

Engineering Test Reactor (ETR) Vessel Relocated



Click on image to enlarge.

On Monday, September 24, 2007 the Engineering Test Reactor (ETR) vessel was removed from its location and delivered to the Idaho CERCLA Disposal Facility (ICDF).

The long history of the ETR began for this water-cooled reactor with its start up in 1957, after taking only 2 years to build. According to "Proving the Principles," by Susan M. Stacy:



Gantry jacks attached to ETR vessel. Initial lift starts. - *Click on image to enlarge.*

When the Engineering Test Reactor started up at the Test Reactor Area in 1957, it was the largest and most advanced materials test reactor in the world. The 175-megawatt reactor provided larger test spaces than the older Materials Test Reactor and provided a more intense neutron flux. The ETR evaluated fuel, coolant, and moderator materials under environments similar to those of power reactors.

In 1972 the ETR was modified by the addition of a Sodium Loop Safety Facility into the reactor core.

With this, the reactor played a new role supporting DOE's breeder reactor safety program. ETR test programs related to the core design and operation of breeder reactors. As testing progressed, the reactor was again modified with a new top closure accommodating the irradiation loop. Other additions included a helium coolant system and sodium-handling system. The ETR was the first complete reactor facility to be deactivated and documented immediately after shutdown. The last month of operation for the ETR was December 1981.



ETR vessel removed from substructure. Vessel lifted approximately 40 ft. - *Click on image to enlarge.*



130 ton vessel positioning for transport. - *Click on image to enlarge.*



Vessel on transport vehicle. Ready for ICDF delivery. - *Click on image to enlarge.*



The vessel's final resting place in the ICDF. - *Click on image to enlarge.*

[Click here to see a time elapsed video of the ETR vessel being removed.](#) (30 sec, 2 Kb wmv file)