

Site Evaluation Process

**Presented to
Blue Ribbon Commission
Waste Disposal Subcommittee**

**Presented by
Dr. Robert W. Andrews
Principal Scientist
INTERA Inc.**

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Questions Posed by Blue Ribbon Commission

- ◆ **What were the drivers behind the scope of scientific work, and the associated cost and time, required for evaluation of the WIPP and Yucca Mountain sites?**
- ◆ **How can a future site evaluation process be designed to allow the many necessary and sometimes conflicting goals for site evaluation to be met in a credible way within a reasonable time and at a reasonable cost?**

Drivers Controlling the Required Scope of Work at Yucca Mountain

◆ Regulatory

- Regulations
- Quality Assurance

◆ Technical

- Design
- Performance Assessment
- Regulators
- Stakeholders
- Technical Reviews
- Unexpected Results

◆ Management

- Policy or legal risks
- Competition

Future Site Evaluation Process - Goal

- ◆ **Goal of any potential future site evaluation process should be to characterize the relevant and significant natural and engineered features, events and processes that affect the ability of the diverse engineered and natural barriers to meet the performance objective of protecting human health and the environment**
- ◆ **Credibility can be obtained by the objective review of pre-licensing and licensing products by independent technical groups including the regulator**
- ◆ **The reasonableness of cost and schedule is a function of a number of variables, not all of which are technical**

Future Site Evaluation Process - Design

- ◆ **Transparent and implementable regulatory objectives**
- ◆ **Stable QA program, including staff, with traceable flow down of requirements to processes and procedures**
- ◆ **Reasonably robust design concept(s)**
- ◆ **Analog and regional hydro-geo-chemical basis**
- ◆ **Site- and design-specific safety case concept**
- ◆ **Stakeholder involvement in iterative performance assessments identifying key features, events and processes**
- ◆ **Work plan and integrated schedule that is enforced using project management and control processes**