

**Effect of U.S./Russia Highly
Enriched Uranium Agreement**

1999

Report to Congress Under Section 3112 (b) (10) of the

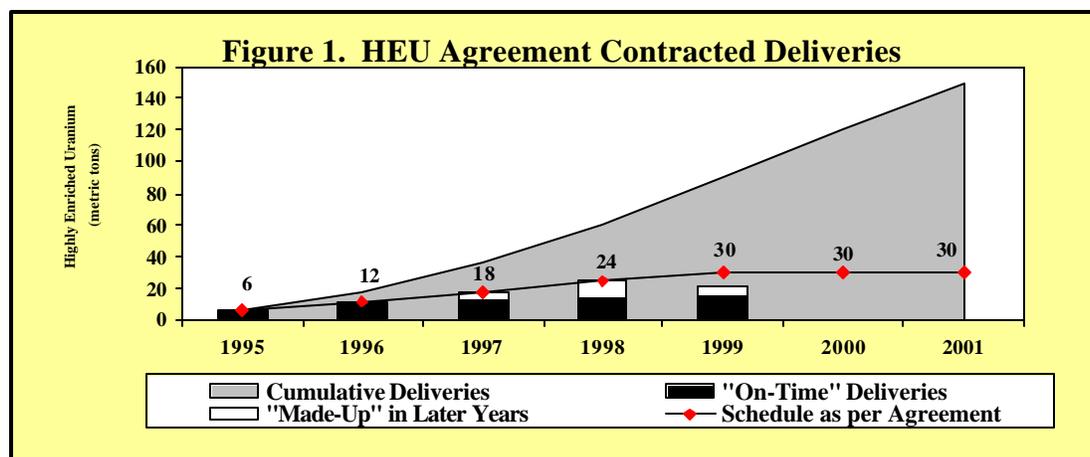
United States Enrichment Corporation Privatization Act

Introduction:

The *Agreement Between the Government of the United States and the Government of the Russian Federation Concerning the Disposition of Highly Enriched Uranium Extracted from Nuclear Weapons* ("HEU Agreement") was signed on February 13, 1993. The HEU Agreement provides for the United States to purchase from the Russian Federation 500 metric tons of highly enriched uranium converted to low enriched uranium over twenty years (1993-2013). The highly enriched uranium is blended down to low enriched uranium under the terms of this Agreement.¹

The HEU Agreement is a key element of U.S. nonproliferation policy and serves mutual U.S. and Russian interests. The Agreement provides incentives for Russia to take fissile material from their nuclear warheads and blend them into low enriched uranium for use and sale as commercial reactor fuel. The revenue stream from the Agreement helps provide an ongoing incentive for blending down Russia's highly enriched uranium weapons inventory. The HEU Agreement also provides a structured basis for Russia to participate in uranium markets. In the absence of the Agreement, Russia could have incentives to sell more uranium and provide more centrifuge enrichment services on world markets that, as in the early 1990s, could depress prices without securing any nonproliferation benefit.

The scheduled quantities of highly enriched uranium to be downblended and delivered in each year



¹The low enriched uranium being purchased by the United States under this Agreement represents the equivalent of almost 400 million pounds of natural uranium and 92 million separative work units, enough to satisfy about 9 years of demand for uranium and separative work units in the United States. Because the uranium is in the form of natural uranium hexafluoride, it also represents over 150,000 metric tons of conversion services.

compared to actual deliveries under the HEU Agreement through 2001 are shown in Figure 1. The cumulative shortfall for 1997 and 1998 scheduled deliveries, called “made-up” deliveries in Figure 1, were completed during 1998 and 1999, respectively. Of the 30 metric tons of highly enriched uranium scheduled to be downblended and delivered in 1999, 14.7 metric tons were delivered during 1999, and 6.6 metric tons were delivered in early 2000. However, the precise schedule for the remaining 8.7 metric tons (for the remaining 1999 deliveries) has not yet been determined. This remaining quantity reflects the interruption of deliveries from Russia in 1998 due to complications arising from the natural uranium feed issue. Deliveries of low enriched uranium from 30 metric tons of highly enriched uranium are scheduled for annual delivery during 2000-2012 and 20 metric tons in 2013 (to reach 500 metric tons total).

A contract implementing the HEU Agreement was signed on January 14, 1994, with USEC Inc.’s predecessor, the United States Enrichment Corporation (USEC), acting as executive agent on behalf of the United States, and Techsnabexport (Tenex) representing the Russian Federation. Tenex is majority owned by the Russian Ministry of Atomic Energy.

On April 26, 1996, the President signed the United States Enrichment Corporation Privatization Act (Privatization Act) P.L. 104-134, (42 U.S.C. 2297h), which addressed several issues in connection with the HEU Agreement. First, the Privatization Act directed the Department of Energy (DOE) to purchase the uranium feed component contained in the 1995 and 1996 deliveries (Section 3112(b)(1) and (2)). Second, the Privatization Act set quotas for sales of the natural uranium feed component into the U.S. commercial nuclear fuel market (Section 3112(b)(5)). Finally, the Privatization Act established a monitoring and reporting requirement. Section 3112 (b) (10) of the Privatization Act requires the President to:

1. Monitor the performance of the U.S. executive agent (USEC) under the Agreement.
2. Report to Congress each year on the effect the low enriched uranium delivered under the terms of the HEU Agreement is having on the domestic mining, conversion, and enrichment industries and on the operation of the gaseous diffusion plants (which USEC operates under a lease agreement with DOE) including actions taken or proposed to be taken by the President to prevent or mitigate any material adverse impact on these industries or any loss of employment at the gaseous diffusion plants as a result of the Agreement.

The purpose of this report is to respond to the second requirement above by analyzing the effect of the deliveries under the HEU Agreement on the nuclear fuel industries and employment at the gaseous diffusion plants and by describing actions taken or proposed to be taken to prevent or mitigate any material adverse impact. This report concludes that there has been an adverse impact on the domestic uranium mining, conversion services, or enrichment services industry caused, in part, by the deliveries under the HEU Agreement, as well as by other uranium inventory sales and foreign competition.

Implementation of the HEU Agreement:

Table 1 shows the number of warheads dismantled, quantities of highly and low enriched uranium contained in the warheads, and their equivalent natural uranium, conversion services, and separative work units delivered to date.

Table 1. Status of Deliveries Under the HEU Agreement

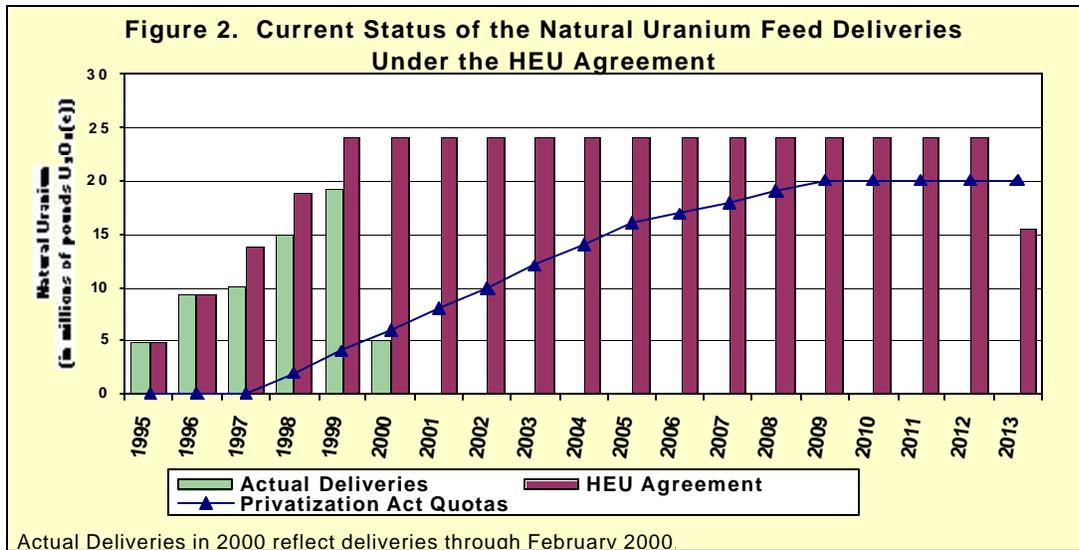
Contracted Year	Dismantled Warheads	Highly Enriched Uranium (metric tons U)	Low Enriched Uranium (metric tons U)	Natural UF ₆ Feed Component (Million lbs. U ₃ O ₈ (e))	Natural UF ₆ Conversion Component (Million kgU)	Separative Work Units (SWU) (Million SWU)
1995	244	6.1	186.0	4.8	1.8	1.1
1996	480	12.0	371.0	9.5	3.7	2.2
1997 Delivered in CY1997	536	13.4	358.5	10.2	3.9	2.4
1997 Delivered in CY1998	184	4.6	121.5	3.5	1.3	0.8
1998 Delivered in CY1998	580	14.5	450.0	11.5	4.4	2.7
1998 Delivered in CY1999	380	9.5	274.5	7.4	2.9	1.8
1999 Delivered in CY1999	588	14.7	444.0	11.7	4.5	2.7
1999 Delivered in CY2000	264	6.6	180.0	5.0	1.9	1.2
1999 Delivery (dates to be determined)	348	8.7	-	--	--	--
2000 Delivery in CY2000	1,200	30.0	858.0	23.3	9.0	5.5

Figure 2 compares the quantities of the natural uranium feed allowed to be sold into the United States as defined by the HEU Agreement compared to the actual and planned deliveries. In 1997 and 1998, deliveries of low enriched uranium were delayed due to the issues surrounding the natural uranium feed component. The shortfall of deliveries at the 1997 and 1998 contract prices was made up during 1998 and 1999, respectively. The timing of when the remaining deliveries at the 1999 contract price (the 8.7 metric tons of highly enriched uranium remaining -- $U_3O_8(e)$ of approximately 6.6 million pounds) has not yet been determined.

Resolution of the Natural Uranium Feed Issue

Pursuant to the Privatization Act (Section 3112(b)(1) and (2)), DOE took title to the natural uranium component (14.3 million pounds $U_3O_8(e)$) from the first 18 metric tons of highly enriched uranium purchased by the requirement (1995-1996 deliveries). Approximately 4.5 million pounds of the 14.3 million pounds $U_3O_8(e)$ was sold by DOE back to Russia for use in matched sales² contracts, as provided for in the Privatization Act.

²“Matched sales” refers to one of the methods through which Russian uranium can enter the U.S. market under the *Agreement Suspending the Antidumping Investigation on Uranium from Russia* (the Suspension Agreement) as amended. Under this provision, Russian uranium is allowed to enter the U.S. market up to a specified volume if the quantity is equally matched with newly produced, U.S.-origin uranium prior to delivery to the ultimate consumer in the United States. The Department of Commerce and Russia signed an amendment effective October 3, 1996, that allows highly enriched uranium feed to be sold in the United States, thus making the Suspension Agreement consistent with the Privatization Act.



In addition, also pursuant to the Privatization Act, Russia was provided title to natural uranium in the United States in proportion to the deliveries of enrichment services under the HEU Agreement, and the opportunity to market it under terms set out in the Act. However, almost no sales were made by the Russian Federation for the uranium feed component from the 1997 and 1998 deliveries because no commercial agreement could be reached between the Russian Federation and a Western consortium (made up of Cameco, COGEMA, and Nukem). After several years of negotiations, Russia and the Western consortium, for a variety of complex reasons, were unsuccessful in reaching a commercial agreement for the natural uranium feed. The Russian Federation was therefore only receiving about 60 percent of the value of the low enriched uranium deliveries.³ By the end of 1998, the Russian Federation reluctantly suspended deliveries to USEC, due to Russian export regulations that prevented Russia from continuing to accumulate an asset

³The value of each metric ton of low enriched uranium product is approximately \$800,000. Included in this total is the enrichment, which is valued at approximately \$500,000 per metric ton and the natural uranium feed required for enrichment, which is valued at \$300,000 per metric ton.

outside of Russia without compensation. Partly as a result of the difficulties in reaching a commercial agreement, the Russian Federation became interested in transferring any unsold portion of the natural uranium to Russia.⁴

Without a resolution of the issues surrounding the natural uranium feed component, the entire HEU Agreement was increasingly in jeopardy. In an effort to resolve this issue, Presidents Clinton and Yeltsin at the September 1-2, 1998, Moscow Summit charged Secretary of Energy Bill Richardson and Russian Minister of Atomic Energy Yevgeniy Adamov to find a solution. As a first step, on September 22, 1998, in Vienna, Secretary Richardson and Minister Adamov signed an interim joint report on the status of implementation of the Agreement. The DOE committed to withhold its existing uranium inventory off the market for ten years in an effort to help reinforce conditions for an agreement between Russia and a Western consortium of commercial parties.

Subsequently, on October 21, 1998, Congress enacted and the President signed a bill (Public Law 105-277) into law that provided for the United States to purchase, for up to \$325 million, the unsold backlog of Russian natural uranium component associated with the 1997 and 1998 deliveries under the Agreement. Any purchase was contingent upon Russia and the Western consortium reaching a commercial agreement for the purchase of the uranium component from deliveries in 1999 through the conclusion of the HEU Agreement.

In the months that followed, many discussions took place among the U.S. Government, the government of the Russian Federation, and the Western consortium. On March 24, 1999, Secretary Richardson and Minister Adamov signed an *Agreement Between the United States Department of Energy and the Ministry of the Russian Federation for Atomic Energy Concerning the Transfer of Source Material to the Russian Federation* (“Transfer Agreement”) that established the long-term framework for resolving the feed component issues. As a result, the Western consortium and Tenex signed a purchase agreement for the natural uranium feed component associated with deliveries scheduled after 1998. The DOE would purchase some 28 million pounds of Russian U₃O₈(e), and add it to its own inventory stockpile. The DOE would withhold from the market its 22,000 metric tons of inventory for ten years, while the Western companies would market Russian feed within the annual quotas, with any unsold amounts being returned to a Russian stockpile likewise capped at 22,000 metric tons. Thus, the Transfer Agreement provided a framework for Russia to sell the feed component in a manner that was also anticipated to provide an additional stability in the market. An overview of provisions of the Transfer Agreement and commercial contract are outlined in Table 2.

The DOE and MINATOM agreement for DOE’s purchase of the natural uranium feed component contained in the 1997 and 1998 deliveries was completed in August 1999. DOE made four purchases for a total of 11,000,000 kilograms of uranium (28 million pounds U₃O₈(e)) from MINATOM for \$325 million. As agreed, DOE will stockpile the uranium plus an additional 30 million pounds U₃O₈(e) of its own inventories for 10 years. The Russian Federation stockpile capped at a total of 22,000 metric tons of uranium (58 million pounds U₃O₈(e)), can be withdrawn under the circumstances described in Table 2.

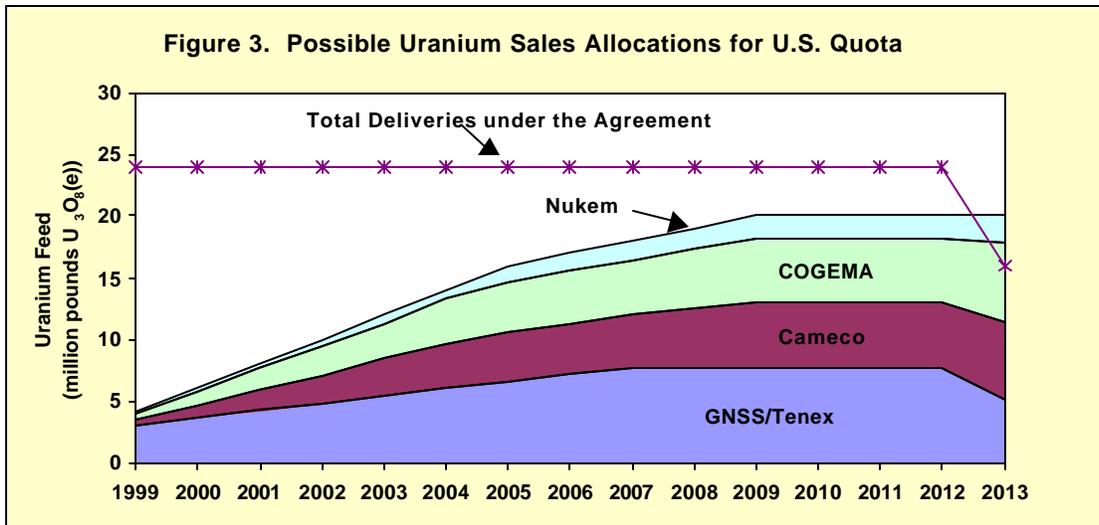
⁴Prior to execution of the feed agreements, no “source material” was permitted to be shipped back to Russia due to the lack of an agreement for nuclear cooperation between the United States and the Russian Federation.

Table 2. March 1999 Natural Uranium Feed Agreements

Government-to-Government and Commercial Agreements	Main Provisions
DOE and MINATOM "Transfer of Source Material"	<ul style="list-style-type: none"> Ⓒ Allows the transfer of natural uranium not sold or transferred by the Russian Executive Agent to Russia for storage. Material may be withdrawn (provided that a stock of at least 22,000 metric tons (58 million pounds $U_3O_8(e)$) is maintained): <ol style="list-style-type: none"> 1) for downblending of HEU (up to 2,580 metric tons per year (6.7 million pounds $U_3O_8(e)$), or 2) for sale in accordance with the commercial agreement, or 3) for sale as low enriched uranium under existing contracts to eligible countries. Ⓒ DOE stockpiles 22,000 metric tons (58 million pounds $U_3O_8(e)$) for 10 years - 28 million pounds from the 1997-1998 deliveries (see "Annex" below), plus 30 million pounds of DOE's existing inventory.
DOE and MINATOM "Annex to Agreement on the Transfer of Source Material"	<ul style="list-style-type: none"> Ⓒ DOE purchases approximately 28 million pounds $U_3O_8(e)$ (from 1997-1998 deliveries) for \$325 million as allocated by Congress in October 1998. Ⓒ The total to be divided into four deliveries to DOE with payment to Russia.
Administrative Arrangement	<ul style="list-style-type: none"> • Establishes the procedures for nuclear material accounting and control for any feed component returned to Russia.
Commercial Agreement between Tenex and the Western consortium	<ul style="list-style-type: none"> • Provides options to the Western consortium (Cameco, COGEMA, and Nukem) for purchases of a portion of the natural uranium contained in post-1998 deliveries under the Agreement. Ⓒ Prices under the Agreement will be market based with a floor price.
Two Diplomatic Notes and Two Decrees	<ul style="list-style-type: none"> • Provides the United States certain nonproliferation assurances and endorses the signing of the commercial deal. • The two decrees approve the text of the diplomatic notes and authorize exchanging them with the United States.

Against this backdrop, Figure 3 shows how the U.S. sale quotas specified under the Privatization Act might be allocated among the parties under the commercial agreement. It assumes that Tenex sell a portion from the deliveries, and that 45 percent of the remaining quantities are allocated each to Cameco and COGEMA, and the remaining 10 percent to Nukem through 2004; and 42.5 percent each to Cameco and COGEMA, and 15 percent to Nukem for 2005 through the end of the Agreement. Purchase options not exercised under the quota, along with quantities from total deliveries that exceed the U.S. quota under the Privatization Act, will be transferred to Russia's stockpile, where it remains available for sale under the commercial agreement, including in non-

U.S. markets with which the U.S. has an agreement for nuclear cooperation.

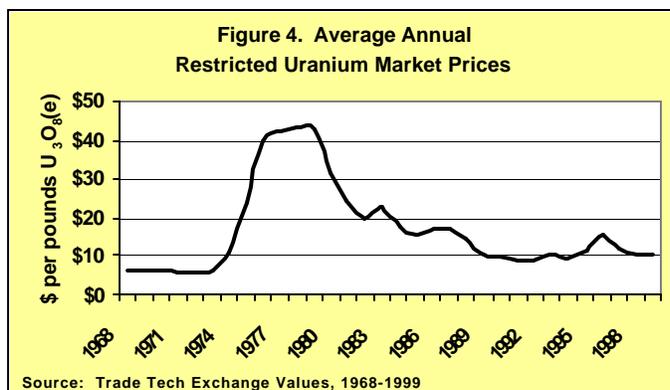


Status of the Nuclear Fuel Markets:

In recent years, the uranium mining, conversion services, and enrichment services markets have all suffered from a downward pressure on market price, which has led to production cutbacks in one form or another (delayed or suspended operations or employee layoffs). Deliveries under the HEU Agreement have been a contributing factor to the decline in the market price, although they have not been the only cause. Inventory sales of uranium held by USEC, in combination with HEU Agreement deliveries, will continue to affect the nuclear fuel industries, particularly if the material is not carefully sold into the market in a measured fashion.

In the uranium and conversion services market, actual sales of uranium into the United States from deliveries under the HEU Agreement have been minimal to date. Limited demand as well as end-user utilities and suppliers drawing down existing inventories instead of purchasing newly produced uranium have been critical factors in the sluggish market. The strong U.S. dollar is also a factor in the difficulties being experienced by U.S. producers. A strong U.S. dollar provides an advantage to foreign producers because the price that they charge for products sold in U.S. dollars is actually cheaper in their currency, thus allowing them to make a larger profit margin or to cut their price relative to U.S. producers. The following provides a more detailed historical review of each market.

Uranium Mining⁵ - Figure 4 illustrates that the uranium mining industry has experienced a significant decline since the mid-1970s. In the early to mid-1970s, projections for new reactor



construction were at an all-time high and the price of uranium (measured in \$/pound U₃O₈(e)) reached \$43.23 per pound in 1978. However, many reactor construction projects were canceled, which caused the uranium market price to fall. By 1992, the restricted spot market price fell to an annual low of \$8.53 per pound U₃O₈ (prior to signature of the HEU Agreement). The average annual price did not again exceed \$10 per pound until 1995. During 1996, the average annual price recovered

considerably, reaching \$15.60 per pound. However, in 1997 the average annual price fell to \$12 per pound and in 1998 to \$10.22 per pound U₃O₈. During the first half of 1999, the price remained above \$10 per pound,⁶ but by the end of the year, it dropped to \$9.60 per pound (The Ux Weekly, January 3, 2000). The uranium market is projected to improve because of increased demand due to utilities and some producers entering the market to purchase their uncommitted uranium requirements for the post-2000 time frame or to cover existing contracts (producer purchases).

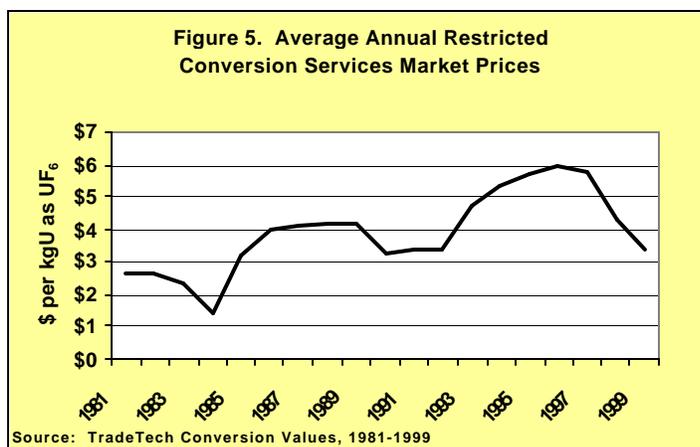
The prices shown in Figure 4 are annual average prices calculated from monthly prices. On average, monthly uranium market prices fluctuate by approximately 20 percent over the course of a year, particularly due to the seasonal nature of purchases for the nuclear fuel market.

The U.S. uranium industry has not fared well since the spot market price started its decline in the 1980s. With the exception of a short period in the mid-1990s when the spot market price edged to \$16 per pound, U.S. uranium producers have had difficulty competing with foreign, lower cost producers. In 1999, a U.S. producer, International Uranium Corporation (IUC), discontinued mining operations at the Sunday Mine complex due to weak uranium and vanadium prices.⁷ Uranium Resources Inc., placed the Kingsville Dome and Rosita production facilities on standby during most of 1999 but did continue some limited production activities. Other U.S. producers,

⁵The natural uranium feed (in the form of uranium hexafluoride) is made of two components, the U₃O₈ component (uranium mining industry) and conversion services.

⁶Average and monthly values were obtained from The Uranium Market Outlook - July 1999, table C-3. Trade Tech Exchange Values, The Ux Consulting Company, Ltd.

⁷Vanadium is a byproduct found in the alternative feeds that IUC has been producing.



Power Resources Inc, Cogema Mining, and Rio Algom Mining Corporation, did continue operations during 1999. U.S. production during 1998 was 4.7 million pounds U₃O₈ (Energy Information Administration, Uranium Industry Annual, April 1998, page ix). U.S. production for 1999 was at 4.7 million pounds (Energy Information Administration, www.eia.doe.gov).

Conversion Services⁸ - As illustrated in Figure 5, the spot market price for the conversion services industry (measured in \$/kgU as uranium hexafluoride (UF₆)) has run somewhat contrary to the uranium spot price until recently. In 1984, the average annual spot price for conversion services fell to a low of \$1.41 per kgU. During two months in 1984, the spot market price even fell to \$0 per kgU. The 1984 decline was caused by the liquidation of significant amounts of UF₆ inventories brought about by reactor cancellations. Due to a closure of the Sequoyah Fuels conversion plant in the United States during 1992, the conversion market tightened considerably, and the spot market price quickly began its ascent from an annual average of \$3.15 per kgU in 1985 to an annual average of \$4.16 per kgU in 1989. The price from 1990 through 1993 maintained a level of about \$3.30. The spot market price for much of 1994 and all of 1995, 1996, and 1997 was at least \$5.00 per kgU, at times reaching \$6.00 per kgU. However, the spot market price for conversion services decreased to an annual average of \$4.25 per kgU in 1998 and to a low of \$2.65 in December 1999. Market activity was fairly heavy in the early parts of 1999, however, ConverDyn, the only U.S. converter, announced that it would decrease its production capacity by 25 percent. Excess inventories of UF₆ from the HEU Agreement and USEC natural uranium, coupled with little demand in the market, are factors in the conversion services market's decline.

Enrichment Services - The spot market price for enrichment services (measured in dollars/separative work units) has also been declining over recent years. Foreign enrichment suppliers have taken advantage of U.S. utilities' desire to diversify supply and have made a concerted effort to increase their market share in the United States. The strength of the U.S. dollar has provided the foreign enrichment suppliers with the edge needed to increase their market share in the U.S. from approximately 10 percent in 1994 to approximately 26 percent in 1998.⁹

⁸The conversion services industry takes the mined uranium (U₃O₈) and converts it to UF₆.

⁹Based on U.S. utilities' uranium feed deliveries to U.S. and foreign enrichment producers (Energy Information Administration).

Impact of the Agreement on the Nuclear Fuel Markets

Uranium and Conversion Services Industry

Market prices have remained low due, in part, to the overhang in the market of large quantities of supply anticipated from the HEU Agreement and USEC inventories. Although resolution of the natural uranium feed component issues during 1999 did not have an immediate effect on spot market prices for uranium or conversion services, in the longer term, it is expected to provide much needed stability to the market.

The uranium and conversion services from the HEU feed component will be entering the market mainly through primary producers. Because they have a vested interest in maintaining healthy market prices and would be expected to limit the level of sales into the market, the impact on market price is expected to be more limited. Additionally, the stockpiling of 58 million pounds U_3O_8 by both DOE and Russia should provide additional stability to the market.

Because purchases under the commercial feed agreement are optional, less of this uranium will enter the market when the price is low and more when the market price is higher. As a result, in the long term, entrance of the natural uranium feed component of the Russian low enriched uranium will occur in a manner that does not cause drastic shifts in the market. Also, as a large portion of the uranium purchased by the Western consortium is expected to enter the market through existing contracts, the impact to the market price should be minimized.

After the conclusion of the Transfer Agreement in March 1999, the European Supply Agency signaled to European utilities that it may no longer limit imports of Russian uranium associated with the HEU Agreement if such uranium is sold by the Western consortium.¹⁰ Such an action by the European Supply Agency would allow for more of the natural uranium feed component to be sold into Europe. By increasing market access in Europe, it is possible that the sales into the United States might decrease proportionally, or at least partially, thus also helping U.S. producers. The European Supply Agency is expected to make a formal decision in the near future.

Uranium Enrichment Services

On July 28, 1998, the United States Enrichment Corporation, a government-owned corporation,

¹⁰Since 1992, the European Supply Agency had imposed a flexible quota that allows no more than 25 percent of European requirements to be supplied by any one region of the world; however, it was primarily aimed at limiting imports from the Commonwealth of Independent States.

became USEC, Inc., a fully privatized company through an initial public offering on the New York Stock Exchange. The newly privatized USEC Inc. initiated a voluntary reduction-in-force program for employees at the Paducah, Kentucky, and Portsmouth, Ohio, gaseous diffusion plants, citing the need for increased efficiencies. In November 1998, USEC Inc. completed the first phase, eliminating a total of 259 positions solely through a voluntary reduction-in-force program. The second phase involved 240 additional reductions through June 2000. To balance production with expected SWU purchases from Russia, USEC will decrease production and expects to operate its plants at one-quarter of their nameplate capacity in fiscal year (FY) 2001. As a result, USEC, on February 3, 2000, announced a further reduction-in-force in July 2000. The company expects to reduce the number of employees by 540, or 14 percent of USEC's work force. Through August 1, 2000, approximately 340 employees have been separated as a result of this announcement.

In order to mitigate the impact of these reductions, the Department funded a voluntary separation incentive program at the two facilities. Approximately 219 of the 340 workers who separated through August 1, 2000 participated in this program, and 137 of the remaining 200 planned reductions will be through this program. All separating workers could qualify for medical, training, relocation and outplacement assistance. In addition, the Department of Labor approved provision of Trade Adjustment Assistance for separated workers.

The HEU Agreement has been a contributing factor to the reduction in employment at USEC Inc., but it is not the only factor. Increased competition from foreign enrichment suppliers, a global overcapacity of uranium enrichment, a strong U.S. dollar, and the liquidation of inventories in the market, as well as corporate management policies and actions, were also factors accounting for the reductions.

Actions Taken to Mitigate Impacts to Domestic Industry

In addition to the action by DOE in March 1999 to remove 22,000 metric tons of UF_6 from the market for 20 years as a result of the Transfer Agreement with Russia, DOE has taken actions to help mitigate the reductions in employment at the gaseous diffusion plant sites:

- The Southern Ohio Diversification Initiative (SODI), was established in August 1995 as the Community Reuse Organization (CRO) for the Portsmouth site. The not-for-profit community improvement corporation actively promotes the reuse of underutilized lands, buildings and facilities of the Portsmouth Gaseous Diffusion Plant. In addition SODI promotes economic diversification, encourages area residents to move from dependency on a single federal facility to self-sufficiency and assists with the implementation of economic development and diversification activities designed to effect positive change and growth.

As of June, 2000, a total of \$10.5 million has been committed to the CRO, of which \$5.7 million has been spent. A total of 434 jobs have been created or retained, with an additional 460 projected by the year 2003.

The Zahn's Corner Industrial Park has received matching funding from the local government, the State of Ohio, the Economic Development Administration, and the Appalachian Regional Commission in addition to funds from SODI. The anchor tenant at the industrial park is Mills Pride. The Mills Pride project includes the construction of a one million square-foot distribution facility, a \$57 million private investment that will create 150 jobs.

- The Paducah-Area Community Reuse Organization (PACRO) was established in August of 1977 in order to mitigate the effect of DOE restructuring at the Paducah Gaseous Diffusion Plant in Paducah, Kentucky. As of June 30, 2000, a total of \$8.4 million has been committed to the CRO, \$850,000 of which has been spent. The majority of this funding has been received. It is expected that 242 jobs will be created in the next three years as a result of activities supported by these funds.

The grant funds are being used to support: 1) an entrepreneurship information clearinghouse and revolving-loan fund; 2) business/industry retention and expanding marketing and technical assistance to business entrepreneurs; 3) training and reemployment coordination and skill services assessments; 4) identification of regional industrial park sites and incubator buildings; 5) marketing and recruitment of new businesses and industry; and 6) reuse, lease, and sale of the Paducah Gaseous Diffusion Plant infrastructure assets, facilities, and property inventory.

- In July 2000, \$16 million in supplemental FY 2000 funding was appropriated for accelerated cleanup work at Portsmouth and Paducah. Additionally, the President's budget request for FY 2001 includes approximately \$50 million for increased Environmental Management funds and approximately \$20 million for increased Nuclear Energy funds. Preliminary estimates indicate that this funding could result in up to 600 additional positions performing work in the Portsmouth and Paducah communities. As a result, total peak DOE funded positions at the two sites could be as many as 1,400 by the end of FY 2001, made up of approximately 200 Nuclear Energy supported positions and approximately 1,200 Environmental Management supported positions. This compares to the approximately 800 positions supported by DOE funds at the two facilities at the end of FY 1999.
- DOE continues procurement activities for the construction and operation of depleted uranium hexafluoride conversion facilities at the gaseous diffusion plant sites consistent with the purpose of P.L. 105-204, 112 Stat. 621, July 21, 1998.

Conclusion:

The uranium and conversion services markets have all experienced downward pressure on prices during recent years. U.S. producers, as well as some foreign, have lowered or delayed production plans. This market decline cannot be solely attributed to the HEU Agreement, where to-date only a small quantity of the natural uranium has actually entered the market, or to the sale by USEC Inc. of uranium inventories alone.

Resolution of the natural uranium feed issue is expected to have a positive impact on the market. First, DOE's purchase of the natural uranium component from the 1995-1998 deliveries under the HEU Agreement and its agreement to stockpile 58 million pounds of uranium for 10 years is expected to help the market. In addition, the commercial agreement that was reached between Tenex and the Western consortium should help to lessen potential impacts of the HEU Agreement. As the natural uranium will be entering the market mostly through primary producers, quite possibly under existing contracts, impacts on the market prices will be minimized.

USEC Inc., in its Prospectus stated that to the maximum extent possible it plans to sell its natural uranium inventories under long-term domestic and international contracts. Over 50 percent of all USEC Inc. inventory sales are limited by statutory or contractual restrictions will help to reduce adverse impact on domestic industry. An increasing proportion of USEC Inc.'s inventory will become committed to contracts, which in principle, could relieve some downward pressure on market prices.

The enrichment services contained in the deliveries from the HEU Agreement have been absorbed into the enrichment market through USEC, Inc. Although the HEU Agreement is one factor partially responsible for reductions in employment at the gaseous diffusion plants, the combination of a highly competitive enrichment market and the cost reductions required to improve efficiencies, as well as USEC Inc. management policies and actions, have also been factors. The strength of the U.S. dollar has provided the foreign enrichment suppliers with an edge to be more competitive, especially in the U.S. market, which has further pushed the market price downward.

The U.S. Government has sought to help mitigate near-term reductions in employment through cleanup and work force transition activities at the gaseous diffusion plants. In addition, the activities associated with environmental cleanup and the depleted UF₆ program, particularly the response to P.L. 105-204 and construction of conversion plants, are expected to help both Paducah and Portsmouth to create additional jobs for the long term.