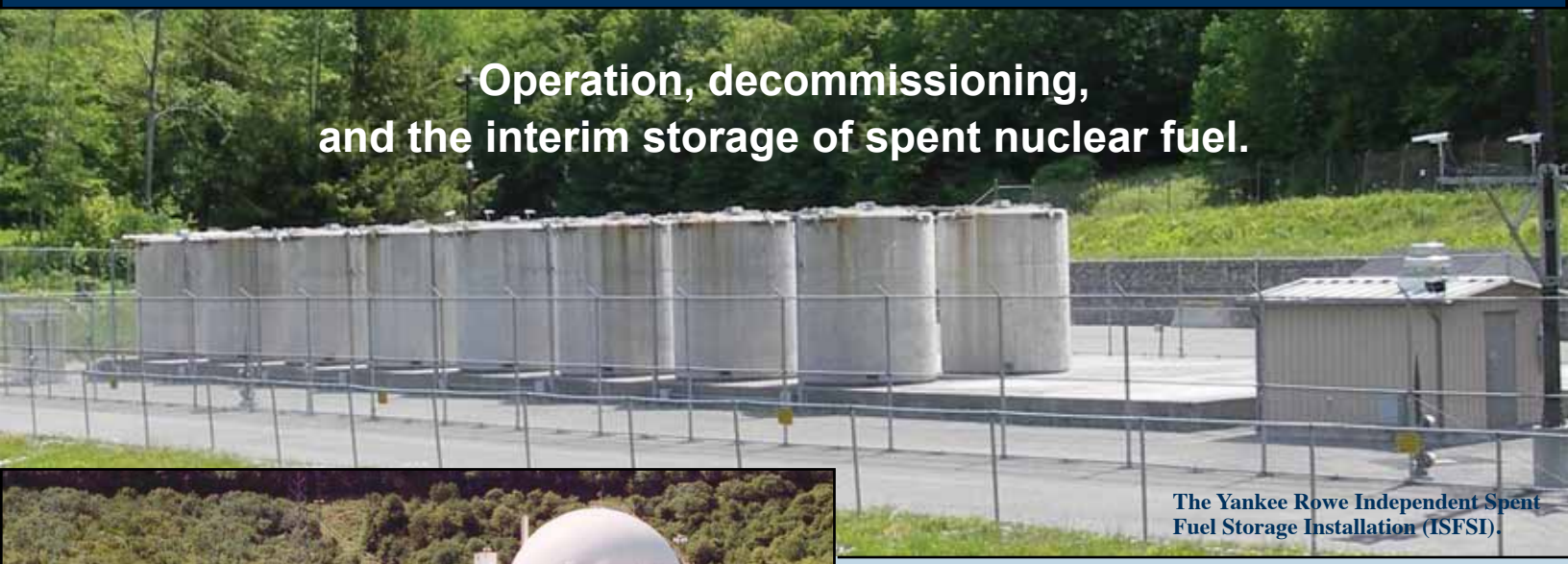
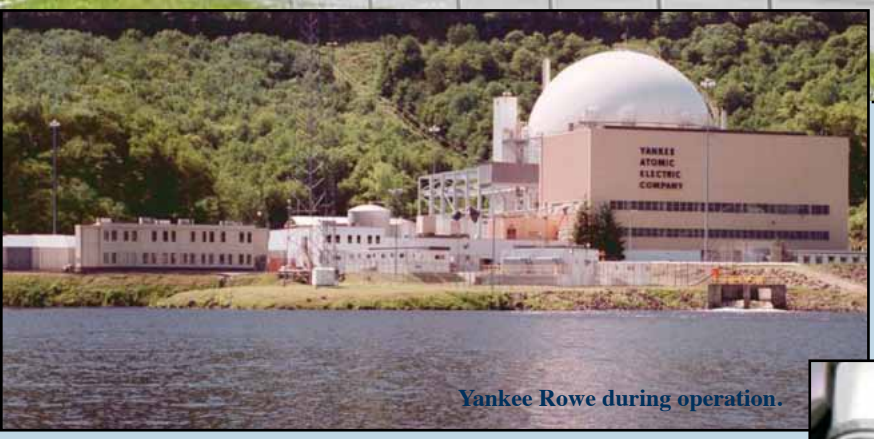
Yankee Rowe

Operation, decommissioning, and the interim storage of spent nuclear fuel.



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



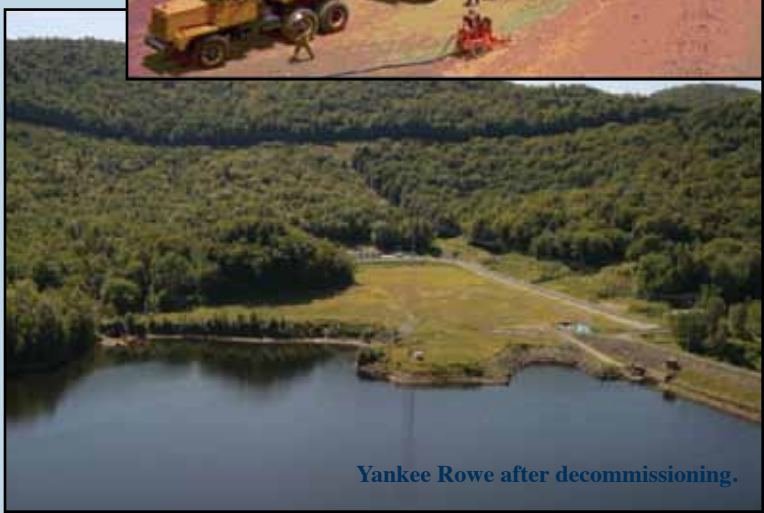
Yankee Rowe during operation.

Yankee Atomic Electric Company was formed in 1954 to build one of the first commercial nuclear power electric plants in the United States. The Yankee station in Rowe, Massachusetts began commercial operation in 1961 and was permanently shut down in 1992 for economic reasons.

Left: steam generator removal. Below: reactor vessel and large component shipments ready for burial in Barnwell.

Since the start of physical decommissioning in 1993, more than 21 miles of piping and tubing, 1071 valves, 8,569 pipe hangers, 321 pumps, and 33 miles of conduit and cable tray have been removed. In addition, six large components weighing a total of more than 500 tons were also removed. Some of the material, including the large components, was sent to the Barnwell, SC low-level radioactive waste disposal facility for permanent disposal.

Physical decommissioning of the former Yankee Rowe (YR) plant was completed in 2007 with the U.S. Nuclear Regulatory Commission's formal notification that the site had been fully decommissioned in accordance with NRC procedures and regulations. The federal license for the site was also reduced from 1600 acres to approximately 2 acres surrounding the Independent Spent Fuel Storage Installation (ISFSI). The 2007 milestones marked the full federal decommissioning approvals of the plant site with all plant buildings removed, the site remediated, and restoration complete.



Yankee Rowe after decommissioning.

The approximate gross decommissioning costs for YR were $608 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.


Reactor cavity after RPV removal.


Reactor cavity after RPV removal.

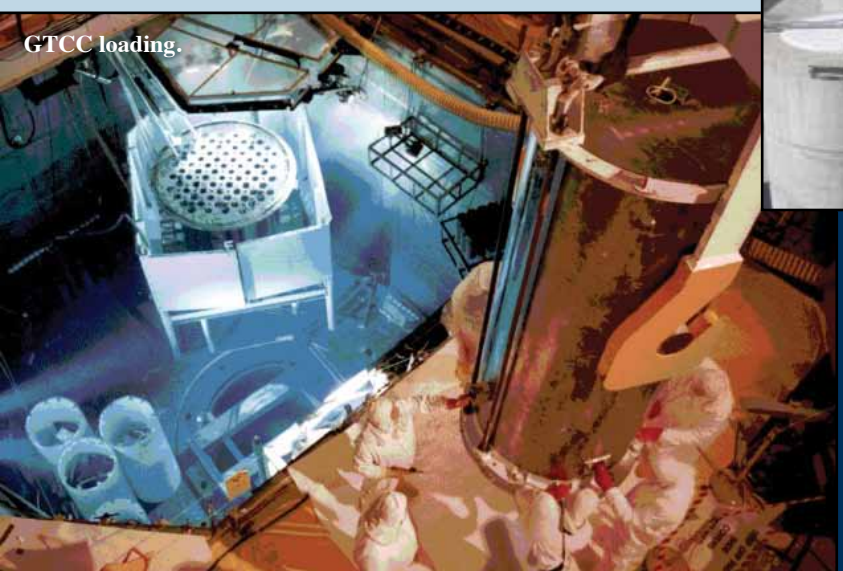
The NAC-MPC fuel storage/transport canister system chosen by Yankee Atomic is licensed by the NRC for storage and transportation. Construction of the reinforced concrete storage pad and vertical concrete and steel storage casks that hold the dual-purpose canisters was completed in early 2002. Transfer of the fuel from the wet spent fuel pool into the dry storage/transportation canisters and then into the dry vertical storage casks began in June 2002 and was completed in March 2003.

There are 16 vertical dry storage casks on the three-foot-thick concrete pad. Fifteen of the casks contain the 533 spent fuel assemblies and one stores sections of the reactor vessel internalsclassified as high level radioactive (Greater Than Class C) waste. Each concrete cask has a three and a half-inch steel liner surrounded by 21 inches of reinforced concrete. Each storage cask, when loaded with the storage/transportation canister, weighs 110 tons.


ISFSI pad construction.

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


The YR ISFSI.


GTCC loading.

Unlike operating nuclear power plants that are all part of a larger fleet of plants with common ownership, Rowe and sister plants Connecticut Yankee and Maine Yankee are each stand-alone single asset companies where all costs 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.