

STATEMENT SUBMITTED  
BY THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE  
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT  
COMMITTEE ON SCIENCE  
UNITED STATES HOUSE OF REPRESENTATIVES

CONCERNING  
EXTERNAL REGULATION OF DOE FACILITIES:  
PILOT PROJECT RESULTS

SUBMITTED BY  
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CHAIRMAN

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HEARING ON OVERSIGHT  
OF THE DEPARTMENT OF ENERGY

Mr. Chairman, Members of the Subcommittee, I am pleased to appear before you today to discuss the results of the pilot program for external regulation of certain Department of Energy (DOE) facilities. Since May 1998, when former NRC Chairman Jackson appeared before you to discuss the status of the pilot program, we have made considerable progress in completing the pilot program, and we have prepared an independent report that presents our view of the results. The Commission submitted this report to the Congress and the Secretary of Energy earlier this week. Our report differs considerably from the conclusions presented in the DOE pilot project reports for Lawrence Berkeley National Laboratory, the Radiochemical Engineering Development Center at Oak Ridge, and the Receiving Basin for Offsite Fuel at Savannah River, which had already been provided to the Congress.

Based on our experience with the pilots, we concluded that, although the pilot sites selected were not representative of the entire DOE nuclear complex and did not include any defense facilities, no significant issues were found during the pilot project that would impede NRC regulation of similar DOE non-defense nuclear facilities. We also concluded that the NRC could be the sole external regulator of DOE nuclear and radiological safety, if the Congress determined that such regulation was in the best interests of the Nation. We believe that the majority of the technical, policy, and regulatory issues identified during the pilot program can be adequately resolved within the existing NRC regulatory framework. There are precedents in NRC policy and practice that would indicate a clear path to resolving the issues raised during the pilot program (with the possible exception of certain legacy issues, as described later in this testimony). For example, in cooperation with the DOE, we successfully resolved a number of these issues in licensing spent fuel storage by the DOE at Ft. St. Vrain and at the Idaho National Environmental Engineering Laboratory.

A critical part of the Commission's support for NRC oversight of DOE facilities, phased in over time, has long been the contingency of receiving adequate funding and staffing for this oversight. If legislation giving the NRC regulatory authority over DOE facilities were enacted, NRC regulation should be funded through direct appropriations, and the costs should be recovered through fees assessed to the licensee, just as for other NRC licensees. The NRC has recently submitted to the Congress proposed legislation that would allow us to assess

licensing fees to Federal agencies. As the Committee is aware, the NRC's resources are at an all-time low in constant dollars, and NRC staffing is at its lowest level in 20 years. There would be no overall gain in public health and safety if NRC regulation of DOE diverted attention from the NRC's primary mission of ensuring the safety and security of civilian nuclear facilities.

Based upon the results of the pilot program, we also made a number of additional findings, including:

- We expect that few changes to DOE facilities or procedures would be needed under NRC external regulation for the pilot facilities, and we believe that DOE's cost estimates for making the transition to external regulation are considerably higher than is justified.
- It appears more efficient to regulate an entire site than a single facility within a complex site, because such facilities depend on the shared-site infrastructure for many key elements of safe operation, such as radiation protection, nuclear criticality safety, emergency preparedness, waste management, and environmental protection.
- DOE sites contain legacy materials, such as buried contamination, abandoned buildings, and contaminated buildings currently in use. Some of these legacy materials have existed for a long time and constitute large volumes requiring remediation. Current NRC decommissioning requirements are focused on unrestricted use of the licensed facility following license termination—an approach that could require modification to account for the DOE's unique situation, given the nature of certain DOE sites and particularly given the DOE's role as the ultimate custodian of radioactive waste in the United States. Although existing requirements provide significant flexibility, NRC regulations may have to be revised to account for these DOE factors.
- The NRC could regulate DOE, the DOE contractor, or both, according to site-specific circumstances, rather than using a "one size fits all" approach. The NRC has precedent for making all three approaches work.
- NRC processes lend themselves to more public scrutiny than routine DOE practices,

thereby enhancing credibility, as well as providing opportunity for meaningful stakeholder involvement.

- The current Memorandum of Understanding between the NRC and the Occupational Safety and Health Administration is highly effective in facilitating efficient and effective regulation of occupational hazards at civilian nuclear facilities. This arrangement could be extended to include the DOE sites that are subject to external regulation.

However, our Task Force report identified certain statutory requirements and practical details that would need to be resolved for the NRC to implement an effective and efficient oversight program for DOE nuclear facilities. These issues include resolving potential organizational conflicts of interest, complying with National Environmental Policy Act requirements, providing Price-Anderson indemnification, and resolving decommissioning timeliness and financial assurance issues. Some involve conflicting or overlapping statutory or regulatory requirements and would need to be addressed through an administrative arrangement or, possibly, legislation. As I mentioned previously, many of these issues, such as decommissioning and potential organizational conflicts of interest, are currently being resolved successfully by the NRC and DOE in other regulatory and licensing actions, such as in licensing the DOE's storage of spent fuel from Three Mile Island Unit 2.

If the NRC were given the authority to regulate DOE nuclear facilities, we would implement our current risk-informed, performance-based approach to regulation. The NRC would not require the DOE to change its approach to safety unless we determined that the DOE approach resulted in an unacceptable level of risk.

We see a number of distinct benefits and "value added" from NRC external regulation of DOE nuclear facilities. For example, external regulation of these facilities would eliminate the inherent conflict of interest arising from self-regulation, help to foster a safety culture comparable to that in the rest of the nuclear industry, and enable the DOE to reprogram resources from safety oversight to its primary missions. It would also impart an enforced discipline on both the DOE and its contractors that would require adherence to a single set of clear and relatively stable standards and requirements.

Precise cost estimates are difficult to develop for regulation of the entire DOE nuclear complex based solely on the pilot program, and without having established the mechanism to be used for regulation. Nevertheless, the cost to DOE of NRC's regulation could be minimized, potentially resulting in a net savings. For example, the cost of changing regulators could be minimized by reducing the level of DOE oversight of the regulated activities to a level consistent with a corporate oversight model. Costs associated with the NRC regulation of DOE facilities can be held to the minimum required for safety if a risk-informed and performance-based approach is taken, applying credit where justified due to design features, operating history, and the results of previous DOE reviews.

It is evident from the pilot projects that DOE requirements, when adhered to, generally produce a safety envelope that is comparable to that produced by NRC regulation. We recognize that DOE nuclear facilities have been subject to safety oversight. The extent to which previous DOE safety evaluations of a facility will be accepted by the NRC will vary on a facility-by-facility basis, but the approach to regulating these facilities should be risk-informed and should focus resources on the dominant risks at each facility.

## **Conclusion**

Based on the pilot program and our ongoing regulation of certain DOE nuclear activities, we believe that most of the technical, policy, and regulatory issues involved in NRC oversight of these facilities could be resolved successfully within the existing NRC regulatory structure. Over the last 25 years, the Congress has incrementally expanded the NRC mission by assigning various regulatory and oversight roles over DOE nuclear activities. The question before the Congress is whether our mission should be further broadened to provide for external regulation of a larger and more diverse group of facilities. Although we do not seek this additional work, we believe that we are fully capable of regulating DOE nuclear facilities to the benefit of the American public, if the Congress were to assign this additional mission to us and provide the requisite fiscal and staffing resources and legislation.