

JUN 25 1992

03/92 TECH EXCHANGE SUMMARY

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

Dear Mr. Roberts:

SUBJECT: SUMMARIES FROM THE MARCH 17-18, 1992, TECHNICAL EXCHANGES ON "DRAFT STAFF TECHNICAL POSITION ON 'GEOLOGIC REPOSITORY OPERATIONS AREA UNDERGROUND FACILITY DESIGN -- THERMAL LOADS'" AND "AIR AND VAPOR MOVEMENT DUE TO THERMAL GRADIENTS"

The purpose of this letter is to transmit the summaries for the March 17-18, 1992, technical exchanges between the Nuclear Regulatory Commission and the U.S. Department of Energy (DOE). Representatives from the State of Nevada and DOE program participants also participated in the technical exchanges.

The focus of the March 17, 1992, technical exchange was to discuss how the NRC staff responded to the comments received on the July 1991 public comment draft staff technical position on Geologic Repository Operations Area Underground Facility Design -- Thermal Loads (see Enclosure 1).

On March 18, 1992, the NRC and DOE conducted 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 focused on the respective modeling approaches of NRC and DOE concerning gas transport and moisture redistribution at the proposed geologic repository at Yucca Mountain, Nevada (see Enclosure 2).

Additionally, a comprehensive NRC staff summary is attached as Enclosure 3 to provide a technical synopsis of each DOE presentation given during the meeting. This report is included to provide information on the technical content of the meeting since there were no DOE briefing materials distributed at the technical exchange. Included in this NRC staff summary is a table presented by Dr. Karsten Preuss, of Lawrence Berkeley Laboratories, that has been partially reconstructed from the notes of the NRC staff in attendance at the technical exchange. Because the information in this table is incomplete, a complete copy of it is requested along with information regarding how the calculations shown in this table were derived. The staff does not intend to critically review this table. Rather, the staff intends to consider this information in its continuing investigation of vapor transport at Yucca Mountain.

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Should you have any questions regarding these summaries, please contact Michael P. Lee (301/504-2421, FTS 964-2421) of my staff.

Sincerely,

MS

Joseph J. Holonich, Director
 Repository Licensing and Quality
 Assurance Project Directorate
 Division of High-Level Waste Management
 Office of Nuclear Material Safety
 and Safeguards

Enclosures (3): 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-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. Shank, Churchill County, NV
- T. Hickey, Nevada Legislative Committee

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OFC :HERD	:	:	:	:	:
NAME: JHolonich	:	:	:	:	:
Date: 05/11/92	:	:	:	:	:

- cc: R. Loux, State of Nevada
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ENCLOSURE 1

SUMMARY OF THE NRC/DOE TECHNICAL EXCHANGE ON THE
DRAFT STAFF TECHNICAL POSITION ON "GEOLOGIC REPOSITORY
OPERATIONS AREA UNDERGROUND FACILITY DESIGN -- THERMAL LOADS"

March 17, 1992
Albuquerque, New Mexico

received with letter dated
6/25/92

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