# **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



# 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"



# **Transportation Contingency Planning**

- 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

#### **Predecisional Draft**

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# 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
  - I 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