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Yucca Mountain

Industry Perspectives on Yucca Mountain

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Yucca Mountain

- Nuclear energy is important to the nation's future
- Nuclear energy is poised for significant growth – propelled by strong economics and public/political support
- Yucca Mountain is a central element of all future scenarios – regardless of what fuel cycle is used
- For the Yucca Mountain licensing process to move forward:
  - DOE momentum towards licensing must be regained
  - Project must build on progress already made in the pre-licensing phase of the process
  - Standardized canister design modifications must be quickly and competently implemented
  - Regulatory expectations must remain stable and consistent with 10 CFR Part 63
- Progress on Yucca must be made to support nuclear energy growth

Popular Support for Nuclear Energy

Question: "Overall, do you strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of nuclear energy as one of the ways to provide electricity in the United States?"

The Larger Climate Surrounding Yucca Mountain

- Global Nuclear Energy Partnership (GNEP)
  - Paves way for future nuclear development on a global scale
  - Develops advanced fuel cycles
  - Yucca Mountain will be needed regardless of fuel cycle
    - *Not a substitute for near-term progress at Yucca Mountain*
- Legislation
  - Domenici/Administration expected proposal
  - Reid/Ensign/Bennett Hatch proposal
- FY ’07 Appropriations
  - DOE request of $544 million ($100 million increase) demonstrates commitment to move the project forward
- Nevada opposition continues
- The Office of Civilian Radioactive Waste Management is experiencing a period of significant change

Regaining Licensing Momentum

- Change Management
  - OCRWM must assure a smooth transition to new organization and lead lab
- EPA Standard
  - EPA and NRC need to complete rulemakings in expeditious manner
  - If a million year standard is to be included in the final rule, it must be implemented in as reasonable a manner as possible
- Licensing support network recertification
  - DOE and NRC have had plenty of time to address problems with initial DOE certification
- USGS e-mails and other Quality Assurance issues
  - DOE must respond in a competent, decisive, and timely manner
  - Response must be effectively communicated to public and political audiences

Building on What Has Already Been Accomplished

- An impressive pre-application record exists
  - FEIS and Science & Engineering Report
  - 256 closed Key Technical Issues
  - NRC December 2004 issue resolution status report
  - Independent performance assessments by NRC and EPRI
  - Multiple re-affirmations of DOE technical information
  - Critical examination by NWTRB and ACNW
- Therefore, changes to DOE's existing draft application should be limited
  - Modifications must address TADs and EPA Standard
  - Future program evolutions can be addressed in future amendments

Implementing Standardized Transportation, Aging, and Disposal (TAD) Canisters

- Industry supports the TAD initiative
  - Approach whereby DOE issues performance requirements and industry designs and builds the TADs in a competitive marketplace is workable
- DOE and industry (utilities and vendors) are engaged in a dialogue to address technical issues
- DOE issuance of performance requirements mid-2006 appears feasible
- Yucca Mountain license application should be based on TAD performance requirements with vendor designs added later as they become available

Regulatory Consistency

- 10 CFR Part 63 was designed from the ground up as a risk-informed, performance-based regulation specifically for Yucca Mountain
- 10 CFR Part 63 calls for a step-wise licensing process
  - "Part 63 provides for a multistage licensing process that affords the Commission the flexibility to make decisions in a logical time sequence that accounts for DOE collecting and analyzing additional information over the construction and operational phases of the repository." – NRC 10 CFR Part 63 (Public comment response, FR pg. 55739)
- NRC should not expect a level-of-detail that exceeds information "reasonably available" at the time of application
- Step-wise process is even more important given GNEP
  - Must first license today's Yucca Mountain to support the development of tomorrow's fuel cycles
  - Some existing material may not be reprocessed/recycled

Industry Focus

- Moving fuel – **As Soon As Possible**
- A high quality Yucca Mountain license application
- Effective implementation of standardized canister approach
- Achieving a successful legislative outcome
- Used fuel issues must not result in plant shutdowns or jeopardize licensing actions
- Adequate FY07 appropriations and long term funding
- Implementation of US Court of Appeals decision on EPA standard
- Transportation
- Defining the role and timing of advanced fuel cycles

Conclusion

- Yucca Mountain remains a national priority
- Industry continues to strongly support the program
- The Yucca Mountain licensing process must move forward
- Challenges can and must be met
- DOE and NRC must focus on Yucca Mountain licensing based on what is currently known
- Near-term progress on Yucca Mountain supports the expansion of nuclear energy which will lead to the development of advanced fuel cycles associated with a successful Global Nuclear Energy Partnership