

MAY 11 1988

Mr. Ralph Stein, Acting Associate Director
Office of Systems Integration and Regulations
Office of Civilian Radioactive Waste
Management
U.S. Department of Energy RW-24
Washington, D.C. 20545

Dear Mr. Stein:

The Nuclear Regulatory Commission (NRC) staff has completed its technical review of the Consultation Draft Site Characterization Plan (CDSCP) for the Yucca Mountain Nevada Site issued by the Department of Energy (DOE). My March 7, 1988 letter to DOE transmitted draft point papers containing our preliminary concerns, which were the focus of NRC-DOE workshops in March and April. The point papers have been finalized, with no significant changes, and are presented (Enclosure 1) for DOE's continued consideration in the development of the Site Characterization Plan (SCP). It is important to note that although we endeavored to identify our most significant concerns within the time available for this review, our continuing interactions with DOE and our review of the SCP may result in identification of additional concerns.

The NRC's most fundamental technical concern with the CDSCP remains the objection (Objection 1 in Enclosure 1) related to the failure to recognize the range of alternative conceptual models of the Yucca Mountain site that can be supported by the existing limited data base and that need to be considered in the development of testing programs. This concern was the subject of the April 11-14, 1988 workshop on alternative conceptual models during which the NRC, DOE, and State of Nevada participated in an open and useful exchange of technical information and views on considering a full range of alternative conceptual models of present and future states of the proposed repository site and anticipated and unanticipated processes and events in identifying needed investigations. The NRC staff recommended that the DOE provide in the SCP a systematic treatment of alternative conceptual models, integrated across technical disciplines, and suggested ways in which such information might be effectively presented in the SCP. The NRC staff review of the SCP will determine to what extent these concerns have been addressed.

Another fundamental concern (Objection 5) is that the quality assurance (QA) plans for site characterization activities are undergoing potentially significant revisions, have been the subject of NRC comments unaddressed by DOE to date, or have not undergone NRC staff review. During the March 21-24 Draft Point Papers workshop, the DOE made the following commitments: (1) DOE will not start new work in an area until the NRC has reviewed the QA plan for that program area and confirmed its implementation through audits; (2) the Nevada Project Office QA plan was to be submitted within two to three weeks of that workshop; and (3) DOE will meet with NRC in May to discuss all open items

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reduce the number of holes and the corresponding potential for compromising the waste isolation capability of the site (Objection 1; Comment 27).

As emphasized in my March 7, 1988 letter, you are encouraged to give full attention to all the point papers, with a view to resolving the individual concerns prior to the start of new site characterization activities. Steps toward timely resolution of the concerns that have already been taken are the April 11-14, 1988 workshop on alternative conceptual models and the March 21-24, 1988 draft point papers workshop at which DOE indicated that they understood the NRC concerns and made commitments regarding the QA concern. Also, at an April 13, 1988 management meeting NRC proposed a number of interactions with DOE on some of the staff's other major concerns, e.g., exploratory shaft location and design; interpretation of "substantially complete containment" in 10 CFR Part 60.113. DOE agreed with the desirability of those interactions and committed to an early response on how many of them could be scheduled in the time available prior to release of the SCP. Furthermore, the staff is tentatively scheduled to meet with the DOE in June or July 1988 to discuss how the DOE plans to respond to the staff's CDSCP concerns. The SCP is where resolution of these concerns needs to be documented. As part of the acceptance review of the SCP, the NRC staff will determine if DOE has substantively responded to the NRC staff CDSCP concerns.

The NRC staff will continue to be available to consult with the DOE regarding the concerns highlighted in this letter and the enclosed package. Mr. Youngblood of my staff will work with you to make the necessary arrangements for any interactions that may assist in resolution of these concerns.

Sincerely,

Robert E. Browning, Director
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure:
NRC Staff Final Point Papers
on the CDSCP Yucca Mountain Site

cc: C. Gertz, DOE-NV/WMPD
R. Loux, State of Nevada

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* SEE PREVIOUS CONCURRENCES

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DATE	:05/10/88	:05/10/88	:05/10/88	:05/10/88	:05/11/88	:05/11/88	:

investigations related to one discipline do not seem to be related to or coordinated with holes related to another discipline.

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R. Loux, State of Nevada

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