Advancing the Used Fuel Management Agenda

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Industry Strategy

• New management entity
• Access to the waste fund and fees
• Completion of the Yucca Mountain licensing process
• Consolidated storage for commercial used fuel and DOE high-level waste
• Research, development and demonstration on advanced fuel cycles
• Support waste confidence rulemaking and eventual legislative determination
Consolidated Storage Program

2013: Begin design

2014: Restart NRC licensing and ASLB proceedings

2013: Reconstitute DOE and NRC programs

2016: License application submitted

2016: NRC construction authorization received and construction begins

2018: NRC license received and construction begins (estimated 18 months duration)

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2020: Construction completed and operations begin

2020: Construction completed and operations begin (max $2 billion/yr appropriated based on DOE 2007 estimate)

2026: Construction completed and operations begin (max $2 billion/yr appropriated based on DOE 2007 estimate)

2026: Construction completed and operations begin (max $750 million/year appropriated)

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2034: Construction completed and operations begin (maximum of $750 million/year appropriated)

2042: Construction completed and operations begin (maximum of $500 million/year appropriated)

Funding Scenarios

Cost: Pre-operation $490 million
Operation $108 million annually*

Cost: Restart/relicensing $800 million
Construction $12.4 billion
Operation $1.4 billion annually**

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Damage awards from taxpayer-funded Judgment Fund (billions)

2020: $20.8
2026: $23.8
2034: $27.8
2042: $31.8

The potential for delays due to additional NRC or Court proceedings was not considered


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* Based on EPRI report 1018722 "Cost Estimate for an Away-Form-Reactor Generic Interim Storage Facility (GSIF) for Spent Nuclear Fuel."

Yucca Mountain Timeline

1982 Nuclear Waste Policy Act (NWPA)

1987 NWPA amended – Site characterization narrowed to Yucca Mountain

1998 contractual deadline for DOE waste acceptance

2002 Yucca Mountain Development Act completes site characterization, begins licensing

2004, DOE misses commitment date for License Application (LA), initiates changes

June 2008 DOE submits LA

Feb. 2010 NRC staff questions on LA answered

Oct. 2010 Project Terminated
Impact of Lack of Federal Program

- Waste Confidence
  - NRC has halted new plant licensing until agency can address court ruling
- Over 1600 dry cask storage systems – doubling over the next 10 years
- Lack of confidence in federal government
- U.S. has lost leadership in international community
Who Pays?

• Rate payers
  - one mill/kWh - one tenth of a cent per kW/h
  - $750 million per year
  - Nuclear Waste Fund – more than $28 billion

• All taxpayers
  - Payments from taxpayer funded Judgment Fund from lawsuits
  - $21 billion by 2020
The Political Landscape

- Legislation will be considered in both Houses of Congress
- Senate – no deal that does not eliminate Yucca Mountain as an option
- House – no deal that does not include Yucca Mountain
Legislation Introduced

• 111th Congress
  - Voinovich and Upton on Fedcorp

• 112th Congress
  - Senator Murkowski – used fuel storage
  - Senators Feinstein, Alexander, Bingaman, and Murkowski – used fuel storage in approps
  - Senator Bingaman – Nuclear Waste Administration Act

• 113th Congress
  - Senators Wyden, Murkowski, Feinstein, and Alexander – Nuclear Waste Administration Act – discussion draft
Informing the Discussion

• More than half of the members of Congress have been in office for 6 years or less

• Industry Efforts
  - Legislative principles
  - Response to Senate discussion draft
  - Ongoing interaction with Congress and the Administration

• Stakeholders for Nuclear Waste Reform
Blue Ribbon Commission Report
DOE and Administration Strategy
Industry Strategy and Legislative Principles

Congress must now establish a sustainable program
Backup Slides
Background

• Blue Ribbon Commission
  - Studies were thorough
  - Recommendations were generally consistent with industry strategy

• DOE Strategy
  - Reaffirmed BRC recommendations
  - Does not address Yucca Mountain

• Broad consensus among major stakeholders
Blue Ribbon Commission Recommendations

- Consent-based approach to siting
- New organization to manage program
- Access to funds
- Prompt efforts on one or more repositories
- Prompt efforts on consolidated storage
- Prompt efforts to prepare to transport
- Support for innovation
- U.S. leadership (non-proliferation, security, etc.)
Consensus Among Major Stakeholders On BRC Recommendations

- National Association of Regulatory Utility Commissioners (NARUC),
- Nuclear Energy Institute (NEI),
- Nuclear Waste Strategy Coalition (NWSC)
- American Public Power Association (APPA)
- National Rural Electric Cooperative Association (NRECA)
- Edison Electric Institute (EEI)