



UNITED STATES
NUCLEAR WASTE TECHNICAL REVIEW BOARD
2300 Clarendon Boulevard, Suite 1300
Arlington, VA 22201

April 30, 2003

Dr. Margaret S. Y. Chu
Director
Office of Civilian Radioactive Waste Management
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Chu:

On behalf of the U.S. Nuclear Waste Technical Review Board, I want to thank your staff for participating in the February 25, 2003, meeting of the Board's Panel on the Waste Management System in Las Vegas, Nevada. We found the presentations very clear and helpful in carrying out the Board's evaluation of the technical and scientific validity of activities undertaken by the Secretary of Energy related to managing the disposal of the nation's spent nuclear fuel and high-level radioactive waste.

A major purpose of the meeting was to familiarize the Panel members with the baseline from which DOE work will progress in the years ahead. We think that goal was achieved. The presentations at the meeting make clear that a sustained and well-thought-out effort will be needed to develop a transportation program that will engender public confidence. Other observations and recommendations drawn from the information presented at the meeting are summarized below.

Transportation and Waste Acceptance

In the Board's view, the DOE should adopt safety as a guiding principle in planning and developing a transportation system and should develop an integrated safety plan for guiding the development process. The schedule for such transportation planning also is important, and it appears that the DOE's current timetable may be optimistic, considering the substantial amount of work to be done. For example, the DOE presentation identified a transportation strategic plan, to be issued in fiscal year 2003; a transportation project management plan, to be developed during fiscal year 2003; and transportation operations plans, to be developed in fiscal year 2005 and beyond. As the highest-level document, the strategic plan is clearly the most urgent, and public involvement in its development is essential. The Board recommends that the DOE publish a draft strategic plan for public comment as soon as practical.

During the afternoon session, several representatives of affected local governments made excellent presentations on potential issues of concern related to the transportation of spent nuclear fuel through their areas. These presentations and the comments of members of the public made clear that affected parties would like to know as soon as possible what modes and routes will be used for transporting spent nuclear fuel to a Yucca Mountain repository so that they can

begin their own preparations. The Board also is interested in this information and requests that the DOE provide its timeline for making those decisions and for issuing the “Record of Decision” for the Yucca Mountain final environmental impact statement.

The DOE presentation indicated that, because of pending lawsuits, there are few, if any, on-going interactions on waste acceptance between the DOE and electric utilities. However, it is apparent that significant coordination is needed for the waste acceptance process to be smooth and efficient. For example, no casks have been certified for transporting some of the higher-burnup spent fuel likely to be generated in the future. Coordination of cask development (and certification) with utility shipping needs and with repository and transportation-system capabilities will be important for efficient operations. The DOE should seek approaches to improving communication with utilities in a way that will facilitate planning for the waste acceptance process.

Surface and Underground Facilities

The Board would appreciate receiving additional information on two significant issues related to the design and operation of surface and underground facilities. First is the possibility that a small amount of spent fuel will be damaged during transportation to Yucca Mountain. Spent fuel found to be damaged when the casks are opened at the surface facilities will be handled in the remediation building. However, DOE does not plan to have the remediation building operational until three years after the receipt of spent fuel begins. The Board requests more information about the DOE’s plans for resealing and storing damaged spent fuel during the interim period before construction of the remediation building. Second, the DOE presentation identified two potentially significant changes in the design and operation of the underground facilities: (1) use of a wheeled waste transporter and (2) location of exhaust drifts and shafts. The Board would like more details on the technical bases for these concepts.

Again, thank you for the DOE’s support of this meeting. Waste acceptance and transportation are likely to become topics of significant interest in the months ahead, and the Panel on the Waste Management System anticipates holding additional meetings to review the DOE’s progress in this area.

Sincerely,

{Signed by}

Michael L. Corradini
Chairman