Winter Board Meeting
January 25 and 26, 2000

Addressing Uncertainty
Repository Safety Strategy
Scientific Programs Update

Alexis Park Hotel
375 East Harmon Ave.
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Tuesday, January 25

8:30 a.m. Call to Order
Jared Cohon
Chairman
Nuclear Waste Technical Review Board (NWTRB)

8:35 a.m. Perspectives on the Program
Ivan Itkin
Director
Office of Civilian Radioactive Waste Management (OCRWM)

9:00 a.m. Questions and discussion

9:15 a.m. Perspectives on the Yucca Mountain Project
J. Russell Dyer
Project Manager
Office of Licensing and Regulatory Compliance
Yucca Mountain Site Characterization Office (YMSCO)

9:35 a.m. Questions and discussion

9:45 a.m. NARUC Views on the Program
Greg White, Staff Assistant
Michigan Public Service Commission

9:55 a.m. Questions and discussion
10:00 a.m. Nye County Drilling: Phase 2
Nick Stellavato, Nye County

10:10 a.m. Questions and discussion

10:15 a.m. BREAK (15 minutes)

Addressing Uncertainty
Session Chairman
Norman Christensen
Member, NWTRB

10:30 a.m. Uncertainty in Complex Analyses: Sources and Types
Daniele Veneziano, Massachusetts Institute of Technology

11:00 a.m. Questions and discussion

11:15 a.m. Decision-Making Under Uncertainty
D. Warner North, NorthWorks

11:45 p.m. Questions and discussion

12:00 p.m. LUNCH (one hour)

1:00 p.m. Regulatory Views on Uncertainty in Licensing a Yucca Mountain Repository
Budhi Sagar, Technical Director
Center for Nuclear Waste Regulatory Analyses

1:30 p.m. Questions and discussion

1:45 p.m. Addressing Uncertainty at Yucca Mountain: Overview
Abraham van Luik, YMSCO
- The different kinds of uncertainty and how they should be treated
- The display of uncertainty in a manner that best communicates its nature and extent
- Different ways of incorporating and considering uncertainty in decision-making

2:15 p.m. Questions and discussion

2:30 p.m. BREAK (15 minutes)

2:45 p.m. Panel Discussion: Addressing Uncertainty at Yucca Mountain
Previous speakers, State of Nevada, AULG, etc.
4:45 p.m. Public Comments
Jared Cohon
Chairman, NWTRB

5:00 p.m. Recess until Wednesday, January 26, 8:30 a.m.

Wednesday, January 26

Repository Safety Strategy
Session Chairman
Debra Knopman
Member, NWTRB

7:15 a.m. Continental Breakfast, Public and Board Members

8:30 a.m. Update on the Yucca Mountain Repository Safety Strategy
Jack Bailey, Management & Operating Contractor (M&O)

9:00 a.m. Questions and discussion

9:15 a.m. Application of Principal Factors: Seepage Studies
Bo Bodvarsson, Lawrence Berkeley National Laboratory (LBNL)

• How was seepage identified as a principal factor?
• How does seepage affect uncertainties in TSPA? What is the relationship between seepage and tunnel stability?
• What supporting data exist for estimating seepage?
• What are the goals for addressing uncertainties through additional studies of seepage? How (and when) will those goals be achieved?
• How much information on seepage does the DOE believe is needed to support the site recommendation? The license application?

9:40 a.m. Questions and discussion

9:55 a.m. BREAK (15 minutes)

10:10 a.m. Application of Principal Factors: Drip Shield Design
Thomas Doering, M&O

• How was drip shield performance identified as a principal factor?
• How do drip shields affect uncertainties in TSPA?
• What supporting data exist for projecting drip shield performance?
• What are the goals for addressing uncertainties by adding drip shields to the repository design? How (and when) will those goals be achieved?
• How much information about the drip shield design does the DOE believe is needed to support the site recommendation? The license application?

10:35 a.m. Questions and discussion

10:50 a.m. Simplified TSPA Capability

Mark Nutt, Golder Associates

11:20 a.m. Questions and discussion

11:35 a.m. Public Comments

12:00 p.m. LUNCH (one hour)

Scientific Programs Update
Session Chairman
Donald Runnells
Member, NWTRB

1:00 p.m. Update on Ongoing Work: Overview

Mark Peters, Los Alamos National Laboratory (LANL)

2:00 p.m. Questions and discussion

2:30 p.m. Natural Analog Studies

Ardyth Simmons, LBNL

2:50 p.m. Questions and discussion

3:00 p.m. Natural Analog Studies

John Stuckless, U.S. Geological Survey

3:20 p.m. Questions and discussion

3:30 p.m. BREAK (15 minutes)

3:45 p.m. Fluid Inclusions: Capabilities and Limitations

Robert Bodnar, Virginia Polytechnic Institute and State University

4:15 p.m. Questions and discussion

4:30 p.m. Fluid Inclusions: Results of Yucca Mountain Studies

Jean Cline, University of Nevada, Las Vegas
5:00 p.m.  Questions and discussion

5:15 p.m.  Busted Butte Studies and Update on Site-Scale Flow-and-Transport Modeling  
        Paul Dixon, LANL

5:45 p.m.  Questions and discussion

6:00 p.m.  Public Comments

6:15 p.m.  Closing Remarks and Adjournment  
        Jared Cohon  
        Chairman, NWTRB