

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

Dear Mr. Shelor:

SUBJECT: PROPOSED INTERACTIONS FOR DISCUSSION AT THE DECEMBER 13, 1990,  
INTERACTIONS SCHEDULING MEETING

Enclosed is a list of proposed interactions for discussion at the upcoming interactions scheduling meeting to be held on December 13, 1990. As was agreed upon at the October 29, 1990, Licensing and Management Meeting, the staff of the U.S. Nuclear Regulatory Commission (NRC) is providing the U.S. Department of Energy (DOE) with this information for its use in preparing for the meeting. The format used to identify interactions is consistent with that agreed upon at the last interactions scheduling meeting.

In providing the enclosed list, the NRC staff has identified a number of interactions that cover a period of eight months from January to August 1991. Although the staff does not expect to establish firm dates and commitments for interactions beyond four months, it is providing the later interactions to DOE for its consideration. Also, included are several meetings for which the staff has not identified specific times, but which are high priority and need to be discussed at the December 13, 1990, meeting. The meeting is scheduled to begin at 9:00 a.m., and will be held in room 6-B-11 of the NRC's White Flint Building.

If you have any questions, please feel free to contact the responsible NRC staff member Mr. Joe Holonich. Mr. Holonich can be reached at (301) 492-3403 or FTS 492-3403.

Sincerely, *JS*

John J. Linehan, 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-Echner, Nye County, NV

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Enclosure

List of Proposed Interactions

Topic: Exploratory Shaft Facility (ESF) Alternatives Study

Objective: To present to the U.S. Nuclear Regulatory Commission (NRC) staff the scope and structure of the U.S. Department of Energy (DOE) study and answer questions related to how the regulatory considerations of 10 CFR Part 60 were factored into the ESF design option.

Scope: Discussions should focus on the various alternatives considered by DOE and the comparative evaluation of alternatives to major design features that are important to the alternatives that would provide longer radionuclide containment and isolation. [10 CFR 60.21(c)(1)(ii)(D)]

Date: January 1991

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Topic: Seismic Hazards Investigations Staff Technical Position

Objective: To discuss the technical and regulatory issues related to the identification of seismic hazards.

Scope: The discussion at this meeting will address the use of a deterministic approach to investigations of fault displacement and seismic phenomena, as applied to geologic repository investigations, and the appropriateness of such an approach for the collection of sufficient data for input to analyses of the fault displacement and seismic hazards, both for the preclosure period and for the period after permanent closure. Also, see Site Characterization Analysis (SCA) concerns 60, 61, 64, 67, 127.

Date: January 1991

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Topic: Radionuclide Retardation Testing and Modelling

Objective: To discuss the technical and regulatory issues related to the methods planned for demonstrating applicability of laboratory data to repository transport calculations.

Scope: This technical exchange will focus on discussion of laboratory methods to simulate repository conditions of radionuclide transport on a small scale and methods of extrapolating those data to repository scale (both temporal and spatial). The discussions should include experimenters and modelers. Also, see SCA concerns 27, 28, 29, 30, and 96.

Date: February 1991

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Topic: Procedural Agreement Meeting

Objective: To discuss the inconsistencies identified with the procedural agreements and proposed revisions.

Scope: Discussion should center around the inconsistencies with the procedural agreements identified at the October 29, 1990 Licensing and Management Meeting, and proposed revisions to the agreements or dispositions to address the items. Participation should be at the first-line supervisor level.

Date: March 1991

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Topic: Waste Form: Glass

Objective: To discuss the technical and regulatory issues related to the expected performance of vitrified high-level waste in the Yucca Mountain environment.

Scope: Discussion should include planned vitrification activities at both Savannah River and West Valley, and foreign experience. This exchange should include a tour of the Defense Waste Processing Facility.

Date: March 1991

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Topic: Thermal Loads and Repository Design

Objective: To discuss the Staff Technical Position (STP) being developed in this area.

Scope: At this technical exchange, the staff will provide DOE and other program participants with an overview of the information to be addressed in an upcoming STP. The meeting will give the participants an opportunity to gain insight into the staff's work and provide comment.

Date: April 1991

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Topic: Construction of a Complementary Cumulative Distribution Function (CCDF)

Objective: To discuss the technical and regulatory issues related to the construction of a CCDF.

Scope: This technical exchange will address the use of a definition of scenarios consistent with the logic used to construct a CCDF, including human intrusion scenarios in the CCDF, and the use of expected partial performance measures to guide site characterization. Also, see SCA comments 93, 95, 98, and 99.

Date: April 1991

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Topic: Waste Form: Spent Nuclear Fuel

Objective: To discuss the technical and regulatory issues related to the expected performance of spent fuel in the Yucca Mountain environment.

Scope: Discussions should include the various types of spent fuel and cladding and effects of burn-up and defects.

Date: July 1991

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Topic: Scenario Development and Screening

Objective: To discuss the technical and regulatory issues related to the methods planned for developing and screening scenarios.

Scope: This technical exchange will address the current operational definition of scenarios, how scenarios are to be generated from elemental events and processes, what initial set of scenarios of elemental events and processes are to be screened for purposes of site characterization and appropriate methods for screening scenarios and how much should be implemented and documented. Also, see SCA concerns 1, 95, 100, and 103.

Date: August 1991

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Topic: Natural Resources Assessment

Objective: To discuss the technical and regulatory issues related to the assessment of natural resources.

Scope: This technical exchange will address the geological, geophysical, and geochemical investigations, including those derived from satellite imagery, planned for natural resource assessments and how these investigations will be integrated with those planned for other site characterization activities. Also, see SCA comment 53 and questions 14 and 15.

Date: Summer 1991

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Topic: Data Management

Objective: To discuss the inventory of site data and NRC computer access to the Site Engineering Properties Data Base.

Scope: This technical exchange will focus on progress that has been made on implementing the proposed organization of the data bases and development of computer access to these data bases by all DOE participants and NRC. The discussion would also include an update of the inventory of data in all DOE data bases and how much has been transferred to the Site Engineering Properties Data Base.

Date: This meeting is a high priority and should be scheduled when DOE is ready to hold the interaction.

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Topic: Characterization of the Calico Hills Formation

Objective: To discuss the technical and regulatory issues related to the characterization of the Calico Hills Formation.

Scope: This technical exchange will focus on discussion of specific geologic, geochemical, hydrologic and engineering data needed to characterize the Calico Hills Formation. The technical exchange will also address specific tests that need to be run to collect the data. In addition, the discussion will include the process used to determine the need and method for characterizing the Calico Hills Formation. Also, see SCA concerns 14 and 16.

Date: This meeting is a high priority and should be scheduled when DOE is ready to hold the interaction.

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