THE U.S.-RUSSIAN HEU AGREEMENT: 
A MODERN DAY EXAMPLE OF SWORDS INTO PLOWSHARES

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SUMMARY

After four decades and hundreds of billions of dollars spent on the buildup of nuclear weapons, the United States and the Russian Federation have taken a bold step to convert deadly instruments of the Cold War into peaceful and productive resources. The United States and Russia are implementing a historic agreement whereby the United States is purchasing material recovered from dismantled Soviet weapons for use in commercial electricity production. By purchasing Russian highly enriched uranium (HEU), the United States is helping to ensure that it will be used solely for peaceful purposes.

Under the agreement, approximately 500 metric tons of HEU removed from the equivalent of more than 22,000 nuclear warheads from the former Soviet Union will be converted to low enriched uranium (LEU) suitable for commercial power reactor fuel. Once HEU is transformed into LEU, it becomes useless for nuclear weapons. Swords are being transformed into plowshares.

On June 23, 1995, 24 metric tons of low enriched uranium arrived at the United States Enrichment Corporation (USEC) facility in Portsmouth, Ohio. This was the first of many shipments under a $12 billion, 20-year contract between USEC, serving as executive agent for the United States government, and Techsnabexport, executive agent for the Ministry of Atomic Energy of the Russian Federation.

In addition to the national security and nonproliferation benefits, the U.S. purchase of Russian HEU is producing a valuable commodity that will be sold in the marketplace enabling some of the costs of disarmament to be recovered. This agreement is also pumping hard currency into a cash-starved Russia that will greatly help its transition to a market-based economy. Russia has committed to use a portion of proceeds from the sale of LEU derived from HEU for conversion of defense enterprises, upgrading the safety of its nuclear power...
plants and environmental cleanup. USEC will gradually phase the material into its supply mix for sale to the enrichment market.

The world's leading supplier of enrichment services, USEC provides uranium enrichment services to more than 60 U.S. and foreign electric utilities, and as such, is uniquely situated to provide a market outlet for the Russian LEU while still guaranteeing customers a reliable, quality product at competitive prices.

USEC is pleased to perform this vital role in helping to carry out the national commitment to ensure that nuclear energy is used for peaceful and constructive purposes.

BACKGROUND

On February 18, 1993, representatives of the governments of the United States and the Russian Federation signed a government-to-government agreement to convert highly enriched uranium (HEU) recovered from Soviet-era nuclear weapons into low enriched uranium (LEU) for use as fuel in commercial nuclear power plants. To implement this "megatons to megawatts" agreement, on January 14, 1994 the United States Enrichment Corporation (USEC), serving as the U.S. executive agent, contracted with Techsnabexport, the Russian executive agent, to purchase reactor fuel grade uranium derived from 500 metric tons of HEU over a 20 year period.

By way of background, USEC is a wholly owned government corporation created by Congress under the Energy Policy Act of 1992 to restructure the U.S. Department of Energy's uranium enrichment program. The Corporation produces and markets uranium enrichment services to more than 60 electric utilities that own and operate commercial nuclear power plants in the United States and 11 foreign countries. The Corporation is headquartered in Bethesda, Maryland and operates plants in Paducah, Kentucky and Portsmouth, Ohio.

USEC will market the LEU derived from weapons-grade HEU to commercial electric utilities to fuel nuclear reactors throughout the world. USEC is the world's leading supplier of enrichment services, and is uniquely capable of marketing LEU derived from HEU without disrupting the international market while guaranteeing customers a reliable, quality product.

This historic "swords into plowshares" agreement goes beyond nonproliferation. Through it, the United States is expediting the dismantlement of nuclear warheads in the Russian Federation while ensuring that highly enriched uranium is used exclusively for peaceful purposes. Instruments of war are being converted into a valuable commodity that can help to pay for the cost of disarmament.

Under the contract, highly enriched uranium extracted from the equivalent of 22,000 Russian and Ukrainian nuclear warheads is being converted to low enriched uranium suitable for commercial power reactor fuel. Blending down of the HEU takes place in Russia, after which title to the low enriched uranium product passes to USEC. USEC is responsible for transporting the material to the United States. Once HEU is transformed into LEU, it cannot be made weapons-usable without going through the difficult enrichment process again.

The 500 metric tons of HEU that USEC will purchase over the next 20 years will be converted to 15,260 metric tons of LEU according to the following schedule:

- 6 metric tons of HEU in 1995
- 12 metric tons of HEU in 1996
- 10 metric tons of HEU per year, 1997 through 1999
- 30 metric tons of HEU per year for the remainder of the 20 years

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