



U.S. Department of Energy  
Office of Civilian Radioactive Waste Management



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Spent Fuel Management

# Office of National Transportation Update

Presented to:  
**Nuclear Regulatory Commission**  
**2006 Regulatory Information Conference**

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# 2005 Highlights

- In July, the Department of Energy (DOE) announced its decision to use dedicated trains for the usual rail transport of spent nuclear fuel when the repository is operational
- In December, the Department of the Interior (DOI) signed a Public Land Order granting a land withdrawal along the Caliente corridor
- Initial technical data collection along the Caliente corridor was completed in support of the Nevada Rail Alignment Environmental Impact Statement (EIS)



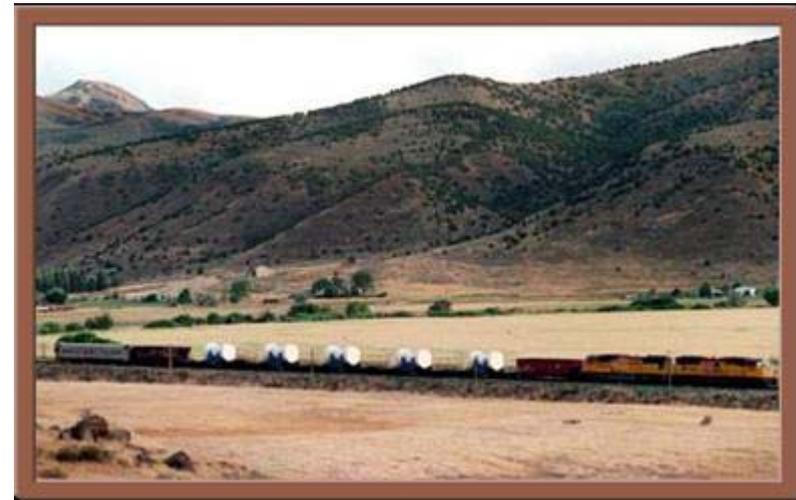
# 2005 Highlights (continued)

- **Consensus was reached on a revised approach to funding emergency preparedness training through Section 180(c) of the Nuclear Waste Policy Act**
- **Modeling of rail car suspension systems (trucks) was completed**



# Dedicated Train Service

- **Benefits of dedicated train service include system efficiency and operational control**
- **Enables Office of Civilian Radioactive Waste Management (OCRWM) to better manage resources**
  - **Avoiding lengthy “dwell times” in rail yards means shorter transit time**
  - **Increased command and control capabilities**
  - **Increased routing flexibility, operational control over the shipments**
  - **Shorter transit time provides more efficient use of assets**



# Land Withdrawal Along Caliente Corridor

- **A two-year segregation of public lands along the Caliente corridor that was granted in December 2003 was set to expire on December 29, 2005**
- **A Draft Environmental Assessment (EA) on land withdrawal was issued in August 2005**
  - **Three public meetings were held to receive comments on the Draft EA**
  - **Comments were addressed and the Final EA was assembled into a Case File that was submitted for a land withdrawal request in early December 2005**
- **DOI signed a Public Land Order on December 21, 2005**
  - **The Land Order withdraws the land along the Caliente corridor for 10 years.**



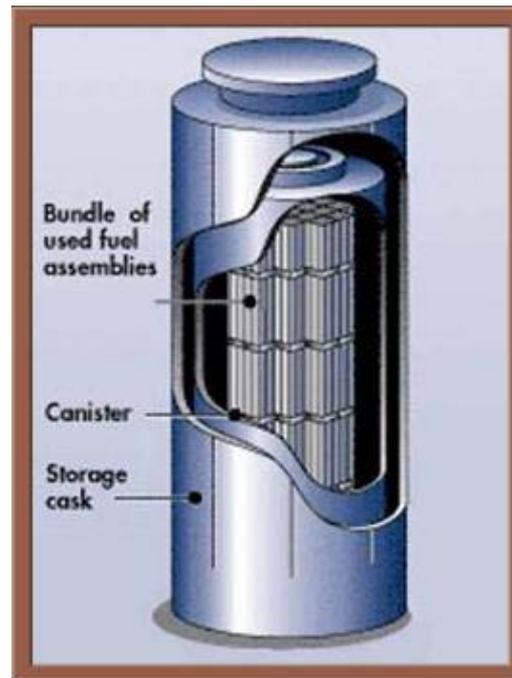
# 2006 Priorities

- **Focus on completing Draft Nevada Rail Alignment EIS**
- **Develop options for accelerating transportation schedules**
- **Continue working with State Regional Groups and tribes**
- **Coordinate with key stakeholders through the Transportation External Coordination Working Group regarding route selection criteria, 180(c) development, and security planning**
- **Update OCRWM section of *Radioactive Material Transportation Practices Manual***



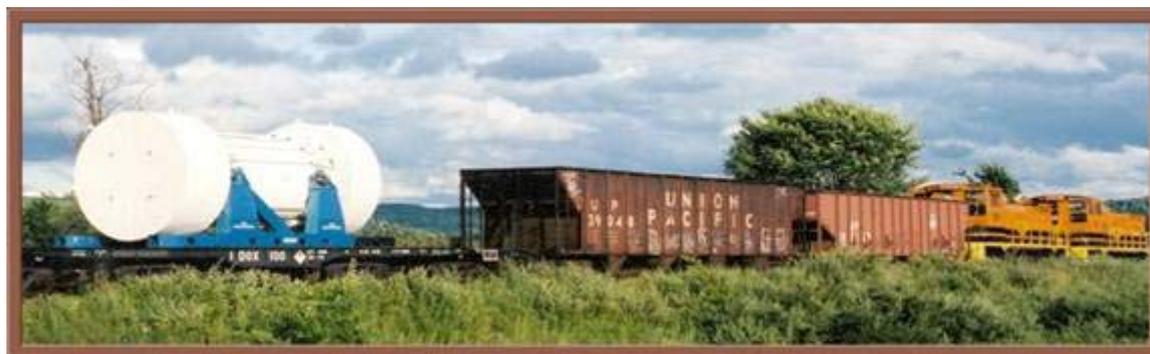
# Cask Acquisition

- **The repository is moving toward a clean-canistered design**
  - **Canistered systems would support transportation, aging, and disposal of commercial spent fuel**
  - **Performance-based technical specifications for these canisters are being developed**



# Rolling Stock Acquisition

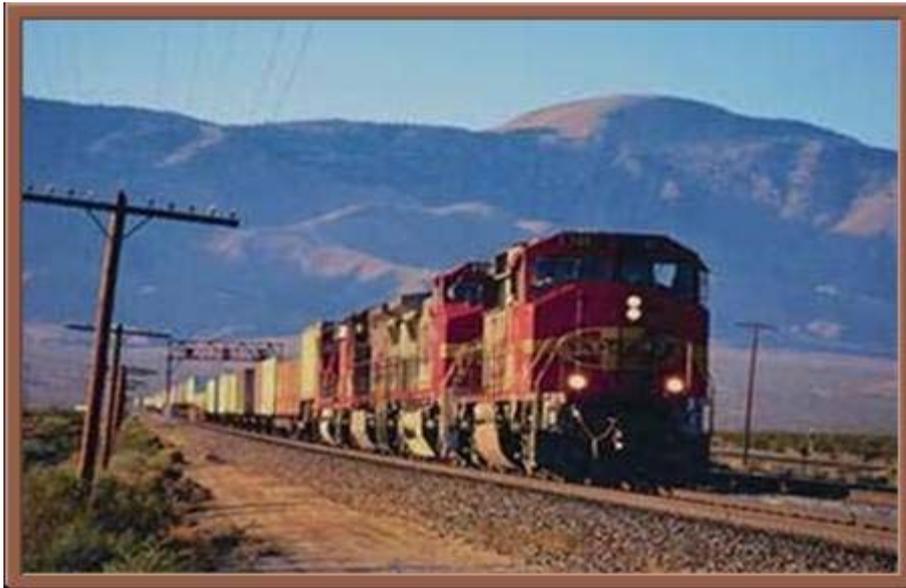
- **DOE has supported modeling of railcar suspension systems (trucks) with heavy loads**
  - Found that existing trucks can meet the desired performance standards
- **A decision will be made in the future either to procure a fleet of locomotives or to utilize locomotives supplied by the railroads**
- **Requests for proposals for conceptual design of prototype cask, buffer, and escort railcars are pending**



# Nevada Rail Development

- **Path Forward**

- Review and finalize technical data collected along the corridor
- Issue draft Rail Alignment EIS in FY 2006
  - ◆ Hold public hearings to obtain comments on draft Rail Alignment EIS



- Issue final Rail Alignment EIS in FY 2007
- Issue Record of Decision for rail alignment
- Final design and construction of the rail line



# ONT Institutional Activities

- **Path Forward**

- **Develop and issue revised Section 180(c) Policy**
- **Work with State Regional Groups to develop regional suite of routes**
- **Continue meeting with individual tribes to establish consultation and coordination mechanism on topics like Section 180(c) and routing**
- **Update *Radioactive Materials Transportation Practices Manual (DOE M 460.2-1)***
- **Open an office in rural Nevada to provide transportation information products and EIS interactions.**



# Operational Path Forward

- **Path Forward**
  - *Develop the Classification Guide for Secure Transportation of Nuclear Waste*
  - **Refine transportation logistics/routing models**
  - **Conduct operational and systems studies**



# The National Academies' Committee on Transportation of Radioactive Waste

- **Key points of *Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste***
  - The committee could find no fundamental barriers to the safe transport of spent nuclear fuel and high level radioactive waste in the United States
  - U.S. regulations are adequate to ensure package containment effectiveness over a wide range of transport conditions
  - The Department's choice of a mostly rail transportation mode and the use of dedicated trains were endorsed
  - Opportunities to manage social risks still exist



# Summary

- **ONT has made significant progress despite myriad challenges, including budgetary difficulties**
- **Infrastructure acquisition plans are moving forward in phases, emphasizing flexibility**
- **Transportation operations will continue to evolve over the life of the shipping campaigns**
  - **Continued development of the security envelope will affect operations**
  - **Institutional interactions will also affect operations.**

