

Suggestions and Recommendations to Nuclear Waste Technical Review Board June 13, 2018

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Thirty Years since the NWSA Amendments Act of 1987

- Established the NWTRB
- Focused Program On Yucca Mt. Site- provided 10 more years for program to 1998
- Authorized agreement States for LLW Disposal

Report of the Blue Ribbon Committee

- Stronger Role for Local Agencies in HLW Disposal Site selection

My Recommendations and Strong Suggestions- Negotiate a Broader charter for the NWTRB; Take a broader look at the major decisions and requirements that define the national program.

- Eliminate the 1 Million years licensing time Frame- 1 Million years, 6-8 ice ages-DDATTS
 - Don't Dispose spent Fuel- separated waste can be tailored to 10,000 year hazard
 - Preserve the Resource Value in spent Fuel, reduce/eliminate decay heat issues
 - Use Yucca Mt. for Reprocessed Waste only
 - Some defense waste does not require repository; regional storage will be attractive, and will minimize transportation costs, and public objections
- Transport Spent Fuel to locations where reprocessing is possible-sites of future energy parks
 - Subsidize on site storage of spent fuel at existing reactor; keep Nuclear plants as backup power better than batteries, flywheels, or pumped storage hydro- Submarine example
 - Highest near term priority- Small reactors to assist Electro Magnetic Pulse recovery, and supply emergency core cooling capability to prevent meltdown of reactors after EMP
- Make Fast Reactors an integral part of waste disposal program
 - Fast reactors, breeders or burners, can transmute the long lived radionuclides
 - On site processing and recycle in systems like PRISM can minimize proliferation risk and transportation impacts.
 - Plan for a multi decade Fast reactor program that will permit Fast Reactor design maturation