



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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MEMORANDUM FOR: Joseph J. Holonich, Director  
Repository Licensing and Quality Assurance  
Project Directorate, HLWM  
Division of High-Level Waste Management, NMSS

FROM: Ronald L. Ballard, Chief  
Geology and Engineering Branch, HLWM  
Division of High-Level Waste Management, NMSS

SUBJECT: PHASE I REVIEW OF STUDY PLAN 8.3.1.9.2.1 - NATURAL RESOURCES  
ASSESSMENT OF YUCCA MOUNTAIN, NYE COUNTY, NEVADA

As requested (C. Abrams to K. McConnell note of January 4, 1993), we have completed the Phase I review of the study plan - Natural Resources Assessment of Yucca Mountain, Nye County, Nevada. The Phase I review was conducted under the guidance provided in the "Review Plan for NRC Staff Review of DOE Study Plans" (Rev. 1) dated December 6, 1990.

The study plan review plan requires that the Phase I review determine whether the subject study plan conforms to the "DOE Content Requirements for Descriptions of Studies in Study Plans," Attachment B of the "Summary of the [May 7-8, 1986] NRC/DOE Meeting on the Level of Detail for Site Characterization Plans and Study Plans." Our review indicates that the subject study plan is substantially consistent with the Agreement on Content resulting from the Level of Detail Meeting.

Our review of the subject study plan also noted no instances where activities described appeared to have (1) any potential adverse effects on repository performance; (2) any potential significant and irreversible/unmitigable effects on characterization that would physically preclude obtaining information necessary for licensing; (3) any potential significant disruption to characterization schedules or sequencing of studies. As such, we have identified no objections related to the activities in this study plan.

In the submission of this study plan (Roberts to Holonich, dated December 17, 1992), DOE did identify two Site Characterization Analysis (SCA) comments and two SCA questions as having been addressed in this study plan. In a follow-up letter (Roberts to Holonich, dated February 5, 1993), DOE clarified its earlier letter by requesting closure of three of the four above SCA open items. The February 5 document also provided additional information supporting DOE's request for NRC resolution of the three SCA open items. In the event that a detailed review of the study plan is conducted, an assessment of the responses to the four open items would be undertaken.


The study plan appears to be consistent with the "Level of Detail" agreement and no "objections" have been identified. DOE has proposed closure of three SCA open items and has indicated that one SCA open item has been "addressed."

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In order to assess whether the information is sufficient to permit complete or partial resolution of the four SCA open items, a detailed technical review of this study plan should be carried out. As a result, we recommend that this study plan be considered for detailed technical review. It is anticipated that the detailed technical review of the subject study plan would be performed by the Center for Nuclear Waste Regulatory Analyses.

The overall review was conducted by Harold Lefevre (504-3464) of the Geology and Geophysics Section, HLGE. Dr. A. K. Ibrahim (504-2523) reviewed the geophysical aspects of the study plan and has no preliminary review comments. John Buckley (504-2513) provided input from the quality assurance perspective.

  
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In order to assess whether the information is sufficient to permit complete or partial resolution of the four SCA open items, a detailed technical review of this study plan should be carried out. As a result, we recommend that this study plan be considered for detailed technical review. It is anticipated that the detailed technical review of the subject study plan would be performed by the Center for Nuclear Waste Regulatory Analyses.

The overall review was conducted by Harold Lefevre (504-3464) of the Geology and Geophysics Section, HLGE. Dr. A. K. Ibrahim (504-2523) reviewed the geophysical aspects of the study plan and has no preliminary review comments. John Buckley (504-2513) provided input from the quality assurance perspective.

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