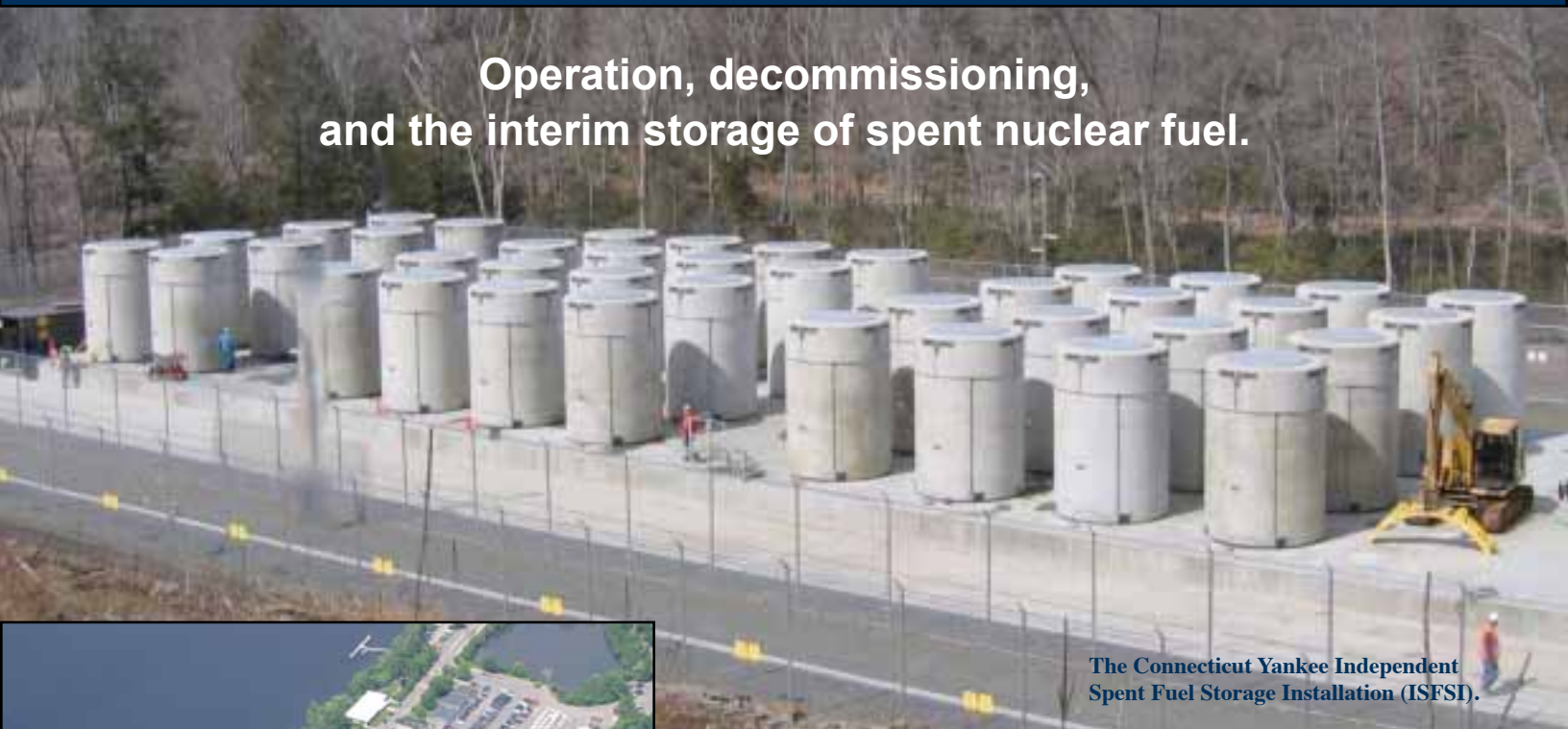


# Connecticut Yankee

Operation, decommissioning,  
and the interim storage of 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 pressurized water reactor from 1968 until permanent shut-down in 1996 at the Haddam Neck site. The plant produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history.

The nuclear power plant underwent a successful decommissioning from 1998-2007 with all plant structures removed to three feet below grade and the site restored to stringent federal and state clean-up standards.



Left: Primary Auxiliary Building demolition and excavation.  
Below: CY after decommissioning.

CY chose immediate dismantlement (the DECON method) with significant decommissioning activities beginning in May 1998 and fully completed in November 2007 with NRC approval of the termination of the operating license on the plant area. In October 2007, the Connecticut Department of Environmental Protection approved a stewardship permit, indicating that remediation of non-radioactive contaminants is complete, and that the only remaining activity is groundwater monitoring, which will extend until approximately 2011, depending upon results.

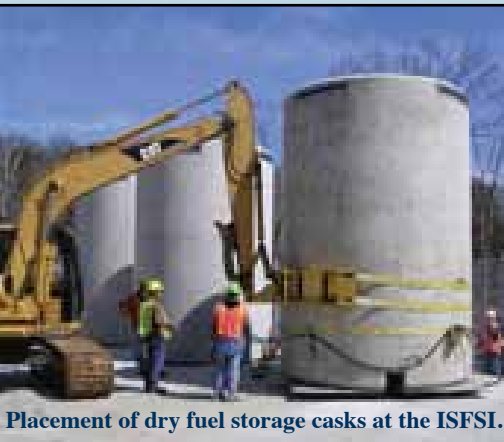


The approximate gross decommissioning costs for CY were \$871 million, which included all dismantlement and decontamination costs, as well as all spent fuel storage related costs through completion of the plant's decommissioning and final NRC license termination approval.



The CY reactor pressure vessel departing by barge in December 2003.

There are 43 dry storage casks on the 100 by 200-foot, three-foot-thick concrete pad at the CY ISFSI. Forty of the casks contain the 1019 spent fuel assemblies and three casks store sections of the reactor vessel internals that are classified as Greater Than Class C (GTCC) waste. Each vertical concrete cask has a three and a half-inch steel liner surrounded by 21 inches of reinforced concrete. The entire dry storage process -- procuring materials, fabricating the fuel containers, constructing the storage facility, and transferring the fuel -- took approximately three years to complete.



Placement of dry fuel storage casks at the ISFSI.



Fuel transfer cask stackup for transport to the ISFSI.

Connecticut Yankee and sister plants Yankee Rowe and Maine Yankee are each stand-alone single asset companies where all costs such as security, insurance, pensions, and medical are considered decommissioning costs once the plants are permanently shut down. Once the federal government removes the spent nuclear fuel from the Yankee sites, the companies will go out of business.

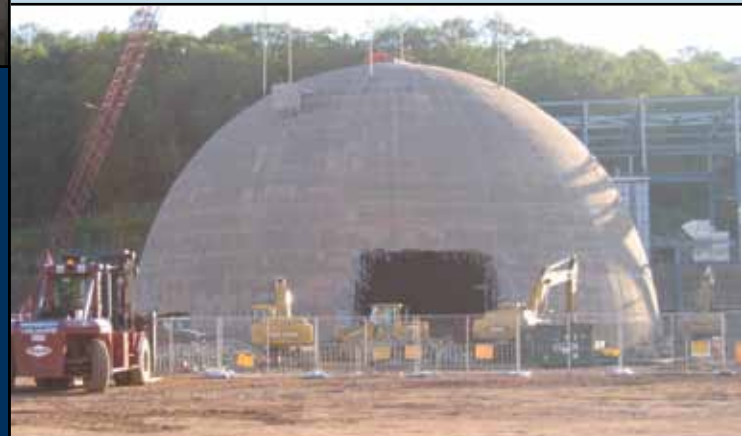
The CY Independent Spent Fuel Storage Installation (ISFSI) is located about three-quarters of a mile from the former reactor site, tucked in a slight valley between natural ridgelines. The NAC-MPC fuel storage and transport canister system chosen by CY is licensed by the NRC for both storage and transportation.



Current aerial view of the CY ISFSI.

Construction of the ISFSI was completed in 2002. Spent fuel loading and transfer from the wet spent fuel pool to dry storage canisters began in the first quarter of 2004 and was completed on March 30, 2005 when the final loaded canister was transferred to the ISFSI.

The average annual cost associated with the continued operation of CY's ISFSI is \$8 million per year.



Containment demolition in July 2006.