

MAR 3 1992

## MARCH TECH EXCH/MTG NOTICE

- 1 -

**MEMORANDUM FOR:** Robert L. Johnson, Acting Section Leader  
Systems Engineering and Special Projects  
Section  
Repository Licensing and Quality Assurance  
Project Directorate  
Division of High-Level Waste Management

**FROM:** Michael P. Lee, Project Manager  
Systems Engineering and Special Projects  
Section  
Repository Licensing and Quality Assurance  
Project Directorate  
Division of High-Level Waste Management

**SUBJECT:** FORTHCOMING U.S. NUCLEAR REGULATORY COMMISSION/  
U.S. DEPARTMENT OF ENERGY (NRC/DOE) TECHNICAL EXCHANGES

**DATES:** March 17-18, 1992  
9:00am - 5:00pm

**LOCATION\*:** Sheraton Old Town  
800 Rio Grande, N.W.  
Albuquerque, New Mexico 87104

**PURPOSES:** On March 17, 1992, the NRC and DOE will conduct a technical exchange to discuss NRC's final draft staff technical position on Geologic Repository Operations Area Underground Facility Design -- Thermal Loads. As part of the technical exchange, the NRC staff will discuss how it responded to the comments received on the July 1991 public comment draft. (See proposed agenda in enclosure 1.)

On March 18, 1992, the NRC and DOE will conduct a second technical exchange to discuss technical and regulatory issues related to evaluating gas transport and moisture redistribution due to repository-induced thermal gradients. The technical exchange will focus on the modeling approaches of NRC and DOE concerning gas transport and moisture redistribution at the proposed geologic repository at Yucca Mountain, Nevada. (See proposed agenda in enclosure 2.)

**PARTICIPANTS:**

<u>NRC</u>			
M. Nataraja	R. Codeil	T. Brandshaug	<i>WM-1 AIA.8.1 NH16</i>
M. Lee	R. Wescott		
<u>DOE</u>			
C. Flum, et al.	M. Wilson	B. Ross	
P. Bunton	E. Weeks	T. Buscheck	

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PDR WASTE  
WM-1

PDR

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MARCH TECH EXCH/MTG NOTICE

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STATE OF NEVADA

R. Loux

C. Johnson, et al.

AFFECTED LOCAL GOVERNMENTS

- S. Bradhurst, Nye County, NV
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO
- P. Niedzielski-Eichner, Nye County, NV
- C. Thistlethwaite, Inyo County, CA
- V. Poe, Mineral County, NV
- F. Sperry, White Pine County, NV
- R. Williams, Lander County, NV
- P. Goicoechea, Eureka County, NV
- L. Vaughan II, Esmeralda County, NV
- C. Schank, Churchill County, NV

Original Signed by:

Michael P. Lee, Project Manager  
 Systems Engineering and Special Projects  
 Section  
 Repository Licensing and Quality Assurance  
 Project Directorate  
 Division of High-Level Waste Management

Enclosures (2): As stated

\* Meetings between NRC technical staff and DOE are open to members of the public, petitioners, intervenors, or other interested parties wishing to attend as observers pursuant to the spirit of "Open Meeting Statement of NRC Staff Policy," 43 Federal Register 28058, dated June 28, 1978, which details the open meeting policy for applicants and licensees.

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 NAME:MLee *MPL* :MNataraja *Ran* :RBallard *[Signature]* :RWescott *[Signature]* :MVFederline :KStablein  
 Date:02/18/92 :0 28/92 :0 428/92 :03/2/92 :03/3/92 :03/3/92

PROPOSED AGENDA  
NRC/DOE TECHNICAL EXCHANGE ON STAFF TECHNICAL POSITION (STP)  
ON GEOLOGIC REPOSITORY OPERATIONS AREA UNDERGROUND  
FACILITY DESIGN -- THERMAL LOADS

AGENDA ITEM

DISCUSSION LEAD

- |   |                 |
|---|-----------------|
| - Opening Remarks   | NRC, DOE, State |
| - NRC Final Draft STP (1 hr)                                      | NRC             |
| - Introduction  |                 |
| - Technical Positions   |                 |
| - NRC Staff Discussion of Responses to Public Comments<br>(2 hrs) | NRC             |
| LUNCH   |                 |
| - Comments by DOE   | DOE             |
| - Comments by the State of Nevada                                 | State           |
| - Open Discussion   | All             |
| - Closing Remarks   | All             |

PROPOSED AGENDA  
 NRC/DOE TECHNICAL EXCHANGE ON AIR AND VAPOR MOVEMENT  
 DUE TO THERMAL GRADIENTS

<u>AGENDA ITEM</u>	<u>DISCUSSION LEAD</u>
- Opening Remarks	NRC, DOE, State
- DOE Modeling Approach (1½ hrs)	DOE
- Introduction	
- Physical characteristics of air circulation through Yucca Mountain	
- Modeling of non-isothermal flow effects at Yucca Mountain	
- Modeling and analysis of repository-heat-driven flow at Yucca Mountain	
- Temperature-driven gas transport and C-14	
- Integration of gaseous release results in total system performance assessment	
- NRC Modeling Approach (1½ hrs)	NRC
- Introduction	
- Driving forces for gas flow through Yucca Mountain	
- NRC's gas flow model for Yucca Mountain	
- NRC/CNWRA C-14 geochemical model	
- Other volatile radionuclides that should be considered in modeling	
- Incorporation of volcanic effects into the model	
LUNCH	
- Open Discussion	A11
- Closing Remarks	A11