

WM DOCKET CONTROL MEMORANDUM
CENTER



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DATE: August 5, 1986

SUBJECT: Quality Reviews - Yucca Mountain

A review is provided for each comment.

This presentation is in accord with SRP - Page 7, 5.2 (1, 2, 3, 4, and 6).

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PDR WMRES EECWOC
D-1003 PDR

WM-RES
WM Record File
D1003
Weston

WM Project 1911, 16
Docket No. _____
PDR ✓
LPDR ✓ (B, N, S)

Distribution:
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TUFF

YUCCA MOUNTAIN
QUALITY REVIEW

MAJOR COMMENT NO. 1

Fault Activity

- 5.2.1 OK for technical defense. A concluding paragraph to be added to Page 5 of this major comment is suggested to summarize the NRC position concerning the guidelines and the specifics that are enumerated in this major comment. In part, this would consist of a restating of Paragraph 1, Page 1, but expanded to reflect the details that are then presented.
- 2 OK with qualification that information from the FEA such as Page 2, Paragraph 1 should be referenced to the specific section, page, etc. of the FEA to show that the 40,000 year and 6,000 year dates originate with the FEA. Also, references that do not appear with the FEA Knauss, 1981, should be noted as non-FEA reference material.
- 3 OK, the consistency with objectives is especially noteworthy with regard to such a major concern and active faulting and younger dates than the FEA might infer or conclude.
- 4 OK for technical consistency across projects; but it is suggested that since this major comment rather thoroughly includes material on seismicity, the title of the comment be expanded to read "Fault Activity and Seismicity".
- 6 OK, no inconsistencies are noted.

NOTE: On Page 4, Paragraph 1, the reference to a more definite interpretation could be emphasize better by stating the need and deleting the noted deferral to the period of site characterization. With regard to predicted acceleration values, it is suggested that on Line 7 of Paragraph 3, Page 4, the value be indicated that it could considerably exceed the value of 0.4g as noted, rather than specify a doubling.

MAJOR COMMENT NO. 2

Tectonics

- 1 A technical distinction should be considered for seismicity at Yucca Mountain and seismicity in the vicinity of Yucca Mountain; or provide a broader statement that the major comment discussions concerning tectonics apply rather uniformly to the Yucca Mountain area in a broader sense than to just the Mountain itself or only specific features in the vicinity of Yucca Mountain.
- 2 OK with following observations. References to non-FEA material such as USGS, 1984, could be better cross-referenced if specific section numbers and/or page numbers were noted for completeness.
- 3 OK, the major concern under tectonics is appropriately ground motion due to seismicity.
- 4 OK for discipline and across projects.
- 6 OK, as no inconsistencies are noted.

NOTE: Some words or phrases of a more exacting nature may help to emphasize the concern with tectonics in this major comment. For example, on Page 1, Paragraph 1, Line 5, deletion of "at Yucca Mountain" will indicate a more overall concern. On Page 5, Paragraph 2, "a comprehensive discussion" could be replaced by "a comprehensive evaluation and discussion".

DETAILED COMMENT ON HYDROTHERMAL ACTIVITY

This detailed comment correctly emphasizes the need for added attention to the matter of hydrothermal activity. References are thorough and the deferral to an SCP activity is appropriately noted in the NRC discussion.