Holtec’s Vision for a Centralized Interim Storage Facility

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Holtec’s Dry Storage & Transport Expertise

• Holtec offers a complete line of equipment for dry fuel storage and transportation

• 73 plants worldwide (48 in the U.S.) are under contract for use of Holtec’s dry storage systems

• Over 550 Holtec canisters have been successfully loaded
  – This number grows by 70-90 canisters per year
Holtec’s Interim Storage Experience

- Holtec gained valuable experience by supporting the licensing of PFS
- Holtec’s above ground storage system was approved for use
- Over 4,000 systems were expected to be used
- Demonstrated integrity even considering aircraft impact (F-16)
Why Do We Need Centralized Interim Storage?

- The path to a repository is uncertain
- CIS more than pays for itself
- Recommended by the BRC
- At 9 decommissioned sites, the SNF is all that prevents from releasing the land to other uses
- CIS is the shortest path for DOE to begin taking SNF and reduce the amount the government pays as a result of lawsuits (currently projected at $500M/yr. by 2020)
- Provides the most flexibility for recycling, research, and disposal
What is Holtec Doing?

• HI-STORM UMAX

  – Underground Storage System
  – Based on an already certified design - the HI-STORM 100U
  – Offsite doses are negligible
  – Provides the added security against aircraft and other radiological sabotage
  – Increased efficiency associated with standardization
  – An excellent solution for an ISFSI or CIS facility
Underground Maximum – “UMAX”

Purpose-specific casks allow for optimized transfer, storage, and transport of the canisterized spent fuel.

- HI-STORM FW*
  System Certified Components:
  - HI-STORM Overpack
  - HI-STORM VVM
  - MPC-37
  - HI-TRAC VW*

- HI-STAR 190
  Transport Package

*FW – Flood and Wind
*VW – Variable Weight
Constituent Parts of the VVM

- Closure Lid
- Cavity Enclosure Container (CEC)
- Divider Shell
MPC BEING LOWERED INTO THE VVM
• Holtec plans to certify a system called HI-STORM CIS
  – “CIS” is essentially a double capacity UMAX
    – MPCs are stacked vertically underground
    – Minimizes the site footprint
    – Reduced construction and operating costs
    – Ultra secure (e.g. against aircraft impact)
HI-STORM CIS – A Closer Look

HI-STORM CIS loaded with single canister

Centering and Spacing rings

HI-STORM CIS loaded with two canisters
Turning Plans into Actions
(Who will do the heavy lifting?)

- Holtec will support the prompt development of one or more consolidated interim storage sites
  - Holtec is ready to partner with one or more communities to design and license a CIS
  - Holtec believes an interim storage facility makes technical and economic sense
  - CIS provides flexibility to deal with SNF in the future (recycling, research, cooling prior to shipment to repository)
Turning Plans into Actions (continued)

• Holtec supports the BRC’s recommendations
  – We urge Congressional action to adjust the NWPA to allow for an interim storage facility
  – A new waste management organization with access to the NWF is essential
  – We support the consent based approach for siting, recognizing that Congress must act to provide incentives for potential host communities
  – Potential host communities should dialog now with DOE on how they might meet the consent based standard
Conclusions

- CIS is a viable short-term solution for SNF
- A facility could be available in a few years
- There are no technical impediments
- Holtec is certifying the needed systems now
- Holtec seeks to partner with host communities