



Department of Energy
Washington, DC 20585

February 24, 1994

The Honorable Ivan Selin
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Chairman:

In accordance with Section 113(b)(3) of the Nuclear Waste Policy Act of 1982, as amended, the Department has prepared the ninth in a series of progress reports focused on site characterization at the Yucca Mountain candidate site in Nevada. The document is entitled "Site Characterization Progress Report: Yucca Mountain, Nevada" and covers the period from April 1, 1993, through September 30, 1993.

The Civilian Radioactive Waste Management Program made significant progress at the Yucca Mountain Site Characterization Project during this reporting period. Construction of the Exploratory Studies Facility North Ramp Starter Tunnel began on April 2, 1993, and was completed on September 9, 1993, to a distance of about 200 feet. In addition, a contract was awarded for purchase of the Tunnel Boring Machine that will be used to excavate the remainder of the main ramps and tunnels. Deep borehole drilling and testing continued, with the second deep borehole reaching a depth of 1300 feet. All boreholes, 99 in total, were completed for the Neutron Access Program. Surface trenching and excavation continued to determine geologic faulting and volcanism history as well as to define seismic hazard basis.

Advanced conceptual design of the waste package continued, and feasibility and implementation studies were conducted for the use of a multipurpose canister system. Field testing progressed on the large block heater test and engineered barrier system tests.

Review and revision of the entire set of System Requirements Documents were completed during this period and implemented.

Formal interactions continued between the Project Office and the Nuclear Waste Technical Review Board in April, July, and September. In April, the Yucca Mountain Site Characterization Project hosted a tour of Yucca Mountain and presented its process for resolving difficult issues. In July, the Department presented its approach for electing and validating a thermal loading strategy to the Review Board. On September 21-23, the Project Office held a workshop to discuss alternative concepts for the repository waste package in response to recommendations by the Review Board.

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In interactions with the Nuclear Regulatory Commission, the Department forwarded Revision 2 of the "Mined Geologic Disposal System Annotated Outline Skeleton Text for the Preparation of a License Application." In addition, the Department and the Commission participated in a technical exchange on "Substantially Complete Containment and the Waste Package/Engineered Barrier System Design Concepts" in August.


The Department continues to interact with the National Academy of Sciences as the Academy develops recommendations on health-based standards for protection of the public from releases from a repository at the Yucca Mountain site, as described in Section 801 of the Energy Policy Act of 1992.

To comply with requirements of Section 803 of the Energy Policy Act of 1992, the Department prepared and issued for public review and comment a draft report entitled "Adequacy of Management Plans for Future Generations of Spent Nuclear Fuel and High-Level Radioactive Waste."

Public outreach activities were continued with 68 tours of Yucca Mountain conducted for about 2600 members of the public and other interested parties. In addition, various programmatic and technical workshops and presentations were conducted by Yucca Mountain Site Characterization Project staff.

The Department will continue to issue progress reports on a semi-annual basis, as specified in the Nuclear Waste Policy Act.

Sincerely,


Daniel A. Dreyfus, Director ⁴⁰¹
Office of Civilian Radioactive
Waste Management

Enclosure

cc: w/enclosure

The Honorable John T. Myers
Ranking Minority Member
R. Nelson, YMPO
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J. Holonich, U.S. NRC
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