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# DEPARTMENT OF ENERGY

# Clear Strategy on External Regulation Needed for Worker and Nuclear Facility Safety

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Mr. Chairman and Members of the Subcommittees:

We are pleased to testify on the progress being made by the Department of Energy (DOE) toward the external regulation of both worker safety and nuclear facility safety. It should be noted that DOE is now conducting a pilot program with the Nuclear Regulatory Commission (NRC) and the Occupational Safety and Health Administration (OSHA) to simulate external regulation at selected facilities. This statement is based on our report to the full committee.[1] The objectives of our review were to

- identify DOE's position on external regulation and
- evaluate DOE's strategy for conducting pilots on external regulation.

In summary we reported that over the last 5 years, DOE leadership has often stated its intention to have its facilities subject to external regulation by independent agencies in matters of worker safety and nuclear facility safety. In 1996, DOE endorsed recommendations to phase out its self-regulation over a 10-year period and announced it would seek immediate legislation to authorize NRC and OSHA to become its external regulators. DOE's position, however, has changed. DOE is now evaluating the feasibility of external regulation by conducting a pilot program at selected DOE sites over a 2-year period. DOE's pilot program is a sharp departure from its earlier strong position to immediately seek legislation enabling external regulation by NRC and OSHA. Moreover, DOE's pilot program, which is designed to simulate external regulation at selected facilities, will not provide managers with much of the information they will need to make well-informed judgments about the value and the practicality of external regulation. The scope of the pilot program remains in doubt because no high-risk, complex, or defense facilities have been selected. Also, DOE's pilot program has been largely limited to simulate regulation by NRC. No joint pilots with OSHA have been completed or planned to study the jurisdictional overlap that exists between the two agencies.

## Background

We, along with others, have long-criticized DOE for weaknesses in its self-regulation of the environment, safety and health at its own facilities. With few exceptions, worker and nuclear facility safety has been self-regulated by DOE in the name of national security. To its credit, DOE's leadership has recognized the need for external regulation. In 1993, then-Secretary Hazel

[1]Department of Energy: Clear Strategy on External Regulation Needed for Worker and Nuclear Facility Safety (GAO/RCED-98-163, May 21, 1998).

O'Leary announced that the Department would seek external regulation for worker safety. In 1994, legislation was proposed and hearings were held to externally regulate nuclear safety. Although no laws were enacted, in 1995 DOE created an advisory committee, which concluded that secrecy had been used as a shield to deflect public scrutiny. In sum, the committee stated that

"Widespread environmental contamination at DOE facilities and the immense costs associated with their cleanup provide clear evidence that self-regulation has failed."

In 1996, a subsequent DOE working group concluded that external regulation could improve safety, eliminate the inherent conflict of interest from self-regulation, gain consistency with current domestic and international safety management practices, and improve credibility and public trust.

The facilities that would be subject to external regulation are substantial. DOE maintains 3,500 nuclear facilities at 34 individual sites in 13 states, covering, in all, more than 85 million square feet of building space. Eighty percent of these facilities are funded by DOE's defense and environmental management programs. Included in these figures are DOE's national laboratories, which include 23 laboratories whose total budget is about $7.5 billion. DOE's facilities that are currently self-regulated reflect a complex array of activities from research reactors, fuel storage, and weapons dismantlement to accelerators and fusion experiments.

## DOE's Position on External Regulation Is Unclear

Despite its public commitment in 1993 to seek immediate legislation that would authorize NRC and OSHA to regulate its facilities, and a renewed commitment in 1996, DOE has since decided to evaluate whether external regulation is even warranted. On November 21, 1997, the Secretary of Energy and the Chairman of NRC signed a Memorandum of Understanding to simulate NRC's regulation in a pilot program at 6 to 10 selected DOE sites over a 2-year period. According to DOE, the final report on this program would be used to determine whether NRC regulation is warranted.

DOE's new approach to external regulation is also reflected in its 1997 Strategic Plan, which states that DOE will work with NRC and OSHA during 1998 to evaluate the costs and benefits of independent external regulation of safety and health. This initiative contrasts with DOE's 1994 Strategic Plan that included the goal to commit to seeking independent and credible external regulation as soon as possible. DOE officials explained to us that

Secretary Frederico Peña's decision to conduct a pilot program in lieu of a phased implementation does not represent a change in DOE's position on external regulation. Rather, they said, it reflects a more business-like approach to external regulation.

Uncertainty in DOE's position on external regulation is affecting interactions with both NRC and OSHA, DOE's most likely external regulators. While NRC has been actively working with DOE in anticipation that it will be DOE's nuclear regulator in the future,[2] NRC has expressed public uncertainty over its future role in at least one important area. Previously, DOE had announced that it would develop legislation to allow NRC to license its planned facility for making mixed-oxide (MOX) fuel, which is part of DOE's proposal to dispose of surplus plutonium by burning some of it in commercial nuclear reactors. A fabrication facility would be needed to develop the fuel, and DOE had been working closely with NRC on the assumption that the Department would develop legislation for NRC to regulate the facility. (DOE's proposal for the facility includes the NRC as the licensor.) Although DOE had planned to submit its proposal to the Congress by April 1998 to allow NRC to regulate any MOX fuel fabrication facility starting in 1999, the Department's position has recently changed. DOE now plans to continue self-regulating while studying several complex issues related to the new facility. As a result of this change, the Chairman of NRC commented publically that she is uncertain about NRC's role as a regulator for the planned MOX fuel facility.[3]

Furthermore, although OSHA has collaborated with DOE for several years on a proposal to transfer regulatory authority for worker safety to OSHA, its officials are also uncertain about its role as a future DOE regulator. In 1996, OSHA conducted a simulated worker safety inspection of DOE's Argonne National Laboratory in Illinois and found no serious health or safety problems in its 6-month pilot at that laboratory. OSHA has also had specific authority to inspect DOE's gaseous diffusion plants in Kentucky and Ohio, both of which DOE owns but leases to the United States Enrichment Corporation.[4] OSHA has an internal team working with DOE on a plan to eventually transfer authority on worker safety to OSHA. However, in a

[2]For example, NRC provided us with a list of 16 of DOE's activities (including privatized DOE facilities or activities) in which they have a role. These roles range from providing advice on a problem reactor at the Brookhaven National Laboratory in New York to the potential for licensing the West Valley Demonstration Project in New York.

[3]DOE Briefing on MOX Fuel Fabrication Facility Licensing, NRC Public Meeting, Apr. 3, 1998.

[4]DOE formerly operated and self-regulated these large chemical-processing plants, which enrich uranium to produce fuel for nuclear power plants. Under the Energy Policy Act of 1992, the Congress explicitly charged OSHA and NRC with regulatory authority in these facilities.

January 12, 1998, internal memorandum, OSHA officials discussed a meeting held between the deputy secretaries of DOE and the Department of Labor (to which OSHA reports) that documents DOE's changing position on external regulation. A senior OSHA official noted that DOE had slowed the process by which DOE would transfer authority on worker safety to OSHA and concluded that DOE may no longer support external regulation.

## DOE's Strategy to Conduct a Pilot Program Is Limited

Although DOE's pilot program will provide useful insights, the information collected will not represent the size and the complexity of DOE's vast nuclear complex and thus will not yield the practical data needed to address many critical issues on external regulation. So far, the sites in the pilot program pose relatively simple and limited worker safety and nuclear facility safety problems. The first two pilots underway are

- the Lawrence Berkeley National Laboratory, in California, and
- the Radiochemical Engineering Development Center, at the Oak Ridge National Laboratory, in Tennessee.

A third pilot is scheduled for the Receiving Basin for Offsite Fuel at the Savannah River Site in South Carolina. The fourth pilot is scheduled for the Pacific Northwest National Laboratory. Sites for the remaining pilots have not been chosen.

While the pilot program will produce useful information, none of the first four sites contains a nuclear reactor, about which the public usually has significant safety concerns. Also, the pilot program sites contain no weapons plants, or heavily contaminated facilities, even though these kinds of facilities were the reason for seeking external regulation in the first place and defense and environmental cleanup sites comprise 80 percent the Department's complex. Nor will DOE be conducting pilots at any of its three largest national laboratories—Lawrence Livermore, Los Alamos, and Sandia—which account for about a third of all laboratory activities and operate significant defense and nondefense nuclear facilities. While DOE officials have told us that future sites for pilot projects will be more complex, they have no plans to involve the largest national laboratories or any nuclear defense facilities. Moreover, by excluding these national laboratories in its 2-year pilot program, DOE cannot gain the practical experience needed when it is required to report to the Congress by July 1, 1999, about how it intends to arrange oversight of its national laboratories.[5]

[5]National Defense Authorization Act for Fiscal Year 1998, sec. 3154 (P.L. 105-85).

A major goal of the pilot program is to provide insights about costs based on actual experiences, but to more accurately estimate the expected cost of externally regulating DOE's facilities, the pilot program sites need to be more representative of the whole complex. For example, on the basis of the pilot at Lawrence Berkeley, NRC estimated it could regulate that laboratory at a cost of one-fifth of a staff person per year. (Regulatory oversight would include preparing for inspections, conducting inspections, writing reports, processing license amendments, and preparing paperwork associated with an average of two enforcement actions per year.) This estimate, however, does not represent the cost of regulating the vast majority of DOE's nuclear facilities, nor will much of the information obtained from the next two pilot sites be representative. In 1995, NRC estimated that it would need 1,100 to 1,600 more staff (and an additional $150 million to $200 million per year) to regulate DOE. Moreover, DOE is not integrating OSHA with NRC in its pilot program; instead, each regulatory agency is proceeding under a separate strategy without the benefit of collaborating to understand jurisdictional overlaps.

Pilot sites were selected, in large part, because the contractor was willing to participate. For example, officials at the Lawrence Berkeley National Laboratory, which is operated by the University of California, were willing participants because they were confident that their nuclear facility would be judged favorably during the simulated inspection. Other criteria for selecting pilot sites included similarity to current NRC-licensed facilities, diversity of hazard, geographic diversity, and the age and the condition of the facility.

Although OSHA and DOE officials have discussed the desirability of pursuing a series of pilots on worker safety, there are no plans for future pilots after the planned pilot at the Oak Ridge site (OSHA had previously conducted a pilot at the Argonne National Laboratory). According to OSHA officials, the lack of a budget to conduct pilots limits their willingness to participate—especially since DOE's commitment to external regulation is unclear. In July, OSHA plans to give its recommendations for the external regulation of DOE worker safety to the Office of Management and Budget as part of its proposed budget for fiscal year 2000. OSHA officials have explained that budget limitations have precluded its participation.

Although DOE has previously endorsed OSHA as its external regulator for worker safety, OSHA has no part in pilot programs with NRC. DOE, NRC, and OSHA officials acknowledge that their overlapping jurisdictions raise many significant issues for protecting workers from radiation. These problems

have surfaced at the gaseous diffusion plants, which OSHA and NRC have been regulating for several years. OSHA did not participate in NRC's first pilot at the Lawrence Berkeley National Laboratory and its participation in the second pilot at the Oak Ridge National Laboratory is not a joint effort. Neither NRC nor OSHA has plans to participate in any joint pilots in the future.

Each of the three participating agencies—DOE, NRC, and OSHA—has created a variety of separate internal working groups and steering committees on issues relating to the external regulation of safety at DOE facilities. Moveover, all three agencies are proceeding on different tracks and timetables toward external regulation, without the benefit of a single structure to integrate all three agencies' positions and strategies. For example, DOE created a small task force of headquarters individuals to coordinate the pilot program and work with NRC to develop reports; a separate working group of DOE program and field office representatives was created to help prepare the assessments for these reports; and finally, a steering committee comprised of senior DOE managers and the Office of General Counsel was created to resolve important policy issues. DOE's various pilots have been focused largely on working with NRC, and no plans have been made to integrate that work with OSHA.

Mr. Chairman and members of the subcommittees, this concludes my prepared remarks on DOE's move to external regulation of worker and nuclear facility safety. I would be pleased to respond to any questions you or members of the subcommittees may have.

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