

United States Senate

WASHINGTON, DC 20610-7012

November 26, 2001

Dr. Jared L. Cohon
Chairman
United States Nuclear Waste Technical Review Board
2300 Clarendon Boulevard, Suite 1300
Arlington, VA 22201

Dear Dr. Cohon:

We are writing in regard to the Department of Energy's (DOE) possible site recommendation for Yucca Mountain, Nevada. The DOE is expected to make a determination by early next year on the suitability of the proposed repository. There are, however, unresolved questions regarding the integrity of DOE's scientific conclusions and procedures for investigating Yucca Mountain. Moving forward with a site recommendation prematurely would threaten Nevadans and would create a hazard for the residents of the 43 states through which the waste will be transported.

As you know, several independent review boards have raised questions about the DOE's investigation of the proposed repository. For example, in your letter of October 16, 2001 to Mr. Lake Barrett, Acting Director of DOE's Office of Civilian Radioactive Waste Management you stated:

"(The Board] believes there are significant problems associated with the technical basis for DOE's base-case repository design, which is a high-temperature design...[T]he Board recommended that the DOE undertake a comparison of the higher- and lower-temperature designs. This comparison does not appear to have been completed."

In addition, the Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste (ACNW) raised concerns about the computer simulation used by the DOE to determine the suitability of the repository. In a September 21, 2001 letter to NRC Chairman Meserve, the ACNW stated:

"The [DOE computer simulation (TSPA-SR)] does not lead to a realistic risk-informed result, and it does not inspire confidence in the TSPA-SR process. In particular, the TSPA-SR reflects the input and results of models and assumptions that are not founded on a realistic assessment of the evidence."

To better understand these and other problems facing the site recommendation process, we would appreciate your responding to the following questions:

1. How strong is the current technical basis for DOE's repository design and for the analysis that support the Site Recommendation?
2. How confident are you that the current DOE program would lead to a safe repository that protects human health and the environment at Yucca Mountain?
3. Is it premature for the DOE to make a recommendation that the site is suitable for a geologic repository?

Your response to these questions will help us better identify the problems facing the Yucca Mountain program. Without clear resolution to these problems, the public will lack confidence that a sound scientific process has been followed and that their health and safety have been adequately considered. If you have any questions about our concerns, please contact us.

We appreciate your consideration of our request and look forward to hearing from you.

Sincerely,



HARRY REID
U.S. Senator



JOHN ENSIGN
U.S. Senator

Cc: William D. Barnard

HR:jh