MRMTC’s Compare and Contrast of SNF Shipments

• The information on the following page was gathered in part from the MRMTC’s Transportation Tabletop Workshop held in Indianapolis, Indiana, on November 13, 2019.
  • Workshop participants included representatives from the states of Michigan, Indiana, Illinois, Missouri, and Kansas; the NEI; the FRA; the NRC; and BNSF.

• Acronyms
  • MRMTC: Midwestern Radioactive Materials Transportation Committee
  • SNF: Spent Nuclear Fuel
  • NEI: Nuclear Energy Institute
  • FRA: Federal Railroad Administration
  • NRC: Nuclear Regulatory Commission
  • BNSF: Burlington Northern Santa Fe Railway
  • NWPA: Nuclear Waste Policy Act of 1982
  • DOE: Department of Energy
  • DOT: Department of Transportation
  • FMCSA: Federal Motor Carrier Safety Administration
  • AAR: Association of American Railroads
  • PHMSA: Pipeline and Hazardous Materials Safety Administration
DOE Shipments Under the NWPA¹

- Security: DOT
- Overweight permits: States
- Route designation (highway): States
- Inspection requirements: Federal and States
- Preplan and coordinate with states: DOE, NRC
- Route identification (rail): DOT-PHMSA, NRC
- Route identification (highway): DOT-FMCSA, NRC
- Safety Compliance Oversight Plan (SCOP): DOT-FRA
- Escort requirements (security, safety): DOE, NRC
- Notification to Canada of shipment affecting the Great Lakes: Great Lakes Water Quality Agreement, Article 6
- CVSA Level VI Inspection (truck): DOT-FMCSA
- Required to have tracking system: DOE, NRC
- Continuous monitoring: DOE, NRC
- Advance notification: NRC²
- Package approval: NRC³
- State fees: States
- S-2043 railcar will be used: AAR

¹DOE has agreed to meet and/or exceed all NRC regulations, and is required to follow US DOT regulations
²NWPA Section 180(b)
³NWPA Section 180(a)

Licensee Shipments

- Route sharing: 2 weeks in advance; NRC
- Not required to share entire route(s) with states
- Aiming for 2023 shipments, pending CISF approval
- Licensee is fully responsible throughout shipment
- Standard Contract doesn’t apply
- NRC approval of routes

State Regional Group coordination: DOE
Curfews/key dates to avoid: States
DOE has their own dedicated tracking system: TRANSCOM
Additional carrier/driver requirements: DOE
Route sharing: 5 years in advance; DOE
Standard Contract applies
Licensee provides properly loaded SNF packages to DOE at the site boundary
NRC approval of routes not required

Funds for training: NWPA Section 180(c)
Public outreach: DOE
TEPP training: DOE

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