



Program Overview and Status

***Presentation to the
Nuclear Waste Technical Review Board***

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September 10, 2002***

Yucca Mountain Project Status Summary

- **The President signed the Congressionally approved resolution of repository siting approval on July 23, 2002, allowing the Department of Energy (DOE) to move forward to develop a license application (LA) for submittal to the Nuclear Regulatory Commission (NRC)**
- **We have embarked on the next phase of the Program**
 - **Budget and resources need to be enhanced to meet 2004 License Application and 2010 Waste Acceptance milestones**
 - **Ramp-up transportation planning activities**
 - **Establish a continuing science and technology program**
- **We are implementing management improvements consistent with the work to be done in this next phase**
- **Nuclear Waste Technical Review Board (NWTRB) input continues to be important to the Program**

Critical Elements for December 2004 License Submittal

- **Complete high-quality sustainable LA**
 - **Design**
 - **Post-closure Total System Performance Assessment**
 - **Pre-closure Safety Analysis**
 - **Testing and Evaluation including Performance Confirmation**
- **Licensing Support Network (LSN) certified no later than June 2004**
- **Ensure an effective Quality Assurance (QA) program**

Challenges for the December 2004 License Submittal

- **First of its kind**
- **Cultural sea-change from scientific investigations to a NRC-regulated (licensing culture) QA environment**
- **Timely resolution of NRC's Key Technical Issues and other open items**
- **Need to look ahead to critical activities after submittal: NRC review of LA**

Strategy for December 2004 License Submittal

- **Acquire adequate resources for LA development**
- **Build schedule contingency with Management Improvement Initiatives**
- **Clarify NRC expectations through interactions early and often**

Critical Elements for 2010 Waste Acceptance

- **Receive Construction Authorization in 2007**
- **Construct the repository and surface facilities by 2010**
- **Develop transportation capability to support planned 2010 waste acceptance (transportation plan to be completed in 2003)**
 - **Cask system acquisition**
 - **Operational readiness**
 - **Institutional interactions**
 - **Emergency preparedness**

Challenges for 2010 Waste Acceptance

- **Timely and effective response to highly rigorous license review**
- **Since transportation activities have been deferred for years, DOE needs to develop and implement a national transportation program**
- **Large increase in construction costs very difficult under current budget caps and system**
- **Ongoing litigation**

Strategy for 2010 Waste Acceptance

- **Acquire resources and systems to support LA and obtain construction authorization in 2007**
- **Consider phased approach for repository design and construction**
- **Implement long-term science and technology program**
- **Jump-start transportation planning**
 - **Initiate acquisition of long-lead specialty casks**
 - **Begin Section 180(c) process to ensure emergency preparedness is in place**
 - **Define fleet requirements**
 - **Reactivate institutional activities to address State and Tribal concerns**

Across-the-Board Challenges

Funding

- **Need adequate funding for near-term milestones and ability to manage long-lead-time requirements**
 - Request level \$527 million
 - Senate mark \$336 million
 - House Committee mark \$525 million
 - Timetable for House-Senate conference is unclear
- **Some additional funding possible under FY 2002 amendment**
- **Looking at life-cycle cost reduction and near-term reprioritization**

Management Improvement Initiatives

- **Committed to NRC to improve 5 areas:**
 - Roles, responsibilities, authority, and accountability
 - QA Program
 - Project procedures
 - Corrective Action Program
 - Safety-conscious work environment
- **Began implementing improvement initiatives in August 2002**

Science and Technology Program

- **Committed to developing a sustained program that:**
 - **Increases confidence in repository performance by reducing uncertainty**
 - **Enhances efficiencies and reduces life-cycle costs**
 - **Improves existing technologies and develops new ones**
 - **Maintains U.S. leadership in nuclear waste management**
- **Relationship to licensing:**
 - **May enhance confidence during LA review**
 - **Relevant information will be integrated into licensing-related activities as appropriate**
 - **Some activities may be implemented through the Performance Confirmation program**
- **A DOE task force was created in April to start the planning**
- **Initial funding in FY 2003 has not been determined**
- **NWTRB review and input will be a valuable component**

Summary

- **With the formal site designation of Yucca Mountain, a historical milestone was achieved -- and one which could not have been achieved without the hard work and dedication of many people**
- **As we move forward, we look forward to the comments of the NWTRB to help DOE improve its technical bases**
- **Science and technology program will be an important area for NWTRB review and comment**