

Used Fuel Disposition Campaign

DOE Spent Fuel Storage and Transportation Research Activities

Roundtable Discussion

Sylvia Saltzstein, Sandia National Labs
Manager, Used Nuclear Fuel Storage and Transportation
Technologies

Reg Con 2015
November 18, 2015
NRC White Flint

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

[illegible]