



Department of Energy
Washington, DC 20585

April 21, 1992

Mr. Joseph J. Holonich, Director
Repository Licensing and Quality Assurance
Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Holonich:

As part of the DOE's work on volcanism issues at the Yucca Mountain Site, we are requesting NRC Phase II Detailed Technical Review comments on the Study Plan 8.3.1.8.1.1, "Probability of Magmatic Disruption of the Repository." The NRC transmitted a letter on October 5, 1991, advising the DOE of completion of the Phase I Review of that study plan. The letter stated that in the Phase I Review of that study plan, no objections were identified with any of the activities proposed. The NRC noted that the study plan would receive a Phase II detailed Technical Review and that staff comments would be provided to the DOE as soon as that review is completed.

In accordance with the DOE/NRC procedural agreement, site characterization analysis work has moved forward in the absence of NRC objections to the study plan contents. Subsequent to NRC's Phase I Review, the principal investigators have identified the need to make several revisions to the methods bounding uncertainty of the probability attributes that were described in the study plan. The revisions will focus on recurrence models, and disruption probability.

The emphasis of the revised sections will be on the application of analogue data from basaltic volcanic fields of the basin-range province for constraining the uncertainty of probability calculations.

Before proceeding with this revision, the DOE would like to consider any technical comments that the NRC has identified through their Phase II Review of the current version of the study plan. A draft of the revised study plan is planned for by July 15, 1992. For this reason, NRC technical review comments on the study plan are needed by June 15, 1992 in order to be considered in this planned revision.

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If you have any questions concerning this letter, please contact Linda Desell at (202) 586-1462.

Sincerely,

A handwritten signature in cursive script that reads "John P. Roberts". The signature is written in dark ink and is positioned above the printed name and title.

John P. Roberts
Acting Associate Director for
Systems and Compliance
Office of Civilian Radioactive
Waste Management

CC:

C. Gertz, YMPO
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