Used Nuclear Fuel Transportation
Responsibilities and Operations

NWTRB Panel on the
Waste Management System
January 21, 2004

John A. Vincent
Senior Project Manager, Waste Management

NUCLEAR ENERGY INSTITUTE
Used Nuclear Fuel Transportation

**NWPA Responsibilities**

- DOE OCRWM obligated to take all used nuclear fuel
  - Provide the transportation system and ship used fuel
  - Take title to utility used fuel at the plant gate
  - DOE will be shipper of record
- Utilities obligated to pay all costs of disposal and transport for commercial used fuel
- Utilities responsible to provide at reactor storage
- DOE to utilize private sector transportation services to the maximum extent practical
Used Nuclear Fuel Transportation

*NWPA Responsibilities*

- Utilities and DOE signed individual standard contract for disposal
  - Annual shipping allocations based on used fuel discharge dates and quantities
  - Utilities can select used nuclear fuel to be shipped in allocations
Used Nuclear Fuel Transportation

**DOE Responsibility**

- Conduct waste acceptance based on allocation schedules - Take title and transport
- Provide transportation casks certified by NRC and compatible with existing utility plant site infrastructure
- Select shipping routes and coordinate with states and tribes
- Provide security during transport
- Provide emergency response training assistance and funding to states and tribes
Used Nuclear Fuel Transportation

*Utility Responsibility*

- Provide contractual notice to DOE for location of used fuel and required mode of transport for annual waste acceptance allocations
  - Utilities may swap allocations
- Coordinate annual shipping schedule development with DOE, i.e. avoid plant scheduled outages
- Select used nuclear fuel to be loaded and shipped
Used Nuclear Fuel Transportation

Other Considerations

• DOE should comply with NRC and DOT transportation regulations

• Used nuclear fuel transportation programs benefit greatly from advance coordination and planning with all parties involved
  - Transport plans, Emergency response plans, Security plans, and Public outreach and communication plans

• Utility site review transport system compatibility with technical and license requirements of the reactor plant site.
Used Nuclear Fuel Transportation

DOE Transportation Program

- DOE should assure its transportation program will support operation in 2010
- DOE should confirm its preference for mostly rail
- DOE should begin its transportation planning and develop its transport system procurement needs

- Industry advocates the use of dedicated trains
- DOE should incorporate benefits of PFS planning and prior commercial and DOE shipping campaigns (WIPP and FRF)
Used Nuclear Fuel Transportation

DOE Transportation Strategic Plan

- Strategic plan issued in November
- An institutional plan for stakeholder interactions
- Utilizing regional groups as well as interacting with states and tribes is a positive step
- Industry would like additional detail, but the plan recognizes procurement, routing, emergency response, etc.
- Industry can update plant information when asked
Used Nuclear Fuel Transportation

*DOE Preferred Rail Corridor*

- Caliente identified as Nevada preferred rail corridor
- This is good news.
- The Secretary of Energy’s action is encouraging and timely allowing rail construction after license issuance
- Industry supports early publication of ROD for mostly rail mode selection and selection of the Caliente corridor and start alignment EIS activity
- Selection of the Caliente corridor is consistent with the NEI industry policy on used fuel transport
Used Nuclear Fuel Transportation

Summary

- Transportation system needed to support waste acceptance beginning in 2010.
- Transport Plan and Corridor Announcement are good news.
- DOE can benefit from significant private sector fuel and transportation knowledge and experience.
- Extensive transport planning and coordination is required among DOE and utility contract holders as well as states and tribes.
- Comprehensive and uniform transport regulations build in transport safety.
- Used nuclear fuel transport has been and will be SAFE.
NEI Contact Information

John A. Vincent
Senior Project Manager, Waste Management
202-739-8115
jav@nei.org
Nuclear Energy Institute
1776 “I” Street, NW
Suite 400
Washington, DC 20006
www.nei.org