



**Department of Energy**  
**Office of Civilian Radioactive Waste Management**  
**Yucca Mountain Site Characterization Office**  
**P.O. Box 30307**  
**North Las Vegas, NV 89036-0307**

QA: N/A

JAN 2 2001

**OVERNIGHT MAIL**

John T. Greeves, Director  
Division of Waste Management  
Office of Nuclear Materials Safety  
and Safeguards  
U.S. Nuclear Regulatory Commission  
Two White Flint North  
Rockville, MD 20852

**TRANSMITTAL OF A KEY REPORT RELEVANT TO U.S. DEPARTMENT OF ENERGY'S  
(DOE) SITE RECOMMENDATION: NEAR-FIELD ENVIRONMENT PROCESS MODEL  
REPORT (PMR)**

In my letter dated November 24, 1999, the DOE described a plan to make available to the U.S. Nuclear Regulatory Commission (NRC) staff, reports that describe the technical basis that will support any DOE site recommendation of a potential monitored geologic repository at Yucca Mountain, Nevada.

The enclosed Near-Field Environment PMR, TDR-NBS-MD-000001, Revision 00, ICN 03 (enclosure 1), has been accepted by DOE. This PMR describes the analyses and modeling based on current understanding of the evolution of the near-field within the rock mass extending outward from the drift wall of the potential repository.

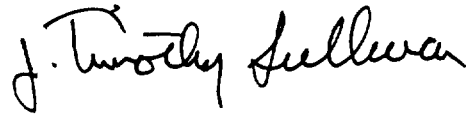
Analysis and Model Reports (AMRs), which contain the more detailed technical information, support the PMRs. The Near-Field Environment PMR is supported by four AMRs, which provide detailed descriptions of the various near-field models. Preliminary copies of these AMRs have been previously transmitted to you; current versions of these AMRs, along with the Near-Field Environment PMR, are also enclosed in compact disc format for your convenience (enclosure 2).

The Near-Field Environment PMR is the last of the nine PMRs that address the technical basis supporting the Total System Performance Assessment. The DOE will transmit additional key documents, and any future updates to the AMRs and PMRs to you, as they become available. The Near-Field Environment PMR will also be available in the near future over the Internet on the Yucca Mountain Project home page, at [www.ymp.gov](http://www.ymp.gov).

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Please direct comments on this letter or the enclosures to Deborah L. Barr at (702) 794-1479 or Timothy C. Gunter at (702) 794-1324.

  
for Stephan Brocoun  
Assistant Manager, Office of  
Licensing and Regulatory Compliance

OL&RC:TCG-0466

Enclosures:

1. Near-Field Environment PMR (hard copy),  
TDR-NBS-MD-000001, Revision 00, ICN 03
2. Compact Disc with the Near-Field Environment  
PMR, TDR-NBS-MD-000001, Revision 00,  
ICN 03, and associated AMRs:
  - Thermal Tests Thermal-Hydrological  
Analysis/Model Report, ANL-NBS-TH-  
000001, Rev. 00
  - Features, Events, and Processes in Thermal  
Hydrology and Coupled Processes, ANL-  
NBS-MD-000004, Rev. 00
  - Drift Scale Coupled Processes (DST and  
THC Seepage) Models, MDL-NBS-HS-  
000001, Rev. 00
  - Abstraction of Drift Scale Coupled  
Processes, ANL-NBS-HS-000029, Rev. 00

cc w/encls:

K. C. Chang, NRC, Rockville, MD (originals)  
C. J. Glenn, NRC, Las Vegas, NV

cc w/encl 2 only:

S. H. Hanauer, DOE/HQ (RW-2) FORS  
Richard Major, ACNW, Rockville, MD  
W. D. Barnard, NWTRB, Arlington, VA  
B. J. Garrick, ACNW, Rockville, MD  
Budhi Sagar, CNWRA, San Antonio, TX  
Steve Kraft, NEI, Washington, DC  
J. H. Kessler, EPRI, Palo Alto, CA  
R. R. Loux, State of Nevada, Carson City, NV

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cc w/encl 2 only (continued):

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D. A. Bechtel, Clark County, Las Vegas, NV  
George McCorkle, Esmeralda County, Goldfield, NV  
Leonard Fiorenzi, Eureka County, Eureka, NV  
Andrew Remus, Inyo County, Independence, CA  
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Jerry McKnight, Nye County, Tonopah, NV  
Josie Larson, White Pine County, Ely, NV  
R. I. Holden, National Congress of American  
Indians, Washington, DC  
Allen Ambler, Nevada Indian Environmental  
Coalition, Fallon, NV  
J. R. Curtiss, Winston & Strawn, Washington, DC  
F. S. Echols, Winston & Strawn, Washington, DC  
C. A. Kouts, DOE/YMSCO (RW-2) FORS

cc w/o encls:

Ivan Itkin, DOE/HQ (RW-1) FORS  
L. H. Barrett, DOE/HQ (RW-2) FORS  
A. B. Brownstein, DOE/HQ (RW-52) FORS  
N. H. Slater, DOE/HQ (RW-52) FORS  
R. A. Milner, DOE/HQ (RW-2) FORS  
C. W. Reamer, NRC, Rockville, MD  
N. K. Stablein, NRC, Rockville, MD  
B. W. Leslie, NRC, Rockville, MD  
D. J. Brooks, NRC, Rockville, MD  
W. L. Belke, NRC, Las Vegas, NV  
W. C. Patrick, CNWRA, San Antonio, TX  
John Meder, State of Nevada, Carson City, NV  
Michael King, Inyo County, Edmonds, WA  
J. N. Bailey, M&O, Las Vegas, NV  
R. L. Kelmenson, M&O, Las Vegas, NV  
M. C. Bryan, M&O, Las Vegas, NV  
J. G. Linhart, M&O/NSNFP, Las Vegas, NV  
J. H. Smyder, Naval Reactors, Las Vegas, NV  
J. R. Dyer, DOE/YMSCO, Las Vegas, NV  
D. G. Horton, DOE/YMSCO, Las Vegas, NV  
Stephan Brocoum, DOE/YMSCO, Las Vegas, NV

cc w/o encls (continued):

D. R. Williams, DOE/YMSCO, Las Vegas, NV  
T. C. Gunter, DOE/YMSCO, Las Vegas, NV  
A. V. Gil, DOE/YMSCO, Las Vegas, NV  
C. M. Newbury, DOE/YMSCO, Las Vegas, NV  
D. L. Barr, DOE/YMSCO, Las Vegas, NV  
C. L. Hanlon, DOE/YMSCO, Las Vegas, NV  
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