

November 5, 1996

MEMORANDUM TO: Charles J. Haughney, Acting Director  
SFPO/NMSS

FROM: John T. Greeves, Director  
DWM/NMSS

SUBJECT: DEPARTMENT OF ENERGY TOPICAL REPORT "PRECLOSURE SEISMIC DESIGN  
METHODOLOGY FOR A GEOLOGIC REPOSITORY AT YUCCA MOUNTAIN,  
REV. 1"

Please find attached to this memorandum a copy of the subject topical report (TR) for your consideration. Your staff might be interested to note that the U.S. Department of Energy (DOE) is addressing the issue of seismic hazard and seismic design for the geologic repository by preparing a three-part series of TRs. The first in the series on "Seismic Hazard" was submitted by DOE in FY 95 and has been approved by the Division of Waste Management (DWM) staff. The second TR dealing with "Seismic Design Methodology" (Rev. 0) was received, and the staff comments were provided to DOE in FY 96. The third and final TR on "Design Inputs" is expected to be completed by DOE in FY 98.

Rev. 1 of the second TR (subject TR) being provided to you reflects the changes made by DOE in response to the U.S. Nuclear Regulatory Commission comments. It should be noted that in its TR-1, DOE proposed (and DWM staff accepted) a probabilistic methodology for developing the seismic and fault displacement hazard curves for the proposed geologic repository at the Yucca Mountain site. The design methodology being proposed in DOE's TR-2 for the surface facilities at Yucca Mountain would adopt the applicable review criteria from NUREG-0800. Rev. 1 of TR-2 essentially follows the staff's recommendations and adopts the principles developed under the proposed 10 CFR Part 60 rulemaking on "Design Basis Events."

The Offices of Nuclear Regulatory Research and Nuclear Reactor Regulation have participated in the past reviews of the TRs and are continuing to provide support in the review of the subject TR (Rev. 1 of TR-2). Because of the commonalities between facilities licensed by Parts 60 and 72, it would be beneficial for SFPO staff to be aware of the current developments on this important design issue. We would welcome any comments your staff may have on the subject TR.

For further information and any clarifications, your staff may contact Dr. Mysore Nataraja of my staff who may be reached at 415-6695.

Attachment: As stated

*egh/s*

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NAME	MNataraja/eb/prf read		RWeller		MBell		JGreeves
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DATE	10/31/96	11/1/96	11/1/96	1/96

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