



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

SEP 26 1991

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

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

**SUBJECT:** PHASE I REVIEW OF REVISION 1 OF DOE STUDY PLAN  
8.3.1.8.1.1 "STUDY PLAN FOR PROBABILITY OF MAGMATIC  
DISRUPTION OF THE REPOSITORY"

This memorandum transmits the results of a Phase 1 review of Revision 1 to the Department of Energy's Study Plan 8.3.1.8.1.1 and is considered a supplement to the memorandum of May 6, 1991, transmitting the results of the original Phase 1 review. This revision consists of modifications to section 3.4.2.1 of the text of the study plan and to Appendix A.

The revision to Section 3.4.2.1 has a slight effect on our original comment 4 under Bases for Recommendation for Detailed Technical Review (Enclosure 1). We recommend that our comment be modified to reflect Revision 1, and have attached the suggested revised comment 4 (Enclosure 2).

The revisions to Appendix A make the Quality Assurance portions of this study plan consistent with the agreements reached during the May 7-8, 1986, DOE/NRC meeting on level of detail, and discussion conducted during the December 15, 1988, DOE/NRC meeting on study plans. These revisions are of a procedural nature, and have no effect on the overall study plan.


Based on this review we have determined that our original conclusions regarding this study plan remain unchanged. We still have no objections to this study plan, but recommend that the plan be subjected to a detailed technical review. We note in this regard that during the meeting of the United States Nuclear Waste Technical Review Board on March 1, 1991, Dave Dobson of the Department of Energy (DOE) stated that "Within the next 6-12 months DOE will develop a paper on volcanic risk assessment that it intends to use to close this issue." In recent discussion between Dave Dobson (DOE) and Philip Justus (NRC), Dobson has indicated that this paper will be forthcoming during FY92. Because many of the areas of discussion will concern items covered within Study Plan 8.5.1.8.1.1, detailed review of this study plan prior to receipt of the paper would provide a coordinated NRC response to DOE positions. We therefore recommend that this detailed review commence early in FY 92.

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Should you have any question, please contact me, or John Trapp on x20509.

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

Enclosures:  
As stated

cc: K. Stablein

Should you have any question, please contact John Trapp on x20509.

Ronald L. Ballard, Chief  
Geology and Engineering Branch  
Division of High-Level Waste Management,  
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Enclosures:  
As stated

cc: K. Stablein

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\*See previous concurrence\*

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