



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

October 20, 1997

MEMORANDUM TO: Michael J. Bell, Acting Chief
Performance Assessment and High-Level
Waste Integration Branch
Division of Waste Management

FROM: Michael P. Lee, Systems Analyst 
Performance Assessment and High-Level
Waste Integration Branch
Division of Waste Management

SUBJECT: FORTHCOMING U.S. DEPARTMENT OF ENERGY (DOE)/U.S. NUCLEAR
REGULATORY COMMISSION (NRC) TECHNICAL EXCHANGE
(INCLUDING VIDEOCONFERENCE)

DATE & TIME: November 5-6, 1997
8:30 a.m. — 5:30 p.m. (PST)

LOCATIONS: DOE Summerlin I Facility
1551 Hillshire Drive, Atrium Room
North Las Vegas, Nevada

NRC Headquarters — Two White Flint North
11555 Rockville Pike, Room T-2B5 (videoconference room)
Rockville, Maryland

PURPOSE: Technical exchange to discuss DOE's plans and methodology for
conducting a total-system performance assessment in support of
its forthcoming Viability Assessment. Also discussed will be the
status of NRC efforts to develop its independent performance
assessment capability. (See attached agenda.)

PARTICIPANTS:

NRC	DOE	State of Nevada
T. McCartin <i>et al.</i>	A. van Luik <i>et al.</i>	S. Frishman <i>et al.</i>

AFFECTED UNITS OF LOCAL GOVERNMENT

M. Murphy, Nye County	M. Baughman, Lincoln County
D. Bechtel, Clark County	B. Mettam, Inyo County
V. Poe, Mineral County	W. Cameron, White Pine County
R. Williams, Lander County	L. Fiorenzi, Eureka County
J. Regan, Churchill County	J. Hoffman, Esmeralda County
L. Bradshaw, Nye County	P. Niedzielski-Eichner, Nye County
R. Arnold, Pahrump (NV)	M. Stellavato, Nye County

CONTACT: M. Lee/DWM
(301) 415-6677



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WM-11

Meetings and technical exchanges between NRC and DOE are open to members of the public and other interested parties wishing to attend as observers, pursuant to the spirit of the "Open Meeting Statement of NRC Staff Policy" (59 FR 48340, dated September 20, 1994) which details the open meeting policy for applicants.

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DATE	10/17/97		10/20/97	10/20/97				

PROPOSED AGENDA
DOE/NRC Technical Exchange on
Total System Performance Assessments (TSPA) for Yucca Mountain

November 5-6, 1997
8:30am - 5:30 pm (PST)

Locations:
DOE Summerlin I Facility, 1551 Hillshire Drive, Atrium Room
North Las Vegas, Nevada

NRC Headquarters — Two White Flint North
11555 Rockville Pike, Room T-2B5 (videoconference room)
Rockville, Maryland

Wednesday, November 5, 1997

- **Opening Remarks**
- **Saturated Zone Hydrology**
 - Results/conclusions from the DOE expert elicitation — Insights related to matrix diffusion and/or vertical mixing
 - C-Well Complex test results: Alternative interpretations and process model incorporation
 - Matrix diffusion/modeling assumptions for the TSPA-VA
 - NRC views on evidence of fracture flow at the site
- **Treatment of Disruptive Events**
 - Overview of DOE 's Features-Events-Processes approach to consequence analyses for non-mutually exclusive events
 - Updates on DOE approach to the treatment of disruptive events for the TSPA-VA, including treatment of criticality
 - NRC approach to the treatment of disruptive events in IPA Phase 3 consequence modeling: Assumptions for volcanism, faulting, and seismicity
 - NRC pre-VA views

Thursday, November 6, 1997

- **Waste Package Degradation**
 - Results/conclusions from the DOE expert elicitation
 - DOE views on how waste is being released from the waste package canister
 - DOE approach for the TSPA-VA
 - Key assumptions and approach NRC's waste package modeling in IPA Phase 3
- **Biosphere Evaluations**
 - Results of recent DOE Biosphere Survey
 - DOE preliminary views on modeling dilution at pumping well
 - DOE approach for the TSPA-VA — Utilization of Biosphere Survey Results
 - NRC treatment of biosphere issues in IPA Phase 3
 - Dilution assumptions
 - Regional drilling practice survey, including pumping assumptions
 - Dose Conversion Factors
- **Closing Remarks**