Interim Storage of Used Nuclear Fuel – Private Fuel Storage Perspectives

John L. Donnell
Background from the Early Days

• Nuclear Waste Policy Act of 1982, as amended, mandated permanent geologic disposal of Spent Nuclear Fuel (now called Used Nuclear Fuel)

• The 1987 amendment to the Act that designated Yucca as the sole site being considered also created the Nuclear Waste Negotiator (1987 – 1994) where the Federal Government sought voluntary candidate sites to consider hosting an alternate repository or for temporary storage of spent fuel (MRS)
  – Among others, the Skull Valley Band of Goshute Indians in Utah participated in this program

• At about the same time as the volunteer siting program was terminated and Yucca was not on the horizon, a nuclear utility consortium was looking for a suitable volunteered site to host an interim storage facility. This effort became known as the Private Fuel Storage Project.

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Consent Based Siting – circa 1995

• Of some interest today, the NRC EIS documents the national siting process used by PFS to find a volunteered site
  (REF: NUREG-1714, Vol 1, Chapter 7)
  – Based on volunteered sites responding to the Nuclear Waste Negotiator or direct offerings to PFS (20+12=38 total)
  – Evaluation Questions / Site Selection Questionnaire utilized to support the decision making process to down-select to one candidate site area with two potential sites on the Skull Valley Band of Goshute Reservation

• The Skull Valley Band of Goshute Indians reached a Cooperative Agreement with PFS to pursue the Interim Storage Project “on the way to Yucca”

• Project participants
  – Skull Valley Band of Goshutes
    • Reservation 55 miles west of Salt Lake City, Utah
  – 8 Utilities As Equity Partners
Where was Private Fuel Storage?
Site Overview
What Could Have Been……..
“Start Clean / Stay Clean” Philosophy

• Allows reuse of the land and all buildings after decommissioning of the facility
• Canisterized storage system eliminates the need to handle individual fuel assemblies at the facility
• Only commercial nuclear UNF would be accepted
  – Deliberate separation from DOE to not cloud Yucca progress
• Usage of the facility was governed by a confidential business agreement that defined PFS and Customer roles and responsibilities
• License Application submitted June 20, 1997
• License (SNM-2513) issued February 21, 2006
What Happened to PFS?

- Final site area lease contingent on completion of the EIS; receipt of an NRC license; and incorporation of EIS mitigation measures into the lease - completed January 2002
- Congress created a wilderness area using the Defense Authorization Act of 2006 that blocked the rail corridor leaving only the alternate intermodal truck haul route as the transportation route
- DOI denied the site area Lease (BIA) and rights-of-way for the rail corridor and intermodal point (BLM); September 2006
- Federal District court ruled in July 2010 actions taken were “arbitrary, capricious, and an abuse of discretion”

[US District Court 07/26/10 on DOI ROD’s dated 9/27/06]
- BIA (site area) and BLM (Intermodal Transfer Point) leases remanded back to DOI for further action
What did we learn from the PFS Experience?

- PFS started its siting process in 1996; received a NRC license in 2006; and was still in Court in 2010
- 14 years is too much time = Change is inevitable
- Comparing then to now……..
  - Almost all NPP’s have Interim on-site dry storage of UNF
  - On-going damage claims against DOE by these same utilities continue unabated ($2.6B to date)

Today…….With the possible exception of shutdown plants, there is little if any utility incentive to use interim offsite storage unless DOE takes title to the Used Nuclear Fuel
What is the Ultimate Lesson?

• From PFS, we can see that complying with regulations and the resulting legal process is not enough to get across the finish line

• **So What is the Answer………Consent Based Siting**
  – A siting process based on strong Local and State support through education and negotiation for a binding Host Agreement

• Obtaining and **Maintaining** Consent is critical; time is not your friend
  – But who gives it?
    • Can “Consent” start locally and then rally support upward to the State and Federal level?

OR

• Is it the opposite? Must it start first at the State / Federal level in consultation with local interested parties?

• We will see………..Maybe soon………. 