

MAR 15 1988

Mr. Robert R. Loux, Director
Agency for Nuclear Projects
Nuclear Waste Project Office
State of Nevada
Carson City, Nevada 89710

Dear Mr. Loux:

This letter is in response to your February 2, 1988 letters to Chairman Zech, Mr. Hugh Thompson, and other NRC staff enclosing a copy of a draft report by J. Szymanski, Department of Energy (DOE), entitled "Conceptual Considerations of the Death Valley Groundwater System with Special Emphasis on the Adequacy of this System to Accommodate the High-Level Nuclear Waste Repository." I appreciate your sending the Nuclear Regulatory Commission (NRC) information pertinent to the proposed Yucca Mountain high-level waste repository site.

On January 11, 1988 the NRC staff began its review of the DOE Consultation Draft Site Characterization Plan (CDSCP) Yucca Mountain Site, Nevada. As part of this review, the staff is considering the material in Mr. Szymanski's draft report in evaluating DOE's proposed site characterization activities. One of the main concerns identified to date in the staff's review of the CDSCP is the lack of consideration of the range of alternative conceptual models that can be supported by the existing limited data and the impact this would have on the tests planned to investigate the site. As discussed in a February 29, 1988 telephone conversation between you and B.J. Youngblood of the Division of High-Level Waste Management (DHLWM), the NRC and DOE have tentatively scheduled a workshop the week of April 11th to discuss alternative conceptual models of the Yucca Mountain site, including the model developed by Mr. Szymanski.

Such a workshop will give the DOE, NRC, and the State of Nevada the opportunity to explore the range of alternative conceptual models of the Yucca Mountain site that can be supported by the existing data and that needs to be considered in the development of site characterization programs. Based on a January 29, 1988 discussion between you and J. Linehan, DHLWM, it is our understanding that recent statements, reported in the press, by State of Nevada officials, questioning the suitability of the Yucca Mountain site, are based on an alternative conceptual model of the site resulting from the state's analysis of the same data available to the NRC. Discussion of the alternative conceptual models proposed by different parties should help DOE plan site characterization activities that can reduce the uncertainties about which conceptual model best portrays the Yucca Mountain site.

With respect to your conclusions that the investigations recommended by Mr. Szymanski be conducted before the exploratory shaft, the NRC staff has not identified any technical reason why constructing an exploratory shaft at the Yucca Mountain site would preclude DOE from obtaining meaningful surface-based test results. Furthermore, based on the information available to us today, and as concluded in a June 8, 1987 report to the NRC Commissioners (SECY-87-137) the NRC staff believes that collection of data from both

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surface-based testing and underground testing will be required to resolve the major issues at the Yucca Mountain site. The NRC staff position is that any studies related to potentially disqualifying information associated with the various alternative conceptual models of the site should not be delayed unless such studies might preclude the ability to physically collect appropriate site data.

Again, I appreciate your sending Mr. Szymanski's draft report to the NRC. If you have any questions concerning this letter, please contact B.J. Youngblood (301-492-3387).

Sincerely,

Original signed by
Victor Stello, Jr.

Victor Stello, Jr.
Executive Director
for Operations

Enclosure: SECY 87-137

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* SEE PREVIOUS CONCURRENCES

Response cleared with Comm. Carr's office.

Record Note: The Editor, Ellen Kraus, has concurred on this letter

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