

OCT 05 1991

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Mr. Dwight E. Shelor, Associate Director
for Systems and Compliance
Office of Civilian Radioactive Waste Management
U. S. Department of Energy, RW 30
Washington, D.C. 20585

Dear Mr. Shelor:

SUBJECT: PHASE I REVIEW OF U.S. DEPARTMENT OF ENERGY (DOE) STUDY PLAN FOR
PROBABILITY OF MAGMATIC DISRUPTION OF THE REPOSITORY

On March 5, 1991, DOE transmitted the study plan entitled "Probability of
Magmatic Disruption of the Repository" (Study Plan for Study 8.3.1.8.1.1) to
the U.S. Nuclear Regulatory Commission (NRC) for review and comment. NRC has
completed its Phase I Review of this document using the Review Plan for NRC
Staff Review of DOE Study Plans, Revision 1 (December 6, 1990).

The material submitted in the study plan was considered substantively consis-
tent with the agreement on content resulting from the NRC-DOE agreements made
at the May 7-8, 1986 meeting on Level of Detail for Site Characterization
Plans and Study Plans. In addition, the references for the study plan have,
for the most part, been provided to NRC or are readily available in the public
domain.

A major purpose of the Phase I Review is to identify concerns with studies,
tests, or analyses that, if started, could cause significant and irreparable
adverse effects on the site, the site characterization program, or the eventual
usability of the data for licensing. Such concerns would constitute
objections, as that term has been used in earlier NRC staff reviews of DOE's
documents related to site characterization (Consultation Draft Site
Characterization Plan and Site Characterization Plan [SCP] for the Yucca
Mountain site). The Phase I Review of this study plan identified no objections
with any of the activities proposed.

After completion of the Phase I Review, selected study plans are to receive a
second level of review, called a Detailed Technical Review, based on the
relationship of a given study plan to key site-specific issues or NRC open
items, or its reliance on unique, state-of-the-art test or analysis methods.
Because of the importance of the volcanism issue at the Yucca Mountain site,
the key role of this study plan in integrating the results of other volcanism
study plans to address the volcanism issue, and NRC staff concerns
preliminarily identified during the Phase I Review, NRC has decided to proceed
with a Detailed Technical Review of this study plan. We will provide DOE with
staff comments as soon as that review is completed.

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WM-11 PDR

If you have any questions concerning this letter, please contact King Stablein (FTS 301/492-0446) of my staff.

Sincerely,

Original signed by
Joseph J. Holonich for
John J. Linehan, Acting Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As Stated

- cc: R. Loux, State of Nevada
- C. Gertz, DOE/NV
- S. Bradhurst, Nye County, NV
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO
- P. Niedzielski-Eichner, Nye County, NV
- C. Thistlethwaite, Inyo County, CA
- V. Poe, Mineral County, NV
- F. Sperry, White Pine County, NV

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*See previous concurrence

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| Date:10/ /91 | :09/30/91 | :10/01/91 | :10/01/91 | :10/3/91 | :10/3/91 |

If you have any questions concerning this letter, please contact King Stablein (301)/FTS-492-0446 of my staff.

Sincerely,

John J. Linehan, Acting Director
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| NAME: KStablein/B:JTrapp | :PJustus | :RBallard | :JHolonich | :J:Linehan | |
| Date: 09/30/91 | :09/30/91 | 09/30/91 10/01/91 | :09/1/91 | :09/ /91 | :09/ /91 |

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