PHYSICAL PROTECTION OF SPENT FUEL SHIPMENTS: RESOLUTION OF STAKEHOLDER CONCERNS THROUGH RULEMAKING- 12284

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• Development of the issue

• Extra-rulemaking issues

• Past testing programs

• Nevada concerns about full-scale cask testing

• Nevada recommendations

Regulatory Action
NRC issued its first regulations in 1979, and adopted the current system of regulations (10CFR73.37) by rulemaking in 1980.

Nevada’s petition (PRM-73-10), filed by the State Attorney General, published in the *Federal Register* on September 13, 1999.

2001 Terror Attacks

In October 2010 the NRC published its proposed rule.

In January 2012, the NRC published its final rule.
As noted earlier, the State of Nevada strongly endorses the NRC final rule (10 CFR 73.37)

There have been significant changes in the threat environment, which affect both current and future SNF and HLW shipments.

Nevada believes that the revised rule reflects more realistic assessments of changes in the threat environment since the terrorist attacks of September 11, 2001
Nevada documented vulnerability of shipping casks to high-energy explosive devices and differences in the shipping environment (changes in numbers and duration).

Most of the regulatory changes requested by Nevada are adopted in this rulemaking.

Agreement:
Item 2: Definition of radiological sabotage
Item 3: Efforts made to reduce vulnerabilities
Items 4 & 5: Armed escorts
Item 6: Preplanning
Three Nevada’s requests, rejected by the Commission, have been resolved through other proceedings and developments:

- Item 1 changes to the design basis threat
- Item 7 mandatory use of dedicated trains
- Item 8 comprehensive assessment of attack consequences

Nevada Endorsement
• Regulatory status of DOE shipments

“If DOE takes custody of the spent fuel at the licensee’s site, DOE regulations would control the actual spent fuel shipment. Under such circumstances, the NRC’s primary role in transportation of spent fuel to a repository would be certification of the packages used for transport. … However, if NRC licensees are responsible for shipping the spent fuel not only must the transport container be certified by the NRC, but also the shipment must comply with NRC regulations for the physical security of spent fuel in transit (10 CFR Part 73).”

Future Issues

• Route selection
• Pre-planning for shipments
• Physical protection program
Conclusions

- The threat environment has dramatically changed since 1999, and the policy environment has changed accordingly.

- Nevada’s petition and the resulting NRC rulemaking and final rule led to a satisfactory resolution of the State's concerns.

- Stakeholder concerns can be resolved through rulemaking.

- DOE can and must engage Stakeholders regarding future shipments.

Spandrel anti-tank missile used as roadside IED.