Transportation Plan

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Overview

• Background
• Preliminary Draft Transportation Plan
• Contingency planning
• Approach to system development
• Equipment acquisition
• Operating system development
• Institutional activities
Office of Civilian Radioactive Waste Management

Background

• Mission

- transportation of:
  - spent fuel from reactors or storage sites to CRWMS facilities
  - spent fuel from MRS (if available) to repository
  - high-level waste from producer sites to repository
  - wastes from repository, if needed

- planning principles for the transportation program
  - protect public health and safety
  - provide for public participation
  - use private industry to the fullest extent possible
  - exercise cost effectiveness
Background (con't)

- Spent fuel shipping experience
- Nuclear Waste Policy Act
- Transportation Business Plan
- Transportation Institutional Plan
Transportation Plan

• Provides an overview of the transportation system

• Will replace the *Transportation Business Plan* and the *Transportation Institutional Plan*

• New program guidance and realignment incorporated

• Preliminary draft completed June 1994
  - distributed at Transportation Coordination Group meeting
  - comments due October 1994

• Planned as a “living document”
• Cask programs on schedule to provide transportation capability in the year 2000

• Approaches to meet earlier date if necessary
  - existing NRC approved casks
  - current technology casks
    - development and NRC certification of new cask designs using current technologies

• Operational structure - could use existing DOE traffic management
Systems Engineering Approach

• **Top-level document is the Civilian Radioactive Waste Management System Requirements Document**

• **Transportation system technical baseline documents**
  - Transportation System Requirements Document
  - Transportation Design Requirements Documents
  - Transportation-Related Interface Control Documents
  - Transportation Design Packages

• **Transportation System Operations Plan**
  - provides detailed concept of operations
Transportation System Architecture

- Transportation cask subsystems
- Planning and control
- Service and maintenance support
- Field operations
Transportation System Assumptions

- Consists of equipment, facilities, organizations, and activities required to ship spent fuel and high-level waste

- All surface modes will be considered

- Majority of spent fuel shipped in multi-purpose canisters by rail

- Some spent fuel will be shipped by truck due to handling constraints

- High-level waste shipped by rail
System Development Activities

- Hardware development and acquisition
- Operating system
- Institutional program
Cask Subsystem Development

- **Casks**
  - from-reactor
  - specialty
  - high-level waste
  - multi-purpose canister
  - transportable storage cask

- **Transporters**
Operational System Development

- Functions to be performed
- Operational structure
- Operational concepts
- Schedule and approach
Institutional Interactions

- Essential to promote understanding of OCRWM's transportation program

- Work together with stakeholders to ensure public safety and promote confidence

- Programmatic issues
  - Resolution results in management and administrative actions necessary to implement the program
Programmatic Issues and Activities

- Routing
- Section 180(c)
- Risk management
- Full-scale cask testing
- Advance notification to Indian tribes
- Inspection/enforcement