

SUMMARY OF NRC-DOE TECHNICAL EXCHANGE
ON TECTONIC MODELS
December 19-20, 1989
Rockville, Maryland

Agenda: See Attachment 1.

List of Attendees: See Attachment 2.

Summary:

On December 19-20, 1989, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) conducted a technical exchange on NRC's draft Technical Position, "Methods of Evaluating the Seismic Hazard Present at a Geologic Repository", and related topics. The NRC explained the intent of the draft Technical Position and, in particular, its references to 10 CFR Part 100, Appendix A, Seismic and Geologic Siting Criteria for Nuclear Power Plants, which were the focal point of DOE's written comments on the Technical Position.

After discussion of the Technical Position, DOE presented its ideas on generic requirements for a seismic hazards methodology and on alternative methods for developing a design basis. Much of the ensuing discussion centered on DOE's concept of the 10,000-year cumulative slip earthquake, how use of that concept differs from both the 10 CFR Part 100, Appendix A approach and that contained in DOE Order 6430.1A, the General Design Criteria Manual, and the relative advantages and disadvantages of each approach. The State of Nevada also participated in the exchange, with two representatives of the State giving presentations on historical earthquakes in and around Nevada and their significance relative to calculation of 10,000-year cumulative slip earthquakes.

Both NRC and DOE considered that the discussions facilitated DOE's understanding of the subject draft Technical Position and NRC's understanding of DOE's comments on it. However, the State of Nevada pointed out that some of its written comments on the draft Technical Position, particularly those regarding the need to define certain terms critical to how 10 CFR Part 100, Appendix A concepts are to be applied to a geologic repository, remain to be addressed.

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AGENDA

DOE-NRC TECHNICAL EXCHANGE ON THE NRC DRAFT TECHNICAL POSITION ON
METHODS OF EVALUATING THE SEISMIC HAZARD PRESENT AT A GEOLOGIC REPOSITORY

DECEMBER 19 AND 20, 1989, ROCKVILLE MD, Room 4-B-11 White Flint
Tuesday 8:30 a.m. - 5:00 p.m.
Wednesday 8:30 a.m. - 12:30 p.m.

- PURPOSE:** To discuss comments on the NRC draft technical position on methods of evaluating the seismic hazard present at a geologic repository, and to discuss additional concepts related to evaluating seismic hazards.
- SCOPE:** This technical exchange will concentrate on topics related to defining the seismic hazard for a geologic repository, and will allow each of the interested parties (NRC, DOE, State) to present ideas on appropriate methods that could be used to define and evaluate seismic hazards. The agenda below covers topics related to the draft NRC technical position, and other topics suggested by exchange participants related to seismic hazard methods, and allows time for discussions.

<u>Agenda Topics</u>	<u>Discussion Leader</u>
o Introductions	all
o Discussion of Technical Position including NRC's reasons for referring to Appendix A	NRC
Discussion	all
o Generic requirements for a seismic hazards methodology; specific preclosure needs and postclosure needs; includes topics such as Q-list and subsurface ground motion	DOE
Discussion	all
o Discussion of the topic of maximum earthquake and the implications of using a maximum earthquake as a design basis (required judgments and implicit assumptions)	DOE
Discussion	all
o Alternative methods for developing a design basis (Part 100, 10,000-yr. cumulative slip earthquake, DOE Order 6430.1A)	DOE
Discussion	all
o Discussion of how an acceptable approach will be developed	all

NRC-DOE TECHNICAL EXCHANGE ON
SEISMIC HAZARDS TECHNICAL POSITION
12/18-20/89

Attachment 2

LIST OF ATTENDEES

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