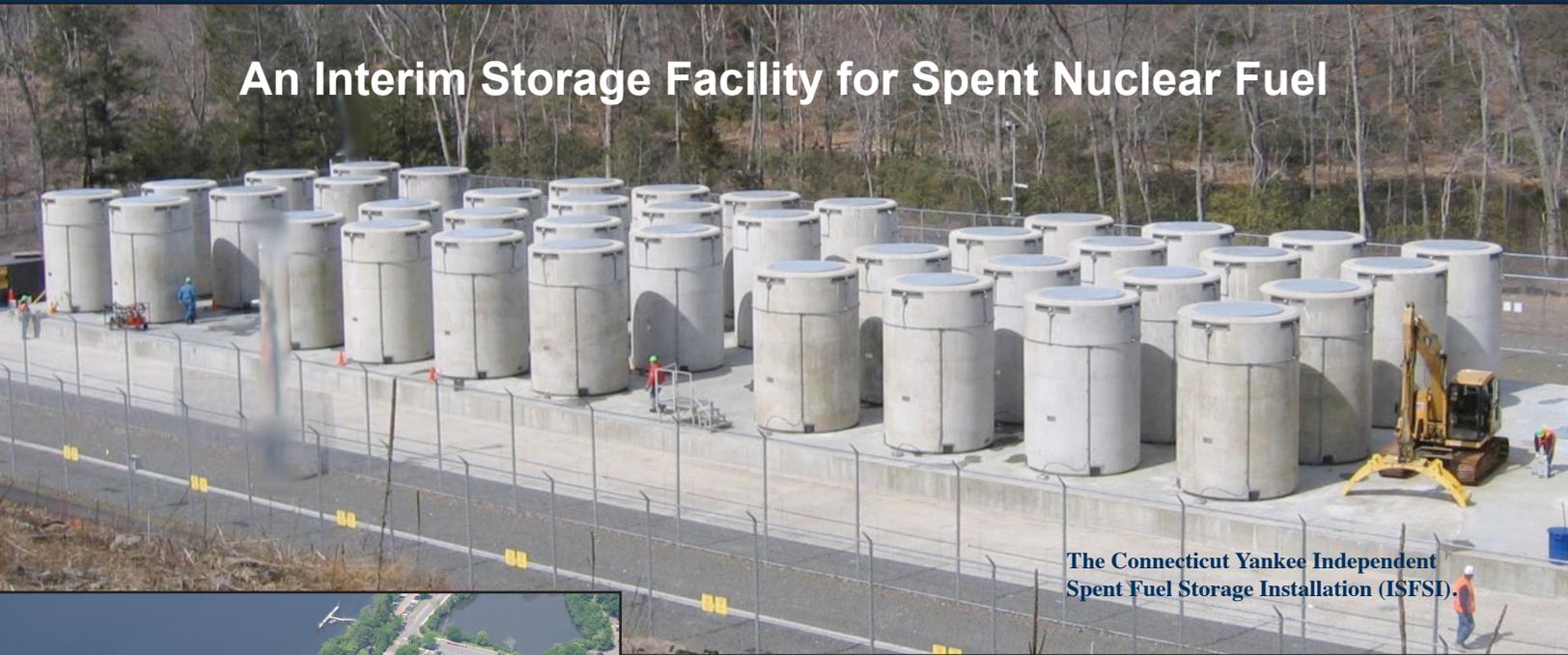


Connecticut Yankee

An Interim Storage Facility for Spent Nuclear Fuel



The Connecticut Yankee Independent Spent Fuel Storage Installation (ISFSI).

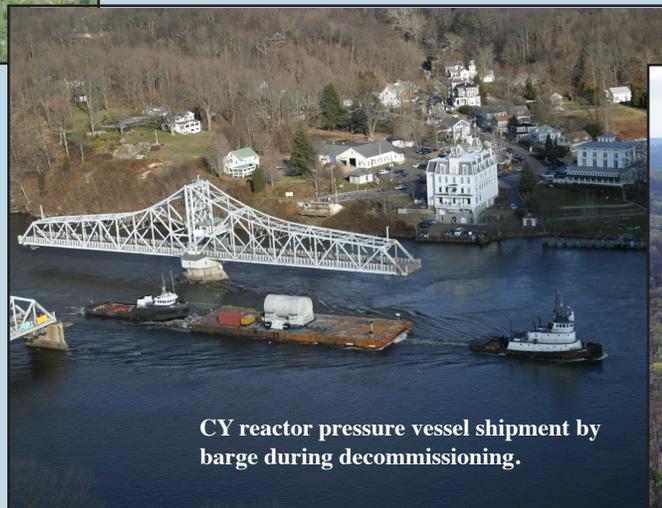


CY in 2003 before demolition of major structures began.

Connecticut Yankee (CY) operated a 619 megawatt nuclear power plant located in Haddam Neck, CT that produced more than 110 billion kilowatt-hours of electricity from 1968-1996 when it was permanently shut down for economic reasons.

The plant was successfully decommissioned between 1998-2007 with structures removed and the site restored to stringent federal and state remediation standards. In November 2007 the U.S. Nuclear Regulatory Commission (NRC) provided notification that the former plant site had been fully decommissioned in accordance with NRC procedures and regulations.

Remaining at the CY site is the Independent Spent Fuel Storage Installation (ISFSI) consisting of 40 dry storage casks containing 1019 spent nuclear fuel (SNF) assemblies used during the years of plant operation and 3 casks containing sections of the reactor vessel internals classified as Greater than Class C waste (GTCC waste). CY uses the NAC-MPC dual-purpose dry cask/canister system which is licensed by the NRC for both storage and transport. The ISFSI is located on approximately 5 acres of the 525 acre CY site about $\frac{3}{4}$ of a mile from the decommissioned reactor location.



CY reactor pressure vessel shipment by barge during decommissioning.



The CY site after decommissioning.

The transfer of the SNF assemblies and GTCC waste from the plant's spent fuel pool to the stainless steel canisters and then placement of the canisters into the concrete and steel casks began in April 2004 and was completed in March 2005.



Fuel transfer cask stackup for transport to the ISFSI.

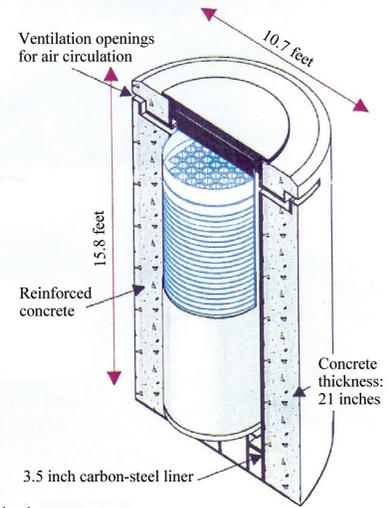


Placement of dry fuel storage casks at the ISFSI.

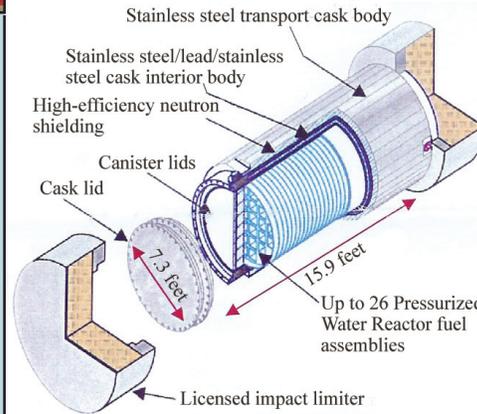
Under the Nuclear Waste Policy Act and contracts with the U.S. Department of Energy (DOE), the Federal Government was required to have begun removing the SNF and GTCC waste from CY by January 1998. The DOE has yet to meet this obligation and it is uncertain when it will. In the meantime, it is CY's responsibility as an NRC licensee to safely store the SNF and GTCC waste in accordance with all applicable federal regulations including programs for security, emergency planning, and cask monitoring. Once the Federal Government fulfills its commitment to remove the SNF and GTCC waste from the site, the ISFSI site will be decommissioned and CY will go out of business.

The 43 dry storage casks stand on a two-foot-thick concrete pad approximately the size of a hockey rink. Each concrete cask is comprised of a three and a half-inch steel liner surrounded by 21 inches of reinforced concrete.

Each cask weighs about 126 tons and contains a sealed stainless steel canister. The cask/canister system is completely passive with vents at the base and top of each cask circulating the air that removes heat from the canisters.



Above: diagram of vertical concrete storage cask with canister.



Left: diagram of transport cask with canister.

As currently planned, when the time comes to remove the SNF and GTCC waste, the dual-purpose canister will be removed from each cask, placed in an NRC licensed shipping cask, and likely transported from the site by barge or heavy haul truck. Both means of transportation were used for shipment of heavy components from the site during decommissioning.



Shipment of the CY pressurizer by rail.

The annual cost to operate the Connecticut Yankee ISFSI is on the order of \$10 million per year. For more information about the storage of spent nuclear fuel and decommissioning at Connecticut Yankee, as well as litigation with the DOE seeking to recover the cost of storing this material resulting from the Federal Government's failure to fulfill its obligations to remove it, go to 3yankees.com.



Aerial view of the CY ISFSI.