



Department of Energy

Washington, DC 20585

July 18, 2001

JUL 23

Dr. Jared L. Cohon
Chairman
Nuclear Waste Technical Review Board
2300 Clarendon Blvd.
Suite 1300
Arlington, VA 22201-3367

Dear Chairman Cohon:

Thank you for your letter of June 11, 2001, providing the Board's impressions of the April 13, 2001, meeting on developing multiple lines of evidence.

The Department of Energy agrees that multiple lines of evidence are an important element in the evaluation of the results of total system performance assessments. The Department agrees with the board that "Eliminating all the uncertainties associated with performance assessment at Yucca Mountain will never be possible although they can be reduced in certain instances." These uncertainties are attributable to a variety of causes, ranging from uncertainty in the understanding of fundamental processes that may affect system performance to uncertainty in long-term projections of repository performance. For this reason, the Department's approach to addressing uncertainty has included the evaluation of multiple lines of evidence that may contribute to the understanding of the performance of the potential repository.

The expanded consideration of multiple lines of evidence during the development of the recent supplemental science and performance analyses has improved the Department's understanding of processes important to repository performance, independent of the results of the quantitative total system performance assessment. As a consequence, the Department intends to continue the expanded evaluation of multiple lines of evidence to provide additional confidence in the results of total system performance assessments. We will consider both supporting and opposing lines of evidence to provide a balanced discussion of the available lines of evidence.

Sincerely,

A handwritten signature in black ink, appearing to read "Lake H. Barrett", with a long horizontal stroke extending to the right.

Lake H. Barrett, Acting Director
Office of Civilian Radioactive
Waste Management