

Abstract

Trend of spent fuel management and storage in Eastern Europe F. Takats, Hungary

About 100 nuclear power plant units have been constructed in the Central and Eastern European (C+EE) countries, 71 are operational. Most of them were designed and delivered by the Soviet Union (Russia).

The majority of the reactors are the so called WWERs, which is the Russian equivalent of a PWR. The spent fuel management plans for these reactors assumed reprocessing after the necessary decay cooling. The whole required infrastructure (reloading, tightness control, transfer and transportation equipment) have been developed for this purpose.

Countries with Soviet reactors have all been shipping spent fuel back for some periods of time, but the collapse of the Soviet Union and additional technico-economical and political difficulties brought to an end the fuel return for most countries.

To alleviate the shortage in storage capacity additional storages were constructed. Besides the at-reactor pools, presently there are 22 AFR spent fuel storage facilities in the C+EE countries, 13 of them are pools.

WWER-440 fuel is being reprocessed together with higher enriched fuel from power and transportation reactors since the beginning. At present there is about 55.000 tHM of spent fuel in storage, approximately 7% in dry stores.

The presentation gives a country-by-country update on the present situation with SF storage in all countries of the Region.