D24. DECOMMISSIONING PLANNING WHEN THERE'S NO PLACE TO PUT WASTE (PART II)

LLW Management: Even if LLW disposal is not available at the start of decommissioning, the DECON alternative can remain as a possible alternative. In that case, LLW could be stored on-site until access to a LLW disposal facility becomes available.

The following are examples of approaches that are routinely used to reduce the amount of LLW for interim on-site storage:

- 1) Contaminated equipment can be offered as surplus material for use by others.
- 2) Contaminated metals can be melted and recycled for use as shielding material, to fabricate containers for LLW or to be stored on-site as billets.
- 3) Burn contaminated waste oils on-site.
- 4) Off-site volume reduction facility used to decontaminate, compact or incinerate LLW.

Instead of building an interim onsite LLW storage facility, the Radioactive Waste Building (RWB) of a NPP could be used to store LLW, as may be required to support decommissioning. A RWB often can be suitable for storing decommissioning LLW because the design basis was to perform the functions of a LLW storage and shipping facility as well as a LLW treatment facility. Use of a RWB for storage LLW then can be considered as a continuation of its original function.

Conclusion:

An ISFSI may be necessary if spent fuel pool capacity is exceeded. Even if the capacity is not exceeded, the benefits of an Independent Spent Fuel Storage Installation (ISFSI) could justify the capital investment especially when the NSF storage duration becomes protracted. With all fuel removed from the spent fuel pool, decommissioning planning and implementation would benefit from the resulting simpler procedures, operations, and security.

LLW generated during NPP operation while LLW disposal is unavailable can be minimized using available methods to reduce on-site storage requirements. Without LLW disposal, decommissioning must be delayed or LLW must be accommodated on-site. If interim on-site LLW storage space is needed, the RWB may be suitable to provide extended storage for even a large volume of decommissioning waste.

For more, "Decommissioning Planning When There's No Place to Put the Waste," pg. 16, Nuclear Plant Journal, January-February 1996.