Maine Yankee

An Interim Storage Facility for Spent Nuclear Fuel

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

Maine Yankee (MY) operated a 900 megawatt nuclear power plant located in Wiscasset, ME that produced 119 billion kilowatt-hours of electricity from 1972-1996. MY permanently shut-down for economic reasons in 1997.

The Maine Yankee site, during early phases of decommissioning.

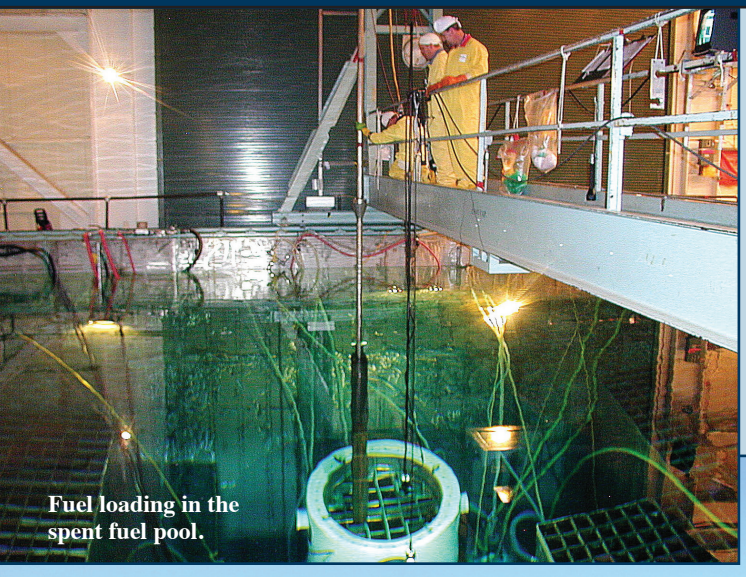
The plant was successfully decommissioned between 1997-2005 with structures removed and the site restored to stringent federal and state remediation standards. In October 2005 the U.S. Nuclear Regulatory Commission (NRC) provided notification that the former plant site had been fully decommissioned in accordance with NRC procedures and regulations.

Remaining at the MY site is the Independent Spent Fuel Storage Installation (ISFSI) consisting of 60 dry storage casks containing 1434 spent nuclear fuel (SNF) assemblies used during the years of plant operation and 4 casks containing sections of the reactor vessel internals classified as Greater than Class C waste (GTCC waste). MY uses the NAC-UMS dual-purpose dry cask/canister system which is licensed by the NRC for both storage and transport. The ISFSI is located on approximately 11 acres of the 180 acre MY site.

The Maine Yankee reactor pressure vessel leaving the site by barge.

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 December 2001 and was completed in February 2004.

Maine Yankee after decommissioning.

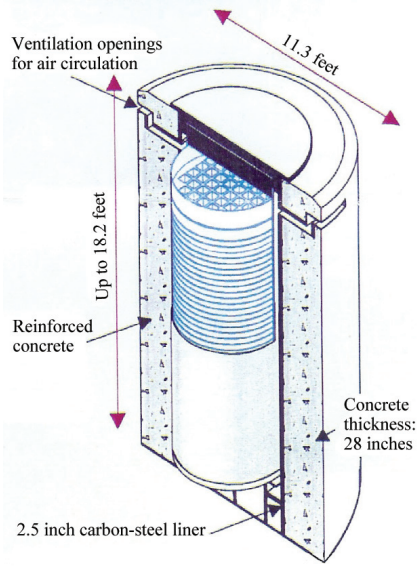


Fuel loading in the spent fuel pool.

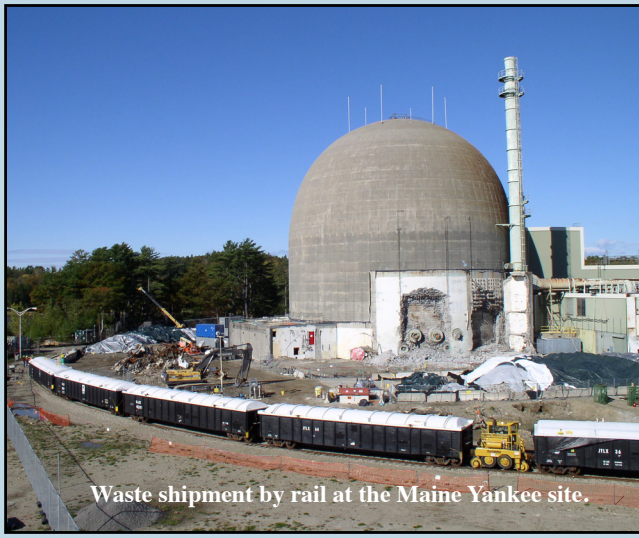
The 64 dry storage casks stand on 16 three-foot-thick concrete pads. Each concrete cask is comprised of a two and a half-inch steel liner surrounded by 28 inches of reinforced concrete. Each cask weighs about 150 tons and contains a sealed stainless steel canister. The cask/canister system is completely passive with vents at the base and top of each cask circulating the air that removes heat from the canisters.

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 MY by January 1998. The DOE has yet to meet this obligation and it is uncertain when it will. In the meantime, it is MY'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 MY will go out of business.

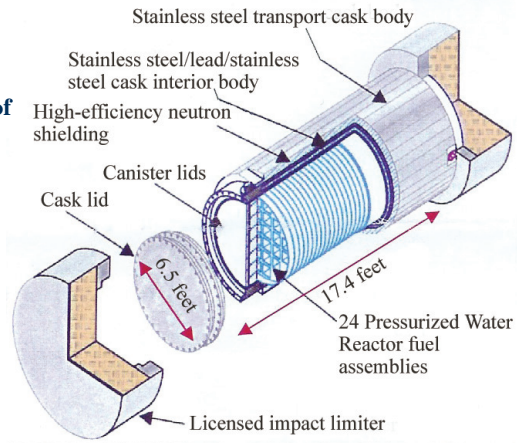
Transfer of loaded canister to the ISFSI and placement on pad.



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 rail, barge or heavy haul truck. Rail and barge were used for the shipment of heavy components from the site during decommissioning.



Waste shipment by rail at the Maine Yankee site.



Above: diagram of vertical concrete storage cask with canister.

Right: diagram of transport cask with canister.

The annual cost to operate the Maine Yankee ISFSI is on the order of $10 million per year. For more information about the storage of spent nuclear fuel and decommissioning at Maine 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.

The Maine Yankee ISFSI.