Waste Acceptance

Presented to:
Nuclear Waste Technical Review Board

Presented by:
David K. Zabransky
Waste Management Office
Office of Civilian Radioactive Waste Management (OCRWM)
U.S. Department of Energy (DOE)

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The License Application (LA) Analyzes the following Waste Types and Volumes:

Waste Type	Assemblies/Canisters	Metric Tons of Heavy Metal (MTHM)
Commercial Spent Nuclear Fuel (CSNF)	~221,000 / 7,500[1]	63,000
Commercial High Level Waste	275	
Defense High Level Waste	~9,300	4,667
DOE Spent Nuclear Fuel	~3,500	2,268
Naval Spent Nuclear Fuel	400	65
Total		70,000

Note 1 – Transportation, Aging and Disposal Canisters

TAD Availability

- Final Transportation Aging and Disposal (TAD) Canister System Specification was issued in June 2007 and design proposals were submitted to Office of Civilian Radioactive Waste Management (OCRWM).
- Two contracts were awarded to NAC International and AREVA Federal Services in May 2008 to continue the development of TAD Canisters.
- TAD Canisters are expected to be commercially available in 2013.
- Any other cask vendor may proceed with the design and licensing of a TAD System in accordance with the TAD Specification.

Basis for the Assumption of 90% TADs

- Based on commercial site cask handling capabilities from 2005 OCRWM Facility Interface Data Sheet.
- Sites with rail cask handling capability (including shutdown sites with pool and Morris) assumed to load TAD canisters .
- CSNF in non-canistered dry storage assumed to be loaded into TAD canisters for shipping.
- TADs available for dry storage at reactor sites by 2013.

Basis for the Assumption of 90% TADs

- **Possibility that a Nuclear Regulator Commission-licensed 3rd party could load TAD canisters from bare CSNF transported from commercial sites.**
- **With the increasing need for dry storage at reactor sites, there has been a trend to upgrade cask handling capabilities to handle large canisters – we expect this trend to continue in the future.**

Plan for Packaging and Shipping DOE HLW/SNF

- **Per OCRWM-DOE Environmental Management (EM) agreement, EM is responsible for preparing DOE HLW and SNF.**
  - **Only DOE wastes packaged in "standard" DOE SNF canisters and HLW canisters will be accepted.**
- **OCRWM is responsible for providing transportation casks for shipping DOE HLW and DOE SNF canisters to repository.**
- **Repository will not accept hazardous waste as defined by the Resource Conservation and Recovery Act.**

Summary

- The License Application is based upon a capacity limit of 70,000 MTHM.
- Current expectation that TAD Canisters will be commercially available in 2013.
- TAD Canister utilization assumed to be ≥ 90%.
- EM is responsible for the preparation and packaging for shipment of DOE HLW and SNF; OCRWM is responsible for providing the transportation cask and transporting the DOE HLW and SNF to the repository.