



Department of Energy

Washington, DC 20585

September 15, 1994

Dr. John E. Cantlon
Chairman
Nuclear Waste Technical Review Board
1100 Wilson Boulevard
Arlington, Virginia 22209

Dear Dr. Cantlon:

Enclosed is the Department of Energy's response to the Nuclear Waste Technical Review Board's *Letter Report to Congress and the Secretary of Energy* that was issued on February 24, 1994.

The Department is aware of the Board's concerns with the management of the Civilian Radioactive Waste Management Program and is in the process of addressing them. To focus the Department's efforts on the underlying concerns with the program's implementation, Secretary Hazel O'Leary asked Dr. James A. Thurber, Director of the Center for Presidential and Congressional Studies at The American University to prepare an independent study of past reports, papers, and significant comments regarding the program. The Department has received this report and is preparing a response, which should be issued shortly. In the meantime, the Secretary instructed the Office of Civilian Radioactive Waste Management to analyze the report and determine which changes have been made and what further changes are appropriate.

It is important to note that a new management team is in place, and that team has already taken significant steps to improve management practices. We believe these steps will help to ensure that the increased funds requested for program expenditures will be effectively utilized to complete our priority activities. For example, a reorganization of the Yucca Mountain Site Characterization Office became effective on March 11, 1994. The reorganization addresses the Board's concern with the diffuse nature of the organization by defining and establishing clear lines of responsibility and accountability related to project goals. The program's headquarters organization has also been realigned, effective on July 10, 1994, to place emphasis on the near-term issues of waste acceptance and the major management needs of overall program integration. The contractor establishment is being restructured both in Washington D.C. and in Las Vegas, Nevada, to reflect the same philosophy.

In addition, the independent financial and management review of the Yucca Mountain Site Characterization Office is underway and the results will be used to assess the effectiveness of our changes and determine additional actions that may be required. The Department will consider the need for a wider management review, as recommended by the Board, after the results of these first steps are analyzed and the impacts are evaluated. At that time, we encourage the Board to provide us with its views on the adequacy of these steps in addressing the Board's specific concerns.

The Department is continuing to focus the program on its highest priority activities including the development of near-term storage technologies and the suitability evaluation of the candidate Yucca Mountain site. We agree that the momentum of these activities should be maintained while we address the Board's concerns.

The Board's support of our recent initiatives to broaden the public's participation in the decision-making process is appreciated. We understand that earning public trust and confidence is a long process that will be effective only through persuasive and consistent actions, and that we may never achieve the trust of some of our stakeholders. We are nonetheless committed to working with all groups to improve relationships to any extent possible to earn increased confidence in the program. We intend to expand on the activities noted in our response as we develop a framework for constructive interaction as the Board recommends.

The Department welcomes the Board's recommendations regarding our technical program. We intend to continue to work with the Board to resolve these concerns as we move forward to implement a safe and cost-effective solution to the management of spent nuclear fuel and high-level radioactive waste. If you have any questions, please contact me at (202) 586-6850.

Sincerely,



Daniel A. Dreyfus, Director
Office of Civilian Radioactive
Waste Management

Enclosure

**Department of Energy Response to the
Nuclear Waste Technical Review Board's
Letter Report to Congress and the Secretary of Energy, February 1994**
(Submitted to the NWTRB on September 15, 1994)

The Nuclear Waste Technical Review Board's Letter Report to Congress and the Secretary of Energy, issued on February 24, 1994, includes three recommendations on important programmatic issues. The Department of Energy and the Office of Civilian Radioactive Waste Management have evaluated these recommendations and other comments contained in the report, and are in the process of taking steps to address those concerns. The Department's response to the Board's latest recommendations are presented in this report.

Recommendation 1:

Independent Program Review Needed Now More Than Ever

Response:

The Department is aware of the criticism regarding the organization and management of the Civilian Radioactive Waste Management Program. As noted in the Board's report, the Department has put in place a new management team that is confronting these challenges, and is committed to making the necessary changes to ensure that program resources are allocated more efficiently to the highest priority activities. To respond to the widespread criticism regarding program organization and management, the new management team determined that a realignment of the Office of Civilian Radioactive Waste Management was required to focus the program on achieving its strategic goals and to maximize efficiency. The first step, reorganization of the Yucca Mountain Site Characterization Office, was completed in March 1994. The Office's new organization is task oriented, and is structured along the functional lines in the areas of suitability and licensing, scientific programs, engineering and field operations, environment, safety, and health, public affairs, and administration. The reorganization defines and establishes clear lines of responsibility and accountability related to project goals.

The next step, the realignment of the headquarter's elements, was completed in July 1994. The new alignment of the program's headquarters organization emphasizes the near-term issues of waste acceptance and the major management needs of overall program integration. These alignments will provide the basis for critically reviewing the program's need for contractors and is expected to lead to further consolidation and improved efficiency in the program's implementation. In addition, a program-wide strategic plan is being prepared that charts the path the Department will follow in fulfilling its mission. The details of this plan were presented to the Board for review at its 1994 Spring and Summer Full Board Meetings and further updates are planned as our plans are refined. To solicit specific predecisional input from our stakeholders on the program's strategic goals and its plans for achieving them, public meetings are scheduled for later this year. The new management team will be tasked with implementing the plan consistent with Congressional budget direction.

As part of her review of the program, Secretary Hazel O'Leary also commissioned an independent study of past reports, papers, and significant comments written about the program during the previous five years. This review was conducted by Dr. James A. Thurber, the Director of the Center for Presidential and Congressional Studies at The American University in Washington, D.C., and deliv-

ered to the Secretary on March 1, 1994. The Department's response to this report will be issued shortly. In the meantime, the Secretary directed the Office of Civilian Radioactive Waste Management to analyze the report, determine which changes have been made and what further changes are appropriate. To further address these concerns, an independent financial and management review of the Yucca Mountain Site Characterization Office has been initiated at Secretary O'Leary's direction. Since the Yucca Mountain Site Characterization Office's expenditures make up over 70% of the overall program's budget, the review will assess the majority of the program, including the Board's concerns regarding the management of large complex projects and related systems acquisitions. This review will encompass financial and business management techniques, the project schedule and the credibility of project milestones, contracting practices, internal planning processes and organizational effectiveness. The review will also address the adequacy of funding levels and funding priorities, including infrastructure costs. The independent panel overseeing the review is presently selecting a contractor to conduct the detailed analyses and we expect preliminary results of this review next year. These results will be used to assess the effectiveness of our changes and determine additional actions that may be required.

The Department believes that these actions are a step in addressing the Board's concerns while maintaining the momentum of the program. The Department also believes that the most prudent approach is to integrate the results of the independent financial review of the Yucca Mountain Site Characterization Office into its internal evaluation of program status as the new organization is implemented, before authorizing additional reviews. Once these steps have been completed and the results evaluated, the Department will determine whether there is a need for an additional independent management review of the overall program.

Recommendation 2:

Maintain the Momentum of Site-Characterization Activities

Response:

The Department fully agrees that program momentum must be maintained while we address the concerns of our stakeholders. With regard to ensuring efficient progress toward determination of suitability of the candidate Yucca Mountain site, Secretary O'Leary determined that site suitability can best be evaluated by exploration of the underground geology and hydrology by means of tunnel excavation as recommended by the Board (December 1991, June 1992, December 1992). The Secretary directed the program to continue excavation and tunneling activities for the Exploratory Studies Facility at Yucca Mountain during the period that program objectives are being reevaluated, and the program is implementing this direction. As discussed with the Board at the June 1994 meeting of its Panel on Structural Geology and Geoengineering, the first tunnel boring machine has been delivered to the Yucca Mountain site and is presently undergoing final system checks. The Department plans to initiate the test-phase operation of this machine in early September 1994.

The Department also agrees that iterative performance assessments should serve as the basis for prioritizing site testing activities. Total system performance assessments were completed in 1991 and 1993 and the results have been used to further refine priorities in the testing and design programs. We appreciated the Board's insightful review and comments regarding these efforts. The current emphasis is on developing and refining detailed process models (e.g., waste package corrosion, unsaturated zone transport) that serve as the basis for the total system models.

Despite substantial progress, the new management team has determined that expectations established by the Nuclear Waste Policy Act of 1982, as amended, cannot be met within the budget and appropriations framework previously established. The Administration's Fiscal Year 1995 budget request proposes a new funding approach that will allow the program to pursue the policy goals expressed in the Nuclear Waste Policy Act, as amended. The Administration has proposed an increased annual funding profile for the program over the next several years and has made it clear that this funding profile is critical to cost-effective accomplishment of the program's mission.

Recommendation 3:

Expand Efforts to Integrate Stakeholder Views

Response:

The Department agrees with the Board that stakeholder involvement is crucial to the Civilian Radioactive Waste Management Program's success and for building public trust and confidence in its activities. Overcoming public mistrust is one of the Department's most difficult and perplexing challenges, but is essential to achieving its missions. Nevertheless, we are committed to conducting our business in such a way that earns trust and engenders confidence, and we will continue to build on efforts that invite the active and ongoing participation of all those who are interested in the Civilian Radioactive Waste Management Program.

In its *Letter Report*, the Board encourages the Secretary to consider a "long-term framework for constructive interaction on high-level waste issues" with program stakeholders similar to the Environmental Protection Agency's recently completed year-long superfund study. In reviewing the Final Consensus Report of that study, we note that the Office of Civilian Radioactive Waste Management has established many public involvement mechanisms similar to those discussed in the report (e.g., public information offices, working groups, and technical assistance grants). On May 21, 1994, the Office of Civilian Radioactive Waste Management convened a stakeholder meeting in Las Vegas, Nevada. The meeting followed the stakeholder briefings on the Administration's Fiscal Year 1995 budget proposal given earlier this year, and provided an opportunity for continued stakeholder involvement in setting the program's direction. This meeting focused on the new Proposed Program Approach and the site suitability evaluation process. A summary of the comments received at the meeting has been prepared and provided to the meeting attendees for comment. These comments will be considered in the continued development of the Proposed Program Approach and the site suitability evaluation process.

In addition, the Department has prepared a follow up to our August 10, 1993, Stakeholder Workshop ("August 10, 1993 Workshop Follow-up Report: Next Steps for Program Implementation"). In this report, we respond to the comments on the draft report and propose to implement many of the suggestions identified by the stakeholders who participated in the workshop. We believe that our future work with stakeholders to further develop and implement these recommendations will serve as the foundation for the long-term framework for constructive interaction the Board urges. For example, the program has taken the initiative to seek stakeholder participation in the site suitability determination process. The program recently conducted several in-depth workshops in Las Vegas, Nevada, and Washington, D.C., to discuss the proposed process with stakeholders and to seek their input. In order to systematically address this issue, the program is also preparing a public participation plan that will prove to be a vehicle for addressing stakeholder involvement in the decisionmaking process. This plan is scheduled for issuance in draft form in the fall of 1994.

In addition, as part of this continuing interaction, the program has opened to the public many of its meetings to encourage early stakeholder involvement in key program activities. To augment this new openness, the program now widely distributes the *OCRWM Calendar* enabling stakeholders to determine their own level of involvement. In addition, the program has increased the number of opportunities for stakeholders to provide input into program decisions and conducted a series of public workshops to enable stakeholder early involvement and access to information on key program activities (e.g., workshops on the Section 803 Report, the Draft Multi-Purpose Canister Conceptual Design Report, and the system architecture study). The program also inaugurated bimonthly meetings between the Yucca Mountain Site Characterization Office and affected units of government to discuss specific issues of concern to governments that have proximity to or jurisdiction over the characterization site.

The *Letter Report* also notes "that public perceptions about the potential risks associated with nuclear power and the waste it generates must be addressed." The program recognizes that an informed public is a prerequisite to informed predecisional participation. To that end, the program conducts a comprehensive public information effort and maintains several information centers, a toll-free telephone number for public inquiries, and informational displays used at conferences. The program issues a quarterly newsletter and videotaped programs for general distribution. The program provides financial support to nonpartisan organizations, such as the League of Women Voters, the National Conference of State Legislatures, the National Congress of American Indians, and the National Association of Regulatory Utility Commissioners to inform the public about radioactive waste. Some of the program's public information and outreach activities conducted in the past year include:

- A second televised workshop on our new secondary school curriculum; *Science, Society, and America's Nuclear Waste*
- 6 public update meetings conducted on the Yucca Mountain studies
- 400 Yucca Mountain Site Characterization Office presentations given to civic, educational, business, and professional groups
- 18,000 students provided classroom presentations
- 10,000 inquiries answered by the Civilian Radioactive Waste Information Center; questions originating from all 50 states and 35 countries and territories
- 500,000 publications and approximately 5,400 videos distributed to the public.

The activities described above are designed to inform and involve the public in the Civilian Radioactive Waste Management Program's decision-making process. The Department recognizes that the highly contentious nature of disposing of highly radioactive waste may preclude a national consensus from ever being reached. However, we believe that we have a responsibility to continue our efforts to ensure that the program is implemented based on sound scientific and engineering practice and that all parties will have an opportunity to be heard.