

AMEC 1.1: Development of a prototype container and storage pad for interim storage and transport of naval spent nuclear fuel

Description:

Submarine dismantlement requires infrastructure to deal with spent nuclear fuel. This infrastructure is severely taxed and overburdened in Russia with legacy wastes. Spent nuclear fuel storage facilities and service vessels are nearing capacity. There is a need for safe spent nuclear fuel storage casks for the storage of spent nuclear fuel being generated at an accelerated rate by ballistic missile submarine dismantlement mandated by START. This project will support the design and construction of a prototype interim storage and transport container and storage pad for damaged and undamaged naval nuclear fuel.

Status/Accomplishments:

The first two tasks have been completed (cost benefit analysis and design criteria). The third task, the technical design of the cask, was initiated in November 1998. Fabrication of the cask has started and will be tested and certified by October 1999. The project also includes the design and construction of an interim storage pad near Murmansk for the casks prior to their shipment.

Relationship to CTR:

As soon as the prototype cask is tested and certified, the Defense Threat Reduction Agency (DTRA) plans to procure approximately 100 casks. This will enable the safe storage and transportation of spent nuclear fuel from remaining strategic ballistic missile nuclear submarines scheduled for dismantling under the START agreement.

International Agreement:

This project is being undertaken pursuant to the CTR SOAE agreement.

National Security Issues:

Safe, secure storage and transportation of spent nuclear fuel in Northwest Russia is essential for the implementation of the START agreement. It is also a high priority with our NATO ally, Norway. This project is also Russia's top priority for it will allow defueling of all Russian submarines awaiting dismantlement.

Timeline:

Cask Development: February 12, 1998 to October 30, 1999---- Total months: 19

Pad Construction: December 1, 1998 to July 01, 2000 ----Total months: 19

Funding Matrix:

	FY 97	FY98	FY 99	FY 00	FY 01	FY 02	Total
US Project Requirements (\$ in thousands)	200	2,000	1,600	800	0	0	\$4,600