Gas Centrifuge Deployment
The USEC Inc. objective is to replicate the existing U.S. technology and reduce costs using advances in carbon fiber and other material and manufacturing technologies. The USEC Inc. program would be performed in three phases:

- a demonstration phase entirely under DOE auspices and regulatory control;
- the American Centrifuge Lead Cascade Facility (Lead Cascade) phase; and
- the commercial deployment of the American Centrifuge Plant (ACP) phase.

The demonstration phase, which is primarily being conducted by USEC Inc. in Oak Ridge, TN, is intended to provide detailed test data for the gas centrifuge machines. The Lead Cascade phase is intended to provide reliability information on a group of machines and the auxiliary systems as they would be used in commercial operations. The Lead Cascade, consisting of up to 240 centrifuges, will recycle the enriched and depleted uranium it produces. The only uranium withdrawals from the cascade will be in the form of small samples. In February 2003, USEC Inc. submitted its license application for the Lead Cascade to the NRC. After conducting detailed safety, security, and environmental reviews, the NRC granted USEC Inc. a license for the Lead Cascade in February 2004. USEC began operating the Lead Cascade in August of 2006.