

Holtec's Vision for a Centralized Interim Storage Facility

INMM Spent Fuel Seminar January 16, 2013

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a generation ahead by design



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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



Rendering of Private Fuel Storage

 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?

H O L T E C international

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• 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

<u>Underground Maximum – "UMAX"</u>





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

- a generation ahead by design
 - HI-STORM FW* System Certified Components:
 - HI-STORM
 Overpack
 - HI-STORMVVM
 - MPC-37
 - HI-TRAC VW*

HI-STAR 190 Transport Package *FW – Flood and Wind

*VW – Variable Weight

Constituent Parts of the VVM





HI-STORM UMAX VVM





MPC BEING LOWERED INTO THE VVM





What's Next? HI-STORM CIS





- 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





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