U.S. Nuclear Waste Technical Review Board (NWTRB)



Ron Latanision, Member
Board Meeting, May 18, 2004
Washington, DC

The Board

- 11 scientists and engineers
 - appointed by President from list of NAS nominees
 - from fields related to nuclear waste disposal
 - part-time on Board
- Evaluate scientific and technical validity of DOE's activities in HLW & SF
- Make reports to DOE and Congress
- Board does not:
 - Make or enforce regulations
 - Advise EPA or NRC or DOT or any entity except DOE and Congress
 - Do experimental or design work

Issue

- All conditions necessary to initiate crevice corrosion of Alloy 22 will likely be present during the thermal pulse
 - Brines (deliquescence of salts in dust)
 - High temperatures
 - Data showing crevice corrosion initiation likely under such conditions

Reasons not to Use PA to Dismiss Corrosion Concerns

- More difficult to achieve fundamental understanding at high temperatures
- Avoid compromising an important barrier
- Better engineering sense to avoid the problem if possible
- Uncertainty in estimating the consequences of crevice corrosion
- Safety case based on multiple lines of evidence is needed