Waste Acceptance

Presented to:
Nuclear Waste Technical Review Board

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

<table>
<thead>
<tr>
<th>Waste Type</th>
<th>Assemblies/Canisters</th>
<th>Metric Tons of Heavy Metal (MTHM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Spent Nuclear Fuel (CSNF)</td>
<td>~221,000 / 7,500(^1)</td>
<td>63,000</td>
</tr>
<tr>
<td>Commercial High Level Waste</td>
<td>275</td>
<td></td>
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<tr>
<td>Defense High Level Waste</td>
<td>~9,300</td>
<td>4,667</td>
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<tr>
<td>DOE Spent Nuclear Fuel</td>
<td>~3,500</td>
<td>2,268</td>
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<tr>
<td>Naval Spent Nuclear Fuel</td>
<td>400</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70,000</strong></td>
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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 $\geq 90\%$.
- 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.