CIS Development Project: Eddy-Lea Energy Alliance LLC

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Holtec & ELEA, LLC’s Vision for a Centralized Interim Storage Facility

By: John Heaton, Chairman, Eddy-Lea Energy Alliance
Who is the EDDY-LEA Alliance?

- Alliance of the Cities of Carlsbad & Hobbs, and the Counties of Eddy Lea
- Formed Under the Local Economic Development Act (LEDA) for Economic Development in 2006 & to Respond to Global Nuclear Energy Partnership (GNEP) Proposal from DOE
- ELEA purchased 1,000 acres of land approximately halfway between Carlsbad and Hobbs, N.M. for potential use
Why the ELEA Site?

- Land studied extensively during Global Nuclear Energy Partnership (GNEP) process
- Remote location
- Geologic stability
- Dry area
- Infrastructure present, including rail
- Preexisting robust scientific and nuclear operations workforce
- STRONG CONSENT FROM AREA
SE New Mexico’s Nuclear Corridor
Conclusion

- CIS is a viable short-term solution for SNF
- There are no technical impediments
- Holtec UMAX System is Certified by the NRC
Questions
HI-STORE: A Consolidated Interim Storage Facility for Used Nuclear Fuel and HLW

By: Pierre Oneid, Senior Vice President & Chief Nuclear Officer
Holtec International
How Private Initiative Can Contribute

- Provide an unprecedented opportunity to DOE to make good on the government’s long standing promise to defuel nuclear plant sites
- Supplements long-term repository contemplated by DOE
- Allows removal of used fuel from reactor sites much sooner than awaiting a repository
- Provide a highly cost efficient away-from-reactor storage mode
- Eliminate the stakeholder and political challenges associated with reactor-site used fuel storage by relocation to a site that has strong local and state consent and support
Holtec & ELEA Team

- **Holtec International**
  - U.S. Company with U.S. manufacturing
  - Advanced dry storage technology
  - Experience in licensing fuel storage facilities

- **Eddy-Lea Energy Alliance, LLC**
  - Long-standing alliance of the Cities of Carlsbad & Hobbs and the Counties of Eddy & Lea
  - Formed in 2006 under New Mexico’s Local Economic Development Act

Holtec Heavy Manufacturing Center, Camden, NJ
HI-STORE Site Location

- 1,000 acres: Geologically stable, dry, elevated land
- Developed infrastructure: electric, water, roads & rail
- Remote location:
  - 35 miles from nearest town
  - Midway between Carlsbad & Hobbs, NM
- Populace: Robust scientific & nuclear workforce
- Strong support:
  - Local communities
  - State and Local government
HI-STORE Characteristics

- Holtec’s Below grade Dry Storage Technology
- Canister is entirely below grade
- Designed store canisters up to 75 ¾ inches in diameter, and up to 213 inches tall
- Will store any US-origin commercial nuclear fuel currently packaged in dry storage canisters, or stored in the nation’s fuel pools
- No repackaging of fuel required
HI-STORE Characteristics

- Operational Advantages
  - Single System
  - Canister placed into storage or removed in less than one shift

- Maximizes Security
  - Facility is visually inconspicuous
  - Profile < 2 ft tall
  - Less visible target from the air
  - Reduced visibility from public land
  - No area of obstructed view

- Maximizes Safety
  - Minimize dose to environment & crew
  - Virtually immune to environmental disasters - hurricanes, floods, tornados, earthquakes
  - Designed to withstand crashing aircraft or on-site fire without any radiological consequences
HI-STORE Site Layout

- Total Storage Capacity 10,000 canisters
- Initial Storage Capacity 500 canisters
- Facility utilizes 500 of the 1000 acres available
- Operations could commence 2022
Two Part Approach to Licensing

Part 1. HI-STORM UMAX FSAR Amendment

- August 2016 Submitted HI-STORM UMAX License Amendment:
  - ✔ Added NUHOMS 24PT1 canister for vertical storage
  - ✔ Standard HI-TRAC (transfer cask) and HI-STORM UMAX designs are utilized for NUHOMS canisters
- In succession update HI-STORM UMAX certificate to:
  - ✔ Add canisters from specific shutdown / decommissioned plants
  - ✔ Add all canisters licensed to store SNF
Two Part Approach to Licensing

Part 2. Site Specific License Application

- Pre-submittal Meeting Dec 6, 2016: Environmental Report focus
- Pre-submittal Meeting February 1, 2017: Outline of the SAR focus
- NRC audit February 22&23, 2017: pre-application audit of Holtec’s HI-STORE application
- March 31, 2017: Submitted Site Specific License Application per 10 CFR 72
  - Initial application - 500 canisters
  - Future amendments for additional canisters up to 10,000
  - Reference the amended HI-STORM UMAX Certificate and FSAR for technical details