in the private sector. Since 2006, when management of the weapons labs was transferred from the nonprofit University of California to for-profit entities, **administrative fees have jumped by 650 percent at Los Alamos**. The bloat in the weapons complex is hardly limited to the national labs; the **Y-12 nuclear weapons plant** in Tennessee has excess capacity that is comparable, in size, to two auto assembly plants.

The Obama administration should establish a commission—one, this time, that is not dominated by the very contractors that run the nuclear weapons complex—to analyze and downsize the redundant elements of that complex. The Defense Department accomplished such a downsizing over the past 20 years; it's long past time for the Energy Department to begin shedding its surplus capacity. Given that weapons facilities dominate the wage and benefit structures of large areas in several states, such streamlining will no doubt meet stiff congressional resistance. Still, the downsizing sword could eliminate redundant facilities and free up funding to rebuild those that are truly needed.

Finally, the most recent study of the weapons complex raises a fundamental question: Could it be that the “orphan” status of nuclear weapons in the United States reflects not presidential and congressional inattention, but changing priorities in the real world of international security? When the president spoke last year of “reducing the role of nuclear weapons in our security strategy,” he seemed to *unequivocally* answer this question. By rebranding the Energy Department in a way that gives nuclear weapons production equal status with the whole of US energy policy, the congressional panel has tried to impose on the government a Cold War urgency that does not reflect the actual relevance of nuclear weaponry in the 21st century. Some estimates have put a **trillion-dollar price tag** on replacing our decaying nuclear deterrent. With the stakes so high, is it really in the nation's interest to rely on a panel dominated by the interests of weapons contractors for advice on managing the problems of the weapons complex?



Robert Alvarez

A senior scholar at the Institute for Policy Studies, Robert Alvarez served as senior policy adviser to the Energy Department's secretary and deputy assistant secretary for national security and the environment from 1993 to 1999. During this tenure, he led teams in North Korea to establish control of nuclear weapons materials. He also coordinated the Energy Department's nuclear material strategic planning and established the department's first asset management program. Before joining the Energy Department, Alvarez served for five years as a senior investigator for the US Senate Committee on Governmental Affairs, chaired by Sen. John Glenn, and as one of the Senate's primary staff experts on the US nuclear weapons program. In 1975, Alvarez helped found and direct the Environmental Policy Institute, a respected national public interest organization. He also helped organize a successful lawsuit on behalf of the family of Karen Silkwood, a nuclear worker and active union member who was killed under mysterious circumstances in 1974. Alvarez has published articles in *Science*, the *Bulletin of Atomic Scientists*, *Technology Review*, and *The Washington Post*. He has been featured in television programs such as *NOVA* and *60 Minutes*.

