JUN 2 1 1994

MEETING MINUTES

DEPARTMENT OF ENERGY/NUCLEAR REGULATORY COMMISSION

INTERACTIONS SCHEDULING MEETING

MAY 17, 1994

Staff from the United States Nuclear Regulatory Commission met with representatives of the United States Department of Energy (DOE) on May 17, 1994, in a video-conference to schedule interactions in the high-level waste repository program for the six month period from July through December 1994. Video conference facilities at DOE headquarters in Washington, DC and the DOE offices in Las Vegas, Nevada were the sites for the video-conference. Representatives from the State of Nevada (NV) and Nye County, NV also participated in the meeting. Representatives of other Affected Units of Local Government were informed of the meeting, but did not attend.

Following the May 18, 1994, DOE/NRC Management meeting in Rockville, Maryland, a brief meeting was held between the NRC staff, representatives of DOE, NV, and Nye County, NV (Nye County via telephone) to finalize dates for several interactions which had been tentatively scheduled during the May 17, 1994, videoconference.

Attachment \mathbb{Z} is a summary of the interactions scheduled. Attachment 2 is a description of the interactions scheduled. In addition, the NRC staff and the representatives of DOE agreed to proposed dates for interactions during the January through June 1995 time period.

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INTERACTIONS FOR JULY-DECEMBER 1994

July 26	Bi-Monthly Management Meeting	Rockville
July 27	Experimental Studies Facility (ESF) Meeting	Rockville
August 23-24	Field Heater Experiments (coupled processes)/Large Block Test Technical Exchange	Las Vegas or Yucca
Sept. 12-13	Total System Performance Assessment Technical Exchange	Rockville
Sept. 14 AM	Bi-Monthly Management Meeting	Rockville
October	Open	
Nov. 7	Tunnel Boring Machine (TBM) Site Visit (if appropriate)	Yucca
Nov. 8	ESF Meeting	Las Vegas
November 29- December 1*	Groundwater Flow/Groundwater Travel Time Technical Exchange	Denver
December 6 AM	Bi-Monthly Management Meeting	Rockville
December 6 PM**	Interactions Telecon or Videocon	

*Meetings will be extended to begin Monday Afternoon (11/29) and end Thursday (12/2) at noon, if necessary.

**Participants will either use available video-conferencing facilities or phone into a bridge number for a telecon, depending on availability of facilities.

DOE-NRC INTERACTIONS FOR THE PERIOD 6/94 - 12/94

Management Meeting

Topic: Bi-Monthly DOE-NRC Manager's Meeting

Objectives: For DOE and NRC managers to discuss Yucca Mountain activities.

Scope: To provide a forum for both DOE and NRC managers to discuss

current activities, concerns, and needs. The goal of this meeting is provide both agency managers with relevant information so they can access the impact of their respective activities on the other organization.

This will also help both agency's better allocate resources to

accomplish their respective responsibilities. Agenda will be negotiated

prior to meeting.

Date: July 26, 1994

Location: Rockville, MD at NRC White Flint Building

Technical Meeting

Topic: Explorator

Exploratory Studies Facility (ESF) Status

Objective: To provide an update of activities for design and construction of the

ESF.

Scope: To be negotiated during a DOE-NRC telephone conference prior to the

meeting.

Date: July 27, 1994

Location: Rockville, MD

Topic:

Field Heater Experiments Associated with Coupled Thermal-Hydrologic-Mechanical-Chemical (THMC)

Processes

Objective:

To discuss technical issues needing experimental resolution for coupled THMC processes, and the adequacy of current DOE plans to address these phenomena.

Scope:

This technical exchange would focus on the DOE's approach to address issues related to coupled processes (THMC). Discussions would focus on the Fran Ridge Large Block Experiment and the ESF heated room test (Study Plans 8.3.4.2.4.4 and 8.3.1.15.1.6). Presentations would include discussion of the requirements and needs identified for these processes, applicable lessons learned from heater tests in G-tunnel and the Climax Facility, testing plans, testing goals, the

intended use of the testing results, and how DOE intends to approach couple THMC processes. presentations will provide a forum for DOE and NRC

to discuss DOE's plans to field these tests.

Date:

August 23, 1994 with possible site visit on

8/24/94

Location:

Las Vegas, NV

Topic:

Total System Performance Assessment (TSPA)

Objective:

To provide an update on the progress acheived by

NRC and DOE in the area of TSPA.

Scope:

To discuss the preliminary results of DOE's TSPA, the integration of site characterization results into the TSPA, DOE's scenario methodology, and radionuclide release modeling. NRC will present

TSPA, Phase 2. The respective parties will

discuss the results of their assessments and plans to incorporate further improvements in subsequent iteration, including ways to use the results of TSPA to direct the collection of data in order to

reduce uncertainty.

Date:

September 12-13, 1994

Location:

Rockville, MD at NRC White Flint Building

Management Meeting

Topic: Bi-Monthly DOE-NRC Manager's Meeting

Objectives: For DOE and NRC managers to discuss Yucca

Mountain activities.

Scope: To provide a forum for both DOE and NRC managers

to discuss current activities, concerns, and needs. The goal of this meeting is provide both NRC and DOE managers with relevant information so they can access the impact of their respective activities on the other organization. This will also help both agencies better allocate resources to accomplish their respective responsibilities.

Agenda will be negotiated prior to meeting.

Date: September 14, 1994

Location: Rockville, MD at NRC White Flint Building

Site Visit

Topic:

The results of initial tunnel boring activities along the north ramp of the Exploratory Studies Facility (Technical Exchange)

Objectives:

- 1. To apprise the NRC staff of the results of the initial phase of tunnel boring along the north ramp including characterization data collected along the path of the ESF and in alcoves associated with the north ramp.
- 2. To facilitate staff reviews of DOE ESF design documents and study plans and address concerns raised in reviews of the SCP and related study plans.

Scope:

During the late Fall and Winter of 1994, initial tunnel boring will be conducted along the north ramp, including transit of the poorly lithified pre Ranier Mesa tuffs. This technical exchange would focus on the results of these initial tunnel boring activities. Specific topics to be addressed would include efforts to characterize the stratigraphy, structure, rock properties, hydrology, and geochemistry along the path of the north ramp construction and in alcoves associated with the north ramp. The scope of the exchange would include discussions of the results of drilling and testing of NRG 7 and other drillholes along the North Ramp-Geologic Holes and Systematic Drilling hole SD-12. Discussions would also address any ESF design issues raised by the initial tunnel boring activities. Anticipated encounters with fault zones and testing activities associated with those faults would also be discussed.

Date:

November 7, 1994 (If appropriate)

Location:

Yucca Mountain

Technical Meeting

Topic: Exploratory Studies Facility (ESF) Status

Objective: To provide an update of activities for design and

construction of the ESF

Scope: To be negotiated during a DOE-NRC telephone

conference prior to the meeting. This interaction would also include a tour of the ESF facility to

observe field activities.

Date: November 8, 1994

Location: Las Vegas, NV (FOC)

Location: Nevada Test Site (FOC), Nevada

Topic:

Groundwater Flow Through Unsaturated, Fractured

Rock

Objective:

Acquaint DOE and NRC with the results and ongoing research efforts to characterize groundwater flow through the unsaturated zone at Yucca Mountain, Nevada

Scope:

Areas to be considered could include the following:

- Techniques available to obtain fracture hydrologic parameters describing resistance as a function of water content, fracture porosity, or means of water moving between fracture and matrix.
- Experimental confirmation of concepts of unsaturated groundwater flow in fractured rock. Verification of laboratory or field experiments either by the continuum (single or dual), discrete fracture network, or the stochastic approaches.
- Investigations of hydrologic processes to determine their importance to Yucca Mountain geologic repository performance.
- Prototype testing work conducted to support hydrologic tests in the Exploratory Studies Facility.

Date:

November 29-30, 1994 (may be extended to begin November 28th PM, if necessary)

Location:

Denver, CO

Topic: Groundwater Travel Time

Objective: To discuss technical issues related to site

characterization and the assessment of groundwater

travel time.

This technical exchange will focus on discussing Scope:

site characterization issues related to the determination of groundwater travel time and approaches to calculating and modelling

groundwater travel time.

Date: November 30-December 1, 1994 (May be extended to

December 2 AM, if necessary)

Location: Denver, CO Management Meeting

Topic: Bi-Monthly DOE-NRC Manager's Meeting

Objectives: For DOE and NRC managers to discuss Yucca

Mountain activities.

Scope: To provide a forum for both DOE and NRC managers

to discuss current activities, concerns, and needs. The goal of this meeting is provide both agency' managers with relevant information so they

can access the impact of their respective

activities on the other organization. This will also help both agency's better allocate resources to accomplish their respective responsibilities.

Agenda will be negotiated prior to meeting.

Date: December 6, 1994

Location: Rockville, Md. at NRC White Flint Building

Management Meeting

Topic: Interactions Scheduling Meeting

Schedule DOE-NRC interactions for the period of Objective:

January through June 1995.

Scope:

The DOE and NRC will provide respective lists of desired interactions for the period 30 days prior to the meeting. During the meeting, DOE-NRC will negotiate to satisfy both parties.

December 6, 1994 Date:

Conference call. Location: