

Used Fuel Disposition Campaign

DOE Spent Fuel Storage and Transportation Research Activities

Roundtable Discussion

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Used Fuel Disposition

Gap Analysis to Support Extended Storage of UNF FCRD-USED-2011-000136

| Gap | Priority | Gap | Priority |
|--|----------|--|----------|
| 1. Thermal Profiles | 1 | 14. Neutron poisons – Thermal aging | 7 |
| 2. Stress Profiles | 1 | 15. Moderator Exclusion | 8 |
| 3. Monitoring – External | 2 | 16. Cladding – Delayed Hydride Cracking | 9 |
| 4. Welded canister – Atmospheric corrosion | 2 | 17. Examination of the fuel at the INL | 10 |
| 5. Fuel Transfer Options | 3 | 18. Cladding – Creep | 11 |
| 6. Monitoring – Internal | 4 | 19. Fuel Assembly Hardware – SCC | 11 |
| 7. Welded canister – Aqueous corrosion | 5 | 20. Neutron poisons – Embrittlement | 11 |
| 8. Bolted casks – Fatigue of seals & bolts | 5 | 21. Cladding – Annealing of radiation damage | 12 |
| 9. Bolted casks – Atmospheric corrosion | 5 | 22. Cladding – Oxidation | 13 |
| 10. Bolted casks – Aqueous corrosion | 5 | 23. Neutron poisons – Creep | 13 |
| 11. Drying Issues | 6 | 24. Neutron poisons – Corrosion | 13 |
| 12. Burnup Credit | 7 | 25. Overpack – Freeze-thaw | 14 |
| 13. Cladding – Hydride reorientation | 7 | 26. Overpack – Corrosion of embedded steel | 14 |

