

#### UNITED STATES NUCLEAR WASTE TECHNICAL REVIEW BOARD 1100 Wilson Blvd., Suite 910 Arlington, VA 22209

## Agenda

# Fall Board Meeting: Site-Suitability Issues

Alexis Park Hotel 375 East Harmon Las Vegas, Nevada 89109 Tel: (702) 796-3300 Fax: (702) 796-4334

#### Wednesday, October 12, 1994

8:00 A.M.	Welcome and opening remarks John Cantlon, Chairman Nuclear Waste Technical Review Board (NWTRB)
8:05 а.м.	Office of Civilian Radioactive Waste Management (OCRWM) FY 95 program and outlook Daniel A. Dreyfus, Director OCRWM
8:35 A.M.	Session introduction Clarence Allen, NWTRB
8:45 а.м.	<ul> <li>The process for determining site suitability</li> <li>Stephan Brocoum/Jane Summerson</li> <li>Department of Energy (DOE)</li> <li>What are the DOE's current views with respect to the site-suitability process: <ul> <li>Why is 10 CFR 960 still viable?</li> <li>Who will do site-suitability assessments?</li> <li>Who will review them, the National Academy of Sciences (NAS)?</li> <li>How will the DOE's "technical site-suitability" determination differ from what is submitted to the Nuclear Regulatory Commission (NRC) for a construction license? How is it distinct from overall site suitability?</li> </ul> </li> </ul>

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	— How will Nevada and other stakeholders be involved in these various phases?
	<ul> <li>What is the relationship between the environmental impact statement (EIS) and site-suitability determination?</li> <li>What is the difference in the level of performance assessment needed to support site suitability and that needed to support the EIS?</li> <li>How will Nevada and other stakeholders be involved in site-suitability assessment?</li> <li>How could deliberations of the NAS committee on standards affect site suitability?</li> <li>Expert judgment and peer review in site-suitability determination</li> <li>When and how will the different forms of expert judgment (such as formally elicited judgments, informal advise from individual experts, and peer review teams) be used?</li> <li>The use of outside (of the DOE and its contractors) expert judgment</li> <li>Status of DOE follow-up on recommendations from 1992 Expert Judgment Workshop</li> </ul>
10:05 а.м.	BREAK (15 minutes)
10:20 а.м.	<ul> <li>The NRC view of and its role in the DOE's site-suitability assessment Malcolm Knapp, NRC</li> <li>The NRC's role in site-suitability assessments made in compliance to 10 CFR 960</li> <li>The relationship between 10 CFR 960 assessments and assessments for licensing under 10 CFR 60</li> <li>Do 10 CFR 960 and 10 CFR 60 require different levels of data collection?</li> </ul>
10:50 а.м.	<b>Comments by the state of Nevada on the process of determining site suitability</b> Steve Frishman Nuclear Waste Projects Office

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11:45 а.м.	LUNCH (1 hour and 15 minutes) Comments by the Nuclear Energy Institute (NEI) on the process of determining site suitability Steven Kraft, NEI	
1:10 р.м.		
12:45 р.м.	<ul> <li>Exploration, testing, and data collection priorities for technical site-suitability determination and licensing, and their rationale</li> <li>Jean Younker</li> <li>Management and Operating Contractor (M&amp;O) — TRW Environmental Safety Systems, Inc. (TRW)</li> <li>The DOE's waste isolation strategy for Yucca Mountain</li> <li>— Conceptual model of how radionuclides will be prevented from harming the public and the environment</li> <li>— What are the roles of the different barriers and sub-barriers in this strategy?</li> <li>— What is the relative importance of these different barriers?</li> <li>— How much does this strategy depend upon regulations? For example, what would be the effect of a dose standard or a period of performance longer than 10,000 years?</li> <li>— How has the strategy evolved since the SCP?</li> <li>Features, events, or processes (potential disqualifiers) that could seriously challenge the viability of the Yucca Mountain site</li> <li>— What are they?</li> <li>— How easily can they be identified?</li> <li>Existing priorities for FY 95 and beyond and their rationale</li> <li>— What are they?</li> <li>— What are they?</li> <li>— What are they?</li> <li>— What are the underlying technical bases for these priorities?</li> <li>— How will they be implemented?</li> </ul>	

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	<ul> <li>Is thermal loading (e.g. site thermal-hydrologic properties) a DOE technical site-suitability issue? Will it be for the construction authorization application?</li> <li>What information and analyses, in addition to those used in determining technical site suitability, will be needed to support an application for construction authorization and a license to receive and possess nuclear materials in the repository?</li> <li>Future plans for setting priorities</li> </ul>
1:45 р.м.	The Belgian repository concept and the role of engineered and natural barriers J. Van Miegroet The National Agency for Radioactive Waste and Enriched Fissile Materials (ONDRAF/NIRAS)
2:45 р.м.	<b>Crystalline rock repository concepts and the role of engineered and natural barriers</b> Edward Patera Los Alamos National Laboratory (LANL)
3:20 р.м.	BREAK (15 minutes)
3:40 р.м.	<ul> <li>Round-table discussion on natural and engineered barriers and site suitability</li> <li>Moderator: Garry Brewer, NWTRB</li> <li>Participants: Stephan Brocoum (DOE), Malcolm Knapp (NRC), Steve Frishman (state of Nevada), Martin Steindler (Advisory Committee on Nuclear Waste-NRC), Chris</li> <li>Whipple (Board on Radioactive Waste Management-NAS), William Magavern (Public Citizen), James Curtiss (Winston and Strawn), Thomas Cotton (TRW), Willis</li> <li>Clarke (Lawrence Livermore National Laboratory), Julie Canepa (LANL), Felton Bingham (Sandia National Laboratories), Gene Roseboom (USGS), and J. Van Miegroet (ONDRAF/NIRAS), Edward Patera (LANL) Jean Younker (TRW)</li> <li>Opening presentations by selected participants (five minutes each)</li> </ul>

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	<ul> <li>Sample discussion topics:</li> <li>What are the regulations and guidelines with respect to limitations on the use of engineered barriers?</li> <li>To what extent can engineered barriers be used to mitigate adverse site conditions?</li> <li>To what extent can engineered barriers be used to reduce uncertainty in the performance of the natural barriers?</li> <li>How do the uncertainties in the performance of engineered and natural barriers compare over different periods of time?</li> <li>What are the advantages of redundancy or diversity among barriers?</li> <li>What are the limitations of analysis in defining optimal configurations of natural and engineered barriers?</li> <li>What types of events should be considered in defining the role of natural and engineered barriers?</li> </ul>
5:20 р.м.	Comments from the audience
5:25 р.м.	Summary remarks Clarence Allen, NWTRB
5:30 р.м.	<b>Closing remarks and adjournment</b> John Cantlon, Chairman, NWTRB