Uranium from Russia

Investigation No. 731-TA-539-C (Third Review)
Uranium from Russia

Investigation No. 731-TA-539-C (Third Review)
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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.
Determination

On the basis of the record developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that termination of the suspended investigation on uranium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.  

Background

The Commission instituted this review on July 1, 2011 (76 FR 38694) and determined on October 4, 2011 that it would conduct an expedited review (76 FR 64107, October 17, 2011).
Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Act”), that termination of the suspended antidumping investigation of uranium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹

I. BACKGROUND

On December 23, 1991, the Commission determined that there was a reasonable indication that an industry in the United States was being materially injured by reason of imports of uranium from the U.S.S.R. that allegedly were being sold at less than fair value.² Two days later, the Soviet Union dissolved into separate republics. The Department of Commerce (“Commerce”) and the Commission continued their respective investigations, with uranium producers in the 12 independent countries that occupied the territory of the former Soviet Union becoming the respondents in 12 separate investigations.³ Commerce issued preliminary determinations against the industries in the newly independent countries in June 1992.⁴ On October 16, 1992, Commerce entered into suspension agreements with the six Soviet successor countries (Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan) that produced uranium.⁵

In early 1993, Tajikistan and Ukraine requested the termination of their suspension agreements. Accordingly, Commerce reopened the investigations of imports from those countries in April 1993, and issued final affirmative determinations as to each.⁶ The Commission issued a negative determination with respect to Tajikistan and an affirmative determination with respect to Ukraine in August 1993.⁷ Commerce subsequently issued an antidumping duty order on imports of uranium from Ukraine.⁸

The suspension agreements with Kazakhstan, Kyrgyzstan, Russia, and Uzbekistan remained in effect, and were subject to a series of amendments that broadened the range of products subject to the agreements, gave the subject countries a larger quota of U.S. imports, and, in the case of Russia, made

¹ Chairman Deanna Tanner Okun not participating.
³ See, e.g., Agreement Suspending the Antidumping Investigation on Uranium from Russia (Oct. 16, 1992), 57 Fed. Reg. 49220 (Oct. 26, 1992). Commerce subsequently terminated the investigations against the remaining countries that did not produce uranium on the grounds that there were no LTFV sales from those countries. 57 Fed. Reg. 48505 (Oct. 26, 1992).
changes to correspond with the Russian Highly Enriched Uranium ("HEU") Agreement\(^9\) and the USEC Privatization Act.\(^{10}\)

In early 1999, the suspension agreement with Kazakhstan was terminated at the request of the Government of Kazakhstan. As a result of the termination, Commerce and the Commission resumed their investigations, and the Commission reached a negative final determination on July 13, 1999.\(^{11}\) The suspended investigation with respect to Kyrgyzstan was terminated by Commerce in November 1999, after no domestic interested party responded to Commerce’s notice of initiation of a five-year review.\(^{12}\)

The Commission conducted full reviews in its first five-year reviews of the suspension agreements on uranium from Russia and Uzbekistan and the antidumping duty order on imports from Ukraine. In these first reviews, Commerce found that revocation of the Russian Suspension Agreement ("RSA") would likely lead to continuation or recurrence of dumping at a weighted-average margin of 115.82 percent; and the Commission found that termination of the suspended investigation would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.\(^{13}\) Commerce published notice of continuation of the suspended antidumping duty investigation concerning uranium from Russia on August 20, 2000.\(^{14}\) The Commission made negative determinations in the reviews of the antidumping duty order on uranium from Ukraine and the suspended investigation on uranium from Uzbekistan,\(^{15}\) whereupon Commerce revoked the antidumping duty order on uranium from Ukraine and terminated the suspended investigation on uranium from Uzbekistan.\(^{16}\) After these first reviews, the RSA was all that remained of the Soviet Uranium investigation.

In its second sunset review of the RSA, the Commission conducted a full review notwithstanding an inadequate respondent interested party response, “[i]n light of a desire to further examine conditions of competition for this industry, including changes to the U.S.-Russia HEU Agreement.”\(^{17}\) In that review the Commission determined that termination of the suspended investigation would be likely to lead to

\(^{9}\) The Russian HEU Agreement is formally known as 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. CR at I-12, PR at I-10.


\(^{13}\) Uranium From Russia, Ukraine, and Uzbekistan: Determinations, 65 Fed. Reg. 48734 (August 9, 2000).


continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.\textsuperscript{18}

The Commission instituted this review on July 1, 2011.\textsuperscript{19} The Commission received responses to its notice of institution from: (i) USEC, Inc and the United States Enrichment Corporation (collectively “USEC”) (a domestic producer of natural uranium and low enriched uranium); and (ii) Power Resources, Inc. (“PRI”) and Crow Butte Resources, Inc. (“CB”) (both domestic producers of natural uranium, referred to collectively as “PRI/CB”). (USEC and PRI/CB are referred to collectively as the “Domestic Interested Parties.”) No respondent interested parties responded to the notice of institution.

On October 4, 2011, the Commission determined that the responses described above were individually adequate. The Commission also determined that the domestic interested party group response was adequate, and that the respondent interested party group response was inadequate. The Commission did not find any circumstances that would warrant conducting a full review.\textsuperscript{20} It determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Tariff Act of 1930, as amended.\textsuperscript{21}

No respondent interested party provided information or argument to the Commission in this expedited third review. As a result, the record contains only limited new information with respect to uranium from Russia. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigations, the first and second five-year reviews, and the limited new information on the record in this review.\textsuperscript{22}

\textbf{II. DOMESTIC LIKE PRODUCT AND INDUSTRY}

\textbf{A. Domestic Like Product}

\textbf{1. Background}

In making its determination under section 751(c), the Commission defines “the domestic like product” and the “domestic industry.”\textsuperscript{23} The Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an

\textsuperscript{18} Uranium from Russia, Inv. No. 731-TA-539-C (Second Review), USITC Pub. 3872 (Aug. 2006).

\textsuperscript{19} 76 Fed. Reg. 38694 (July 1, 2011).

\textsuperscript{20} Commissioner Lane voted to conduct a full review.


\textsuperscript{22} 19 U.S.C. § 1677e(a) authorizes the Commission to “use the facts otherwise available” in reaching a determination when (1) necessary information is not available on the record or (2) an interested party or other person withholds information requested by the agency, fails to provide such information in the time, form, or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to section 782(i) of the Act. 19 U.S.C. § 1677e(a). The verification requirements in section 782(i) apply only to Commerce. 19 U.S.C. § 1677m(i); see Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750, 765 (Ct. Int’l Trade 2001) (“\textquoteleft’T\textquoteleft{}he ITC correctly responds that Congress has not required the Commission to conduct verification procedures for the evidence before it, or provided a minimum standard by which to measure the thoroughness of a Commission investigation.”).

investigation under this subtitle.” In a section 751(c) review, the Commission also must take into account “its prior injury determinations.”

In its expedited sunset review of the suspended Russian investigation, Commerce defined the scope of the review as follows:

“The merchandise covered by this Suspension Agreement (Section III, “Product Coverage”) includes the following products from Russia: Natural uranium in the form of uranium ores and concentrates; natural uranium metal and natural uranium compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing natural uranium or natural uranium compounds; uranium enriched in U²³⁵ and its compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing uranium enriched in U²³⁵ or compounds of uranium enriched in U²³⁵; and any other forms of uranium within the same class or kind. Uranium ore from Russia that is milled into U₃Ο₈ and/or converted into UF₆ in another country prior to direct and/or indirect importation into the United States is considered uranium from Russia and is subject to the terms of this Suspension Agreement. For purposes of this Suspension Agreement, uranium enriched in U²³⁵ or compounds of uranium enriched in U²³⁵ in Russia are covered by this Suspension Agreement, regardless of their subsequent modification or blending. Uranium enriched in U²³⁵ in another country prior to direct and/or indirect importation into the United States is not considered uranium from Russia and is not subject to the terms of this Suspension Agreement. HEU is within the scope of the underlying investigation, and HEU is covered by this Suspension Agreement. For the purpose of this Suspension Agreement, HEU means uranium enriched to 20 percent or greater in the isotope uranium-235. Imports of uranium ores and concentrates, natural uranium compounds, and all forms of enriched uranium are currently classifiable under the Harmonized Tariff Schedule.


26 See 1992 Suspension Agreements, at 49235.

27 As noted above, the second amendment of two amendments to the Suspension Agreement effective on November 4, 1996, in part included within the scope of the Suspension Agreement Russian uranium which had been enriched in a third country prior to importation into the United States. According to the amendment, this modification remained in effect until October 3, 1998. See Amendments to the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 61 FR 56665, November 4, 1996.

28 Section IV.M of the Suspension Agreement in no way prevents Russia from selling directly or indirectly any or all of the HEU in existence at the time of the signing of the Suspension Agreement and/or LEU produced in Russia from HEU to the U.S. Department of Energy (“DOE”), its governmental successor, its contractors, assigns, or U.S. private parties acting in association with DOE or the United States Enrichment Corporation and in a manner not inconsistent with the agreement between the United States and Russia concerning the disposition of HEU resulting from the dismantlement of nuclear weapons in Russia. See 1992 Suspension Agreements, at 49237.
of the United States ("HTSUS") subheadings: 2612.10.00, 2844.10.20, 2844.20.00, respectively. Imports of natural uranium metal and forms of natural uranium other than compounds are currently classifiable under HTSUS subheadings: 2844.10.10 and 2844.10.50. HTSUS subheadings are provided for convenience and Customs purposes. The written description of the scope of this proceeding is dispositive. The Department has not received any scope requests or made any scope determinations in this proceeding since the Second Sunset Review.\textsuperscript{29}

The subject merchandise is a radioactive substance used commercially, principally as fuel to generate electricity in nuclear power plants and also in defense applications as a fuel to propel naval vessels and as an active ingredient in atomic weaponry.\textsuperscript{30} The process involved in converting uranium ore into nuclear fuel suitable for generating electricity in nuclear power plants is referred to as the "nuclear fuel cycle," which consists of four stages.\textsuperscript{31} In the first stage, "concentrators" mine uranium ore and extract the uranium content of the ore in a concentrated form of $\text{U}_3\text{O}_8$, resulting in a product known as "uranium concentrate."\textsuperscript{32} In the second stage, "converters" transform the $\text{U}_3\text{O}_8$ into natural uranium hexafluoride ($\text{UF}_6$), which is a powder at room temperature but becomes a gas with relatively little addition of energy.\textsuperscript{33} In the third stage, the "enricher" vaporizes the natural $\text{UF}_6$ and processes it to increase the percentage composition of $\text{U}^{235}$ (the only naturally occurring uranium isotope that is readily fissionable), thereby producing enriched $\text{UF}_6$.\textsuperscript{34} The effort expended in the enrichment process is measured in "separative work units" ("SWU"). Through the enrichment process, the proportion of $\text{U}^{235}$ in the uranium is increased from the naturally occurring 0.71 percent to between 3 and 5 percent by weight (low-enriched uranium or LEU for use in nuclear plants) or to 20 percent or more (highly-enriched uranium or HEU for use in nuclear propulsion and nuclear weapons). The enrichment process also produces a waste stream, or "tails," which is depleted in its natural concentration of $\text{U}^{235}$, but can be re-enriched with $\text{U}^{235}$ and recycled into nuclear fuel.\textsuperscript{35} LEU can also be produced by de-enriching or "blending down" surplus HEU, i.e., by diluting its concentration of $\text{U}^{235}$ to LEU levels.

In the fourth and final stage, "fabricators" convert the enriched $\text{UF}_6$ into enriched uranium dioxide ($\text{UO}_2$), which is then pelletized and encased into protective metal sheaths, called fuel assembly

\textsuperscript{29} Uranium From the Russian Federation; Final Results of Expedited Sunset Review of the Suspension Agreement, 76 FR 68404 (Nov. 4, 2011).

\textsuperscript{30} CR at I-21-24, PR at I-17-19.

\textsuperscript{31} CR at I-24-30, PR at I-19-23.

\textsuperscript{32} For the purposes of this review, we use the terms "uranium concentrate" and "$\text{U}_3\text{O}_8$" interchangeably. In March 2011, concentrate accounted for 46.9 percent of total nuclear fuel costs. CR/PR at Table I-5.

\textsuperscript{33} Uranium consists of several isotopes, which are forms of the uranium atom that contain different numbers of neutrons. In March 2011, uranium conversion accounted for 3.5 percent of total nuclear fuel costs. CR/PR at Table I-5.

\textsuperscript{34} In March 2011 the enrichment process accounted for 40.9 percent of total nuclear fuel costs. CR/PR at Table I-5.

\textsuperscript{35} Depleted uranium or uranium tails remain a large potential source of natural uranium. It has not been economically feasible for widespread commercial exploitation of the substantial supply of uranium tails, i.e., re-enrichment of the depleted uranium waste. Only Russia’s enrichers have re-enriched significant quantities of depleted uranium in recent years. CR at I-82, PR at I-63.
rods, to meet the needs of specific nuclear power plants.\textsuperscript{36} Electric utilities have typically purchased the uranium concentrates, contracted with converters and enrichers to toll-produce the natural uranium hexafluoride (natural UF\(_6\)) and low-enriched uranium hexafluoride (LEU-HF) or enriched UF\(_6\), and then contracted with fabricators both to toll-produce the LEU-HF into low-enriched uranium dioxide (LEU-DO) and pelletize the latter product, and to construct the fuel assemblies.\textsuperscript{37}

In the 1991 preliminary determination for the original investigation of Soviet Uranium and the 1993 final determination in Uranium from Tajikistan and Ukraine, the majority of the Commission found that the five-factor semifinished product analysis dictated a single like product encompassing all four forms of uranium.\textsuperscript{38}

In the first five-year review of the suspended investigation of uranium from Russia, the Commission noted that the product had remained essentially unchanged since the 1991 preliminary determination in Soviet Uranium, and that the parties had not presented any arguments for revisiting the 1991 domestic like product definition. Accordingly, it defined a single domestic like product, consisting of all forms of uranium, that was coextensive with the scope of the review.\textsuperscript{39}

In its second five-year review the Commission again defined a single domestic like product, consisting of all forms of uranium, that was coextensive with the scope of the review. The Commission addressed the following four arguments regarding the definition of the domestic like product raised by the Ad Hoc Utilities Group (“AHUG”), a coalition of U.S. nuclear utilities which were industrial users of uranium:

- \textit{The Good/Service Issue.} The Commission rejected the argument that, in light of the Eurodif decisions by the U.S. Court of Appeals for the Federal Circuit finding that SWU transactions amount to the provision of a service rather than the sale of a good,\textsuperscript{40} it should exclude uranium purchased pursuant to SWU transactions from its definition of the domestic like product, and that it was precluded from treating

\begin{itemize}
\item \textsuperscript{36} In March 2011 the converting and pelleting process accounted for 8.7 percent of the total nuclear fuel costs. CR/PR at Table I-5.
\item \textsuperscript{37} CR at I-34-35, PR at I-26.
\item \textsuperscript{38} See Soviet Uranium, USITC Pub. 2471 at 8-9 (The Commission concluded “that the lack of significant independent uses for unenriched forms of uranium other than for nuclear fuel and the presence of the “essential” [U\textsubscript{235}] isotope in all pertinent forms of uranium outweigh the countervailing criteria and support designation of a single like product coextensive with the articles under investigation.”); Uranium from Tajikistan and Ukraine, USITC Pub. 2669 at 12 (The Commission evaluated but declined to find two like products composed of enriched and unenriched uranium.)
\item Likewise, in Uranium from Kazakhstan, the Commission found a single like product encompassing all four forms of uranium. The Commission considered and decided that fuel assemblies should be explicitly excluded from the like product. Uranium from Kazakhstan at 6-8 (July 1999) (The Commission found that the factors favoring a single like product, especially the similarity of functions and the lack of independent markets among the forms of uranium, outweighed the factors suggesting multiple like products.).
\item \textsuperscript{39} First Review Determination at 10. The Commission also addressed two issues pertaining to the domestic like product. One was the Russian respondents’ contention that Commerce’s inclusion of HEU in the scope was invalid; and the other was the domestic interested parties’ argument that uranium tails are within the scope. The Commission explained that both of these arguments involved the scope of the review, that such issues are properly directed to Commerce and not the Commission, and that the Commission is precluded from changing Commerce’s scope. With respect to the question of whether tails are within the scope of the review, the Commission noted that Commerce’s scope language neither explicitly included, nor excluded, depleted uranium; and that the scope included language regarding uranium compounds without reference to the concentration level. Id. at 10-13.
\item \textsuperscript{40} Eurodif S.A. v. United States, 411 F.3d 1355 (Fed. Cir. 2005); Eurodif S.A. v. United States, 423 F.3d 1275 (Fed. Cir. 2005).
\end{itemize}
imports pursuant to SWU transactions as within the scope of the review. The Commission noted that the scope of the review had no exclusion for LEU sold pursuant to SWU transactions, and that it was “contrary to law for the Commission to look behind Commerce’s determination as to what merchandise is subject to review.” The Commission also explained that, regardless of whether imports pursuant to SWU transactions were properly included in the scope, there was no reason for excluding domestic production resulting from SWU transactions from the domestic like product, given the statutory definition of the domestic like product.

Fabricated Fuel Rods and Assemblies. The Commission rejected the argument that fabricated fuel rods and assemblies should be excluded from the like product. It explained that it was following its previous practice of including the uranium content of fuel assemblies in the domestic like product, but excluding the casings.

Tails and Spent Fuel. The Commission rejected the argument that tails and spent fuel should not be included in the like product because they are not included in the scope of the RSA. It explained that there was nothing in AHUG’s argument, or in the record of the second review, that warranted reexamining its position in the first five-year review that it made little difference in practice whether or not depleted uranium or uranium tails are included in the domestic like product because they are treated as waste and are not commercially exploited in the United States.

One or Four Like Products. The Commission rejected the argument that it should find that each of the four segments of the uranium fuel cycle produces a separate like product. Applying its semifinished product analysis, the Commission found that – in light of the almost complete dedication of each upstream product to production of the downstream article; the presence of the same buyers at all stages of the fuel cycle (and at most stages of the fuel cycle, the only buyers), namely the utilities; and the presence of the same essential characteristic (the U235 isotope) in all four forms of uranium – all four forms of uranium constitute a single domestic like product. It found that these factors outweighed the factors that supported separate like products, namely differences in the costs or value of the different forms of uranium, and the significance and extent of the processes used to prepare nuclear fuel.

2. Current Review

USEC and PRI/CB stated that they agree with the definition of the domestic like product in the notice of institution of this review. There is no new information obtained during this expedited review that would suggest any reason to revisit the Commission’s domestic like product definition from the second five-year review. Consistent with this definition, we define the domestic like product as consisting of all four forms of uranium coextensive with the scope of this review.

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41 Second Review Determination at 9-10 quoting from First Review Determination at 11.
42 Id. at 10. Subsequent to the second review, the Supreme Court reversed the judgment of the Federal Circuit and held that Commerce properly treated SWU transactions as subject to the antidumping duty law. United States v. Eurodif S.A., 555 U.S. 305 (2009).
44 Id. at 11.
45 Id. at 11-14.
B. Domestic Industry

1. Background

Section 771(4)(A) of the Act defines the relevant industry as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”47 In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market, provided that adequate production-related activity is conducted in the United States.48 In accordance with our domestic like product determination, we determine that there is one domestic industry consisting of all domestic producers of uranium, including concentrators, the converter, enrichers, and fabricators.

In the first five-year reviews, the Commission considered, and rejected, an argument that U.S. fabricators should be excluded from the domestic industry because they do not engage in sufficient production-related activity. The Commission also considered whether appropriate circumstances existed to exclude Cogema (a domestic concentrator in the first review) or USEC from the domestic industry as related parties; the Commission found that appropriate circumstances did not exist to do so.49

In the second five-year review the Commission considered three domestic industry issues. First, it considered whether PRI/CB were related parties, and if so, whether appropriate circumstances existed to exclude them from the domestic industry. The Commission found that PRI/CB were related parties by virtue of being owned by Cameco, an importer of the subject merchandise, but that appropriate circumstances did not exist to exclude these firms from the domestic industry. The Commission noted that PRI/CB were the largest U.S. uranium concentrate producers; that there was no evidence that PRI/CB were shielded from any injury that might have been caused by subject imports on account of their corporate parent’s importing activity; and that these companies supported the continuation of the RSA, thereby suggesting that their interests lay predominantly in domestic production of uranium.50

The second domestic industry issue considered by the Commission was whether appropriate circumstances existed to exclude USEC from the domestic industry. USEC was a related party by virtue of its importation of LEU from Russia, in its capacity as Executive Agent under the Russian HEU Agreement. The Commission found that appropriate circumstances did not exist to exclude USEC from the domestic industry. The Commission noted that USEC was the sole U.S. enricher and accounted for a substantial share of total domestic production of the domestic like product; USEC imported Russian LEU to support a nuclear non-proliferation agreement, not as a result of a commercial decision to buy the subject merchandise; and there was no indication that USEC did not continue to remain a domestic producer of enriched uranium.51

Finally, the Commission considered whether appropriate circumstances existed to exclude Westinghouse (a fabricator which was a related party by virtue of its importation of uranium hexafluoride from Russia) from the domestic industry. The Commission concluded that appropriate circumstances did not exist to exclude Westinghouse. It noted that no party had urged the Commission to exclude

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49 First Review Determination at 14-18.
50 Second Review Determination at 15-16.
Westinghouse, and because the quantity of Westinghouse’s domestic production of uranium dioxide for fuel rods was much larger than the quantity of its imports of LEU, it seemed unlikely that it was being shielded from any injury by subject imports.52

2. Current Review

There are three related parties in this review: (i) USEC, which continues to import LEU from Russia, (ii) Uranium One USA, Inc., and (iii) Uranium One Exploration USA, Inc.; the latter two firms are U.S. uranium concentrate producers that became operational in 2010 or 2011, and are 51-percent owned by ARMZ Uranium Holding Co., a wholly-owned subsidiary of the Russian State-owned corporation, Rosatom.53

a. USEC Related Party Issue

Under the terms of the Russian HEU Agreement, USEC imports LEU blended down in Russia from HEU and sells it directly to utilities. The SWU component of the LEU is the effective import since the natural uranium hexafluoride feed component of the imported LEU is credited/returned to the Russians and retains Russian ownership.54

As indicated above, in the first and second reviews the Commission declined to exclude USEC from the domestic industry on account of its importation of subject merchandise.55 In the second review it explained as follows:

There have been some changes in the facts that the Commission considered in the first reviews. With the increase in the cost of uranium concentrates, enrichment no longer accounts for as high a percentage of total nuclear fuel costs. Even at the lower percentages, however, USEC still accounts for a substantial share of total domestic production of the domestic like product. Also, since the first reviews, USEC has closed one of its enrichment plants (its Portsmouth, Ohio facility), and has undertaken to build a new one. With the closure of this plant, the sale of Russian SWU accounts for a larger proportion of USEC’s total sales than it did during the first review.

Notwithstanding these changes, we find that appropriate circumstances do not exist to exclude USEC from the domestic industry. USEC is the sole U.S. enricher, and it accounts for a substantial share of total domestic production of the domestic like product. It imports Russian LEU to support a nuclear non-proliferation agreement, not as a result of a commercial decision to buy the subject merchandise rather than make the domestic like product. There is no indication

52 Second Review Determination at 18.

53 CR at I-44, PR at I-34. The Uranium One entities are related parties under the statute because an exporter of the subject merchandise (Rosatom, whose trading arm, TENEX, exports subject merchandise to the United States) indirectly controls them by virtue of the 51-percent ownership stake of ARMZ Uranium Holding Co. See 19 U.S.C. §1677(4)(B)(II) and CR at I-80, PR at I-62.

54 CR at I-12-15, PR at I-10-13. In 2010, USEC produced LEU containing approximately 6 million SWU, and imported LEU containing approximately *** SWU from Russia under the Russian HEU Agreement. USEC Response at 68 and 69.

that USEC does not continue to remain a domestic producer of enriched uranium. This is underscored by its investment in a new enrichment facility.56

There have been some additional changes in the factors that the Commission considered in the second review. Based on the limited data in the record (derived from spot uranium prices in March 2011), enrichment accounts for a greater percentage of total nuclear fuel costs than in 2006.57 Also, since the second review, USEC is no longer the sole enricher in the United States. A second enricher commenced production in June 2010.58 Nevertheless, USEC still accounted for almost all domestic LEU production in 2010.59

Our reasoning for declining to exclude USEC in the second review continues to be valid. Although USEC is no longer the sole U.S. enricher, it still accounts for a substantial share of total domestic production of the domestic like product. It imports Russian LEU to support a nuclear non-proliferation agreement, not as a result of a commercial decision to buy the subject merchandise rather than make the domestic like product. There is no indication that USEC does not continue to remain a domestic producer of enriched uranium. Accordingly, we find that appropriate circumstances do not exist to exclude USEC as a related party.

b. Uranium One Related Party Issues

There is little information on the record to address the question of whether appropriate circumstances exist to exclude the Uranium One entities from the domestic industry. Only one of their mining operations was operational in the January 2010-March 2011 period. The second mine was not operational and the milling operation was on standby.60 There are eight other concentrate producers in the United States in addition to the two Uranium One entities, three of which were also on standby.61 Given that PRI and CB accounted for ***, that the Uranium One entities were only partially operational at the end of the review period, and that the production of uranium concentrate accounts for only part of overall production of the domestic like product, it is likely that the Uranium One entities accounted for only a very small share of domestic production, and that their inclusion or exclusion from the domestic industry would not have a significant impact on overall industry data. Accordingly, we find that appropriate circumstances do not exist to exclude the Uranium One entities from the domestic industry as related parties.

c. Conclusion

For the foregoing reasons, we find that appropriate circumstances do not exist to exclude USEC, Uranium One USA, Inc., or Uranium Resources, Inc. from the domestic industry. Given our determination with respect to the domestic like product, we find there to be one domestic industry, consisting of all domestic producers of uranium, including concentrators, the converter, enrichers, and

56 Second Review Determination at 17-18 (footnotes omitted).
57 Based on published market prices, albeit from different sources, enrichment accounted for 31.6 percent of total nuclear fuel costs in 2006 and 40.9 percent in 2011. Second Review Determination at I-25 and CR/PR at Table I-5.
58 CR at I-43, PR at I-33.
59 Id.
60 PRI/CB Response at Exh. 4.
61 CR at I-42, PR at I-32.
fabricators. There are twelve concentrate producers in the United States today, four of which are believed to be on standby and/or undergoing restoration (PRI; CB; Highlands; Smith Ranch; Mestena Uranium LLC; South Texas Mining Venture; Denison White Mesa LLC; Uranium One USA, Inc.; Uranerz Energy Corp./Wyoming; Uranium Resources, Inc.; Uranium One Exploration USA, Inc.; Cotter Corp.; and Kennecot Uranium Co./Wyoming Coal Resource Co.); one converter (ConverDyn), two enrichers (USEC and Louisiana Energy Services), and three fabricators (Areva NP Inc., Global Nuclear Fuel, and Westinghouse).

III. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE SUSPENDED INVESTIGATION IS TERMINATED

A. Legal Standard In A Five-Year Review

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping order or terminate a suspended investigation unless: (1) it makes a determination that dumping is likely to continue or recur, and (2) the Commission makes a determination that revocation of the antidumping order or termination of the investigation “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.” The SAA states that “under the likelihood standard, the Commission will engage in a counter-factual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.” Thus, the likelihood standard is prospective in nature. The U.S. Court of International Trade has found that “likely,” as used in the sunset review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.

62 CR at I-42, PR at I-32.
63 CR at I-42, PR at I-33.
64 CR at I-42-43, PR at I-33.
65 CR at I-44, PR at I-34.
67 SAA, H.R. Rep. No. 103-316, vol. I, at 883-84 (1994). The SAA states that “[t]he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” SAA at 883.
68 While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued [sic] prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.
The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”\(^{70}\) According to the SAA, a “reasonably foreseeable time” will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis [in antidumping investigations].\(^{71}\) In the second review we agreed with the parties that a longer “reasonable period of time” may be appropriate in that review than in other five-year reviews, due to the length of the nuclear fuel cycle, the prevalence of long-term contracts, and longer lead times for delivery.\(^{72}\) There is nothing in the record of this third review to cause us to reach a different conclusion.

Although the standard in a five-year review is not the same as the standard applied in an original antidumping investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated.”\(^{73}\) It directs the Commission to take into account its prior injury determinations, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if the orders are revoked or the suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).\(^{74}\)

As discussed above, the Commission received responses to its notice of institution from three domestic producers, USEC, PRI and CB. Accordingly, in making our determination, we have relied on information provided by these domestic producers. In addition, when appropriate in this review, we have relied on the facts otherwise available, which consist of information from the original investigation and the first and second five-year reviews, and information available from published sources.\(^{75}\)

In evaluating the likely volume of imports of subject merchandise if an antidumping duty order is revoked or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or

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\(^{70}\) 19 U.S.C. § 1675a(a)(5).

\(^{71}\) SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” SAA at 887.

\(^{72}\) Second Review Determination at 19-20.

\(^{73}\) 19 U.S.C. § 1675a(a)(1). The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission’s determination. 19 U.S.C. § 1675a(a)(5). While the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

\(^{74}\) 19 U.S.C. § 1675a(a)(1). There has been no duty absorption finding by Commerce in this review. 71 Fed. Reg. 32517 (June 6, 2006).

\(^{75}\) 19 U.S.C. § 1677e(a) authorizes the Commission to “use the facts otherwise available” in reaching a determination when (1) necessary information is not available on the record or (2) an interested party or any other person withholds information requested by the agency, fails to provide such information in the time or in the form or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to 19 U.S.C. § 1677m(i). The verification requirements in 19 U.S.C. § 1677m(i) are applicable only to Commerce. See Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750, 765 (Ct. Int’l Trade 2002) (“the ITC correctly responds that Congress has not required the Commission to conduct verification procedures for the evidence before it, or provided a minimum standard by which to measure the thoroughness of Commission investigations.”).
consumption in the United States. In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.

In evaluating the likely price effects of cumulated subject imports if an antidumping duty order is revoked or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to domestic like products and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

In evaluating the likely impact of the subject merchandise if an antidumping order is revoked or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product. All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the suspended investigation at issue and whether the industry is vulnerable to material injury if the suspended investigation is terminated.

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78 19 U.S.C. § 1675a(a)(3). The SAA states that “[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.
80 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that “the Commission may consider the magnitude of the margin of dumping” in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the “magnitude of the margin of dumping” to be used by the Commission in five-year reviews as “the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title.” 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887.

In the final results of its expedited review of the suspended antidumping duty investigation on uranium from Russia, Commerce found that termination of the suspended investigation would be likely to lead to continuation or recurrence of dumping at a margin of 115.82 percent for all Russian manufacturers/exporters. 76 Fed. Reg. 68404, 68407 (Nov. 4, 2011).

81 The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.
B. Conditions of Competition

The following conditions of competition in the uranium industry are relevant to our determination in this review.

1. The Original Investigation and Prior Reviews

   Nature of the Product. In prior reviews, the Commission explained that the various forms of uranium – uranium concentrate (U₃O₈), natural UF₆, enriched UF₆ (LEU-HF), and uranium oxides (UO₂ or LEU-DO) – are fungible, commodity products. The four basic forms are not physically interchangeable with each other since they are all intermediate products at different processing levels, each successively subsumed into the next product in the nuclear fuel cycle. Significant volumes of natural UF₆ and LEU-HF act as substitutes for uranium concentrates, natural conversion, and enrichment services. In other words, utilities are able to skip purchases at the early stages of the nuclear fuel cycle either by purchasing natural or enriched UF₆ from existing inventories, or by purchasing LEU-HF that has been obtained by blending down HEU.⁸²

   Structure of the Domestic Industry. In the first five-year reviews the Commission described substantial structural changes to the domestic industry since the original investigations. These included consolidations and closings affecting concentrate producers and converters, and the privatization of USEC.⁸³

   In the prior reviews the Commission also described USEC’s role as the U.S. Government’s Executive Agent under the Russian HEU Agreement. In this role, USEC is required to import large quantities of Russian enriched UF₆ (LEU-HF blended down from Russian HEU that was part of the Soviet military stockpile) and sell it directly to utilities. USEC is committed to purchasing 5.5 million SWU per year from Russia through 2013, when the HEU Agreement expires. In 2002, the pricing terms under which USEC acquires LEU blended down from Russian HEU were amended to implement a market-based pricing structure. In addition, under this Agreement, USEC pays Russia in kind for the natural uranium contained in the enriched UF₆ (by crediting Russia an equivalent quantity of natural UF₆) and pays in cash for the value of enrichment (SWU).⁸⁴ This natural UF₆ or Russian feedstock, which is owned by Russia and is stored at USEC facilities, may be imported and sold in the U.S. market under increasing annual limits.⁸⁵

   Demand. In its first reviews, the Commission observed that U.S. utilities’ demand for uranium, as measured by reactor requirements, had been constant during the period of review and was projected to remain relatively flat for the next decade. The Commission noted that since 1978, at least 11 nuclear power plants in the United States had been closed and no new plants had been constructed.⁸⁶

   In the second review, the Commission noted that U.S. utilities’ demand for uranium had grown slowly in the past several years, and was projected to continue to do so during the reasonably foreseeable future. It explained that demand for uranium depended on a number of factors, including the level of U.S. demand for electricity, the number of operating U.S. nuclear power plants, the capacity utilization (also known as the “load factor”) of these plants, the enrichment level of the fuel used, the plants’ cycle length

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⁸³ First Review Determination at 28.
⁸⁴ CR/PR at Figure I-1.
⁸⁵ First Review Determination at 29, Second Review Determination at 22.
⁸⁶ First Review Determination at 29.
and burnup/fuel design, and contracted tails assays. Demand for uranium also was affected by
deregulation of electrical utilities, which put nuclear power plants in increased competition with other
sources of electricity. The Commission further explained that the nature of U.S. demand may have
changed as U.S. electric utilities became able to partially bypass the fuel cycle by purchasing the
processed products directly, especially natural UF₆ and enriched uranium. Enriched uranium obtained
from downblended HEU under the HEU Agreement had become a significant source of nuclear fuel for
U.S. nuclear utilities. The Commission also noted that a majority of U.S. electric utilities’ purchases of
uranium and uranium processing were based on long-term contracts.⁸⁷

**Supply.** In its first reviews, the Commission observed that there had been an overall increase in
the supply of uranium, and, in particular, uranium in processed forms, with uranium imports under the
Russian HEU Agreement providing a large and increasing supply of uranium at the LEU stage to the U.S.
market. Further adding to the worldwide abundance of uranium were the development of relatively high-
grade, low-cost uranium ore reserves in Canada and Australia. An overhang of natural and enriched UF₆
inventories in the United States and throughout the world represented another source of uranium supply.⁸⁸

In the second review, the Commission noted that inventories of natural and enriched UF₆ in the
United States and throughout the world continued to represent a significant source of uranium supply.
Inventories were held most notably by owners and operators of U.S. civilian nuclear plants, brokers and
traders, members of the U.S. uranium industry, Russia, and the U.S. Department of Energy (which had a
separate large stockpile of natural UF₆ that was to be held off the market until at least 2009). In addition
to continued large inventories, the supply of uranium concentrate had been affected by an upswing in
exploration and mining of uranium ore in the United States. The large domestic inventories of uranium
allowed producers and utilities to engage in a variety of non-cash transactions. These alternative
transactions resulted in the disaggregation of an advanced stage of uranium (such as natural or enriched
UF₆) into the raw material (uranium concentrate or natural UF₆) and processing (conversion or
enrichment) used to make it, creating separate, but interrelated, markets for the uranium and enrichment
components of enriched UF₆.⁹⁰

In the second review the Commission also noted that Canada and Australia were major
nonsubject suppliers of uranium concentrate to the United States, and that there were also significant
nonsubject imports of LEU-HF, principally from Western European suppliers. The Commission also
noted that the planned deployment of two new enrichment facilities in the United States (USEC’s
“American Centrifuge” facility at Portsmouth, Ohio, and Louisiana Energy Services’ “National
Enrichment Facility” in Eunice, New Mexico) would be significant for the future supply of LEU.⁹⁰

Finally, the Commission explained that trade restrictions in addition to the RSA had affected
exports of uranium from Russia. The European Atomic Energy Community ("EURATOM") countries
limited imports of uranium from Russia to about 15 percent of the EURATOM market. RSA and
EURATOM restrictions resulted in a two-tiered pricing structure in the global market for uranium.
Uranium eligible for sale in the United States and EURATOM countries (known as “restricted market
uranium”) bore a higher price than uranium that could only be sold in countries without import
restrictions (known as “unrestricted market uranium”).⁹¹

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⁸⁷ Second Review Determination at 23. The Commission also noted the prevalence of long-term contracts in its
original preliminary determination. Soviet Uranium at 17.

⁸⁸ First Review Determination at 29-31.


⁹⁰ Second Review Determination at 24-25.

⁹¹ Second Review Determination at 25.
2. The Current Review

In this review, we find that the conditions of competition relied upon by the Commission in making its determinations in the prior reviews of this order generally continued in the current period. In particular, uranium products are highly fungible, price sensitive commodities, consumption of uranium products is projected to remain generally flat for the foreseeable future, most uranium sales are made pursuant to long-term contracts, the United States continues to be the largest single-country importing market in the world, and the Russian HEU Agreement has had and will continue to have a significant impact on the U.S. uranium industry.

There have been a number of additional developments since the second review that are relevant to our analysis. First, the RSA was amended in a number of respects in 2008. The 2008 RSA Amendment includes the following provisions: (i) small amounts of commercial LEU from Russia are allowed into the United States between 2008 through 2013; (ii) during 2014-20, following the expiration of the HEU Agreement, the import quota will be raised to approximately 20 percent of the U.S. enrichment market; (iii) in contrast to the HEU Agreement, the enriched uranium allowed into the United States from Russia after 2013 can be from LEU produced directly through the nuclear fuel cycle, and it does not have to be sold through an executive agent; and (iv) the RSA expires in 2020. The approaching expiration of the HEU Agreement should have a significant impact on the U.S. uranium industry and market.

Another significant development has been the passage in 2008 of the Domenici Amendment to the USEC Privatization Act, which contains import quotas for Russian uranium that mirror the quotas for subject merchandise currently in the amended RSA. According to the Domestic Interested Parties, although both the RSA and the Domenici Amendment effectively allow for the importation of Russian commercial LEU into the United States at limited levels, the RSA is a more comprehensive agreement with a number of additional restrictions and procedures not found in the Domenici Amendment that ensure enforceability of the quotas.

Further, the March 2011 accident at the Fukushima nuclear power plant in Japan has created uncertainties in the nuclear fuel industry and has contributed to a decline in demand in several countries, as well as to a decline in uranium prices in the United States.

Finally, we note that since the second review, Kazakhstan has become by far the world’s largest uranium producer, and that the amounts of uranium purchased from Kazakhstan by U.S. utilities have increased substantially. Thus, Kazakhstan is now one of the largest suppliers of nonsubject imports in the U.S. market.

Based on the record in this review, we find that the current conditions of competition in the uranium market are not likely to change significantly in the reasonably foreseeable future. Accordingly, we find that these conditions of competition provide us with a reasonable basis on which to assess the likely effects of termination of the suspended investigation.

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92 USEC Response at 10.
93 CR at I-11, PR at I-9.
95 USEC Response at 49-50, PRI/CB Response at 4-5.
96 CR at I-51 and I-71, PR at I-40 and I-55.
97 Kazakhstan’s uranium production increased from 5,279 metric tons in 2006 to 17,803 metric tons in 2010. The world’s next largest producer in 2010 was Canada with 9,783 metric tons. CR/PR at Table I-12.
98 U.S. utilities’ purchases of uranium from Kazakhstan increased from 1.6 million pounds U₃O₈ equivalent in 2006 to 6.8 million pounds U₃O₈ equivalent in 2011. CR/PR at Table I-10.
C. Likely Volume of Subject Imports

1. The Original Investigation and Prior Reviews

In its original preliminary determination in Soviet Uranium, the Commission found that the volume of uranium imports (both enriched and natural uranium) increased substantially in both absolute and relative terms during the period of investigation.99

In its first reviews, the Commission found that the volume of subject imports, which was already substantial, likely would increase significantly if the suspended investigation were terminated. It based this decision on Russia’s significant reserves of unmined uranium, its extensive capacity to produce all forms of uranium, its substantial inventories of various forms of uranium, its relatively small home market, and barriers to imports of Russian uranium in third-country markets.100

In the second review, the Commission found that the volume of subject imports, which took the form of natural uranium hexaflouride and LEU-HF, had been significant, even with the RSA in place. In light of Russia’s substantial uranium inventories and production capacity, its stated intention to expand exports to the United States, and its extensive contingent contracts and ongoing contract negotiations with U.S. purchasers during the period of review, the Commission concluded that the already substantial volume of subject imports likely would increase significantly within a reasonably foreseeable time if the suspended investigation were terminated.101

2. The Current Review

In assessing the likely volume effects of the termination of the suspended investigation, we have considered the current volume of subject imports (mostly under the RSA), as well as Russia’s inventories of uranium and its capacity to produce uranium in various stages of the nuclear fuel cycle. We have also considered the relative attractiveness of the U.S. market for uranium for nuclear fuel, as well as several indications of the Russian uranium industry’s intent to increase its exports to the United States. Based on these factors, we find that Russian producers would likely significantly increase shipments of subject uranium to the United States within the reasonably foreseeable future if the suspended investigation is terminated.

The value of U.S. imports of all uranium products from Russia, based on official Commerce statistics, increased irregularly during the period of review, from $841.1 million in 2006 to $1,049 million in 2010.102 These imports were almost all in the form of LEU.103 Imports of uranium into the United States from Russia amounted to *** of the total value of U.S. apparent consumption in 2010, as compared with *** of the total value of U.S. apparent consumption in 2005.104 Russia was one of the two largest suppliers to U.S. nuclear utilities in every year of the review period.105 Russian uranium accounted for

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99 Soviet Uranium at 24.
100 First Review Determination at 32-37.
102 CR/PR at Table I-9.
103 CR at I-62, PR at I-47.
104 CR/PR at Table I-11 and Appdx. C, Table I-1. See CR at I-65, PR at I-50 (discussing some difficulties with determining apparent consumption in this industry).
105 CR/PR at Table I-10.
In short, the volume of subject imports has been significant, even with the RSA in place.

In the second review, the Commission concluded that Russia had substantial inventories of uranium, in the form of natural UF₆ (held in the United States and Russia), LEU-HF, HEU, and uranium tails (depleted UF₆ that is produced as part of the enrichment process). The Commission also found that Russia had significant production capacity to produce all forms of uranium, including re-enrichment of uranium tails and reprocessing of spent nuclear fuel. The Commission noted that collectively, the countries of the former Soviet Union have about 30 percent of the world’s class 1 uranium concentrate reserves; Russian uranium concentrate production, which was estimated to be in the range of *** to *** pounds in 2005, was projected to grow further; Russia was estimated to have 24 percent of the world’s annual natural UF₆ conversion capacity; and Russia was estimated to have annual enrichment capacity of *** SWU in 2005, accounting for almost 40 percent of global nameplate capacity, which was expected to expand further. Based on the limited information in the record of this review, we find that Russia continues to hold substantial inventories of uranium in several forms and that the Russian producers continue to have significant production capacity at all levels of the nuclear fuel cycle.

In addition, the U.S. market is relatively attractive for the Russian uranium industry. The United States is the largest consumer of uranium in the world, accounting for 28 percent of world reactor requirements in 2010. Russian uranium faces barriers to entry in Europe, which is a significant market for enriched uranium. Imports of uranium from the former Soviet states are subject to EURATOM sales quotas, which limit Russian participation in the EURATOM market to about 15 percent. Also, demand for uranium may be declining in some other markets (such as Japan and Germany) in the wake of the Fukushima accident.

Finally, there is also evidence in this review of the Russian industry’s intention to increase its uranium exports to the United States upon termination of the suspended investigation, as there was in the second review. TENEX’s General Director stated in mid-2010 that, “{t}he American market is

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106 See CR/PR at Table I-10.
107 Second Review Determination at 27.
109 USEC submitted a May 2010 consultant’s report indicating that Russian commercial uranium inventories were estimated at ***, a sizable percentage of the total world commercial inventory of ***. The report also indicated that ***. USEC Response at 44 and Exh. 2, p. 4-6.
110 For example, the consultant’s report submitted by USEC states that Russia’s enrichment capacity is estimated to be approximately *** SWU per year, that this capacity is underutilized, and that Russia has access to sufficient uranium to supply its enrichment plants, on account of its own uranium deposits and those in other former Soviet states, especially Kazakhstan. USEC Response at 42-43 and Exh. 2 at 4-4, 6-17, and 6-23.
111 CR/PR at Table I-13.
112 CR at I-82-83, PR at I-63.
113 USEC Response at 38-40.
114 In the second review this evidence took the form of statements to the press by the head of Rosatom indicating that Russia wished to expand its uranium sales in the United States if the suspended investigation were terminated, and discussions and contingent contracts between the Russian industry and U.S. utilities. Second Review Determination at 28-29.
TENEX’s priority market,” and TENEX opened a subsidiary office in Washington DC in October 2010 to facilitate the expansion of its business in the United States.116

In sum, Russia’s substantial uranium inventories and production capacity, when viewed together with the relative attractiveness of the U.S. market and specific evidence of the Russian industry’s intention to increase its uranium exports to the United States, lead us to conclude that the volume of subject imports, which already is substantial, likely would increase significantly within a reasonably foreseeable time if the suspended investigation is terminated.

We recognize that the Domenici Amendment to the USEC Privatization Act117 contains import quotas for Russian uranium that mirror the export quotas for subject merchandise currently in the amended RSA. However, according to the Domestic Interested Parties, while both the RSA and the Domenici Amendment effectively allow for the importation of Russian commercial LEU into the United States only at certain levels, the RSA is a more comprehensive agreement with a number of additional restrictions and procedures not found in the Domenici Amendment that ensure enforceability of the quotas.118 The Domestic Interested Parties maintain that the “quotas in the Domenici legislation would not be a meaningful limit upon Russian uranium exports absent the detailed anticircumvention, reporting and other critical administrative provisions of the Suspension Agreement.”119 This information about the relationship between the RSA and the Domenici Amendment is unrebutted by any contrary evidence in this review.120

D. Likely Price Effects

1. The Original Investigation and Prior Reviews

In its original preliminary determination in Soviet Uranium, the Commission found that there was a reasonable indication that subject imports were having significant price effects on the domestic like product, in light of the decline of many indices of domestic prices, at a time of rising imports from the Soviet Union.121

In the first reviews, the Commission found that termination of the suspended investigation would likely lead to significant underselling by the subject imports, and to significant price depression and suppression, within a reasonably foreseeable time. It based this decision on factors that included the price sensitive nature of the uranium market; an increase in worldwide supplies of uranium, including the

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115 USEC Response at 36 and Exh. 8.
116 USEC Response at 37-38.
118 USEC Response at 49-50, PRI/CB Response at 4-5.
119 PRI/CB Response at 6.
120 We note that the Commerce staff concluded that the Domenici Amendment lacks the comprehensive monitoring and reporting and other enforcement tools provided for by the RSA. They also observed that the RSA includes anti-circumvention provisions without which “there is the potential for the U.S. market to be flooded with uranium swapped or displaced by transactions involving Russian uranium exported to third countries.” Issues and Decision Memorandum for the Third Sunset Review of the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation: Final Results (Oct. 28, 2011) at 10.
growing availability of natural UF₆ and LEU-HF as finished products that bypass part of the fuel cycle; and declining uranium prices.¹²²

In the second review, the Commission found that without the discipline of the Suspension Agreement, there was a substantial likelihood that the Russian uranium would be priced aggressively in the U.S. market in order to gain market share. The likelihood that Russia would undersell the domestic product was, in the Commission’s view, accentuated by the tendency of Russian enrichers to operate at high rates of capacity utilization. The Commission noted that, because the price that USEC pays under the HEU Agreement includes a discount from an index of retrospective U.S. and international prices, Russia could sell additional uranium outside the terms of the HEU Agreement for a higher price than it obtains under that agreement, yet still undersell the domestic like product.¹²³ It also noted that evidence in the record indicates that the Russian industry’s LEU prices in North America and the EU were lower than prices offered by other suppliers. The Commission found that likely underselling by Russian imports would likely lead to significant price depression or suppression of prices for the domestic like product, as the Russian industry competed with the domestic industry for contracts, and as the presence of Russian imports at aggressive prices drove down spot market prices, which, in turn, were a factor in the negotiation of contract prices.¹²⁴

2. The Current Review

The record in this expedited review contains no specific price comparison data. Prices for uranium generally rose irregularly during the period of review.¹²⁵ However, prices declined following the Fukushima accident in March 2011.¹²⁶ We find that the increased volumes of subject imports from Russia that would be likely to enter the United States if the suspended investigation were terminated likely would have significant negative effects on prices for the U.S. product. As discussed above, uranium is a commodity product and thus it is price sensitive to significant changes in the supply of uranium on the market. We find that without the discipline of the RSA, there is a substantial likelihood that the Russian uranium would be priced aggressively in the U.S. market in order to gain market share. In the second review, we explained that the likelihood that Russia would undersell the domestic product was accentuated by the tendency of Russian enrichers to operate at high rates of capacity utilization and by the motivation of Russian producers to sell LEU at whatever price is necessary to move the product and keep their enrichment facilities at full production.¹²⁷ There is nothing in the record of this expedited review to suggest that this motivation has changed. This likely underselling by Russian imports would likely lead to significant price depression or suppression of prices for the domestic like product, as the Russian industry competes with the domestic industry for contracts, and the presence of Russian imports at aggressive prices drives down spot market prices, which, in turn, are a factor in the negotiation of contract prices.

¹²² First Review Determination at 37-38.
¹²³ USEC Posthearing Brief, Answers to Commission Questions at Exhibit 18.
¹²⁴ Second Review Determination at 30-32.
¹²⁵ CR/PR at Figures I-3 to I-9.
¹²⁶ For example, the U₃O₈ spot price dropped over 22 percent from $66.50 per pound in March 2011 to $51.50 in July 2011. CR at I-51, PR at I-40.
¹²⁷ Second Review Determination at 31.
For the foregoing reasons, we find that termination of the suspended investigation on uranium from Russia would be likely to lead to significant underselling by the subject imports of the domestic like product, as well as significant price depression and suppression, within a reasonably foreseeable time.

E. Likely Impact

1. The Original Investigation and Prior Reviews

In its original preliminary determination in Soviet Uranium, the Commission found that many indicators pertaining to the condition of the domestic uranium industry were negative. Other indicators, however, were unknown or positive. The industry overall had a very low and declining market share. The performance of uranium concentrate producers was dismal. The Commission did not have any data concerning the condition of uranium converters. The Department of Energy’s enrichment enterprise did, however, show generally positive results on production, employment, and operating performance. On balance, and considering the condition of the industry as a whole, the Commission found a reasonable indication that the domestic industry was materially injured.\textsuperscript{128}

In the first reviews, the Commission found that the domestic industry was vulnerable. It based this decision on the weakened state of the domestic industry and declines in the overall financial performance of all domestic producers. It concluded that the increase in subject imports at aggressive prices would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time if the suspended investigation with respect to Russia were terminated.\textsuperscript{129}

In the second review, the Commission again found that subject imports from Russia would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time if the suspended investigation was terminated. It noted that, overall, the domestic industry performed poorly during the review period. Given the weak financial performance of the domestic industry overall and the substantial investments that would be required to build two new U.S. enrichment facilities, the Commission concluded that the domestic industry was in a weakened state and was vulnerable to material injury by the likely significant volume of subject imports and subsequent negative price effects that would occur if the suspended investigation was terminated. The Commission noted that USEC was in a particularly vulnerable position, as it sought to make the critical shift from reliance solely on the power-intensive gaseous diffusion technology used in its remaining enrichment facility, to the presumably more energy-efficient centrifuge technology to be used by its planned American Centrifuge facility. The Commission recognized that *** of USEC’s shipments of its U.S. production were exported, but it found that enough of USEC’s production had been directed to the U.S. market to enable the Commission to conclude that subject imports were likely to have a significant negative impact on the company’s U.S. production operations.\textsuperscript{130}

2. The Current Review

As in previous reviews, we have analyzed the impact of the subject imports on the entirety of the domestic like product and industry, but we recognize that some degree of disaggregated analysis is unavoidable, particularly with respect to the financial performance of domestic producers at different stages of the uranium fuel cycle.

\textsuperscript{128} Soviet Uranium at 16-23.
\textsuperscript{129} First Review Determination at 39-40.
\textsuperscript{130} Second Review Determination at 32-34.
In this expedited review, the record information on the domestic industry’s condition is based on data for 2010 provided in response to the notice of institution by two concentrators (PRI and CB) and one enricher (USEC Inc.). The Commission did not receive information from the other U.S. concentrators, the converter, the other enricher, or from fabricators. The limited record is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of termination of the suspended investigation.

We find that the likely significant volume of subject imports would adversely impact the domestic industry if the suspended investigation were terminated. The limited data in the record of this review suggest that the industry performed poorly, although there was improvement in some indicators. The capacity and production of the concentrators was lower in 2010 than in 2005, though their capacity utilization rate was higher. USEC’s capacity was unchanged in 2010 as compared to 2005, while its production and capacity utilization rates improved. The operating income of the concentrators was higher in 2010 than in 2005, but their operating income margin was lower in 2010 as compared with 2005. USEC’s financial results on its U.S. production operations were lower in 2010 than in 2005.

Based on the limited record of this review, we find that, should the suspended investigation be terminated, the likely volume and adverse price effects of the subject imports would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. Declines in these indicators of industry performance would have a direct adverse impact on the industry’s profitability and employment, as well as its ability to raise capital, to make and maintain capital investments (particularly USEC’s ability to complete its new enrichment facility), and to fund research and development.

Accordingly, based on the record in this review, we conclude that, if the suspended investigation is terminated, subject imports from Russia would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

We note that in terms of the share of total processing costs, concentrating and enrichment are by far the largest components of the U.S. industry producing nuclear fuel, together accounting for almost 88 percent of the total processing cost of the final product, as of March 2011. Concentration accounted for 47 percent of total processing costs and enrichment accounted for 41 percent. Commissioner Pinkert finds that the domestic industry producing uranium appears to be vulnerable. He relies in particular on the record data regarding domestic production of uranium concentrate and enriched uranium. Although the 2010 data show higher average unit values than in prior reviews, they show operating margins, high COGS/sales ratios, and significant unused capacity. Moreover, USEC has experienced difficulties in funding its new 3.5 million SWU per year gas centrifuge plant. It estimates that completing the plant will cost an additional $2.8 billion.

The commencement of production at Louisiana Energy Services’ National Enrichment Facility in 2010 is an example of such improvements.

The concentrators’ capacity was pounds in 2005 and pounds in 2010. Their production was pounds in 2005 and pounds in 2010. The capacity utilization rate was percent in 2005 and percent in 2010.

USEC’s capacity was SWU in 2005 and 2010. Its production was SWU in 2005 and SWU in 2010, and its capacity utilization rate was percent in 2005 and percent in 2010.

The concentrators’ operating income was $ in 2005 and $ in 2010. The concentrators’ operating income as a share of net sales was percent in 2005 and percent in 2010.

USEC’s operating income or (losses) was $ in 2005 and $ in 2010. Its operating income/(losses) as a share of net sales was percent in 2005 and percent in 2010.
CONCLUSION

For the foregoing reasons, we determine that termination of the suspended investigation on imports of uranium from Russia would be likely to lead to continuation or recurrence of material injury to the U.S. uranium industry within a reasonably foreseeable time.
INFORMATION OBTAINED IN THE REVIEW
INTRODUCTION

Background

On July 1, 2011, in accordance with section 751(c) of the Tariff Act of 1930, as amended (“the Act”), the U.S. International Trade Commission (“Commission”) gave notice that it had instituted a review to determine whether revocation of the suspended antidumping duty investigation on uranium from Russia would be likely to lead to a continuation or recurrence of material injury within a reasonably foreseeable time. On October 4, 2011, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate. In the absence of respondent interested party responses and any other circumstances that would warrant the conduct of a full review, the Commission determined to conduct an expedited review of the antidumping duty order pursuant to section 751(c)(3) of the Act (19 U.S.C. § 1675(c)(3)). The Commission voted on this review on February 14, 2012. The Commission notified Commerce of its determination on February 27, 2012. The following tabulation presents selected information relating to the schedule of this five-year review.

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1 19 U.S.C. 1675(c).
2 Uranium From Russia; Institution of a Five-Year Review Concerning the Suspended Investigation on Uranium From Russia, 76 FR 38694, July 1, 2011. All interested parties were requested to respond to this notice by submitting the information requested by the Commission. The Commission’s notice of institution is presented in app. A.
3 In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of a five-year review of the subject suspended investigation concurrently with the Commission’s notice of institution. Initiation of Five-Year (“Sunset”) Review, 76 FR 38613, July 1, 2011.
4 Chairman Deanna Tanner Okun is not participating in this five-year review.
5 The Commission received two submissions in response to its notice of institution in the subject review. They were filed on behalf of (1) Power Resources, Inc. (“PRI”), and Crow Butte Resources, Inc. (“Crow Butte”), U.S. producers of natural uranium concentrates, and (2) USEC Inc. and the United States Enrichment Corp. (collectively, “USEC”), a U.S. producer of enriched uranium hexaflouride (also known as low enriched uranium, or “LEU”) and natural uranium. PRI and Crow Butte accounted for *** percent of total U.S. production of natural uranium concentrates during 2010 and USEC accounted for *** percent of total U.S. production of LEU during 2010. Response of PRI and Crow Butte, August 1, 2011, p. 45; and Response of USEC, August 1, 2011, p. 68.
6 The Commission did not receive a response from any respondent interested parties to its notice of institution.
7 Uranium From Russia; Scheduling of an Expedited Five-Year Review Concerning the Suspended Investigation on Uranium From Russia, 76 FR 64107, October 17, 2011. The Commission’s notice of an expedited review appears in app. A. The Commission’s statement on adequacy is presented in app. B.
8 Commissioner Charlotte R. Lane dissented, instead finding that other circumstances warranted conducting a full review.
9 Cited Federal Register notices beginning with the Commission’s institution of a five-year sunset review are presented in app. A.
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<th>Effective date</th>
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<td>Commission’s institution of five-year review</td>
<td>76 FR 38694 July 1, 2011</td>
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<td>July 1, 2011</td>
<td>Commerce’s initiation of five-year review</td>
<td>76 FR 38613 July 1, 2011</td>
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<td>October 4, 2011</td>
<td>Commission’s determination to conduct an expedited five-year review</td>
<td>76 FR 64107 October 17, 2011</td>
</tr>
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<td>November 4, 2011</td>
<td>Commerce’s final expedited five-year review determination</td>
<td>76 FR 68404 November 4, 2011</td>
</tr>
<tr>
<td>February 14, 2012</td>
<td>Commission’s vote</td>
<td>Not applicable</td>
</tr>
<tr>
<td>February 27, 2012</td>
<td>Commission’s determination transmitted to Commerce</td>
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The Original Investigation

On November 8, 1991, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of dumped imports of uranium from the U.S.S.R. and each republic that was a member of the U.S.S.R. on the filing date of the petition. On December 25, 1991, the U.S.S.R. dissolved, and shortly thereafter the United States recognized the former Soviet republics as independent countries. Commerce investigated each of the former Soviet republics in turn and determined that imports of uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan were being, or were likely to be, sold in the United States at less than fair value (“LTFV”). Accordingly, the Commission instituted final investigations Nos. 731-TA-539-A through F under section 735(b) of the Act (19 U.S.C. 1673d (b)).

In a letter dated September 16, 1992, Commerce notified the Commission of its intent to suspend the antidumping duty investigation on uranium from Russia. Accordingly, the Commission suspended its investigation. On October 20, 1992, before the Commission reached determinations on the subject countries, Commerce notified the Commission that it was entering into suspension agreements with all of the subject countries to restrict the volume of direct or indirect exports to the United States of uranium.

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10 The petition was filed by counsel on behalf of the Ad Hoc Committee of Domestic Uranium Producers (“Ad Hoc Committee”) and the Oil, Chemical and Atomic Workers International Union. The names and locations of the petitioners are as follows: Ferret Exploration Co., Inc., Denver CO; First Holding Co., Denver, CO; Geomex Minerals, Inc., Denver, CO; Homestake Mining Co., SanFrancisco, CA; IMC Fertilizer, Inc., Northbrook, IL; Malapai Resources Co., Houston, TX; Pathfinder Mines Corp., Bethesda, MD; Power Resources, Inc., Denver CO; Rio Algom Mining Corp., Oklahoma City, OK; Solution Mining Corp., Laramie, WY; Total Minerals, Corp., Houston, TX; Umetco Minerals Corp., Danbury, CT; Uranium Resources, Inc., Dallas, TX; and Oil, Chemical and Atomic Workers International Union, Denver, CO.

and was therefore suspending its investigations. The Commission suspended its final investigations immediately thereafter.

The suspensions remained in effect for all six subject countries until April 1993, when Commerce notified the Commission that its agreements with Tajikistan and Ukraine were terminated and its corresponding investigations were resumed. The Commission thereupon continued investigation Nos. 731-TA-539-D (Tajikistan) and 731-TA-539-E (Ukraine), and on August 6, 1993, determined negatively with respect to Tajikistan and affirmatively with respect to Ukraine. Commerce’s final antidumping margin for Ukraine was 129.29 percent.

Commission activity on the remaining investigations remained suspended until January of 1999 when Commerce notified the Commission that it was resuming its antidumping investigation on Kazakhstan as a result of the Government of Kazakhstan’s termination of its suspension agreement on uranium. The Commission reached a negative determination with respect to the antidumping investigation concerning imports of uranium from Kazakhstan on July 13, 1999.

The First Five-Year Review

The Commission instituted its first reviews of the suspension agreements on Kyrgyzstan, Russia, and Uzbekistan and the antidumping duty order on Ukraine on August 2, 1999. Commerce terminated its suspended investigation on Kyrgyzstan on November 3, 1999, because no domestic party responded to its notice of initiation of the five-year review and the Commission thereafter terminated its corresponding five-year review. Therefore, the countries that remained under suspension agreements (Russia and Uzbekistan) and under an antidumping duty order (Ukraine) were those subject to the Commission’s full first five-year reviews.

On November 4, 1999, the Commission determined that full sunset reviews of the suspension agreements on uranium from Russia and Uzbekistan and the antidumping duty order on Ukraine should proceed. On March 3, 2000, Commerce found that revocation of the antidumping duty order on uranium from Ukraine would likely lead to continuation or recurrence of dumping at a weighted-average margin of 129.29 percent. On June 27, 2000, Commerce found that revocation of the antidumping duty suspension agreements on uranium from Russia and Uzbekistan would likely lead to continuation or recurrence of dumping at a weighted-average margin of 115.82 percent. In July 2000, the Commission determined that termination of the suspended investigation concerning Uzbekistan and revocation of the antidumping duty order regarding the Ukraine would not be likely to lead to continuation or recurrence of material injury. The Commission further determined that termination of the suspended investigation

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12 Antidumping; Uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan; Suspension of Investigations and Amendment of Preliminary Determinations, 57 FR 49220, 49235, October 30, 1992. Commerce also amended its preliminary determinations to include highly-enriched uranium (“HEU”) in the scope of the investigations.

13 58 FR 21144, April 19, 1993; and 58 FR 29197, May 19, 1993.


15 64 FR 2877, January 19, 1999.


17 64 FR 41965, August 2, 1999.

18 64 FR 59737, November 3, 1999.

19 64 FR 61939, November 15, 1999.

20 64 FR 62691, November 17, 1999.
concerning uranium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.\textsuperscript{21} Commerce published notice of the continuation of the suspended antidumping duty investigation concerning uranium from Russia on August 20, 2000.\textsuperscript{22}

The Second Five-Year Review

The Commission instituted the second five-year review of the suspended investigation on July 1, 2005,\textsuperscript{23} and determined on October 4, 2005, that it would conduct a full review.\textsuperscript{24} On June 6, 2006, Commerce published its determination that termination of the suspension agreement on uranium from Russia would likely lead to continuation or recurrence of dumping at a weighted-average margin of 115.82 percent.\textsuperscript{25} On August 1, 2006, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time\textsuperscript{26} and, on August 11, 2006, Commerce issued the second continuation of the suspended investigation.\textsuperscript{27}

Commerce’s Final Result of Expedited Third Five-Year Review

Commerce published the final results of its expedited third five-year review on November 4, 2011. Commerce concluded that revocation of the suspended investigation on uranium from Russia would likely to lead a continuation or recurrence of dumping at the following weighted-average margin: Russia-wide (115.82 percent).\textsuperscript{28} In the absence of a final determination in the original investigation, Commerce found that the margin determined in its original preliminary investigation is probative of the behavior of Russian manufacturers/exporters of the subject merchandise were the suspension agreement to be terminated.\textsuperscript{29}

\textsuperscript{21} 65 FR 48734, August 9, 2000.
\textsuperscript{22} Notice of Continuation of Suspended Antidumping Duty Investigation: Uranium from Russia, 65 FR 50958, August 22, 2000; and Uranium from Russia; Corrected Continuation of Suspended Antidumping Duty Investigation, 65 FR 52407, August 29, 2000.
\textsuperscript{23} 70 FR 38212, July 1, 2005.
\textsuperscript{24} 70 FR 60368, October 17, 2005. The Commission determined that all of the domestic interested party responses were individually adequate, the domestic interested party group response was adequate, and the respondent interested party group response was inadequate. In light of a desire to further examine conditions of competition for this industry, including changes to the U.S.-Russia HEU Agreement, the Commission found that circumstances warranted conducting a full review.
\textsuperscript{25} 71 FR 32517, June 6, 2006.
\textsuperscript{26} 71 FR 44707, August 7, 2006.
\textsuperscript{27} Continuation of Suspended Antidumping Duty Investigation: Uranium From the Russian Federation, 71 FR 46191, August 11, 2006.
\textsuperscript{28} 76 FR 68404, November 4, 2011.
\textsuperscript{29} Issues and Decision Memorandum for the Third Sunset Review of the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation; Final Results, October 28, 2011, pp. 15-16.
Commerce’s Administrative Reviews

There have been no completed administrative reviews of the suspension agreement. There have also been no changed circumstances reviews or duty absorption findings concerning the suspension agreement. The suspension agreement remains in effect for all manufacturers, producers, and exporters of uranium from Russia.30

Agreements Regarding Imports of Uranium from Russia

The Russian Suspension Agreement (“RSA”)

1992 Original Suspension Agreement

The original agreement to suspend the antidumping duty investigation on uranium from the Russian Federation was signed on October 16, 1992.31 Under that agreement, the Russian Federation Ministry for Atomic Energy agreed to restrict the volume of direct or indirect exports to the United States of uranium products from all producers and exporters of such products in Russia subject to the agreement’s terms. The agreement’s basic provision for controlling imports was an export quota expressed in pounds $\text{U}_3\text{O}_8$ equivalent and kilograms uranium (kg U). It was enforced through export licensing and certification. On a semi-annual basis, Commerce was to determine the market price for subject uranium in the United States and the corresponding quota level. The market price was based on the weighted average of the spot market and long-term contract prices.32 The agreement permitted importation of uranium from Russia for processing in the United States re-export where such imports were not for sale or consumption in the United States and where re-exports took place within 12 months of entry.

1994 Amendment

Since the original 1992 agreement suspending the antidumping duty investigation on Russian uranium, there have been a number of amendments. The first amendment, effective March 11, 1994, was made “to restore the competitive position of the U.S. industry” by introducing the concept of “matched sales” in the United States of Russian-origin and U.S.-origin natural uranium and separative work units (“SWU”).33 The matched imports, through which quota amounts of uranium from Russia could be imported into the United States, provided that a U.S. partner with an equivalent form and quantity of domestically produced uranium was also party to the sale or contractual arrangement and that the Russian material was priced such that the price of the U.S. component could be greater than the average price to

30 Ibid., p. 4.
31 Antidumping; Uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan; Suspension of Investigations and Amendment of Preliminary Determinations, 57 FR 49221, October 30, 1992. Commerce also amended its preliminary determination to include highly-enriched uranium (“HEU”) in the scope of the investigations.
32 The market price determinations and quota calculations were to be made semi-annually on October 1 and April 1 of each year with the exception of the first period which began on October 16, 1992.
33 Amendment to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 59 FR 15373, April 1, 1994. The amendment also extended the duration of the Suspension Agreement to March 31, 2004. A separative work unit (“SWU”) is a unit of measurement of the effort needed to separate the $\text{U}^{235}$ and $\text{U}^{238}$ atoms in natural uranium in order to create a final product that is richer in $\text{U}^{235}$ atoms.
the customer.\textsuperscript{34} The amendment also provided for matched import ratios, 50-50 in the first year to be adjusted thereafter based on the level of U.S. production.\textsuperscript{35} On July 31, 1998, Commerce announced a change to the administration of matched sales. Previously, Commerce used a delivery year quota of April 1 through March 31. At the request of Nuclear Energy Institute members, Commerce switched to a calendar year of January 1 through December 31 to conform with the members’ other internal tracking systems (\textit{i.e.} budgeting, requests for quotes, deliveries).\textsuperscript{36}

\textbf{1996 Amendments}

In April 1996, Congress passed the United States Enrichment Corporation (\textquoteleft\textquoteleft USEC\textquoteright\textquoteright) Privatization Act (42 U.S.C. § 2297h, et seq.), transferring the ownership interests of the United States in USEC to the private sector.\textsuperscript{37} To make the RSA consistent with the USEC Privatization Act, an amendment to the Suspension Agreement, effective October 3, 1996, provided for the sale in the United States of feed associated with imports of Russian low enriched uranium (\textquoteleft\textquoteleft LEU\textquoteright\textquoteright) derived from HEU.\textsuperscript{38}

Substantial quantities of uranium products produced from Russian ore and not subject to the RSA began to undermine the agreement’s effectiveness. To address this situation, another amendment, also effective on October 3, 1996, covered Russian uranium which had been enriched in a third country within the terms of the RSA. This amendment also restored previously unused quotas for SWU. These modifications were to remain in effect until October 3, 1998.\textsuperscript{39}

\textbf{1997 Amendment}

Another amendment to the RSA was signed, effective on May 7, 1997, to encourage processing in the United States of uranium products from Russia. The amendment doubled the amount of Russian-origin uranium which was allowed to be imported into the United States for further processing prior to re-exportation. In addition, the amendment lengthened the period of time uranium could remain in the United States for such processing from 12 months to up to three years.\textsuperscript{40}

\textsuperscript{34} \textit{Uranium From Russia, Ukraine, and Uzbekistan, Investigations Nos. 731-TA-539 C, E, and F (Review), USITC Publication 3334, August 2000, p. I-9.}
\textsuperscript{35} \textit{Amendment to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 59 FR 15376, April 1, 1994.}
\textsuperscript{36} \textit{Amendment Suspending the Antidumping Investigation on Uranium From the Russian Federation, 63 FR 40879, July 31, 1998.}
\textsuperscript{37} H 3931, §3103, Title III Rescissions and Offsets, Chapter 1, Energy and Water Development, Subchapter A-United States Enrichment Corporation Privatization, April 25, 1996.
\textsuperscript{38} \textit{Amendments to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 61 FR 56665, November 4, 1996. HEU feed refers to the natural uranium feed associated with the LEU (derived from HEU), which is imported pursuant to the Agreement Between the Government of the United States of America and the Government of the Russian Federation Concerning the Disposition of Highly Enriched Uranium Extracted from Nuclear Weapons (The HEU Agreement), signed February 18, 1993.}
\textsuperscript{39} \textit{Amendments to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 61 FR 56665, November 4, 1996.}
\textsuperscript{40} \textit{Amendment to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 62 FR 37879, July 15, 1997.}
2008 Amendment

On February 1, 2008, mindful of the approaching expiration of the HEU agreement (see subsequent section in this report entitled “Russian HEU Agreement”), Commerce and the Government of Russia signed another amendment to the RSA instituting new quotas through 2020 for commercial Russian uranium exports sold directly or indirectly to U.S. utilities or otherwise. The 2008 Amendment included the following provisions:

- Small amounts of commercial LEU from Russia were allowed into the United States between 2008 through 2013.
- During 2014-20, following the expiration of the HEU Agreement, the import quota will be raised to approximate 20 percent of the U.S. enrichment market.
- After 2020, the RSA will expire.
- In contrast to the HEU Agreement, the enriched uranium allowed into the United States from Russia after 2013 but before 2021 can be from LEU produced directly through the nuclear fuel cycle, i.e., the LEU does not have to be produced from downblended HEU. Additionally, also in contrast to the terms of the HEU Agreement, the LEU can be sold directly to U.S. utilities without requiring the services of an executive agent.

Commerce noted that the following from Section XII of the 2008 Amendment is of particular relevance in this third five-year review:

In addition, {Commerce} shall conduct sunset reviews under 19 U.S.C. 1675(c) in the years 2011 and 2016. All parties agree that the sunset reviews shall be expedited, pursuant to 19 U.S.C. 1675(C)(4) and (C)(3)(B), respectively, at both {Commerce} and the International Trade Commission.

41 Amendment to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 73 FR 7705, February 11, 2008. The Department issued its memorandum regarding the 2008 Amendment’s prevention of price suppression or undercutting on May 14, 2008. Memorandum to David M. Spooner, Assistant Secretary for Import Administration, from Ronald K. Lorentzen, Deputy Assistant Secretary for Policy and Negotiations, regarding “Prevention of Price Suppression or Undercutting of Price Levels of Domestic Products by the Amended Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation,” May 14, 2008.

42 Issues and Decision Memorandum for the Third Sunset Review of the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation; Final Results, October 28, 2011, p. 3.
The Domenici Amendment

In September 2008, Congress enacted legislation which codified many provisions in the amended RSA and instituted import quotas through 2020 that in large part mirror the quotas in the 2008 Amendment. The Domenici Amendment allowed Russia to export to the United States an additional 5 percent of enriched uranium as SWU provided that Russia downblended prescribed amounts of HEU. The RSA and the Domenici Amendment applied to all LEU purchases including LEU pursuant to SWU contracts.

The HEU Agreement

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 19, 1993. The Russian HEU Agreement facilitates the conversion of HEU extracted from Russia’s nuclear weapons, into LEU for use as fuel in commercial nuclear reactors. This Agreement was reached to further the objectives of broader arms control agreements, in particular the Treaty on the Non-Proliferation on Nuclear Weapons of July 1, 1968. The HEU Agreement provided that the United States would purchase from Russia 500 metric tons of HEU converted to LEU over 20 years (1994-2013). These purchases were made by USEC as the executive agent of the U.S. Government under a 1994 HEU contract with the Russian state-owned corporation, Tenex. In each purchase, USEC traded natural uranium for Tenex’s downblended HEU. Tenex then sold the natural uranium to three western uranium suppliers and retained a portion for itself. The USEC Privatization Act imposed a quota on the total quantity of natural uranium delivered to Tenex that could be sold each year for consumption in the United States, either directly by Tenex or through one of its customers. Figure I-1 graphically depicts the transaction process under the HEU Agreement.

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Figure I-1
Basic Transactions Under the HEU Agreement

A listing of the HEU Agreement milestones is presented in table I-1 below.

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<th>Date</th>
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<tr>
<td>February 18, 1993</td>
<td>The HEU Agreement was signed.</td>
</tr>
<tr>
<td>January 14, 1994</td>
<td>Executive Agents for the United States and Russia (USEC and Tenex) executed the Implementing Contract to the HEU Agreement.</td>
</tr>
<tr>
<td>June 195</td>
<td>The first delivery of LEU that was derived from HEU arrived in the United States.</td>
</tr>
<tr>
<td>April 26, 1996</td>
<td>The USEC Privatization Act P.L. 102-486 was signed by President Clinton. This Act, in part, established the annual amount of natural uranium that can be imported for sale within the United States.</td>
</tr>
<tr>
<td>October 21, 1998</td>
<td>President Clinton signed P.L. 105-277 that, in part, provided for the United States to purchase up to $325 million unsold natural uranium associated with the 1997 and 1998 deliveries of Russian LEU.</td>
</tr>
<tr>
<td>March 24, 1999</td>
<td>The Transfer of Source Material Agreement was signed by the United States and Russian Governments. In addition the Western Consortium and Tenex signed a Commercial Feed Agreement. These agreements were instrumental in introducing the natural uranium component into the market in a nondisruptive manner.</td>
</tr>
<tr>
<td>November 16, 2001</td>
<td>The Western Consortium and Tenex signed an amendment to the Commercial Feed Agreement that exercised the Western Consortium’s options to purchase the natural uranium for the period 2002 through 2013.</td>
</tr>
<tr>
<td>June 19, 2002</td>
<td>The U.S. and Russian Governments approved an amendment to the contract between USEC and Tenex that implemented the HEU Agreement. Under this amendment, a market-based pricing structure for the SWU is used for the remaining term of the HEU Agreement.</td>
</tr>
<tr>
<td>June 16, 2004</td>
<td>The Western Consortium and Russia announced an amendment to the Commercial Feed Agreement to ensure there is sufficient natural uranium in Russia to blend down the HEU to commercially usable LEU through the remaining term of the Agreement.</td>
</tr>
<tr>
<td>September 2004</td>
<td>Deliveries of LEU reached the equivalent level of 9,000 nuclear warheads eliminated.</td>
</tr>
<tr>
<td>August 2005</td>
<td>LEU down blended from 250 MT of HEU was delivered to the United States. This represented one-half of the 500 metric tons of HEU and was equivalent to 10,000 nuclear warheads eliminated.</td>
</tr>
<tr>
<td>September 30, 2005</td>
<td>The U.S. Departments of State and Energy and the Russian Federation Ministry of Foreign Affairs and the Federal Atomic Energy Agency issued a joint statement marking the successful midpoint of the implementation of the HEU Agreement.</td>
</tr>
<tr>
<td>December 31, 2013</td>
<td>The HEU Agreement is set to expire. Russia has not agreed to sign on to a second HEU agreement.</td>
</tr>
</tbody>
</table>

Table I-2 presents data regarding deliveries of Russian LEU to the United States through 2009 and projected totals for the remainder of the HEU Agreement.

### Table I-2
Uranium: Status of Russian LEU deliveries to the United States under the HEU Agreement

<table>
<thead>
<tr>
<th>Contracted year</th>
<th>Estimated dismantled warheads(^1) (number)</th>
<th>HEU (MT)(^2)</th>
<th>LEU (MT)</th>
<th>Natural UF(_6) uranium concentrates component (million pounds U(_2)O(_5) (E))</th>
<th>Natural UF(_6) conversion services component (million kg U)</th>
<th>Uranium enrichment services component (million SWU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>244</td>
<td>6.1</td>
<td>186.0</td>
<td>4.8</td>
<td>1.9</td>
<td>1.1</td>
</tr>
<tr>
<td>1996</td>
<td>479</td>
<td>12.0</td>
<td>370.9</td>
<td>9.5</td>
<td>3.7</td>
<td>2.2</td>
</tr>
<tr>
<td>1997</td>
<td>534</td>
<td>13.4</td>
<td>358.5</td>
<td>10.2</td>
<td>3.9</td>
<td>2.4</td>
</tr>
<tr>
<td>1998</td>
<td>764</td>
<td>19.1</td>
<td>571.5</td>
<td>15.0</td>
<td>5.8</td>
<td>3.5</td>
</tr>
<tr>
<td>1999</td>
<td>970</td>
<td>24.3</td>
<td>718.7</td>
<td>19.0</td>
<td>7.3</td>
<td>4.5</td>
</tr>
<tr>
<td>2000</td>
<td>1,462</td>
<td>36.6</td>
<td>1,037.8</td>
<td>28.3</td>
<td>10.9</td>
<td>6.7</td>
</tr>
<tr>
<td>2001</td>
<td>1,201</td>
<td>30.0</td>
<td>904.3</td>
<td>23.7</td>
<td>9.1</td>
<td>5.5</td>
</tr>
<tr>
<td>2002</td>
<td>1,201</td>
<td>30.0</td>
<td>879.0</td>
<td>23.5</td>
<td>9.0</td>
<td>5.5</td>
</tr>
<tr>
<td>2003</td>
<td>1,203</td>
<td>30.1</td>
<td>906.0</td>
<td>23.7</td>
<td>9.1</td>
<td>5.5</td>
</tr>
<tr>
<td>2004</td>
<td>1,202</td>
<td>30.1</td>
<td>891.0</td>
<td>23.6</td>
<td>9.1</td>
<td>5.5</td>
</tr>
<tr>
<td>2005</td>
<td>1,203</td>
<td>30.1</td>
<td>846.0</td>
<td>23.3</td>
<td>9.0</td>
<td>5.5</td>
</tr>
<tr>
<td>2006</td>
<td>1,207</td>
<td>30.2</td>
<td>870.0</td>
<td>23.4</td>
<td>9.0</td>
<td>5.5</td>
</tr>
<tr>
<td>2007</td>
<td>1,212</td>
<td>30.3</td>
<td>840.0</td>
<td>23.3</td>
<td>9.0</td>
<td>5.5</td>
</tr>
<tr>
<td>2008</td>
<td>1,204</td>
<td>30.1</td>
<td>834.0</td>
<td>23.1</td>
<td>8.9</td>
<td>5.5</td>
</tr>
<tr>
<td>2009</td>
<td>1,204</td>
<td>30.1</td>
<td>834.0</td>
<td>23.1</td>
<td>8.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Total delivered through 2009</td>
<td>15,293</td>
<td>382.3</td>
<td>11,048.0</td>
<td>297.5</td>
<td>113.7</td>
<td>69.9</td>
</tr>
<tr>
<td>Total expected over life of Agreement</td>
<td>20,000</td>
<td>500.0</td>
<td>15,258.6</td>
<td>395.8</td>
<td>152.2</td>
<td>92.1</td>
</tr>
</tbody>
</table>

\(^1\) Based on IAEA’s definition of significant quantities.
\(^2\) The HEU Agreement allowed for up to 30 MTU of HEU to be blended down to LEU for delivery in 1999. However, only 21.3 MTU (14.7 MTU in 1999 and 6.6 MTU in 2000) of the 1999 order was actually delivered. The remaining 8.7 MTU of HEU was scheduled for delivery in future years.

RELATED INVESTIGATIONS

On December 7, 2000, USEC filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of subsidized and LTFV imports of low enriched uranium (“LEU”) from France, Germany, the Netherlands, and the United Kingdom. Commerce determined that LEU from Germany, the Netherlands, and the United Kingdom was not being sold at LTFV.\(^{44}\) The Commission found material injury to the domestic industry by reason of imports of LEU from France, Germany, the Netherlands, and the United Kingdom that were found by Commerce to be subsidized. The Commission also found injury to the domestic industry by reason of imports of LEU from France that found by Commerce to be sold at LTFV.\(^{45}\) Accordingly, on February 12, 2002, Commerce issued one antidumping and four countervailing duty orders.\(^{46}\) On July 7, 2006, Commerce determined that all programs found to have provided countervailable subsidies on LEU from Germany, the Netherlands, and the United Kingdom had been abolished for at least three consecutive years. Commerce found that continued application of these CVD orders was no longer warranted, and revoked the CVD orders on imports of LEU from Germany, the Netherlands, and the United Kingdom.\(^{47}\)

SUMMARY DATA

Appendix C presents selected summary data from the original investigation and first and second full five-year reviews. The tables presented in appendix C are direct reproductions from the Commission’s second five-year review staff report and, thus, retain their original table and page numbers. Certain data collected during this expedited third five-year review for calendar year 2010 are presented throughout this report.

THE PRODUCT

Commerce’s Scope

Commerce has defined the imported product subject to the suspended investigation under review as follows:

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\(^{44}\) Notice of Final Determinations of Sales at Not Less Than Fair Value: Low Enriched Uranium from the United Kingdom, Germany, and the Netherlands, 66 FR 65886, December 21, 2001.

\(^{45}\) Low Enriched Uranium From France, Germany, the Netherlands, and the United Kingdom-Determinations, 67 FR 6050, February 8, 2002.

\(^{46}\) Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order: Low Enriched Uranium From France, with antidumping margins of 19.95 percent ad valorem for CogemaEurodif and all others (67 FR 6680, February 13, 2002); and Notice of Amended Final Determinations and Notice of Countervailing Duty Orders: Low Enriched Uranium From Germany, the Netherlands and the United Kingdom, with subsidy rates in all three countries of 2.23 percent ad valorem for Urenco and all others (67 FR 6689, February 13, 2002), and France, with subsidy rates of 12.15 percent ad valorem for Eurodif/Cogema and all others (67 FR 6691, February 13, 2002).

\(^{47}\) Low Enriched Uranium from Germany, the Netherlands, and the United Kingdom: Final Results of Countervailing Duty Administrative Reviews and Revocation of Countervailing Duty Orders, 71 FR 38626, July 7, 2006.
“The merchandise covered by this Suspension Agreement (Section III, “Product Coverage”) includes the following products from Russia:48 Natural uranium in the form of uranium ores and concentrates; natural uranium metal and natural uranium compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing natural uranium or natural uranium compounds; uranium enriched in U\(^{235}\) and its compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing uranium enriched in U\(^{235}\) or compounds of uranium enriched in U\(^{235}\); and any other forms of uranium within the same class or kind. Uranium ore from Russia that is milled into U\(_3\)O\(_8\) and/or converted into UF\(_6\) in another country prior to direct and/or indirect importation into the United States is considered uranium from Russia and is subject to the terms of this Suspension Agreement. For purposes of this Suspension Agreement, uranium enriched in U\(^{235}\) or compounds of uranium enriched in U\(^{235}\) in Russia are covered by this Suspension Agreement, regardless of their subsequent modification or blending. Uranium enriched in U\(^{235}\) in another country prior to direct and/or indirect importation into the United States is not considered uranium from Russia and is not subject to the terms of this Suspension Agreement.49 HEU is within the scope of the underlying investigation, and HEU is covered by this Suspension Agreement. For the purpose of this Suspension Agreement, HEU means uranium enriched to 20 percent or greater in the isotope uranium-235.50 Imports of uranium ores and concentrates, natural uranium compounds, and all forms of enriched uranium are currently classifiable under the Harmonized Tariff Schedule of the United States (“HTSUS”) subheadings: 2612.10.00, 2844.10.20, 2844.20.00, respectively. Imports of natural uranium metal and forms of natural uranium other than compounds are currently classifiable under HTSUS subheadings: 2844.10.10 and 2844.10.50. HTSUS subheadings are provided for convenience and Customs purposes. The written description of the scope of this proceeding is dispositive. The Department has not received any scope requests or made any scope determinations in this proceeding since the Second Sunset Review.”51

U.S. Tariff Treatment

Imports of the subject uranium products are classifiable under Harmonized Tariff Schedule of the United States (“HTS”) subheadings 2612.10.00 (“Uranium ores and concentrates”), 2844.10 (“Natural uranium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures

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48 See 1992 Suspension Agreements, at 49235.

49 As noted above, the second amendment of two amendments to the Suspension Agreement effective on November 4, 1996, in part included within the scope of the Suspension Agreement Russian uranium which had been enriched in a third country prior to importation into the United States. According to the amendment, this modification remained in effect until October 3, 1998. See Amendments to the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 61 FR 56665, November 4, 1996.

50 Section IV.M of the Suspension Agreement in no way prevents Russia from selling directly or indirectly any or all of the HEU in existence at the time of the signing of the Suspension Agreement and/or LEU produced in Russia from HEU to the U.S. Department of Energy (“DOE”), its governmental successor, its contractors, assigns, or U.S. private parties acting in association with DOE or the United States Enrichment Corporation and in a manner not inconsistent with the agreement between the United States and Russia concerning the disposition of HEU resulting from the dismantlement of nuclear weapons in Russia. See 1992 Suspension Agreements, at 49237.

51 Uranium From the Russian Federation; Final Results of Expedited Sunset Review of the Suspension Agreement, 76 FR 68404, November 4, 2011.
containing natural uranium or natural uranium compounds”), and 2844.20.00 (“Uranium enriched in U\textsuperscript{235} and its compounds; plutonium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing uranium enriched in U\textsuperscript{235}, plutonium or compounds of these products”) as set forth in table I-3.

### Table I-3
**Uranium: Tariff rates, 2011**

<table>
<thead>
<tr>
<th>HTS provision</th>
<th>Article description</th>
<th>General(^1)</th>
<th>Special(^2)</th>
<th>Column 2(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2612.10.00</td>
<td>Uranium ores and concentrates</td>
<td>Free</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>2844.10</td>
<td>Natural uranium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing natural uranium or natural uranium compounds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.10.10</td>
<td>Uranium metal</td>
<td>5%</td>
<td>Free(^4)</td>
<td>45%</td>
</tr>
<tr>
<td>2844.10.20</td>
<td>Uranium compounds</td>
<td>Free</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>2844.10.2010</td>
<td>Oxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.10.2025</td>
<td>Hexafluoride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.10.2055</td>
<td>Other</td>
<td>5%</td>
<td>Free(^5)</td>
<td>45%</td>
</tr>
<tr>
<td>2844.10.5000</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.20.00</td>
<td>Uranium enriched in U\textsuperscript{235} and its compounds; plutonium and its compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing uranium enriched in U\textsuperscript{235}, plutonium or compounds of these products</td>
<td>Free</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>2844.20.0010</td>
<td>Oxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.20.0020</td>
<td>Fluorides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.20.0030</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2844.20.0050</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Normal trade relations, formerly known as the most-favored-nation duty rate.

\(^2\) General note 3(c)(i) lists the special tariff treatment programs indicated in this column. Goods must meet eligibility rules set forth in other general notes, and importers must properly claim such treatment.

\(^3\) Applies to imports from a small number of countries that do not enjoy normal trade relations duty status.

\(^4\) Applies to eligible imports under Generalized System of Preferences ("GSP"); and eligible imports under free trade agreements from Australia, Bahrain, Canada, Chile, Israel, Jordan, Morocco, Mexico, Peru, Oman, and Singapore. Duty-free treatment also applies to eligible imports from countries eligible for preferential treatment pursuant to the Andean Trade Preference Act, the Dominican Republic-Central America Implementation Act, and the Caribbean Basin Economic Recovery Act.

\(^5\) Applies to eligible imports under programs listed in footnote 4 and eligible imports under the African Growth and Opportunity Act.

Domestic Like Product and Domestic Industry

The domestic like product is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is the collection of U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product.

In the 1991 preliminary determination for the original investigation of uranium from the U.S.S.R., the majority of the Commission found that the five-factor semifinished product analysis dictated a single like product encompassing all four forms of uranium. In its first and second full five-year review determinations concerning Russia, the Commission defined the domestic like product consisting of all four forms of uranium coextensive with Commerce’s scope. In its original preliminary determination concerning the U.S.S.R., the Commission defined the domestic industry as domestic producers of the product coextensive with Commerce’s scope of the investigation, including the U.S. Department of Energy’s uranium enrichment operations. In its full first and second five-year review determinations concerning Russia, the Commission defined the domestic industry as all domestic producers of uranium, including concentrators, the converter, the enricher, and fabricators. The Commission noted in its second review determination that, at that time, there were four domestic uranium concentrate producers (PRI/Crow Butte, Areva NC, Cotter, and URI), one converter (ConverDyn), one enricher (USEC), and three fabricators (Areva NP, Global Nuclear Fuel, and Westinghouse).52

PRI and Crow Butte indicated in their response to the Commission’s notice of institution in this third five-year review that they agree with the Commission’s definitions of domestic like product and domestic industry.53 USEC also indicated in its response that it agrees with the definition of the domestic like product and the domestic industry in these reviews. It added that the Commission should find that there is one domestic like product consisting of all forms of uranium, including high enriched uranium (“HEU”) and all uranium products made from downblended HEU.54

Physical Description55

Uranium (U) is a heavy, naturally and slightly radioactive, metallic element (atomic number 92). Uranium is one of over 100 basic chemical elements, or types of atoms, known to occur in nature. Each element is defined by the number of its atoms’ protons, one of the atom’s three building blocks along with electrons and neutrons. The uranium atom has 92 protons and thus ranks 92nd among the elements. Although the number of protons and electrons in the element’s atoms (assumed to be neutral) is equal and consistent, the number of neutrons can vary, resulting in different “isotopes” of the same element, each with slightly different properties. Natural uranium has three principal isotopes (U238, U235, and U234) which constitute 99.285 percent, 0.71 percent, and 0.005 percent, respectively, of the element’s weight in its natural elemental state. U235 is the only naturally occurring fissionable nuclide, i.e., when bombarded by thermal neutrons, the U235 atom disintegrates, creating a self-perpetuating chain reaction with the release of energy. It is the fissionable property of the U235 isotope that is important for uranium’s

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53 Response of PRI and Crow Butte, August 1, 2011, p. 50.
54 Response of USEC, August 1, 2011, p. 75.
55 The discussion in this section is based on information contained in Uranium From Russia: Investigation No. 731-TA-539-C (Second Review), USITC Publication 3872, August 2006, pp. I-17 - I-18.
principal uses - primarily as a fuel to generate electricity in nuclear power plants and secondarily as a fuel to propel naval vessels and as an active ingredient in atomic weaponry. The half-lives of U\(^{235}\) and U\(^{238}\) are 7.13 x 10^8 and 4.51 x 10^9 years, respectively. Because of these slow rates of radioactive decay, natural uranium is only mildly radioactive.

Elemental uranium (uranium metal) is highly reactive chemically. A fresh surface of elemental uranium is silvery gray in color, but rapidly oxidizes to black oxide in air at room temperature. Chips and powder of uranium are highly pyrophoric (igniting spontaneously when exposed to air), and the metal is a strong reducing agent.

Uranium is one of the less common elements but its compounds are readily soluble and widely distributed in many mineral and rock types throughout the world. Most of the large economic deposits have a uranium content greater than 0.10 percent triuranium octoxide (U\(_3\)O\(_8\)). Uranium does not occur in nature in the elemental state but only in chemical combinations with other elements. It is an important constituent in 155 minerals and a measurable constituent in nearly 500 minerals. Therefore, as a first step, natural uranium is mined or recovered from naturally occurring mineral deposits.

“Yellowcake” is the term often applied to the concentrate produced at uranium mills. The exact chemical composition of uranium concentrate is variable and the industry generally includes purified natural uranium oxides in its definition of uranium concentrate. In the United States, the terms uranium concentrate, yellowcake, and natural uranium oxides are used interchangeably in the industry. The uranium industry has adopted the practice of expressing the natural uranium content of uranium concentrates in terms of U\(_3\)O\(_8\) equivalent. Most uranium concentrates contain a minimum of 75 percent U\(_3\)O\(_8\), and average 80 to 85 percent U\(_3\)O\(_8\).

“Enriched uranium” is uranium in which the concentration of isotope U\(^{235}\) has been increased (i.e., the product has been “enriched in U\(^{235}\)”) relative to the natural state. Uranium enrichment is essentially taking a feedstock consisting of a mixture of U\(^{235}\) and U\(^{238}\) and increasing the relative amount of U\(^{235}\) in one batch while necessarily reducing the relative amount of U\(^{235}\) in a second batch. The first batch is the product, the enriched uranium, whereas the second batch which contains less U\(^{235}\) than in the feedstock is referred to as depleted uranium or tails and is often considered a waste product.

U\(^{235}\) is indispensable to the nuclear energy industry because it is the only isotope existing in nature, to any appreciable extent, that is fissionable by thermal neutrons, i.e., at about room temperature. Enrichment of uranium fuel lowers the size of the “critical mass” assemblies of “light-water” nuclear reactors and, therefore, lowers capital cost requirements for the reactors. Enriched uranium for use by commercial power plants in the United States generally has 3 to 5 percent U\(^{235}\) by weight. Depleted uranium usually contains between about 0.2 percent to 0.35 percent U\(^{235}\), but there are exceptions to this rule, particularly in relationship to Russia’s nuclear industry.

The industry has accepted a basic unit of quantity derived from thermodynamics to measure the effort needed to enrich a given amount of uranium from the initial enrichment level to a higher enrichment level. This unit of measurement is referred to as separative work unit (“SWU”). As is intuitively obvious, the amount of SWU required is proportional to the amount of uranium to be enriched and increases (but not linearly) the greater the level of enrichment. In other words, it requires more SWU to enrich a given amount of natural uranium (containing about 0.7 percent U\(^{235}\)) to 5 percent U\(^{235}\) than to enrich the same amount of natural uranium to 3 percent U\(^{235}\).

Uranium is enriched by gaseous-diffusion or gas-centrifuge technology. In order to use these processes, the uranium must be present in a compound that can be readily converted to a gas. For a number of technical reasons, such as a relatively low boiling point, uranium hexafluoride is well suited for this purpose. Uranium hexafluoride (UF\(_6\)) is a white solid at ambient temperature and pressure and is obtained by the chemical treatment of uranium concentrate or oxides. UF\(_6\) forms a vapor at temperatures above 56 degrees Centigrade and is the form of uranium used for the enrichment process. Consequently, two types of UF\(_6\) are of commercial significance (i.e., “natural” and “enriched”).
After enrichment in U$^{235}$, the uranium hexafluoride is converted to a fuel form for use in the manufacture of nuclear fuel assemblies. These forms include the oxides (usually enriched UO$_2$), or metals, alloys, carbides, nitrides, and salt solutions of enriched uranium. Pelletized ceramic UO$_2$ is the most common fuel form used in light-water reactors, which are the type of reactors used by utilities in the United States. Enriched uranium is then encapsulated in protective metal sheaths to produce a “fuel rod.” Fuel rods are then assembled into the required configuration for use in a power plant’s nuclear reactor.

Uses

Nuclear fuel for commercial power reactors for the generation of electricity is the predominant commercial application for uranium. In the United States and most other countries, natural uranium must first be converted into enriched uranium, i.e., the U$^{235}$ component must be increased. However, in a few countries, e.g., Canada and India, electricity can be generated from reactors containing natural uranium. Other uses for uranium include Government-sponsored nuclear programs, including weapons, propulsion (particularly nuclear powered submarines and aircraft carriers), underground tests, isotope production, research and development, and space applications. Relatively small quantities of uranium, depleted in U$^{235}$, are used in specialized non-energy applications, principally for military ordnance. Depleted uranium readily forms alloys with other metals, has a very high density, and is easy to fabricate, which makes it useful for some applications. There have been disagreements as to whether depleted uranium which is less radioactive than natural uranium constitutes a possible health hazard.

Production Process

Uranium is generally found in molecular combination with another element, oxygen, embedded in various concentrations in rock formations, known as uranium ores, throughout the world. Unlike the production of other mineral or metallic products, the process by which uranium is transformed into a nuclear fuel for the generation of electricity involves four successive processes administered by four types of generally independent producers. The various steps in converting uranium ore to nuclear fuel suitable for use in light water reactors is shown in figure I-2.

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56 Unless otherwise indicated, the discussion in this section is based on information contained in Uranium From Russia: Investigation No. 731-TA-539-C (Second Review), USITC Publication 3872, August 2006, p. I-18.

57 WNA, Uranium Enrichment, October 2011.


59 Unless otherwise indicated, the discussion in this section is based on information contained in Uranium From Russia: Investigation No. 731-TA-539-C (Second Review), USITC Publication 3872, August 2006, pp. I-18 - I-22.
Figure I-2  
Nuclear Fuel Production Chain for Light Water Reactors

[Diagram showing the nuclear fuel production chain from In-situ Leach Facility to Nuclear Power Plant, with intermediates such as Uranium Ore, Uranium Mill, Processing Plant, Conversion, and Enrichment.]

The producers and products include:

(1) Miners/Concentrators--natural uranium concentrate--mining uranium-containing ores and concentrating the uranium into the molecular form $U_3O_8$ (3 atoms of uranium combined with 8 atoms of oxygen);

(2) Converters--natural uranium hexafluoride--converting the $U_3O_8$, into UF$_6$;

(3) Enrichers--enriched uranium hexafluoride--enriching the UF$_6$ by increasing the proportion of U$^{235}$; and

(4) Fabricators--Enriched uranium oxides, nitrates, and metals--fabricating the enriched uranium in a final form suitable for positioning and use in a nuclear reactor.

Further details on the production process is provided in the description of the key forms of uranium in relationship to the nuclear fuel cycle provided below.

**Miners/Concentrators (Natural Uranium Concentrate ($U_3O_8$))**

In the uranium industry, the milling operation comprises the entire mechanical and chemical processing from the crushing and grinding of the ore to the precipitation of a marketable uranium concentrate. Mine-run ores are crushed before going to the grinding circuit. Jaw or impact-type crushers are commonly used for the primary crush. Impact, cone, or gyratory crushers are used for the secondary crushing stage.

“Unconventional uranium mining” includes various leaching methods and byproduct operations. For example, uranium is leached from the ore slime by either alkaline treatment (sodium carbonate or sodium bicarbonate) or acid treatment (usually sulfuric acid). In both techniques, oxidation is necessary to convert uranium to the soluble form. Uranium in leach solutions is recovered and purified by solvent extraction or ion exchange. Uranium is precipitated as uranium concentrate that is then filtered, dried, and packaged for shipment. Uranium concentrate is chemically stable and is usually stored and shipped in 55-gallon steel drums.

In-situ and heap leaching are employed to recover uranium from deposits that may not be economically recoverable by conventional mining methods. The in-situ method involves leaching uranium from mineralized ground in place and is also referred to as “solution mining.” The leaching solution is generally a carbonate, and an oxidant, such as oxygen, is added to improve leaching. In-situ leaching (“ISL”) is a very cost-effective method of production because of the low capital and labor costs compared with the costs of a conventional mine. The use of in-situ leaching has grown dramatically, especially in the United States. However, not all uranium deposits are geologically suitable for in-situ mining. Uranium concentrates are also produced as a byproduct of phosphoric acid production; from gold, copper, and other minerals mining; and from mine water.

**Converters (Natural Uranium Hexafluoride (UF$_6$))**

Conversion of uranium concentrate to natural uranium hexafluoride (UF$_6$) is not done in the United States at the mills but is done by “converters.” Several processes have been used to convert uranium concentrate to UF$_6$. In one such process, uranium concentrate is dissolved in nitric acid, the solution is purified by solvent extraction, the uranium is removed with a dilute nitric acid solution, and the resulting uranium nitrate solution is subjected to heat and decomposed to an oxide. The oxide is then
reacted with hydrofluoric acid and fluorine to produce UF₆. The natural UF₆ is then held in inventory until instructions are issued for shipment to an enrichment plant. UF₆ is a highly reactive chemical and is stored and transported in heavy-wall steel cylinders.

**Enrichers (Enriched Uranium Hexafluoride)**

Before uranium can be used as a fuel in most nuclear power plants, the proportion of its U²³⁵ isotope must be increased relative to that of its other isotopes. In the enrichment process, the proportion of U²³⁵ of the uranium in natural UF₆ is increased from 0.71 percent to about 3-5 percent by weight of UF₆ in LEU.

The industry uses a standard of measure of effort or service employed in the uranium enrichment industry known as separative work units, which is commonly abbreviated as SWUs. It is a measure of the effort that is required to transform a given amount of natural uranium feed stock (UF₆) into two streams of uranium, one enriched in the U²³⁵ isotope and the other depleted in the U²³⁵ isotope.

There are two principal methods of uranium enrichment: gaseous diffusion enrichment and gas centrifuge enrichment. Gaseous diffusion involves the passage of UF₆ in a gaseous form through thousands of barriers or cascades, containing millions of microscopic holes, until the desired assay is reached. Because U²³⁵ is lighter than U²³⁸, the U²³⁵ passes through the barriers more readily than the U²³⁸. At the end of the gaseous diffusion process, there are two UF₆ streams, both of which contain primarily U²³⁸, but one stream contains a higher concentration of U²³⁵ suitable for use in a nuclear reactor for the generation of electricity. The stream with the higher concentration of U²³⁵ is LEU which will be transformed into nuclear fuel; the other is the depleted UF₆ (also known as tails) often considered to be a waste product. Enrichment by gas centrifuges is based on the principle that a partial separation of the components of a gaseous mixture results when the gas is subjected to a pressure gradient. The isotopic separation of UF₆ is effected by the high-speed rotation in centrifuges in which the lighter U²³⁵ isotope moves at a greater velocity in the pressure gradient in the centrifuges. The UF₆ gas is spun in a series of centrifuges; the heavier U²³⁵ tends to move toward the outer walls of the centrifuge whereas the lighter U²³⁸ tends to remain near the center. After the uranium is subjected to repeated spins, appreciable separation is achieved between the lighter U²³⁵ and the heavier U²³⁸. The gas centrifuge plants use substantially less electricity than gaseous diffusion plants; however, the savings in electricity are partially offset by higher capital costs for gas centrifuge plants. However, centrifuge technology enjoys other advantages including a modular design which allows for incremental expansion of capacity and production and a higher effective operating capacity that approaches the nameplate capacity.

On balance, the global enrichment industry is moving toward a consensus that state-of-the-art centrifuge technology is superior to gaseous diffusion technology. However, regardless of the technology used, the enriched UF₆ that results from either process is chemically and functionally identical. The gaseous diffusion process is more energy-intensive, requiring significant amounts of electricity to push the UF₆ through the diffusion barriers, whereas the centrifuge process is significantly less energy intensive. Both methods of LEU production come with a relatively high level of capital costs, although producers employing the gaseous diffusion enrichment process, such as USEC, have lower fixed costs per unit of LEU than centrifuge producers. The nature of the gaseous diffusion enrichment process is such that an enrichment facility must be run at least at a minimum production level to achieve commercial

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60 Most of the world’s and all of the U.S. nuclear power plants are so-called “light-water” reactors and require enriched uranium for fuel; however, there are a small number of others, known as “heavy-water” reactors, that are capable of using natural uranium.

61 Extensive research and development on enrichment technologies employing lasers has been conducted and is discussed later in this section.
assay product, whereas centrifuge enrichment facilities which have high capital and low margin of 
operating costs, normally produce at full capacity.

The data in table I-4 illustrates the differences in power usage and costs related to three different 
methods of uranium enrichment: diffusion, centrifuge, and the related laser enrichment technologies (i.e., 
atomic vapor laser isotope separation (“AVLIS”) and separation of isotopes by laser excitation (“SILVA”)). Although AVLIS has never been successfully commercialized on a large scale, other 
isoype separation techniques involving lasers appear to be closer to achieving commercial success. GE 
Hitachi is working on commercializing the SILEX laser isotope enrichment technology developed by 
SILEX in Australia and is conducting testing on setting up a facility in Wilmington, NC.62

<table>
<thead>
<tr>
<th>Table I-4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power usage and cost, by method of uranium enrichment</strong></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Power usage</td>
</tr>
<tr>
<td><strong>(Kilowatt-hour electric per SWU)</strong></td>
<td><strong>(per SWU)</strong></td>
</tr>
<tr>
<td>Diffusion</td>
<td>2,400</td>
</tr>
<tr>
<td>Centrifuge</td>
<td>50</td>
</tr>
<tr>
<td>AVLIS/SILVA</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Assuming 25 mills per kilowatt-hour.


**Fabricators (Fabricated Fuel)**

Generally considered the final step in the production of nuclear fuel, enriched uranium 
hexafluoride from an enrichment plant must be converted to other uranium compounds or uranium metal 
for use in reactor applications.63 LEU conversion is generally done by fuel fabricators as one step in the 
production of fuel rods and fuel assemblies to be used in commercial nuclear reactors. Fuel fabricators 
react uranium hexafluoride with water and hydrogen to obtain uranium dioxide (UO₂) that is used to make 
fuel rods and assemblies. Specifically, this involves converting the enriched UF₆ to enriched uranium 
oxides (primarily UO₂), nitrates, and metals, pelletizing this material, encapsulating the pellets into 
protective metal sheaths, called “fuel rods,” and then assembling the rods into “fuel rod assemblies” in the 
specific configuration the nuclear power facility requires. In contrast to other steps in the fuel cycle, the 
production of fabricated fuel and fuel assemblies is largely consider to be a customized part of the 
production process.

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63 LEU is most often converted from uranium hexafluoride to uranium oxide for use in commercial nuclear 
reactors, whereas HEU is generally reduced from uranium hexafluoride to uranium metal for use in nuclear weapons 
or small nuclear reactors.
Value Added by Segment

The estimated cost of processing uranium ore through the various stages of the nuclear fuel cycle to produce 1 kg of uranium as UO₂ reactor fuel at the spot uranium price as of March 2011 is presented in table I-5. Information regarding the relative cost of processing for the various stages of the front end of the nuclear fuel cycle for 2011 and for time periods examined in the Commission’s two prior reviews of this order are presented in table I-6.

### Table I-5

**Uranium: Processing cost (at spot uranium price as of March 2011), by stage**

<table>
<thead>
<tr>
<th>Processing stage</th>
<th>Calculation</th>
<th>Cost (in U.S. dollars)</th>
<th>Share of total processing cost (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uranium concentrate</td>
<td>8.9 kg U₃O₈ x $146</td>
<td>1,299</td>
<td>46.9</td>
</tr>
<tr>
<td>Conversion</td>
<td>7.5 kg U x $13</td>
<td>98</td>
<td>3.5</td>
</tr>
<tr>
<td>Enrichment</td>
<td>7.3 SWU x $155</td>
<td>1,132</td>
<td>40.9</td>
</tr>
<tr>
<td>Fuel fabrication per kg</td>
<td></td>
<td>240</td>
<td>8.7</td>
</tr>
<tr>
<td>Total cost, all stages</td>
<td></td>
<td>2,769</td>
<td>100.0</td>
</tr>
</tbody>
</table>


### Table I-6


<table>
<thead>
<tr>
<th>Processing stage</th>
<th>Share of total processing cost (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000¹</td>
</tr>
<tr>
<td>Uranium concentrate</td>
<td>31.0</td>
</tr>
<tr>
<td>Conversion</td>
<td>3.0</td>
</tr>
<tr>
<td>Enrichment</td>
<td>59.0</td>
</tr>
<tr>
<td>Fuel fabrication per kg</td>
<td>7.0</td>
</tr>
<tr>
<td>Total cost, all stages</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ Based on published market prices for the individual line items (default values) as used in the Wise Nuclear Fuel Cost Calculator (found at [http://www.wise-uranium.org/nfcc.html](http://www.wise-uranium.org/nfcc.html)).

² Revised valuations provided by USEC to reflect commercial considerations (e.g., long-term contract values) in the U.S. market.


⁴ Because the Wise Nuclear Fuel Cost Calculator has not been updated since 2009, the data presented for 2011 are from the *World Nuclear Association*, "The Economics of Nuclear Power," [http://www.world-nuclear.org/info/inf02.html](http://www.world-nuclear.org/info/inf02.html), March 9, 2011.

Note.–Figures may not add to totals shown because of rounding.

Interchangeability and Customer and Producer Perceptions

U.S.-produced uranium and imported uranium are generally physically interchangeable from the electric utilities’ perspective in meeting product requirements of their U.S. nuclear power plants. Worldwide regulation and monitoring of uranium production, distribution, inventories, and waste/spent-fuel disposal have led to a world market where spot and long-term contract price indicators for uranium and the toll-processing services are published, usually on a monthly basis and typically on a restricted and unrestricted market basis.

U.S.-produced and subject imported uranium are both purchased by U.S. electric utilities for their nuclear generating plants. U.S. electric utilities operating nuclear power plants reported during the second review of the order that availability and reliability of supply were the purchasing factors most often considered very important, with lowest price, quality, and escalation provisions not far behind. This is in contrast to the first review, which noted purchasers rating lowest price, reliable supply, availability, and product quality as the most important factors (in descending order).

Purchaser questionnaire responses received during the Commission’s second five-year review of the order indicated that all of the responding electric utilities generally purchased their uranium products and toll processed on an open-country basis, subject to the uranium being legally acceptable in the U.S. market. Purchasers were asked if uranium products from the United States, Russia, and nonsubject countries were interchangeable. The majority of the purchasers reported that all uranium product and services except fabrication services from each of the country pairs were always interchangeable. The majority of purchasers reported that U.S. and Russian fabrication services were not interchangeable. Purchasers were also asked if there were differences other than price between uranium products from the United States, Russia, and nonsubject countries. Almost the same number of purchasers reported that there were always, sometimes, and never differences between U.S. and Russian uranium concentrates, natural UF$_6$, LEU-HF, EUP, and enrichment. On the other hand, the same number of purchasers reported that there were always differences between U.S. and Russian conversion as reported that there were sometimes and never differences. Lastly, all responding purchasers reported differences between U.S. and Russian fabrication services. Purchasers were further asked if there were differences in prices between uranium products and services among those from the United States, Russia, and nonsubject countries. Almost the same number of purchasers reported that there were always and sometimes differences in prices between U.S. and Russian for all uranium products and services. Few reported that there were never differences in price.

Purchasers were asked to compare domestically produced uranium products with those produced in Russia and in nonsubject countries, for all country pairs for which they had actual experience. Respondents were asked to rate uranium products produced in one country as superior, comparable, or inferior to that from another country with respect to 23 different attributes. The most common comparisons were between U.S. and nonsubject uranium concentrates, U.S. and Russian natural UF$_6$, U.S. and Russian uranium concentrates, and U.S. and nonsubject natural UF$_6$, conversion and enrichment. For uranium concentrates, Russia was mostly considered inferior to the United States and nonsubject countries in availability, and the United States was slightly inferior to nonsubject countries. For reliability of supply, the United States was slightly superior to Russia and nonsubject countries, and Russia was inferior to nonsubject countries. For natural UF$_6$, domestic availability was more often cited as superior to Russian availability, but inferior to nonsubject availability, while Russian availability was

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64 Unless indicated otherwise, the discussion in this section is based on information contained in Uranium From Russia: Investigation No. 731-TA-539-C (Second Review), USITC Publication 3872, August 2006, pp. II-36 - II-51.

65 “Open country” essentially means that the purchaser will accept uranium from any country. Generally implicit in the open-country designation is that the uranium is legally acceptable.
mostly inferior to nonsubject availability. For conversion and enrichment, Russia was most often considered to have inferior availability and reliability of supply when compared to the United States and nonsubject countries.

**Channels of Distribution**

Unlike other industries where the end user purchases the product in final or near final form, nuclear utilities in the United States tend to purchase uranium nuclear fuel directly from the primary uranium producer and the value-added processing directly from the converter, the enricher, and the fabricator, respectively. A utility can purchase a final or near final product, such as enriched uranium product (“EUP”), but such a purchase is the exception rather than the rule. A trend that began occurring as recently as 2005 was a sharp increase in the volume of utility purchases of primary uranium under long-term contracts. This reflected, in part, an increased concern by utilities for security of supply but according to an industry observer, perhaps more importantly, reflects the ability of uranium producers to set terms in an increasingly tight market. According to this observer, the duration of long-term contracts which typically had been three to five years had increased to up to ten years and beyond.

As mentioned earlier, the traditional uranium fuel cycle is still the primary way in which U.S.-produced uranium is sold in the U.S. market. Except for the producers of uranium concentrates, the uranium producers at the other stages in the uranium cycle typically provided toll services to further process uranium. The converter prices its toll services based on the number of kilograms of uranium in the converted uranium, while USEC prices its toll service based on the SWUs required to enrich the natural uranium. In the case of EUP, USEC also charges utilities for the feedstock. On the other hand, the fabricators toll process uranium into LEU-DO and pelletize this product as part of the total contract agreement to produce fuel-rod assemblies; U.S.-produced LEU-DO or its toll conversion is generally not sold separately by U.S. uranium producers. USEC also sells, or has available for sale, natural and low enriched UF6; however, USEC sells only the SWU component of LEU-HF it imports through the Russian HEU Agreement, while the natural UF6, feed component of this imported LEU-HF is sold separately under provisions of the USEC Privatization Act and the US-Russian HEU Agreement.

**Pricing and Related Information**

Prices of natural uranium products and the conversion services are usually quoted on a delivered basis. Discounts are not common in the uranium industry, rather prices are generally based on market conditions and costs. Most sales of uranium are made on a multi-year contract basis. The Commission reported in the second five-year review of the antidumping duty order that contracts typically range in

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66 Unless indicated otherwise, the discussion in this section is based on information contained in *Uranium From Russia: Investigation No. 731-TA-539-C (Second Review)*, USITC Publication 3872, August 2006, pp. I-28 - I-29 and II-11 - II-12.

67 ***. The number of SWUs required to enrich uranium varies by the product and tails assays and the amount of LEU-HF required. Higher product assays and/or lower tails assays require more SWUs. *Investigation No. 731-TA-539-C (Second Review): Uranium from Russia-Staff Report*, June 30, 2006, p. II-11.

68 USEC buys only the SWU (enrichment) component of the Russian LEU-HF. USEC transfers natural UF, from its inventory to Tenex for the natural feed component and pays TENEX for the SWU (enrichment) component of the Russian product. ***. *Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report*, June 30, 2006, p. II-12.

69 Unless indicated otherwise, the discussion in this section is based on information contained in *Uranium From Russia: Investigation No. 731-TA-539-C (Second Review)*, USITC Publication 3872, August 2006, pp. V-3 - V-28.
length from 3 to 5 years for uranium concentrates, 3 to 4 years for conversion services, 5 to 7 years for enrichment services, and typically 5 years, but as long as 10 years, for fabrication services. Negotiations for these contracts typically begin 1 to 2 years before the actual contract period. These contracts are seldom renegotiated during the years in which they are in effect. While terms vary, contracts typically fix both price and quantities during the contract period, but do not contain meet-or-release provisions or standard quantity requirements and do not require price premiums for sub-minimum shipments.

Published prices are a significant factor in arriving at a price for typical long-term and short-term contracts. Price publications that report world prices of uranium concentrates, conversion services, and enrichment services include Nuclear Market Review, Nukem Weekly Report, Ux Weekly, and Uranium Marketing Annual Report prepared by the U.S. Department of Energy. Publicly accessible uranium pricing data contained in Ux Weekly and Uranium Marketing Annual Report are presented below. The published Ux Weekly prices indicate, subject to the terms listed, the most competitive spot offers available for the product or service of which The Ux Consulting Company, LLC is aware.

Presented in figure I-3 are the weighted-average annual prices of total delivered uranium in the form of U₃O₈ purchased by owners and operators of U.S. civilian nuclear power reactors (i.e., utility purchases) from 1994 to 2010 as published by the Energy Information Administration, U.S. Department of Energy.

**Figure I-3**

Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2010 deliveries

Figure I-4 shows published weekly spot market prices for uranium concentrates, as tracked by the trade publication *Ux Weekly*. The Ux U₃O₈ spot price includes conditions for delivery timeframe (less than or equal to 3 months), quantity (greater than or equal to 100,000 pounds), and origin considerations, and is published weekly.

**Figure I-4**

*Uranium concentrates (U₃O₈): Weekly spot market prices of uranium concentrates, as reported by *Ux Weekly*, 1988-2011*

Figure I-5 provides published spot market toll conversion fees for natural uranium hexafluoride (UF₆), as reported by *Ux Weekly*. The Ux conversion prices consider spot offers for delivery up to twelve months forward to destinations in North America or Europe.

**Figure I-5**  
Natural uranium hexafluoride conversion services (UF₆): Weekly spot market toll fees of conversion services for North America and the European Union (“EU”), as reported by *Ux Weekly*, 1995-2011

Figures I-6 and I-7 show spot market prices for natural uranium hexafluoride as reported by *Ux Weekly*. The Ux UF₆ values represent the sum of the conversion and U₃O₈ components and, therefore, do not necessarily represent the most competitive UF₆ offers available.

**Figure I-6**
Natural uranium hexafluoride (UF₆): Quarterly spot market prices for North America and the EU, as reported in *Ux Weekly*, 1995-2006


**Figure I-7**
Natural uranium hexafluoride (UF₆): Weekly spot market prices for North America and the EU, as reported in *Ux Weekly*, 2004-11

Data published by Ux Weekly for uranium enrichment services (in dollars per SWU) are presented in figures I-8 and I-9. The Ux SWU prices presented are for spot offers for deliveries up to twelve months forward for Russian-origin and non-Russian-origin SWU for 1995-2006. March 2006 was the final month Ux listed Russian SWU prices. Therefore, freely accessible historical public price data for uranium enrichment services for Russian-origin SWU are no longer available and do not appear in figure I-9.

Figure I-8
Uranium enrichment services: Quarterly spot market toll fees for enrichment services (non-Russian SWU and Russian SWU) for North America and the EU, as reported by Ux Weekly, 1995-2006


Figure I-9
Uranium enrichment services: Weekly spot market toll fees for enrichment services (non-Russian SWU) for North America and the EU, as reported by Ux Weekly, 1995-2011

THE INDUSTRY IN THE UNITED STATES

U.S. Producers

There are four basic forms of subject uranium manufactured (concentrate, natural UF₆, enriched UF₆, and enriched dioxides, nitrates, and metals) and each form is accounted for by a discrete set of producers. The producers of each form of subject uranium are discussed separately below.

Concentrate Producers

The first step in transforming uranium ore into a usable form is to mine it from the earth and extract the uranium in a concentrated form of U₃O₈. Most uranium concentrates, otherwise known as “yellowcake,” contain a minimum of 75 percent, and usually 80-85 percent, U₃O₈. During the original investigation there were at least 15 separate firms producing concentrate. Consolidations and closings substantially reduced the number of operating concentrate producers in the United States to seven firms during the first review, and two of the seven ceased production during the period of review. Further restructuring of the concentrate production segment of the U.S. uranium industry post 1999 left five firms producing uranium concentrate during the period examined in the Commission’s second five-year review.

The domestic interested parties participating in this third five-year review identified in their response to the Commission’s notice of institution the following ten concentrate producers in the United States today, four of which are believed to be on standby and/or undergoing restoration: Power Resources (also known as “PRI”); Crow Butte; Highlands; Smith Ranch; Mestena Uranium LLC; South Texas Mining Venture; Denison White Mesa LLC; Uranium One USA, Inc.; Uranerz Energy Corp./Wyoming; Uranium Resources, Inc. (“URI”) (on standby/undergoing restoration); Uranium One Exploration USA, Inc. (on standby); Cotter Corp. (on standby); and Kennecot Uranium Co./Wyoming Coal Resource Co. (on standby). Together domestic concentrate producers Power Resources and Crow

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70 Unless indicated otherwise, the discussion in this section is based on information contained in Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report, June 30, 2006, pp. I-44 - I-49.


72 The firms producing concentrate in the United States during the 1997-99 period of the first review were COGEMA, Inc., a subsidiary of COGEMA; Power Resources, a subsidiary of Cameco; Rio Algom, one of the original petitioners; International Uranium; Cotter; Uranium Resources, which ceased producing concentrate in 1999; and IMC Global, which produced concentrate as a by-product of its phosphoric acid production and also ceased producing concentrate in 1999.

73 The firms producing concentrate in the United States during the period examined in the second review were Areva NC Inc. (during 2000-05); Power Resources and Crow Butte Resources (separate sister companies owned by Cameco Corp.); Cotter Corp.; and Uranium Resources (which ceased producing concentrate in 1999). Together Power Resources and Crow Butte accounted for *** percent of total 2005 domestic production of uranium concentrate.
Butte accounted for *** percent of total domestic production of natural uranium concentrates during 2010.74

U.S. Converter

The next step in the process is converting the concentrate into a compound that can be readily turned into a gas, in this case natural UF₆, to facilitate the enrichment process that follows. ConverDyn is now, and was during the original investigation and the first and second reviews, the sole converter in the United States.75 ConverDyn, a joint venture between Honeywell International and General Atomics, owns and operates a single conversion facility in Metropolis, IL. The company functions basically as a toll producer, converting the utilities’ concentrate into natural uranium hexafluoride (UF₆).

U.S. Enrichers

The U.S. Government created USEC in 1992 as a step toward the privatization of its enrichment activities then under the control of DOE. Its enabling legislation intended USEC to operate independently as a market-oriented business, but it was not allowed to be fully divested of Government ownership and become a publicly-held corporation until July 1998. During the period of the first review, USEC ***. ***.

In addition to enriching uranium in the United States,76 USEC is required to import large quantities of Russian enriched UF₆ (LEU blended down from Russian HEU) and purchase the SWU component thereof pursuant to a special agreement between the governments of Russia and the United States known as “the Russian HEU Agreement.” The details of this agreement and its relationship to the Russian Suspension Agreement were discussed in earlier sections. USEC supports the continuation of the suspension agreement currently in place for uranium from Russia.

The domestic interested parties participating in this third five-year review indicated in their responses to the Commission’s notice of institution that USEC accounted for almost all domestic production of LEU during 2010. In addition to USEC, a second U.S. enricher, Urenco USA’s Louisiana Energy Services plant (“LES”), commenced operations in New Mexico during June 2010. USEC also indicated in its response to the Commission’s notice of institution that it is actively seeking to deploy a new production facility in Ohio that will use advanced U.S. centrifuge technology.77

U.S. Fabricators

The final process in producing nuclear fuel for electricity generation, i.e., fabrication, involves converting the enriched UF₆ to enriched uranium oxides (primarily UO₂), nitrates, and metals, pelletizing this material, encapsulating the pellets into protective metal sheaths, called “fuel rods,” and then assembling the rods into the specific configuration the nuclear power facility requires. During the second

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74 Response of PRI and Crow Butte, August 1, 2011, p. 45 and exh. 4.
75 Response of PRI and Crow Butte, August 1, 2011, exh. 4; Response of USEC, August 1, 2011, pp. 27 and 65.
76 There are only a handful of converters worldwide, including Cameco in Canada and Minatom in Russia. Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report, June 30, 2006, p. I-47.
77 USEC is primarily a producer of LEU, but it “generates” natural uranium during enrichment by underfeeding the production process by using more SWU and less natural uranium. Moreover, USEC can produce natural uranium by re-enriching depleted uranium (“tails”). Response of USEC, August 1, 2011, p. 2.
77 Response of PRI and Crow Butte, August 1, 2011, exh. 4; and Response of USEC, August 1, 2011, p. 65.
five-year review completed in 2006, there were four fabricators in the United States.\footnote{The four U.S. fabricators in operation during 2005 were Areva NP Inc. ("Areva"); Global Nuclear Fuel; Westinghouse Electric Co., LLC ("Westinghouse"); and ***.} The domestic interested parties indicated in their responses to the Commission’s notice of institution in this third five-year review that there are currently three U.S. fabricators: Areva NP Inc.; Global Nuclear Fuel;\footnote{Global Nuclear Fuel was jointly established by General Electric Co. of America and Hitachi, Ltd. and Toshiba Corp. of Japan in 2000 as an incorporated entity of General Electric’s fuel plant.} and Westinghouse.\footnote{Response of PRI and Crow Butte, August 1, 2011, exh. 4; and Response of USEC, August 1, 2011, p. 66.} According to the Nuclear Regulatory Commission’s Web site, B&W Nuclear Operations Group is also a fabricator of uranium fuel, operating a facility in Lynchburg, VA.\footnote{Nuclear Regulatory Commission, http://www.nrc.gov/materials/fuel-cycle-fac/fuel-fab.html.}

**Related Party Issues**

PRI and Crow Butte indicated in their response to the Commission’s notice of institution that they are aware of only one U.S. producer (Uranium One USA, Inc. ("Uranium One") that is considered a related party.\footnote{PRI and Crow Butte also reported that they are wholly-owned subsidiaries of Cameco Corp., a Canadian-based company that owns uranium mining and conversion facilities in Canada and the United States. They reported that Cameco is party to a March 1999 agreement between Tenex and the three western companies Cameco, Compagnie Generale Des Matieres Nucleaires of France ("Cogema"), and Nukem Inc. ("Nukem") of Germany. The agreement is called the “UF6 Feed Component Implementing Contract.” Under this agreement, Cameco, Cogema (now AREVA) and Nukem purchase the feed component of enriched uranium made available under the U.S.-Russia HEU Agreement. Under a separate agreement between Tenex and USEC, USEC acts as the Executive Agent of the United States, purchasing the enrichment component.} They reported that Uranium One, a U.S. uranium concentrate producer that received permitting and licensing and became operational in 2010, is 51-percent owned by ARMZ Uranium Holding Co. ("ARMZ" or "Atomredmetzoloto"), which is a wholly-owned subsidiary of the Russian State-owned corporation, Rosatom.\footnote{Response of PRI and Crow Butte, August 1, 2011, p. 44 and exh. 4.}

**Changes in the Domestic Industry**\footnote{Unless indicated otherwise, the discussion in this section is based on information contained in Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report, June 30, 2006, pp. III-2 - III-9.}

The U.S. and global uranium industries and markets have seen significant changes since the period examined during the Commission’s 1999 review. For many years, the U.S. and world uranium market were characterized by large inventories which suppressed prices. These low prices not only reduced the incentive of uranium producers at various levels of processing to invest in new capacity but, especially for the uranium mining and milling industry, were a contributory factor in the closure of many uranium operations. Figure I-10 shows U.S. utilities’ and U.S. suppliers’ uranium inventories during 1993-2010 as reported by DOE’s Energy Information Administration. This figure reveals that U.S. uranium inventories fell continuously from 1998 to 2003, after which they began to generally rise. Since 2006, total commercial uranium inventories have remained relatively stable.
Figure I-10
Uranium: Total commercial inventories of U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors, 1993-2010

Developments in the U.S. Uranium Mining and Milling Industry

The figures presented on the following pages are based on data compiled by the U.S. Energy Information Administration (“EIA”) at the U.S. Department of Energy. Uranium mine production data in the United States during 1993-2010 are presented in figure I-11; total U.S. uranium concentrate production and shipments during 1993-2010 are presented in figure I-12; and employment (in person-years) in the U.S. uranium production industry during 1993-2010 are presented in figure I-13. Related parameters, including U.S. uranium expenditures and U.S. uranium exploration and development drilling during 2004-10 (the only time period for which data were available) are presented in figure I-14 and figure I-15, respectively.

**Figure I-11**
Uranium: U.S. mine production, 1993-2010

![Graph showing U.S. uranium mine production from 1993 to 2010](http://www.eia.doe.gov/cneaf/nuclear/dupr/usummary.html)

Figure I-12
Uranium: U.S. concentrate production and shipments, 1993-2010


Figure I-13
Uranium: U.S. employment, 1993-2010

Figure I-14
U.S. uranium expenditures, 2004-10

![Bar chart showing uranium expenditures from 2004 to 2010.]


Figure I-15
U.S. uranium drilling, 2004-10

![Bar chart showing uranium drilling from 2004 to 2010.]

According to data compiled by the EIA, uranium mine production peaked during 1996-98 and then declined steadily during 1999-2003. U.S. uranium concentrate production, shipments, and employment in the U.S. uranium production industry through 2003 show a similar trend. The Commission reported during its 2005-06 review that the U.S. uranium mining and milling industry had experienced closures and cutbacks in output. Factors that had adversely affected the domestic uranium industry and caused prices to decline and domestic facilities to be shut down before 2004 included continued large-volume purchases of lower-cost uranium from Canada, Australia, and the former Soviet Union, and continued oversupply of uranium inventories from utilities and suppliers. In 2004, the industry experienced its first upturn since 1998. The increases appeared to be generally across the board from 2004 to 2007, including higher prices for the various components of the nuclear industry. According to the EIA, the weighted-average price for a pound of U₃O₈ equivalent, rose from $12.61 in 2004 to $32.78 in 2007 (see figure I-3 presented earlier in this report). Stimulated by the upturn, uranium producers at various levels of processing at that time considered installing or expanding capacity.

Data published by the EIA (presented in figures I-11 through I-15) show that U.S. uranium mining and milling indicators for 2010 were generally higher than those reported in 2005 (the final annual period examined by the Commission in its most recent five-year review). The overall growth of uranium mining activity from 2005 to 2010, however, was tempered somewhat by the effects of the economic downturn beginning in 2008, which resulted in noticeably lower prices. For example, the weighted average spot contract price per pound uranium U₃O₈ equivalent, which was $20.04 per pound uranium in 2005, increased to $88.25 per pound uranium in 2007 before declining steadily to $43.99 in 2010.85

Domestic mine production of uranium increased from 3.0 million pounds U₃O₈ in 2005 to 4.7 million pounds U₃O₈ in 2006, before falling to 3.9 million pounds U₃O₈ in 2008 and increasing slightly to 4.2 million pounds U₃O₈ in 2010. Overall, domestic mine production of uranium increased by 28.6 percent from 2005 to 2010. The EIA reported that domestic uranium concentrate production rose from 2.7 million pounds U₃O₈ in 2005 to 4.5 million pounds U₃O₈ in 2007 before fluctuating downward to 4.2 million pounds U₃O₈ in 2010. Domestic uranium concentrate production was 55.6 percent higher in 2010 than in 2005. Domestic uranium concentrate shipments experienced a similar trend, with an overall reported increase of 88.9 percent from 2005 to 2010. Shipments of domestic uranium concentrate increased by 42 percent from 3.6 million pounds in 2009 to 5.1 million pounds in 2010. Employment in the domestic uranium industry rose from an estimated 420 person-years in 2004 to 1,563 in 2008, before falling to 1,073 in 2010. Related parameters, including expenditures and uranium exploration and development drilling, exhibited similar trends with overall indicators at higher levels in 2010 than in 2005. Domestic producers UPI and Crow Butte stated in their response to the Commission’s notice of institution in this third five-year review that the improvement in the uranium mining industry “has largely been driven by an increase in the price of natural uranium that has rendered more domestic production economically viable.”

Domestic uranium mines (predominantly in-situ leaching (“ISL”) mines) are currently operating in Texas, Wyoming, Colorado, and Utah. In addition, plans have been announced to refurbish and restart uranium mines in Wyoming, Colorado, Utah, Arizona, and New Mexico. According to the EIA, at the end of 2010, seven ISL facilities were operational with a combined annual capacity of 11.8 million pounds U₃O₈, while three additional ISL plants with a combined annual capacity of 2.5 million pounds U₃O₈ were on standby or were fully permitted and licensed. Additionally, the EIA reported that as many as eight ISL uranium facilities were planned as of 2010. Total domestic production capacity for all U.S. uranium ISL facilities (including partially permitted/licensed, developing, and standby facilities) as of end

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86 Response of PRI and Crow Butte, August 1, 2011, p. 16.
of the year 2010 amounted to 22.1 million pounds U\textsubscript{3}O\textsubscript{8}.\textsuperscript{87} According to the WNA, even conventional non-ISL uranium mining, for which there was virtually no domestic production in recent years, is resuming in the United States.\textsuperscript{88}

In March 2011, the Fukushima nuclear plant accident in Japan reinforced doubts about the viability of nuclear power and appears to have contributed to a decline in demand in several countries worldwide, as well as the recent depression of uranium prices in the United States (as evidenced in the decline in spot prices in 2011).\textsuperscript{89} Following the Fukushima accident, the U\textsubscript{3}O\textsubscript{8} spot price dropped over 22 percent from $66.50 per pound in March 2011 to $51.50 in July 2011.\textsuperscript{90}

**Developments in the U.S. Uranium Conversion Industry**

In uranium conversion, the uranium ore concentrates (uranium yellowcake) are converted to uranium hexafluoride, a step required before uranium can be enriched. In the United States, Converdyn is the sole company in the United States providing such conversion services. Much of the uranium hexafluoride that is converted by Converdyn is shipped to USEC, the primary U.S. producer of enriched uranium. Although conversion does not impart as large a value added as uranium mining and milling or uranium enrichment or fabrication, it is an essential step in the nuclear fuel cycle for light water reactors, the type used in the United States and most other countries.

In 1999, Converdyn announced that it was cutting back capacity by 25 percent. This move reflected both the presence of large amounts of inventories from utilities and suppliers, relatively weak demand that resulted, in part, from reduced market share of enriched uranium by USEC, and the impact of the strong U.S. dollar. During 2001, however, market conditions for conversion services improved (for example, conversion prices rose). Industry sources attributed much of this improvement to the announcement by British Nuclear Fuels Limited (“BNFL”), a European converter, that it would cease operations after March 2006. The planned shutdown would have had the effect of reducing world conversion capacity by almost 10 percent. Reflecting these events, the spot market price for conversion services rose beginning in late 2000 and then held steady before rising again in 2004 and 2005. According to industry sources, the spot market price rose in 2004 partly as a result of an industrial accident which caused ConverDyn’s conversion facility to shut down for an extended period of time. As expected, the shutdown led to a shortfall of production and a tightening of the conversion market. The conversion market may have also been affected by a strike at a Canadian conversion facility operated by Cameco during 2004. In March 2005, BNFL reversed its decision to close down.

In 2007, responding to a shortfall in the amount of uranium conversion services, Converdyn increased its UF\textsubscript{6} capacity to 15,000 metric tons U per year.\textsuperscript{91} Concomitant with the shortfall in uranium conversion services prior to 2007 and the increase in uranium demand, the North American spot market price for conversion services increased from $2.25 per kgU in July 2000 to $9.50 at the end of 2007.

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\textsuperscript{87} Owners of ISL facilities which were listed by the EIA in its 2010 report (including non-operational facilities) were Cameco Corp.; Hydro Resources, Inc.; Lost Creek ISR LLC; Mestena Uranium LLC; Power Resources Inc. (dba Cameco Resources); Powertech Uranium Corp.; South Texas Mining Venture; URI Inc.; Uranerz Energy Corp.; Uranium Energy Corp.; Uranium One Americas Inc. and Uranium One USA Inc. U.S. Department of Energy, U.S. Energy Information Administration, *2010 Domestic Uranium Production Report*, June 2011.


\textsuperscript{89} Response of USEC, August 1, 2011, pp. 39-40.

\textsuperscript{90} Response of PRI and Crow Butte, August 1, 2011, p. 18.

\textsuperscript{91} DOE, *HEU Report to Congress 2009*, p. 6.
During 2007-09, reflecting the economic downturn, the spot market price for conversion services declined from $9.50 to $6.50 per kgU at midyear 2009.

Industry reports indicate that an issue of growing importance is concern that Converdyn’s ability to provide adequate supplies of UF₆ following the termination of the HEU agreement in 2013. In that agreement, Russia agreed to supply uranium conversion services, as well as enriched uranium. However, the Russian government has indicated that it does not intend to renew the HEU agreement following its termination.⁹²

**Developments in the U.S. Uranium Enrichment Industry**

In uranium enrichment, the isotopic composition of Uranium-235, which can undergo fission, is increased to a level so that the uranium can be used to generate electricity in nuclear power plants. During 1999-2000, USEC,⁹³ the sole U.S. uranium enricher at that time, experienced loss of market share because of global overcapacity, increased competition, unfavorable currency exchange rates, and higher production costs. As USEC’s capacity utilization rate declined to 25 percent, in part because of reduced market share and increased purchases under the HEU agreement, USEC announced that it would be closing its Portsmouth, OH, gaseous diffusion plant in June 2001. After declining during 1999-2000, prices for uranium enrichment increased in 2001. Industry observers attributed this increase to the shutdown of the Portsmouth, OH, facility and to the initiation of U.S. antidumping and countervailing duty investigations.

With the realization that its aging gaseous diffusion facilities were no longer competitive compared with advanced, gas centrifuge technology, USEC conducted research on new enrichment technologies, but cancelled its Atomic Vapor Laser Separation program in 1999. Subsequently, USEC announced plans to build a new 3.5 million SWU per year gas centrifuge plant, the American Centrifuge Project (“ACP”). USEC began construction of the ACP in May 2007 after being issued a construction and operating license by the Nuclear Regulatory Commission. The plant is based on an updated centrifuge technology originally proposed by the U.S. Department of Energy (“DOE”). According to USEC, the plant has the potential to outperform any other centrifuge plant in existence today. One advantage of the technology is that with the infrastructure in place, future increments of capacity expansion could be added at significant savings and much lower cost per SWU. USEC estimated that it will cost an additional $2.8 billion to complete the ACP project and indicated that it is in need of additional outside financing to do so. USEC has applied for a $2 billion loan guarantee from the DOE but according to the DOE, financial concerns and technical problems have slowed the approval process.⁹⁴

However, USEC is no longer the sole U.S. company providing uranium enrichment services in the United States. Urenco, a Western European enricher, has been involved in a partnership with Louisiana Energy Services (“LES”), a consortium of major nuclear energy companies that include Urenco and the U.S. energy companies Duke Power, Entergy, and Exelon,⁹⁵ to set up an enrichment facility, (the National Enrichment Facility (“NEF”), in Eunice, New Mexico. The new enrichment facility, which

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⁹³ Before 1998, uranium enrichment services in the United States were performed by a U.S. government corporation, the United States Enrichment Corp. In July 1998, the corporation was privatized and renamed USEC, Inc. USEC, Inc. still retains special responsibility with regard to nuclear matters such as implementing the HEU agreement between the United States and Russia.
⁹⁵ The LES partnership was originally made up of limited and general partners consisting of Urenco, Exelon, Duke Power, Entergy and Westinghouse; however, Urenco subsequently purchased the 24.5 percent interest held by Westinghouse Electric Co. in LES.
utilizes Urenco’s centrifuge technology, became operational in 2010 with an annual capacity of 3.3 million SWU. The projected plant capacity for 2014-17 is 5.9 million SWU.96

In addition AREVA, a French-based nuclear company, is building an centrifuge enrichment plant at Idaho Falls, Idaho. The first stage of production will reportedly have the annual capacity of 3 million SWU with later stages adding an additional 3 million SWU. Another company, GE Hitachi is also planning to build a pilot enrichment plant in the United States based on laser technology developed by SILEX of Australia. The plant when completed would have a target capacity of 3.5 million to 6 million SWU.

Were these projected additional enrichment capacities in the United States to come on-stream, they would account for the bulk of U.S. enrichment demand. However, the United States currently obtains most of its enrichment from foreign enrichers. Shown in figure I-16 are purchases of uranium enrichment (SWU) from leading foreign enrichers and the United States during 2006-2010. Shown in figure I-17 are aggregated SWU purchases by U.S. utilities from foreign enrichers compared with aggregated SWU purchases by U.S. utilities from domestic enrichers during 2006-2010. During that time, almost all SWU purchases of domestic origin consisted of purchases from one company, USEC.

Developments in the U.S. Nuclear Fuel Fabrication Industry

The U.S. nuclear fuel fabrication industry, consisting of four facilities and mirroring world-wide trends, has seen increased consolidation and significant ownership changes. The fuel fabrication facility in Columbia, SC, is operated by Westinghouse; the fuel fabrication facilities in Richland, WA, and Lynchburg, VA, are currently operated by Areva, NP; and the fuel fabrication facility in Wilmington, NC, is operated by Global Nuclear Fuels, a firm formed by General Electric with its partners, Hitachi and Toshiba.

Unlike U.S. producers of the other forms of uranium, which are primarily in the business of processing uranium, the fabricators are large, multi-product corporations in which the fabrication of uranium is only one among many operations. And while pre-fabricated uranium is a material commodity, its fabrication requires a certain degree of customizing to fit users’ needs.

During the second five-year review, the Commission reported that the fuel fabrication industry had become increasingly competitive as fabricators increased product diversity and offered products with improved performance capabilities, such as higher burnup. Significant global overcapacity for fuel fabrication services also prompted companies to seek consolidation. In addition, a relatively weak U.S. dollar abetted U.S. exports. There were concerns over (1) the possibility that the fabrication industry would not be able to meet future demand requirements, (2) the impact of higher commodity prices for enriched uranium feedstock on the fabrication industry, and (3) the need to keep pace with technical changes, such as higher burnups and enrichment levels.

Figure I-16
Purchases of enrichment by U.S. utilities by origin country, 2006-10


Figure I-17
Uranium enrichment purchased by owners and operators of U.S. civilian nuclear power reactors, 2004-10

The WNA reported that the nuclear fuel fabrication industry is currently experiencing overcapacity and that new investments will be required if demand increases markedly, tracking the upper demand scenario that it has projected. The market for nuclear reactor fuel in the United States (as well as in other countries employing light water reactors) has become increasingly competitive over the last several years, with fewer suppliers competing to supply almost every different fuel design.97

U.S. Producers’ Trade and Financial Data

The Commission received two submissions in response to its notice of institution in this third five-year review. They were filed on behalf of two U.S. producers of natural uranium concentrates (Power Resources, Inc. (“PRI”) and Crow Butte Resources, Inc. (“Crow Butte’’)) and one U.S. producer of enriched uranium hexafluoride (also known as low enriched uranium, or “LEU”) and natural uranium (USEC Inc./United States Enrichment Corp.). Data provided by these two concentrators and one enricher in response to the Commission’s notice of institution are presented in this section. In terms of the share of total processing costs, concentrating and enrichment are by far the largest components of the U.S. industry producing nuclear fuel, together accounting for almost 88 percent of the total processing cost of the final product, as of March 2011 (see table I-6.)

U.S. Concentrators

In accordance with industry practice, quantity data for uranium concentrates are presented in pounds, or thousands of pounds, U₃O₈. Currently most of the uranium concentrates are produced by in-situ leaching; as byproducts of phosphoric acid production; from other minerals mining; and from mine water. Consequently, “mine capacity,” to the extent it is applicable, does not provide a representative measurement of industry production potential. Instead, data pertaining to facilities that produce uranium concentrates provide the best measure of total U.S. production of natural uranium.

In terms of the share of total processing costs, concentration is the largest component, accounting for 47 percent of the total processing cost of producing nuclear fuel, as of March 2011 (see table I-6.) Because they are the farthest removed from the end product, the concentrate producers are generally more vulnerable to changes in the market than other segments of the industry. Data provided in response to the Commission’s notice of institution in this third five-year review concerning 2010 U.S. concentrate producers’ operations are shown in table I-7. For comparison purposes, also presented are selected data collected in the original investigation (1992) and the first and second five-year reviews (1999 and 2005). During the original investigation there were at least 15 separate firms producing uranium concentrate.

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Table I-7
Natural uranium concentrate (concentrated U\textsubscript{3}O\textsubscript{8}): U.S. producers' trade and financial data, 1992, 1999, 2005, and 2010\textsuperscript{1}

<table>
<thead>
<tr>
<th>Item</th>
<th>1992 Original investigation</th>
<th>1999 First review</th>
<th>2005 Second review</th>
<th>2010 Third review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity ((1,000) pounds of U\textsubscript{3}O\textsubscript{8})</td>
<td>25,551</td>
<td>13,472</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Production ((1,000) pounds of U\textsubscript{3}O\textsubscript{8})</td>
<td>5,917</td>
<td>4,936</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Capacity utilization (percent)</td>
<td>23.2</td>
<td>36.6</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

U.S. shipments:

<table>
<thead>
<tr>
<th>Item</th>
<th>1992 Original investigation</th>
<th>1999 First review</th>
<th>2005 Second review</th>
<th>2010 Third review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity ((1,000) pounds of U\textsubscript{3}O\textsubscript{8})</td>
<td>3,305</td>
<td>3,775</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value (${\text{1,000}}$)</td>
<td>62,220</td>
<td>55,791</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>$18.83</td>
<td>$14.78</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Net sales (${\text{1,000}}$)</td>
<td>139,362</td>
<td>59,939</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>COGS (${\text{1,000}}$)</td>
<td>102,036</td>
<td>59,034</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit or (loss) (${\text{1,000}}$)</td>
<td>37,326</td>
<td>905</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>SG&amp;A expenses (${\text{1,000}}$)</td>
<td>12,579</td>
<td>27,811</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating income or (loss) (${\text{1,000}}$)</td>
<td>24,747</td>
<td>(26,906)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>COGS/sales (percent)</td>
<td>73.2</td>
<td>98.5</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating income or (loss)/sales (percent)</td>
<td>17.8</td>
<td>(44.9)</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Firms believed to have represented all U.S. production of uranium concentrates during 1992 provided data in response to the Commission's questionnaire. Data presented for the final annual period examined in the first five-year review (1999) were provided by five producers (COGEMA, Everest, IMC Global, Rio Algom, and Uranium Resources) that were believed to have represented all U.S. production of uranium concentrates during that year. Data presented for the final annual period examined in the second five-year review (2005) were provided by four producers (Areva NC Inc.; Cotter Corp.; Power Resources Inc./Crow Butte Resources Inc.; and Uranium Resources Inc.) that were believed to have accounted for all U.S. production of uranium concentrates during 2005. Data presented in response to the Commission's notice of institution in this third five-year review for 2010 were provided by two uranium concentrate producers (Crow Butte and Power Resources, Inc.) that were believed to have represented *** percent of U.S. production of uranium concentrates during 2010.

Firms believed to have represented all U.S. production of uranium concentrates during 1992 provided data in response to the Commission’s questionnaire.\textsuperscript{98} Data presented for the final annual period examined in the first five-year review (1999) were provided by five producers (COGEMA, Everest, IMC Global, Rio Algom, and Uranium Resources) that were believed to have represented all U.S. production of uranium concentrates during that year. Data presented for the final annual period examined in the second five-year review (2005) were provided by four producers (Areva NC Inc.; Cotter Corp.; Power Resources Inc./Crow Butte Resources Inc.;\textsuperscript{99} and Uranium Resources Inc.) that were believed to have accounted for all U.S. production of uranium concentrates during 2005. Data presented in response to the Commission’s notice of institution in this third five-year review for 2010 were provided by two uranium concentrate producers (Crow Butte and Power Resources, Inc.) that were believed to have represented *** percent of U.S. production of uranium concentrates during 2010.

U.S. Enricher

In terms of the share of total processing costs, enrichment is the second largest component, accounting for about 41 percent of the total processing cost of producing nuclear fuel, as of March 2011 (see table I-6). Although a second U.S. enricher (Urenco USA’s LES) commenced operations in New Mexico during June 2010, USEC reportedly accounted for almost all domestic production of LEU during 2010. USEC enriches natural UF\textsubscript{6} owned by the utilities and charges a fee for the SWUs it expends in the process. In some cases the utility does not provide the natural UF\textsubscript{6}, which USEC then provides at an additional charge. The enriched UF\textsubscript{6} it purchases and imports from Russia under the HEU Agreement is distributed to the utilities as is: payment is in cash for the enriched component and in kind for the natural component.

Data provided in response to the Commission’s notice of institution in this third five-year review concerning USEC’s 2010 operations are shown in table I-8. For comparison purposes, also presented are selected data provided by USEC in the original investigation (1992) and the first and second five-year reviews (1999 and 2005).

\textbf{Table I-8}

\textit{Enriched uranium hexafluoride (enriched UF\textsubscript{6} (LEU-HF)): USEC’s trade and financial data, 1992, 1999, 2005, and 2010}

\begin{tabular}{cccccccc}
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* & * & * & * & * & * & * & * \\
\hline
\end{tabular}


\textsuperscript{99} ***.
U.S. IMPORTS AND APPARENT CONSUMPTION

U.S. Importers

During the period of the original investigation (1989-91), reported imports of the subject uranium from Russia were accounted for by ***. During the first five-year review (1997-99) *** reported imports of the subject uranium from Russia. In addition to these reported imports from Russia, *** reported imports of enriched uranium from *** in *** that was made from Russian uranium. Even though this uranium was a product of *** for Customs purposes, its natural component was subject to the quota limitations of the Russian Suspension Agreement, as per the Agreement’s “by pass” provisions instituted in 1996.

The following five subject importers provided responses to the Commission’s questionnaires during the second five-year review: Cameco Corp.; Globe Nuclear Services and Supply (GNSS), Ltd.; RWE Nukem Inc. (“Nukem”); USEC; and Westinghouse Electric Co. Ltd. Of the importers’ responses received by the Commission in the second five-year review, *** reported imports of uranium concentrate; *** reported imports of natural uranium hexafluoride; *** reported imports of enriched uranium hexafluoride; and *** reported imports of enriched uranium oxides, nitrates, or metals from Russia during the period of review.

The domestic interested parties indicated in their responses to the Commission’s notice of institution in this third five-year review that, since 2005, the following have likely imported uranium from the Russian Federation for consumption in the United States: Globe Nuclear Services and Supply (GNSS) Ltd; USEC (as Executive Agent under the Russian HEU Agreement); TENAM (Tenex’s U.S. subsidiary); Nukem Inc.; and Transport Logistics International.¹⁰¹

U.S. Imports

The value of U.S. imports of uranium from 2006 to 2010 based on official U.S. import statistics are shown in table I-9. The data are compiled from official Commerce statistics HTS statistical reporting numbers 2612.10.0000, 2844.10.2010 , 2844.10.2025, 2844.20.0010, 2844.20.0020, 2844.20.0030, and 2844.20.0050. Data do not include HTS statistical reporting numbers 2844.10.1000 (uranium metal), 2844.10.2055 (other), and 2844.10.5000 (other), as the products imported under these reporting numbers is unclear. During 2006-10, the vast majority of all U.S. imports from Russia entered the United States under HTS statistical reporting number 2844.20.0020 (uranium flouride enriched in U₂₃⁵). In fact, according to official import statistics, the only other HTS statistical reporting number under which Russian uranium entered the United States during the period examined in this third five-year review was HTS statistical reporting number 2612.10.0000 (uranium ores and concentrates) and that occurred only in 2008. During 2008, only 2 percent of total U.S. imports of uranium from Russia were uranium ores and concentrates and the remaining 98 percent was uranium flouride enriched in U₂₃⁵.

¹⁰⁰ Unless indicated otherwise, the discussion in this section is based on information contained in Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report, June 30, 2006, pp. IV-1 - IV-7.
¹⁰¹ Response of PRI and Crow Butte, August 1, 2011, p. 44; and Response of USEC, August 1, 2011, p. 66.
Table I-9
Uranium: U.S. imports, 2006-10

<table>
<thead>
<tr>
<th>Item</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landed, duty-paid value (1,000 dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>841,074</td>
<td>909,877</td>
<td>853,740</td>
<td>855,824</td>
<td>1,049,038</td>
</tr>
<tr>
<td>Other sources</td>
<td>2,650,771</td>
<td>4,256,676</td>
<td>4,888,277</td>
<td>4,224,098</td>
<td>4,208,021</td>
</tr>
<tr>
<td>All sources</td>
<td>3,491,845</td>
<td>5,166,553</td>
<td>5,742,017</td>
<td>5,079,922</td>
<td>5,257,059</td>
</tr>
</tbody>
</table>

Source: Compiled from official Commerce statistics.

Additional information regarding imports are prepared by the EIA in its Uranium Marketing Annual Report, which tracks natural uranium purchases of U.S. utilities by country of origin (including the United States). Shown in table I-10 are data for delivery years 2006-10. Relative to 2006, the volume of 2010 uranium deliveries fell by 30.0 percent, the weighted-average price more than doubled, and the percentage of deliveries attributable to foreign sources grew from 83.8 percent to 92.1 percent. In 2010, Russia was the largest source of natural uranium purchases, with U.S. utilities taking delivery of over 10.5 million pounds of Russian U₃O₈. These purchases of Russian natural uranium accounted for approximately 25 percent of U.S. utilities’ total deliveries of foreign U₃O₈, and nearly 23 percent of U.S. utilities’ total deliveries of U₃O₈. Canada was the second largest source of natural uranium purchases in 2010 (10.2 million pounds), followed by Australia (7.1 million pounds) and Kazakhstan (6.8 million pounds). Relative to 2006, purchases from Russia during 2010 fell by 30.2 percent; purchases from the United States, by 65.9 percent; and purchases from all other sources combined, by 20.3 percent. Other significant sources of supply of uranium in 2010 were Namibia (4.9 million pounds) and Uzbekistan (1.9 million pounds).
Table I-10
Uranium: U.S. utility purchases and weighted-average prices, by origin country and delivery year, 2006-10

(1,000 pounds U\textsubscript{3}O\textsubscript{8} equivalent; dollars per pound U\textsubscript{3}O\textsubscript{8} equivalent)

<table>
<thead>
<tr>
<th>Source</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>17,052</td>
<td>11,507</td>
<td>12,758</td>
<td>11,164</td>
<td>7,112</td>
</tr>
<tr>
<td>Brazil</td>
<td>822</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Canada</td>
<td>13,325</td>
<td>10,717</td>
<td>9,791</td>
<td>8,975</td>
<td>10,238</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>W</td>
<td>347</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>1,628</td>
<td>2,407</td>
<td>3,818</td>
<td>4,985</td>
<td>6,830</td>
</tr>
<tr>
<td>Namibia</td>
<td>3,009</td>
<td>3,115</td>
<td>3,880</td>
<td>5,732</td>
<td>4,913</td>
</tr>
<tr>
<td>Niger</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>2,001</td>
<td>587</td>
</tr>
<tr>
<td>Russia</td>
<td>15,116</td>
<td>16,766</td>
<td>12,080</td>
<td>7,938</td>
<td>10,544</td>
</tr>
<tr>
<td>South Africa</td>
<td>725</td>
<td>W</td>
<td>783</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2,020</td>
<td>1,263</td>
<td>1,923</td>
<td>1,424</td>
<td>1,865</td>
</tr>
<tr>
<td>Total foreign</td>
<td>55,732</td>
<td>47,011</td>
<td>45,633</td>
<td>42,777</td>
<td>42,895</td>
</tr>
<tr>
<td>United States</td>
<td>10,807</td>
<td>3,973</td>
<td>7,720</td>
<td>7,053</td>
<td>3,687</td>
</tr>
<tr>
<td>Total purchases</td>
<td>66,539</td>
<td>50,983</td>
<td>53,353</td>
<td>49,830</td>
<td>46,582</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted-average price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>$21.23</td>
<td>$30.35</td>
<td>$41.59</td>
<td>$52.25</td>
<td>$51.35</td>
</tr>
<tr>
<td>Brazil</td>
<td>19.61</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Canada</td>
<td>17.61</td>
<td>32.89</td>
<td>48.72</td>
<td>42.25</td>
<td>50.35</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>W</td>
<td>77.02</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>25.74</td>
<td>57.36</td>
<td>60.61</td>
<td>43.41</td>
<td>47.81</td>
</tr>
<tr>
<td>Namibia</td>
<td>18.46</td>
<td>25.24</td>
<td>54.79</td>
<td>47.30</td>
<td>47.90</td>
</tr>
<tr>
<td>Niger</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>47.55</td>
<td>49.00</td>
</tr>
<tr>
<td>Russia</td>
<td>16.34</td>
<td>32.04</td>
<td>27.64</td>
<td>37.98</td>
<td>50.28</td>
</tr>
<tr>
<td>South Africa</td>
<td>20.69</td>
<td>W</td>
<td>27.50</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>15.89</td>
<td>24.42</td>
<td>56.06</td>
<td>46.65</td>
<td>48.57</td>
</tr>
<tr>
<td>Total foreign</td>
<td>18.75</td>
<td>33.05</td>
<td>43.47</td>
<td>45.35</td>
<td>49.64</td>
</tr>
<tr>
<td>United States</td>
<td>17.85</td>
<td>28.89</td>
<td>59.55</td>
<td>48.92</td>
<td>45.25</td>
</tr>
<tr>
<td>Total purchases</td>
<td>18.61</td>
<td>32.78</td>
<td>45.88</td>
<td>45.86</td>
<td>49.29</td>
</tr>
</tbody>
</table>

Note.–W = Data withheld to avoid disclosure of individual company data. Totals may not add due to rounding.

Apparent U.S. Consumption and Market Shares

As was the case in prior reviews concerning uranium, because of the complexity of marketing natural and enriched uranium, the Commission’s usual approach for computing apparent consumption from shipment data is difficult to apply in this five-year review. Further, trade in natural uranium cannot be simply added to trade in enriched uranium to obtain a meaningful statistic, except possibly by value. Nonetheless, U.S. consumption data on a value basis compiled from official import statistics and responses to the Commission’s notice of institution for this third five-year review for 2010 are presented in table I-11.

Table I-11
Uranium: U.S. market data on a valuation basis, 2010

<table>
<thead>
<tr>
<th>Item</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (in 1,000 dollars)</td>
</tr>
<tr>
<td>Sales from U.S. production</td>
<td>***</td>
</tr>
<tr>
<td>U.S. imports from--</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>1,049,038</td>
</tr>
<tr>
<td>Other sources</td>
<td>4,208,021</td>
</tr>
<tr>
<td>Total, U.S. imports</td>
<td>5,257,059</td>
</tr>
<tr>
<td>Total, sales from U.S. production and U.S. imports</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Compiled from official Commerce statistics; Response of PRI and Crow Butte, August 1, 2011, exh. 1; Response of USEC, August 1, 2011, exh. 24.
In addition, as an indicator of apparent consumption, figure I-17 graphically depicts U.S. nuclear power reactor purchases of uranium during 1994-2010. The data indicate an overall increasing U.S. apparent consumption from 1994 to 2006, but an overall decline thereafter.

**Figure I-17**

*Uranium: U.S. nuclear power reactor purchases, 1994-2010*

WORLD PRODUCTION AND CONSUMPTION

Citing the *World Nuclear Association*, PRI and Crowe Butte reported in their response to the Commission’s notice of institution in this third five-year review that the United States currently accounts for almost one-third of the world’s total uranium requirements and is the largest single uranium market in the world. They noted further that the United States is projected to account for 46-96 percent of uncommitted U₃O₈ demand during 2011 and 2017, increasing from 1.7 million pounds U₃O₈ to 34 million pounds U₃O₈ during that time. The European Union (“EU”) and Japan have historically been the second and third largest uranium consuming markets in the world behind the United States. The EU’s percentage of world requirements was greater than 28 percent in 2010 and Japan’s uranium demand currently comprises nearly 14 percent of the world total. Moreover, Japan has represented the largest market for Russian commercial nuclear sales after the United States and the EU.

**Uranium Mining and Milling**

Unlike the other stages of the nuclear fuel cycle, which depend on well-established manufacturing processes and readily available materials, this critical stage of the nuclear fuel process is dependent on the availability in the ground of a relatively uncommon element, uranium, which needs to be present in a concentration of about 0.1 percent or more to be retrievable commercially. Failure to discover adequate new economical deposits could spell the end of nuclear power as a viable energy option. According to the World Nuclear Association (“WNA”), known reserves of uranium are more than adequate to supply global nuclear power needs well beyond 2030.

As of 2010, Kazakhstan, Canada, and Australia were the world’s largest producers of uranium, accounting for about 62 percent of the world’s production of uranium from mines. Other substantial producers include Namibia, Niger, Russia, Uzbekistan, the United States, Ukraine, China, Malawi, South Africa, and India. Table I-12 and figure I-18 present world uranium production data during 2006-10.

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102 Unless indicated otherwise, the discussion in this section is based on information contained in *Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report*, June 30, 2006, pp. IV-11 - IV-20.


### Table I-12
Uranium: World production, by country, 2006-10

<table>
<thead>
<tr>
<th>Country</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>5,279</td>
<td>6,637</td>
<td>8,521</td>
<td>14,020</td>
<td>17,803</td>
</tr>
<tr>
<td>Canada</td>
<td>9,682</td>
<td>9,476</td>
<td>9,000</td>
<td>10,173</td>
<td>9,783</td>
</tr>
<tr>
<td>Australia</td>
<td>7,593</td>
<td>8,611</td>
<td>8,430</td>
<td>7,982</td>
<td>5,900</td>
</tr>
<tr>
<td>Namibia</td>
<td>3,067</td>
<td>2,879</td>
<td>4,366</td>
<td>4,626</td>
<td>4,496</td>
</tr>
<tr>
<td>Niger</td>
<td>3,434</td>
<td>3,153</td>
<td>3,032</td>
<td>3,243</td>
<td>4,198</td>
</tr>
<tr>
<td>Russia</td>
<td>3,262</td>
<td>3,413</td>
<td>3,521</td>
<td>3,564</td>
<td>3,562</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2,260</td>
<td>2,320</td>
<td>2,338</td>
<td>2,429</td>
<td>2,400</td>
</tr>
<tr>
<td>United States</td>
<td>1,672</td>
<td>1,654</td>
<td>1,430</td>
<td>1,453</td>
<td>1,660</td>
</tr>
<tr>
<td>World</td>
<td>39,444</td>
<td>41,282</td>
<td>43,853</td>
<td>50,772</td>
<td>53,663</td>
</tr>
</tbody>
</table>

**Note:** Totals of individual country data presented do not add to “World” data presented.


### Figure I-18
Uranium: World uranium production, 2006-10

Source: Table I-12.
A critical concern of the industry is the lag time between when a deposit is first discovered and the date when uranium production begins. Particularly in Western countries where not only technical problems must be overcome but also regulatory hurdles often from a multitude of agencies, the lag time can take 15 years or more. Thus an unanticipated surge in nuclear power growth could lead to major long-term shortages until uranium production capabilities are finally installed and approved and are ready to meet new demand.\(^{106}\)

Companies involved in uranium mining and milling range from companies that specialize in mining only to companies that are involved in all stages of the nuclear fuel cycle. The uranium mining and milling industry has historically seen increased consolidation; however, Kazakhstan has emerged as a major producer since the Commission’s second five-year review. The percentage of global uranium production accounted for by the top eight mining companies rose from 70 percent in 1995 to 82 percent in 2004. In 2010, the top 10 companies marketed 87 percent of the world’s uranium mine production, whereas the 10 largest-producing uranium mines in 2010 accounted for 55 percent of the global uranium mine production.\(^{107}\) Largely, as a result of rising uranium prices, the World Nuclear Association (“WNA”) reports that at least 60 new companies have been actively engaged in uranium exploration property acquisition, and/or development of new uranium mines.

The share of global uranium production attributed to in-situ leach (“ISL”) mining rose from about 15 percent of global uranium production in 2000 to 21 percent in 2004 and to 41 percent in 2010.\(^{108}\) The importance of ISL mining is that it allows for the extraction of uranium from ore deposits that may not be rich enough to be mined by other methods. ISL mining currently accounts for the dominant share of uranium production in Kazakhstan and Uzbekistan, nearly all U.S. production, minor production in Australia, and possible future production in Russia.\(^{109}\)

Commercially, uranium or nuclear fuel is associated with essentially one end use, the generation of electricity in nuclear power plants. This association strengthened further during the 1990s, with the winding down of the cold war, when the two major producers of nuclear fuel for weapons applications, the United States and the former Soviet Union with a surplus of weapons grade nuclear fuel, sharply curtailed their production of nuclear fuel for weapons applications. Nevertheless, the use of nuclear fuel for weapons applications remains a major consideration not only for national security but also in the commercial sector as evidenced by the HEU agreement.

The potential of uranium in the generation of electricity for civil applications was widely recognized as a consequence of Einstein’s famous equation $E=mc^2$. It took, however, the successful development of nuclear weapons to convince government and industry officials that uranium could indeed be used in civilian applications as well. Following the installation of the first nuclear power plants in the 1950s in Russia and the United States, nuclear power plants were installed in the United States, Russia, Canada, Western Europe, and Japan, followed by countries throughout the world but primarily concentrated in the developed world. Currently, nuclear power growth in the developed world has slowed down, and in some countries may have even declined because of political opposition, especially following the Fukushima accident. In fact, domestic producers PRI and Crow Butte indicated in their response to the Commission’s notice of institution in this third five-year review that uncertainty in the global nuclear fuel market, particularly with respect to short-term demand and global supply and demand balances,

\(^{106}\) According to the WNA, uranium mining output rose by 29 percent during 2005-10. The percentage of annual uranium demand that was supplied by mines rose from 65 percent in 2005 to 78 percent in 2010. WNA, *World Uranium Mining*, September 2011.


\(^{109}\) Ibid.
followed the March 2011 accident at the Fukushima nuclear power plant.\textsuperscript{110} Many industry observers believe that much of the growth in the generation and consumption of nuclear power will occur in Russia and in the relatively technologically advanced developing countries, especially China and India.

In the United States, with the sharp increase in fossil fuel prices reflecting increased resource scarcity and increased concern about global warming and energy security, and new reactor designs that appear to achieve higher levels of safety and economy, there was renewed optimism among supporters of nuclear energy that new nuclear power plants would be installed in the United States in the future. However, no nuclear power plant has been ordered in the United States since 1978. Energy legislation in the United States which included production tax credits and loan guarantees had also fueled optimism about new nuclear power plants which were expected to be installed after 2020.\textsuperscript{111} However, this optimism has been tempered by the Fukushima accident, the global economic downturn, and the increased competition from lower priced fossil fuels (especially natural gas) and renewable energy sources.

In terms of uranium requirements, the United States is the largest consumer of uranium, accounting for 28 percent of the world’s reactor requirements (table I-13).

**Table I-13**

<table>
<thead>
<tr>
<th>Location</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (in MT U)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>19,538</td>
<td>22,724</td>
<td>24,048</td>
</tr>
<tr>
<td>France</td>
<td>10,153</td>
<td>8,762</td>
<td>9,803</td>
</tr>
<tr>
<td>Japan</td>
<td>8,003</td>
<td>9,203</td>
<td>7,424</td>
</tr>
<tr>
<td>Korea</td>
<td>3,804</td>
<td>5,815</td>
<td>6,971</td>
</tr>
<tr>
<td>China</td>
<td>2,875</td>
<td>9,676</td>
<td>20,368</td>
</tr>
<tr>
<td>Russia</td>
<td>4,135</td>
<td>4,642</td>
<td>5,625</td>
</tr>
<tr>
<td>Germany</td>
<td>3,453</td>
<td>680</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>1,675</td>
<td>2,231</td>
<td>2,034</td>
</tr>
<tr>
<td>World</td>
<td>68,646</td>
<td>87,477</td>
<td>102,401</td>
</tr>
</tbody>
</table>

*Note.–* Totals of individual country data presented do not add to “World” data presented.

*Source: WNA, Global Nuclear Fuel Supply 2009, table 5.1.*

\textsuperscript{110} *Response of PRI and Crow Butte, August 1, 2011, p. 7.*

\textsuperscript{111} Earlier reports on nuclear power indicated that new U.S. nuclear power plants could be installed beginning as early as 2015; however, the date has been moved back.
Uranium conversion

Uranium conversion, the conversion of uranium yellowcake to UF₆, is required for the subsequent step of enrichment. Enriched uranium is required in the preparation of nuclear fuel to be used in light water reactors, the predominant kind of reactor used globally with the exception of a few countries including Canada. Shown in table I-14 is a listing of companies involved in uranium conversion to produce natural uranium hexafluoride (UF₆), along with their conversion facility locations and their estimated nameplate capacities.

Table I-14
Natural uranium hexafluoride (UF₆): Converters, locations, and nameplate capacity

<table>
<thead>
<tr>
<th>Converter</th>
<th>Country</th>
<th>Location</th>
<th>Nameplate capacity (MT uranium metal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameco</td>
<td>Canada</td>
<td>Port Hope</td>
<td>12,500</td>
</tr>
<tr>
<td>COMURHEX</td>
<td>France</td>
<td>Pierrelatte</td>
<td>14,500</td>
</tr>
<tr>
<td>CNCC</td>
<td>China</td>
<td>Lanzhou</td>
<td>3,000</td>
</tr>
<tr>
<td>ConverDyn</td>
<td>United States</td>
<td>Metropolis, IL</td>
<td>15,000</td>
</tr>
<tr>
<td>IPEN</td>
<td>Brazil</td>
<td>Sao Paulo</td>
<td>90</td>
</tr>
<tr>
<td>SFL</td>
<td>UK</td>
<td>Springfields</td>
<td>6,000</td>
</tr>
<tr>
<td>Rosatom</td>
<td>Russia</td>
<td>Irkutsk, Seversk</td>
<td>25,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>76,090</td>
</tr>
</tbody>
</table>


Uranium Enrichment

Four enrichment enterprises dominate the world’s enrichment capacity: USEC in the United States; Rosatom in Russia; Eurodif/Areva in France; and Urenco with facilities in Germany, the Netherlands, and the United Kingdom. Enrichment is often considered the most sensitive step in the nuclear fuel cycle from both an economic and nonproliferation point of view as the production of highly enriched uranium is often viewed as the most critical step in the production of nuclear weapons. Enrichment nameplate effective capacities for the primary suppliers of uranium enrichment, consisting of facilities employing both gaseous centrifuge and gaseous diffusion technology, is presented in table I-15.

---

112 In recent years, with higher U₃O₈ prices, the cost of uranium has equaled or exceeded enrichment costs (see, for example, tables I-5 and I-6).
**Table I-15**

**Enriched uranium hexafluoride (UF₆): Enrichers, locations, and nameplate capacity, 2010**

<table>
<thead>
<tr>
<th>Location</th>
<th>Diffusion</th>
<th>Centrifuge</th>
</tr>
</thead>
<tbody>
<tr>
<td>China (CNNC)</td>
<td>(')</td>
<td>1,300</td>
</tr>
<tr>
<td>France (Areva/Eurodif)</td>
<td>8,500</td>
<td>(')</td>
</tr>
<tr>
<td>Germany/Netherlands/UK (Urenco)</td>
<td>(')</td>
<td>12,800</td>
</tr>
<tr>
<td>Japan (JNFL)</td>
<td>(')</td>
<td>150</td>
</tr>
<tr>
<td>United States (Urenco, New Mexico)</td>
<td>(')</td>
<td>200</td>
</tr>
<tr>
<td>Russia (Tenex)</td>
<td>(')</td>
<td>23,000</td>
</tr>
<tr>
<td>United States (USEC)</td>
<td>11,300</td>
<td>(')</td>
</tr>
<tr>
<td>Others¹</td>
<td>(')</td>
<td>300</td>
</tr>
<tr>
<td>Global (est.)</td>
<td></td>
<td>57,550³</td>
</tr>
<tr>
<td>SWU demand (WNA ref.)</td>
<td></td>
<td>48,890³</td>
</tr>
</tbody>
</table>

¹ Not applicable.
² Includes Argentina, Brazil, India, and Pakistan.
³ Centrifuge and diffusion.


As shown, estimated global capacity of 57.6 million SWU in 2010 appears to be noticeably larger than the global demand figure of 48.9 million SWU estimated by the WNA; this is in contrast with the demand-supply balance for primary uranium. In actuality, however, global SWU production may be substantially below nameplate capacity, particularly for diffusion plants.

While gaseous diffusion plants have the advantage of being less capital intensive than gaseous centrifuge plants, there appear to be a number of important advantages of the gaseous centrifuge facilities that render them technologically superior to the gas diffusion facilities. These include lower electrical costs, higher capacity utilization rates, and the ability to incrementally add gaseous centrifuge capacity based on market needs. Consequently, the two main global producers employing gaseous diffusion technology, USEC and Eurodif, have announced plans to move to centrifuge technology.

According to the WNA, further expansion plans by the uranium enrichers are likely if market conditions permit. Urenco, a Western European consortium with enrichment facilities in the United Kingdom, Germany, and the Netherlands, plans to increase its capacity to 12 million SWU at its European facilities by the end of 2015 whereas representatives of the Russian enricher announced plans for a joint venture in Siberia with Kazakhstan with a projected annual capacity of 5 million SWU. Research and development to improve gas centrifuge technology is currently ongoing in tandem with expansion plans. In addition, SWU obtained from secondary sources is still significant and may include downblended SWU from both Russia and the United States as well as mixed oxide (MOX) fuel fabricated...
from plutonium oxide. According to the WNA, the global enrichment industry should be able to meet nuclear fuel requirements for any projected market scenario in the forecast period.\textsuperscript{113}

**Fuel Fabricators for Light Water Reactors**

The WNA lists 21 fuel fabrication facilities worldwide for lightwater reactors, six of which are in Western Europe, four are in the United States, two are in Russia, and four are in Japan. Fuel fabricators are engaged in the final step in what has been designated as the front end of the nuclear fuel cycle. These steps include the conversion of uranium to uranium dioxide, pelletizing, and finally encasing these pellets in a fuel rod/fuel rod assembly system. Not all fabricators, however, are involved in all steps of this process. In contrast to the other stages of the nuclear fuel cycle, the manufacture of fuel assemblies is a highly customized process. In the past, this has resulted in limiting the competitiveness of the various vendors to a limited number of reactors for which they have the design expertise, since many of the fuel fabricators are also reactor vendors. In recent years, in order to increase market share, fuel fabricators have begun to offer fuel fabrication services to customers using reactors manufactured by their competitors. Therefore, the fuel fabrication industry has become increasingly competitive as the firms increase product diversity. At the same time, fuel fabricators are becoming increasingly competitive by offering products with improved performance capabilities, such as higher burnup. According to the WNA, there is significant global overcapacity for fuel fabrication services, a condition that prompted companies to seek consolidation. Despite some production consolidation, overcapacity still exists.\textsuperscript{114}

**Reprocessing Industry and the Recycling of Military Warheads**

Effective nuclear fuel capability can be increased by employing technologies that recycle or reprocess spent fuel. The uranium and plutonium in the spent fuel can be separated—the latter is formed as a byproduct of the nuclear fission process. The reprocessed uranium can then be re-enriched to LEU that is suitable to be used in nuclear reactors. The separated plutonium can also be used when mixed with uranium to form a mixed oxide (MOX) fuel. According to the WNA, a reduction of 30 percent of natural uranium can be achieved. The other advantage of reprocessing is that it reduces the volume of high-level waste as well as the level of radioactivity in the long-term.

The major commercial reprocessing facilities are in Western Europe and Russia. These facilities are located in La Hague, France; Sellafield, the United Kingdom, and Ozersk (Mayak) in Russia. Smaller reprocessing facilities are located in India, Japan, and other countries. MOX fuel fabrication facilities are currently located in France, the United Kingdom, and Belgium. Countries that are planning to install MOX fuel production facilities include the United States, Russia, and Japan.

Plutonium (military grade) and uranium can also be extracted from military warheads. Both the United States and the Russian Federation have done extensive work in this regard. The U.S. DOE downblends HEU it has produced from weapons at facilities in Erwin, TN, and Lynchburg, VA.


THE INDUSTRY IN RUSSIA\textsuperscript{115}

The Russian civilian nuclear fuel industry has been described by the U.S. Embassy in Moscow as follows:

The Russian nuclear industry is composed of four entities: TVEL, Tenex, Atomstroyexport, and Rosenergoatom. TVEL manufactures fuel assemblies and components for sale, both domestically and abroad; Tenex sells Russian uranium enrichment services abroad; Atomstroyexport builds nuclear power plants abroad; and Rosenergoatom builds and operates all domestic nuclear power plants. Although once part of the Soviet and, later, Russian governments, all four organizations have been converted to joint stock companies that are owned primarily by the government. The manner in which these organizations conduct business has changed significantly since the late 1980's. In support of Russia’s foreign policy goals, the civilian nuclear industry frequently set prices for its services lower than what market forces would dictate.\textsuperscript{116}

Figure IV-4 presents a flowchart of the Russian civilian nuclear fuel cycle as of about 2005.

Russian Mining and Milling Industry

Russia is a significant uranium producer, the sixth largest producer in 2010. It possesses about ten percent of world’s reasonably assured resources and the country’s known uranium reserves are increasing. During 2010, Russia’s three major mining centers (JSC Priargunksy, JSC Khiagda, and JSC Dalur) had a combined capacity to produce over 5,650 tonnes of uranium (nearly 14.7 million pounds U\textsubscript{3}O\textsubscript{8}). These centers produced a total of 3,610 tonnes of uranium (nearly 9.4 million pounds U\textsubscript{3}O\textsubscript{8}) during 2010, up from 3,150 tonnes of uranium in 2003. Industry projections indicate that Russia intends to substantially increase uranium production anywhere from 4,714 to 5,950 tonnes of uranium (12.3 to 15.5 million pounds U\textsubscript{3}O\textsubscript{8}) by 2015.\textsuperscript{117}

\textsuperscript{115} The discussion in this section is based on information contained in Investigation No. 731-TA-539-C (Second Review): Uranium from Russia–Staff Report, June 30, 2006, pp. IV-21 - IV-38; and from WNA’s online report, Russia’s Nuclear Fuel Cycle, September 2011.

\textsuperscript{116} Cable from the U.S. Embassy, Moscow, November 5, 2005, p. 1.

\textsuperscript{117} Response of PRI and Crow Butte, August 1, 2011, p. 22.
Figure IV-4
Uranium: The Russian civilian nuclear fuel cycle

INDUSTRY PROCESS

Uranium ore mining and uranium concentrate (U3O8)

Conversion to uranium hexafluoride (UF6)

Enrichment of UF6 processed by U235 from natural state of 0.7% to required enrichment

Enriched UF6 processed into uranium dioxide (UO2)

Fabrication of uranium pellets and nuclear fuel assemblies

Fuel assemblies

Spent fuel (after three-five years) stored or re-enriched

Spent fuel reprocessed and enriched uranium produced. Highly enriched uranium (HEU) from warheads processed into low enriched uranium (LEU) and exported to US by Tekhobsexport

Wet fuel (HEU Purchase Agreement)

Conversion of new Russian-type NPPs abroad

Operation of Russian NPPs

ENTITIES

TVEL
(Fl informational Plant)

TVEL
(Cherepovets Mechanical Plant)

Rosatom
(Sibirsich Chemical Plant, Electrochemical Plant, Arzamas Electrolysis Chemical Plant, Udor Electrochemical Plant, TVEL, Ural Metallurgical Plant, Chemical Metallurgical Plant (Krasnoyarsk)), Novosibirsk Chemical Concentrates Plant, Meshtiroofrany Zavod (Elektrostal)

TENEX
(Selling agent for foreign contracts)

TVEL
(Ural Metallurgical Plant, Chemical Metallurgical Plant (Krasnoyarsk), Novosibirsk Chemical Concentrates Plant, Meshtiroofrany Zavod (Elektrostal))

TVEL calls to:

ROSENERGOATOM
(Russian NPPs)

Research reactors

Russian civil fleet and navy (ice breakers and submarines)

Foreign companies

Rosatom
(Sibirsich Chemical Plant, Udor Electrochemical Plant, TENEX)

TENEX
(Selling agent for foreign contracts)

ATOMSTROYEXPORT

Currently, most uranium production is centered in the Chita region in Siberia near the town of Krasnokamensk. Uranium is produced largely from the Priargunsky underground mine. In 2007, production at that location was 3,037 tonnes of uranium. ISL operations at Dalur and Khiagda were of lesser amounts. In 2006, there were three uranium mining projects in Russia. By 2008, three more uranium mining projects were under construction and three more were projected. A few companies which had recently reorganized operations dominate Russia’s uranium industry.

Russian mining companies are also involved in uranium projects in Kazakhstan, Ukraine, Uzbekistan and Mongolia. The Russian mining company ARMZ Uranium Holding Co. (“ARMZ”) acquired a 51-percent share in Canadian-based Uranium One, which is involved in multiple projects in Kazakhstan. It also made a takeover bid for Australia’s Mantra Resources, which is considering producing uranium in southern Tanzania. Japan’s Mitsui & Company is considering producing uranium with Tenex (the commercial nuclear sales arm of the Russian nuclear complex) in eastern Russia to supply Japan with its uranium needs. In 2007, Cameco signed an agreement with ARMZ to explore and mine uranium in both Russia and Canada. Also, in 2008, ARMZ signed a Memo of Understanding with a South Korean consortium to develop uranium projects, including joint ventures and sales of natural uranium in Russia and possibly elsewhere.118

Priargunsky, a Russian mining company, has operated several mines since 1968 and is known to have one of the most productive sites in the world. However, several of the mines, including the open pit mines have been shut down and most uranium is extracted from underground mines except for a relatively small amount of uranium extracted by leaching. TVEL, a Russian company specializing in the nuclear fuel cycle, has been installing ISL facilities in Dalur, Khiagda, and other areas in Russia. Total Russian uranium production in 2010 totaled 3,562 metric tons, which accounted for about 7 percent of global production in that year. In comparison, Kazakhstan, the world’s largest producer, accounted for 33 percent of global production in 2010. The WNA has projected that ISL may represent the dominant share of future uranium production in Russia. As Russian uranium requirements for 2010 in the reference scenario were estimated in 2009 by the WNA to be 4,135 metric tons, primary uranium supply from Russia and Russian reactor requirements for uranium appeared to be roughly in balance. Nevertheless, some uranium apparently needs to be supplied to Russia’s nuclear power industry either through inventory reductions or through imports.

**Russian Conversion and Fabrication Industry**

Russia is a full provider of nuclear fuel cycle services including uranium conversion and fuel fabrication services. Rosatom, the successor to Minatom, the Russian State-owned Corporation, operates a uranium conversion facility in Angarsk and Seversk near two of the four uranium enrichment facilities. According to the WNA, these facilities supply Russian domestic requirements, as well as requirements by the rest of the FSU and Eastern Europe. Fabrication services for Russian-built reactors have been supplied by the Russian companies MSZ Elekrostal and the Novosibirsk Chemical Concentrates Plant (“NCCP”).

**Russian Uranium Enrichment and Reprocessing Industry**

According to the Commission’s second review report, based on a reported nameplate capacity of 20 million SWU, the Russian uranium enrichment industry operated by Rosatom (formerly Minatom) was the largest in the world at the time, accounting for about 40 percent of global nameplate capacity. Ten gas centrifuge plants were reportedly in operation at four sites in Russia: the Electrolytic Chemical Combine in Angarsk, the Electrochemical Plant in Zelenogorsk (Krasnoyarsk-45), the Ural

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Electrochemical Combine in Novouralsk (Sverdlovsk-44), and the Siberian Chemical Combine in Seversk (Tomsk-7).

Much of Russian military inventories of highly enriched uranium have been delivered to the United States in the form of LEU as a result of the HEU agreement that was reached between the United States and Russia in 1993. The HEU agreement reportedly supplies about 15 percent of the global requirement for enrichment uranium services. It is part of a $12 billion deal between the United States and Russia and supplies about half of U.S. enrichment needs. The terms of that agreement, which is set to expire in 2013, were described earlier in this report.

The Russian civilian nuclear fuel industry is composed of the following entities: TVEL, Tenex, Atomstroyexport, and Rosenergoatom. Overseeing these agencies is Rosatom (the successor agency to Minatom). All these entities were converted to joint stock companies that are primarily owned by the Russian government.

Rosenergoatom builds and operates domestic nuclear power plants, whereas Atomstroyexport builds nuclear power plants outside of Russia. TVEL is a 100-percent state-owned stock-holding company which oversees partially state-owned entities. The company oversees entities involved with mining and processing uranium, manufacturing fuel assemblies and components for sale both domestically and for export. TVEL does not, however, engage in uranium enrichment, spent fuel storage, or reprocessing. These are conducted by other entities that report directly to Rosatom.

The company Tenex, the trading arm of Russia’s State-Owned Corporation (Rosatom), exports uranium enrichment services, other fuel cycle products, and isotope products. In 1988, Tenex was transferred from the Ministry of Foreign Trade to Minatom/Rosatom. In 1994, Tenex became the executive agent of Minatom in the HEU-LEU purchase agreement. In 2002, Tenex was authorized to conclude foreign trade agreements for the importation of spent fuel from foreign nuclear power plants. Tenex reportedly invested $60 million during 2000-05 in a joint venture for natural uranium extraction in Kazakhstan. In 2009, Tenex signed contracts for a multi-billion dollar deal with four U.S. utilities (Ameren UE, Luminant, Pacific Gas & Electric, and Exelon) and a Japanese utility (Chubu). Tenex has also entered into agreements to mine and explore for uranium with local companies in South Africa and with Cameco in Canada. The domestic interested parties also reported in their response to the Commission’s notice of institution that Tenex has made its interest in the U.S. market known by the opening of an office for its wholly owned subsidiary TENAM Corp. outside Washington, DC. The purpose of opening the office was to assist Tenex “in contracting directly with American utilities and on generating NFC-related business opportunities in the country.”

Since 2006, Russia’s Rosatom has actively pursued cooperation deals with South Africa, Namibia, Chile, Morocco, Egypt, Algeria, Vietnam, Bangladesh and Kuwait. In fact, it stated in October 2010 that it expects to receive foreign contracts for the supply of nuclear fuel worth $20 billion partly because it entered new markets, including contracts with Swiss, South African, and Mexican enterprises. Rosatom has claimed to be able to undercut world prices for nuclear fuel and services by about 30 percent.

In 2007, the State corporation Rosatom supplanted the Federal Atomic Energy Agency (also referred to as Rosatom) which, in turn, supplanted the Ministry for Atomic Energy (Minatom). During 2008, the Federal State Unitary Enterprises that constituted the Russian Nuclear industry was “privatized” to form Joint Stock Companies (JSCs). Most of the shares in these JSCs are held by AtomEnergoProm which is a single vertically-integrated state holding company whose purview is Russia’s nuclear power sector (as distinct from the Russian military sector).

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119 WNA, Russia’s Nuclear Fuel Cycle, September 2011.
120 WNA, Russia’s Nuclear Fuel Cycle, September 2011.
121 Response of PRI and Crow Butte, August 1, 2011, p. 33.
122 WNA, Russia’s Nuclear Fuel Cycle, September 2011.
Uranium Inventories in Russia

In their response to the Commission’s notice of institution in this third five-year review, domestic concentrators UPI and Crow Butte argued that Russia continues to maintain extensive inventories of uranium products which could easily be exported to the United States if the suspended investigation were terminated. They added, however, that “the precise magnitude of Russia’s uranium inventory is the subject of much conjecture and speculation.” They noted that following the dissolution of the Soviet Union, Russia came into possession of most of the 1,400 tonnes of highly enriched uranium (“HEU”) produced by the former Soviet States. Under the terms of the current U.S.-Russia HEU Agreement, Russia has agreed to blend down 500 tonnes of HEU to LEU and export to the United States. The domestic interested parties noted that the 900 tonnes difference in HEU product may contain as much as 700 million pounds of U$_3$O$_8$. They argued that since the additional 900 tonnes of HEU would then be covered by the Russian suspension agreement rather than the HEU agreement, the absence of the suspension agreement would result in “massive quantities of HEU-derived material available for processing and export to the United States” from Russia. They pointed out that while the Domenici Amendment to the USEC Privatization Act would prevent the blended down material from being exported directly to the United States, it was the suspension agreement alone “that would function to prevent the material from being indirectly imported via “origin swaps” or other book transfers which are prohibited by Section VII of the RSA, as amended.”

The domestic interested parties also noted that in addition to inventories of HEU, Russia maintains substantial stockpiles of depleted uranium “tails” (i.e., the waste product of the enrichment process), which can be re-enriched for further use as natural uranium. They stated that Minatom is the only enricher in the world that has re-enriched significant quantities of depleted uranium and that Russia now has large stockpiles containing an estimated 300,000 - 545,000 tonnes of depleted uranium. They argued that with underutilized Russian enrichment capacity, these tails are turned into commercial uranium at a relatively low incremental cost.

Trade Barriers in Other Countries

Russian uranium faces barriers to entry in Europe through sales quota restrictions applied by the EURATOM Supply Agency (“EURATOM”). The Commission reported in the second five-year review that EURATOM had increasingly limited Russian access to the European Union market, noting that EURATOM countries limited imports of uranium from Russia to about 15 percent of the EURATOM market. The precise import limit currently in effect is not known but is believed to remain in the 15-20 percent range.

\[123\] Response of PRI and Crow Butte, August 1, 2011, pp. 22-23.
\[124\] Response of PRI and Crow Butte, August 1, 2011, pp. 24-25.
APPENDIX A

FEDERAL REGISTER NOTICES
would be likely to lead to continuation or recurrence of dumping at the following weighted-average percentage margins:

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Weighted-average margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>Sam Young</td>
<td>7.91</td>
</tr>
<tr>
<td></td>
<td>All Others</td>
<td>7.91</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Far Eastern</td>
<td>11.50</td>
</tr>
<tr>
<td></td>
<td>Nan Ya</td>
<td>3.79</td>
</tr>
<tr>
<td></td>
<td>All Others</td>
<td>7.31</td>
</tr>
</tbody>
</table>

Notification Regarding Administrative Protective Order

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a). Timely written notification of the destruction of APO materials or conversion to judicial protective orders is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

The Department is issuing and publishing these final results and this notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act.

DEPARTMENT OF COMMERCE
International Trade Administration
Initiation of Five-Year (“Sunset”) Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: In accordance with section 751(c) of the Tariff Act of 1930, as amended (“the Act”), the Department of Commerce (“the Department”) is automatically initiating a five-year review (“Sunset Review”) of the antidumping and countervailing duty orders and suspended investigation listed below. The International Trade Commission (“the Commission”) is publishing concurrently with this notice its notice of Institution of Five-Year Review which covers the same orders.

DATES: Effective Date: July 1, 2011.


SUPPLEMENTARY INFORMATION:

Background


Initiation of Review

In accordance with 19 CFR 351.218(c), we are initiating the Sunset Review of the following antidumping and countervailing duty orders and suspended investigation:

Filing Information

As a courtesy, we are making information related to Sunset proceedings, including copies of the pertinent statute and Department’s regulations, the Department schedule for Sunset Reviews, a listing of past revocations and continuations, and current service lists, available to the

Dated: June 24, 2011.

Ronald K. Lorenzen, Deputy Assistant Secretary for Import Administration.
public on the Department’s Internet Web site at the following address: “http://ia.ita.doc.gov/sunset/.” All submissions in these Sunset Reviews must be filed in accordance with the Department’s regulations regarding format, translation, and service of documents. These rules can be found at 19 CFR 351.303.

This notice serves as a reminder that any party submitting factual information in an antidumping duty or countervailing duty (AD/CVD) proceeding must certify to the accuracy and completeness of that information. See section 782(b) of the Act. Parties are hereby reminded that revised certification requirements are in effect for company/government officials as well as their representatives in all AD/CVD investigations or proceedings initiated on or after March 14, 2011. See Certification of Factual Information to Import Administration During Antidumping and Countervailing Duty Proceedings: Interim Final Rule, 76 FR 7491 (February 10, 2011) (Interim Final Rule), amending 19 CFR 351.303(g)(1) and (2). The formats for the revised certifications are provided at the end of the Interim Final Rule. The Department intends to reject factual submissions in investigations/proceedings initiated on or after March 14, 2011 if the submitting party does not comply with the revised certification requirements.

Pursuant to 19 CFR 351.103(d), the Department will maintain and make available a service list for these proceedings. To facilitate the timely preparation of the service list(s), it is requested that those seeking recognition as interested parties to a proceeding contact the Department in writing within 10 days of the publication of the Notice of Initiation.

Because deadlines in Sunset Reviews can be very short, we urge interested parties to apply for access to proprietary information under administrative protective order (“APO”) immediately following publication in the Federal Register of this notice of initiation by filing a notice of intent to participate. The Department’s regulations on submission of proprietary information and eligibility to receive access to business proprietary information under APO can be found at 19 CFR 351.304–306.

Information Required from Interested Parties

Domestic interested parties defined in section 771(9)(C), (D), (E), (F), and (G) of the Act and 19 CFR 351.102(b) wishing to participate in a Sunset Review must respond not later than 15 days after the date of publication in the Federal Register of this notice of initiation by filing a notice of intent to participate. The required contents of the notice of intent to participate are set forth at 19 CFR 351.218(d)(1)(ii). In accordance with the Department’s regulations, if we do not receive a notice of intent to participate from at least one domestic interested party by the 15-day deadline, the Department will automatically revoke the order without further review. See 19 CFR 351.218(d)(1)(iii).

If we receive an order-specific notice of intent to participate from a domestic interested party, the Department’s regulations provide that all parties wishing to participate in the Sunset Review must file complete substantive responses not later than 30 days after the date of publication in the Federal Register of this notice of initiation. The required contents of a substantive response, on an order-specific basis, are set forth at 19 CFR 351.218(d)(3). Note that certain information requirements differ for respondent and domestic parties. Also, note that the Department’s information requirements are distinct from the Commission’s information requirements. Please consult the Department’s regulations for information regarding the Department’s conduct of Sunset Reviews. Please consult the Department’s regulations at 19 CFR Part 351 for definitions of terms and for other general information concerning AD/CVD proceedings at the Department.

This notice of initiation is being published in accordance with section 751(c) of the Act and 19 CFR 351.218(c).

Dated: June 21, 2011.

Christian Marsh,
Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2011–16623 Filed 6–30–11; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

Transportation Infrastructure/ Multimodal Products and Services Trade Mission to Doha, Qatar, and Abu Dhabi and Dubai, United Arab Emirates

AGENCY: International Trade Administration, Department of Commerce.

ACTION: Notice.

Mission Description

The U.S. Department of Commerce, International Trade Administration, U.S. Commercial Service is organizing a senior executive-led trade mission for multi-modal transportation and infrastructure development products and services to Doha, Qatar and Abu Dhabi and Dubai, United Arab Emirates (U.A.E) on October 29–November 3, 2011. The mission is designed to contribute to President Obama’s National Export Initiative, which aims to double U.S. exports by 2015 while supporting two million American jobs, by increasing exports of products and services that contribute to infrastructure development projects in Qatar and U.A.E.

The mission will help U.S. companies already doing business in Qatar or the U.A.E. increase their current level of exports and exposure, and will help experienced U.S. exporters, which have not yet done business in Qatar or the U.A.E. enter these markets in support of job creation in the United States. Participating firms will gain market information, connect with key business and government decision makers, solidify business strategies, and/or advance specific projects. In each of these important sectors, participating U.S. companies will meet with prescreened potential partners, agents, distributors, representatives, and licensees. The agenda will also include meetings with high-level national and local government officials, networking opportunities, country briefings, and seminars.

The industry sectors for this mission will include, but are not limited to: multimodal freight transportation systems, products and technologies, including port development, airport development, freight rail systems and technologies, supply chain systems and strategies; mass transportation systems; advanced vehicle technologies and intelligent transportation systems and related services and software; and other relevant products and services.

The delegation will be composed of 15 qualified U.S. firms representing the

3 In comments made on the interim final sunset regulations, a number of parties stated that the proposed five-day period for rebuttal to substantive responses to a notice of initiation was insufficient. This requirement was retained in the final sunset regulations at 19 CFR 351.218(d)(4). As provided in 19 CFR 351.302(b), however, the Department will consider individual requests to extend that five-day deadline based upon a showing of good cause.
assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix;

(c) The quantity and value of U.S. commercial shipments of the Domestic Like Product produced in your U.S. plant(s);

(d) The quantity and value of U.S. internal consumption/company transfers of the Domestic Like Product produced in your U.S. plant(s); and

(e) The value of (i) Net sales, (ii) cost of goods sold (COGS), (iii) gross profit, (iv) selling, general and administrative (SG&A) expenses, and (v) operating income of the Domestic Like Product produced in your U.S. plant(s) (include both U.S. and export commercial sales, internal consumption, and company transfers) for your most recently completed fiscal year (identify the date on which your fiscal year ends).

10) If you are a U.S. importer or a trade/business association of U.S. importers of the Subject Merchandise from the Subject Country, provide the following information on your firm’s(s’) operations on that product during calendar year 2010 (report quantity data in short tons and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping or countervailing duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of Subject Merchandise from each Subject Country accounted for by your firm’s(s’) imports;

(b) The quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. commercial shipments of Subject Merchandise imported from each Subject Country; and

(c) The quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. internal consumption/company transfers of Subject Merchandise imported from each Subject Country.

11) If you are a producer, an exporter, or a trade/business association of producers or exporters of the Subject Merchandise in the Subject Country(ies), provide the following information on your firm’s(s’) operations on that product during calendar year 2010 (report quantity data in short tons and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping or countervailing duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of Subject Merchandise in each Subject Country accounted for by your firm’s(s’) production;

(b) Capacity (quantity) of your firm to produce the Subject Merchandise in each Subject Country (i.e., the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) The quantity and value of your firm’s(s’) exports to the United States of Subject Merchandise and, if known, an estimate of the percentage of total exports to the United States of Subject Merchandise from each Subject Country accounted for by your firm’s(s’) exports.

12) Identify significant changes, if any, in the supply and demand conditions or business cycle for the Domestic Like Product that have occurred in the United States or in the market for the Subject Merchandise in the Subject Country(ies) after 2005, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the Domestic Like Product produced in the United States, Subject Merchandise produced in the Subject Country(ies), and such merchandise from other countries.

13) (OPTIONAL) A statement of whether you agree with the above definitions of the Domestic Like Product and Domestic Industry; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

**Authority:** These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission’s rules.

By order of the Commission.

Issued: June 27, 2011.

James R. Holbein,
Secretary to the Commission.

[FR Doc. 2011–16443 Filed 6–30–11; 8:45 am]

**BILLING CODE 7020–02–P**

**INTERNATIONAL TRADE COMMISSION**

[Investigation No. 731–TA–539–C (Third Review)]

Uranium From Russia; Institution of a Five-Year Review Concerning the Suspended Investigation on Uranium From Russia

**AGENCY:** United States International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** The Commission hereby gives notice that it has instituted a review pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether termination of the suspended investigation on uranium from Russia would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission; to be assured of consideration, the deadline for responses is August 3, 2011. Comments on the adequacy of responses may be filed with the Commission by September 13, 2011. For further information concerning the conduct of this review and rules of general application, consult the Commission’s Rules of Practice and Procedure, part 201, subparts A through F (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207), as most recently amended at 74 FR 2847 (January 16, 2009).

**DATES:** Effective Date: July 1, 2011.

**FOR FURTHER INFORMATION CONTACT:** Mary Messer (202–205–3193), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-
impaired persons can obtain information on this matter by contacting the Commission’s TDD terminal on 202–205–1310. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (http://www.usitc.gov).

The public record for this review may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

SUPPLEMENTARY INFORMATION:

Background.—On October 16, 1992, the Department of Commerce ("Commerce") suspended an antidumping duty investigation on imports of uranium from Russia (57 FR 49220, October 30, 1992). Following first five-year reviews by Commerce and the Commission, effective August 22, 2000, Commerce issued a continuation of the suspended investigation on imports of uranium from Russia (65 FR 50958 and 65 FR 52407 (corrected)). Following second five-year reviews by Commerce and the Commission, effective August 11, 2006, Commerce issued a continuation of the suspended investigation on imports of uranium from Russia (71 FR 46191). The Commission is now conducting a third review to determine whether termination of the suspended investigation would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct a full review or an expedited review. The Commission’s determination in any expedited review will be based on the facts available, which may include information provided in response to this notice.

Definitions.—The following definitions apply to this review:

(1) Subject Merchandise is the class or kind of merchandise that is within the scope of the five-year review, as defined by the Department of Commerce.

(2) The Subject Country in this review is Russia.

(3) The Domestic Like Product is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the Subject Merchandise. In its original preliminary determination concerning the U.S.S.R. and in its first and second full five-year review determinations concerning Russia, the Commission defined the Domestic Like Product as uranium coextensive with Commerce’s scope.

(4) The Domestic Industry is the U.S. producers as a whole of the Domestic Like Product, or those producers whose collective output of the Domestic Like Product constitutes a major proportion of the total domestic production of the product. In its original preliminary determination concerning the U.S.S.R., the Commission defined the Domestic Industry as domestic producers of the product coextensive with Commerce’s scope of the investigation, including the U.S. Department of Energy’s uranium enrichment operations. In its full first and second five-year review determinations concerning Russia, the Commission defined the Domestic Industry as all domestic producers of uranium, including concentrators, the converter, the enricher, and fabricators.

(5) An Importer is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the Subject Merchandise into the United States from a foreign manufacturer or through its selling agent.

Participation in the review and public service list.—Persons, including industrial users of the Subject Merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the review as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission’s rules, no later than 21 days after publication of this notice in the Federal Register. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the review.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation. The Commission’s designated agency ethics official has advised that a five-year review is not considered the “same particular matter” as the corresponding underlying original investigation for purposes of 18 U.S.C. 207, the post employment statute for Federal employees, and Commission rule 201.15(b)(19 CFR 201.15(b)), 73 FR 24609 (May 5, 2008). This advice was developed in consultation with the Office of Ethics. Consequently, former employees are not required to seek Commission approval to appear in a review under Commission rule 19 CFR §201.15, even if the corresponding underlying original investigation was pending when they were Commission employees. For further ethics advice on this matter, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202–205–3088.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list.—Pursuant to section 207.7(a) of the Commission’s rules, the Secretary will make BPI submitted in this review available to authorized applicants under the APO issued in the review, provided that the application is made no later than 21 days after publication of this notice in the Federal Register. Authorized applicants must represent interested parties, as defined in 19 U.S.C. §1677(9), who are parties to the review. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification.—Pursuant to section 207.3 of the Commission’s rules, any person submitting information to the Commission in connection with this review must certify that the information is accurate and complete to the best of the submitter’s knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the Commission, its employees, and contract personnel to use the information provided in any other review or investigation of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

Written submissions.—Pursuant to section 207.61 of the Commission’s rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is August 1, 2011.

Pursuant to section 207.62(b) of the Commission’s rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review. The deadline for filing such comments is September 13, 2011. All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission’s rules and any submissions that contain BPI must also comply with the requirements of sections 201.6 and 207.7 of the Commission’s rules. The
Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the review must be served on all other parties to the review (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the review you do not need to serve your response).

Inability to provide requested information.—Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determination in the review.

Information to be Provided In Response to this Notice of Institution: As used below, the term “firm” includes any related firms or entities.

(1) The name and address of your firm or entity (including World Wide Web address) and name, telephone number, fax number, and E-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the Domestic Like Product, a U.S. union or worker group, a U.S. importer of the Subject Merchandise, a foreign producer or exporter of the Subject Merchandise, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in this review by providing information requested by the Commission.

(4) A statement of the likely effects of the termination of the suspended investigation on the Domestic Industry in general and your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of Subject Merchandise on the Domestic Industry.

(5) A list of all known and currently operating U.S. producers of the Domestic Like Product. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. § 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the Subject Merchandise and producers of the Subject Merchandise in the Subject Country that currently export or have exported Subject Merchandise to the United States or other countries after 2005.

(7) A list of 3–5 leading purchasers in the U.S. market for the Domestic Like Product and the Subject Merchandise (including street address, World Wide Web address, the name, telephone number, fax number, and E-mail address of a responsible official at each firm).

(8) A list of known sources of information on national or regional prices for the Domestic Like Product or the Subject Merchandise in the U.S. or other markets.

(9) If you are a U.S. producer of the Domestic Like Product, provide the following information on your firm’s operations on that product during calendar year 2010, except as noted. Report quantity data in (1) Pounds of natural uranium concentrate (concentrated U3O8) (Concentrate Producers), (2) kilograms of natural uranium hexafluoride, or kgU, (natural UF6) (Converters), (3) SWUs of enriched uranium hexafluoride (enriched UF6 (LEU–HF)), or (4) kilograms of enriched uranium oxides, nitrates, and metals, or kgU (Fabricators) (including only that part of the fabrication that is included with the product scope—i.e., the conversion and pelletizing processes). Report value data in U.S. dollars, f.o.b. plant. If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed or which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping or countervailing duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of Subject Merchandise from the Subject Country accounted for by your firm’s(s’) imports;

(b) the quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. commercial shipments of Subject Merchandise imported from the Subject Country; and

(c) the quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. internal consumption/company transfers of Subject Merchandise imported from the Subject Country.

(10) If you are a producer, an exporter, or a trade/business association of producers or exporters of the Subject...
Merchandise in the Subject Country, provide the following information on your firm’s(s’) operations on that product during calendar year 2010. Report quantity data in (1) pounds of natural uranium concentrate (concentrated U₃O₈) (Concentrate Producers), (2) kilograms of natural uranium hexafluoride, or kgU, (natural UF₆) (Converters), (3) SWU’s of enriched uranium hexafluoride (enriched UF₆ (LEU–HF)) (Enrichers), or (4) kilograms of enriched uranium oxides, nitrates, and metals, or kgU (Fabricators) (including only that part of the fabrication that is included with the product scope—i.e., the conversion and pelletizing processes). Report value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping or countervailing duties. If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of Subject Merchandise in the Subject Country accounted for by your firm’s(s’) production;

(b) Capacity (quantity) of your firm to produce the Subject Merchandise in the Subject Country (i.e., the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) the quantity and value of your firm’s(s’) exports to the United States of Subject Merchandise and, if known, an estimate of the percentage of total exports to the United States of Subject Merchandise from the Subject Country accounted for by your firm’s(s’) exports.

(12) Identify significant changes, if any, in the supply and demand conditions or business cycle for the Domestic Like Product that have occurred in the United States or in the market for the Subject Merchandise in the Subject Country after 2005, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the Domestic Like Product produced in the United States, Subject Merchandise produced in the Subject Country, and such merchandise from other countries.

(13) (OPTIONAL) A statement of whether you agree with the above definitions of the Domestic Like Product and Domestic Industry; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission’s rules.

By order of the Commission.

Issued: June 27, 2011.

James R. Holbein,
Secretary to the Commission.

[FR Doc. 2011–16451 Filed 6–30–11; 8:45 am]
BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 701–TA–480 and 731–TA–1188; Preliminary]

High Pressure Steel Cylinders From China

Determinations

On the basis of the record ¹ developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a) and 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from China of high pressure steel cylinders, provided for in subheading 731.11.00.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV) and subsidized by the Government of China.

Commencement of Final Phase Investigations

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the Federal Register as provided in section 207.21 of the Commission’s rules, upon notice from the Department of Commerce (Commerce) of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appeal as parties in Commission antidumping and

¹ The record is defined in sec. 207.2(f) of the Commission’s Rules of Practice and Procedure (19 CFR 207.2(f)).

By order of the Commission.

Issued: June 27, 2011.

James R. Holbein,
Secretary to the Commission.

[FR Doc. 2011–16537 Filed 6–30–11; 8:45 am]
BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–669 (Third Review)]

Cased Pencils From China

Determination

On the basis of the record ¹ developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1677(c)), that revocation of the antidumping duty order on cased pencils from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

Background

The Commission instituted this review on November 1, 2010 (75 FR 67102) and determined on February 4, 2011 that it would conduct an expedited review (76 FR 11267, March 1, 2011). The Commission transmitted its determination in this review to the Secretary of Commerce on June 27, 2011. The views of the Commission are contained in USITC Publication 4239 (June 2011), entitled Cased Pencils from China: Investigation No. 731–TA–669 (Third Review).

¹ The record is defined in sec. 207.2(f) of the Commission’s Rules of Practice and Procedure (19 CFR 207.2(f)).
information on this matter by contacting the Commission’s TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (http://www.usitc.gov). The public record for these reviews may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

SUPPLEMENTARY INFORMATION:

Background.—On October 4, 2011, the Commission determined that the domestic interested party group response to its notice of institution (76 FR 38688, July 1, 2011) of the subject five-year reviews was adequate and that the respondent interested party group response was inadequate. The Commission did not find any other circumstances that would warrant conducting full reviews. Accordingly, the Commission determined that it would conduct expedited reviews pursuant to section 751(c)(3) of the Act.

Staff report.—A staff report containing information concerning the subject matter of the reviews will be placed in the nonpublic record on October 27, 2011, and made available to persons on the Administrative Protective Order service list for these reviews. A public version will be issued thereafter, pursuant to section 207.62(d)(4) of the Commission’s rules.

Written submissions.—As provided in section 207.62(d) of the Commission’s rules, interested parties that are parties to the reviews and that have provided individually adequate responses to the notice of institution, and any party other than an interested party to the reviews may file written comments with the Secretary on what determination the Commission should reach in the reviews. Comments are due on or before November 1 and may not contain new factual information. Any person that is neither a party to the five-year reviews nor an interested party may submit a brief written statement (which shall not contain any new factual information) pertinent to the reviews by November 1. However, should the Department of Commerce extend the time limit for its completion of the final results of its reviews, the deadline for comments (which may not contain new factual information) on Commerce’s final results is three business days after the issuance of Commerce’s results. If comments contain business proprietary information (BPI), they must conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission’s rules. The Commission’s rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission’s rules, as amended, 67 FR 68036 (November 8, 2002). Even when electronic filing of a document is permitted, certain documents must also be filed in paper form, as specified in II(C) of the Commission’s Handbook on Electronic Filing Procedures, 67 FR 68168, 68173 (November 8, 2002).

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the review must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Determination.—The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. § 1675(c)(5)(B).

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission’s rules.

Issued: October 11, 2011.

James R. Holbein,
Secretary to the Commission.
[FR Doc. 2011–26667 Filed 10–14–11; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–539–C; Third Review]

Uranium From Russia; Scheduling of an Expedited Five-Year Review Concerning the Suspended Investigation on Uranium From Russia


ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the scheduling of an expedited review pursuant to section 751(c)(3) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(3)) (the Act) to determine whether termination of the suspended investigation on uranium from Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of this review and rules of general application, consult the Commission’s Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: Effective Date: October 4, 2011.


SUPPLEMENTARY INFORMATION:

Background.—On October 4, 2011, the Commission determined that the domestic interested party group response to its notice of institution (76 FR 38694, July 1, 2011) of the subject five-year reviews was adequate and that the respondent interested party group response was inadequate. The Commission did not find any other circumstances that would warrant conducting full reviews. Accordingly, the Commission determined that it would conduct expedited reviews pursuant to section 751(c)(3) of the Act.

Staff report.—A staff report containing information concerning the subject matter of the reviews will be placed in the nonpublic record on October 27, 2011, and made available to persons on the Administrative Protective Order service list for these reviews. A public version will be issued thereafter, pursuant to section 207.62(d)(4) of the Commission’s rules.

Written submissions.—As provided in section 207.62(d) of the Commission’s rules, interested parties that are parties to the reviews and that have provided individually adequate responses to the notice of institution, and any party other than an interested party to the reviews may file written comments with the Secretary on what determination the Commission should reach in the reviews. Comments are due on or before November 1 and may not contain new factual information. Any person that is neither a party to the five-year reviews nor an interested party may submit a brief written statement (which shall not contain any new factual information) pertinent to the reviews by November 1. However, should the Department of Commerce extend the time limit for its completion of the final results of its reviews, the deadline for comments (which may not contain new factual information) on Commerce’s final results is three business days after the issuance of Commerce’s results. If comments contain business proprietary information (BPI), they must conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission’s rules. The Commission’s rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission’s rules, as amended, 67 FR 68036 (November 8, 2002). Even when electronic filing of a document is permitted, certain documents must also be filed in paper form, as specified in II(C) of the Commission’s Handbook on Electronic Filing Procedures, 67 FR 68168, 68173 (November 8, 2002).

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the review must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Determination.—The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. § 1675(c)(5)(B).

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission’s rules.

Issued: October 11, 2011.

James R. Holbein,
Secretary to the Commission.
[FR Doc. 2011–26667 Filed 10–14–11; 8:45 am]

BILLING CODE 7020–02–P
thereafter, pursuant to section 207.62(d)(4) of the Commission’s rules.

Written submissions.—As provided in section 207.62(d) of the Commission’s rules, interested parties that are parties to the review and that have provided individually adequate responses to the notice of institution, 4 and any party other than an interested party to the review may file written comments with the Secretary on what determination the Commission should reach in the review. Comments are due on or before December 22, 2011 and may not contain new factual information. Any person that is neither a party to the five-year review nor an interested party may submit a brief written statement (which shall not contain any new factual information) pertinent to the review by December 22, 2011. However, should the Department of Commerce extend the time limit for its completion of the final results of its review, the deadline for comments (which may not contain new factual information) on Commerce’s final results is three business days after the issuance of Commerce’s results. If comments contain business proprietary information (BPI), they must conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission’s rules. Please consult the Commission’s rules, as amended (76 FR 61937, October 6, 2011), and the Commission’s Handbook on Filing Procedures (76 FR 62092, October 6, 2011), available on the Commission’s Web site at https://edis.usitc.gov.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the review must be served on all other parties to the review (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Determination.—The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. § 1675(c)(5)(B).

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission’s rules.

By order of the Commission.

Issued: October 11, 2011.

James R. Holbein,
Secretary to the Commission.

BILING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–785]

In the Matter of Certain Light-Emitting Diodes and Products Containing Same; Notice of Commission Decision Not To Review an Initial Determination Granting Complainant’s Motion To Amend the Complaint and Notice of Investigation


ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination (“ID”) (Order No. 8) of the presiding administrative law judge (“ALJ”) granting complainant’s motion to amend the complaint and notice of investigation in the above-captioned investigation.

FOR FURTHER INFORMATION CONTACT: Clint Gerdine, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 708–2310. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server at http://www.usitc.gov. The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on July 11, 2011, based on two complaints filed by OSRAM GmbH to OSRAM AG, to correct the name of complainant from OSRAM, Inc. of Ridgefield Park, New Jersey; Samsung LED America, Inc. of Atlanta, Georgia; LG Electronics, Inc. and LG Innotek Co., Ltd., both of Seoul, South Korea; LG Electronics U.S.A., Inc. of Englewood Cliffs, New Jersey; and LG Innotek U.S.A., Inc. of San Diego, California.

On September 6, 2011, OSRAM filed a motion to amend the complaint and notice of investigation to reflect a corporate name change from OSRAM GmbH to OSRAM AG, to correct the addresses of Samsung Electronics Co., Ltd. and Samsung LED Co., Ltd., and to make other typographical changes.

On September 19, 2011, the ALJ issued the subject ID granting the motion to amend the complaint and notice of investigation. No party petitioned for review of the ID pursuant to 19 CFR 210.43(a). The Commission has determined not to review this ID.


Issued: October 11, 2011.

James R. Holbein,
Secretary to the Commission.

BILING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Office of Justice Programs

[OJP; BJA; Docket No. 1571]

Meeting of the Department of Justice’s (DOJ’s) National Motor Vehicle Title Information System (NMVTIS) Federal Advisory Committee

AGENCY: Office of Justice Programs (OJP), Justice.

ACTION: Notice of meeting.

4 The Commission has found the responses submitted by Power Resources, Inc.; Crow Butte Resources, Inc.; and USEC Inc. and the United States Enrichment Corp. (collectively, “USEC”) to be individually adequate. Comments from other interested parties will not be accepted (see 19 CFR 207.62(d)(2)).
part of the PRC-wide entity because although it had shipments during the POR, it failed to provide information regarding its eligibility for a separate rate.\(^\text{17}\) Accordingly, we are continuing to apply AFA to the PRC-wide entity, which includes New Oriental and Shanghai Recky.

**Final Results of the Review**

The weighted-average dumping margins for the POR are as follows:

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Weighted-average margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMB Fasteners Ltd., and IFI &amp; Morgan Ltd. (“RMB/IFI Group”)</td>
<td>10.37</td>
</tr>
<tr>
<td>Suntec Industries Co., Ltd</td>
<td>55.16</td>
</tr>
<tr>
<td>Shanghai Prime Machinery Co., Ltd.</td>
<td>55.16</td>
</tr>
<tr>
<td>Jiaxing Xinyue Standard Part Co., Ltd</td>
<td>55.16</td>
</tr>
<tr>
<td>Certified Products International Inc</td>
<td>55.16</td>
</tr>
<tr>
<td>Jiashan Zhongshe Metal Products Co., Ltd</td>
<td>55.16</td>
</tr>
<tr>
<td>Haiyan Dayu Fasteners Co., Ltd</td>
<td>55.16</td>
</tr>
<tr>
<td>Haiyan Julong Standard Part Co., Ltd</td>
<td>55.16</td>
</tr>
</tbody>
</table>

\(^1\) (de minimis).

**Assessment**

Upon issuance of the final results, the Department will determine, and CBP shall assess, antidumping duties on all appropriate entries. The Department intends to issue assessment instructions to CBP 15 days after the date of publication of the final results of review. Pursuant to 19 CFR 351.212(b)(1), the Department will calculate importer-specific (or customer) per unit duty assessment rates based on the ratio of the total amount of the dumping margins calculated for the examined sales to the total entered value of those same sales. The Department will instruct CBP to assess antidumping duties on all appropriate entries covered by this review if any importer-specific assessment rate is above de minimis.

**Cash Deposit Requirements**

The following cash-deposit requirements will be effective upon publication of the final results of this administrative review for all shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the publication date, as provided for by section 751(a)(2)(C) of the Act: (1) For the exporters listed above, the cash deposit rate will be the rate established in these final results of review except, if the rate is zero or de minimis, i.e., less than 0.5 percent, a zero cash deposit rate will be required for that company; (2) for previously investigated or reviewed Chinese and non-Chinese exporters not listed above that have separate rates, the cash deposit rate will continue to be the exporter-specific rate published for the most recent period; (3) for all Chinese exporters of subject merchandise which have not been found to be entitled to a separate rate, the cash deposit rate will be the PRC-wide rate of 206.00 percent; and (4) for all non-Chinese exporters of subject merchandise which have not received their own rate, the cash deposit rate will be the rate applicable to the Chinese exporters that supplied that non-Chinese exporter. These deposit requirements, when imposed, shall remain in effect until further notice.

**Reimbursement of Duties**

This notice also serves as a final reminder to importers of their responsibility under 19 CFR 351.402(f) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this POR. Failure to comply with this requirement could result in the Department’s presumption that reimbursement of antidumping duties has occurred and the subsequent assessment of double antidumping duties.

**Administrative Protective Orders**

This notice also serves as a final reminder to parties subject to administrative protective order (“APO”) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely written notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing this notice in accordance with sections 751(a)(1) and 777(i) of the Act.

Dated: October 31, 2011.

Paul Piquado
Assistant Secretary for Import Administration.

**Appendix I—Issues & Decision Memorandum**

**Comment 1:** Rescission of Review With Respect to Gem-Year

**Comment 2:** Application of AFA to Shanghai Recky

**Comment 3:** No Shipments Certification from New Oriental

**Comment 4:** Wage Rate

**Comment 5:** Excluding Sterling Tool’s Financial Statement

**Comment 6:** Selection of Surrogate Financial Statements

**Comment 7:** Correction of Error in Financial Ratios for Nasco Steels Private Limited

**Comment 8:** Surrogate Value for Hydrochloric Acid

**Comment 9:** Adding HTSUS Numbers to the Scope

**Comment 10:** Separate Rate Determination

**Comment 11:** Zeroing

[FR Doc. 2011–28649 Filed 11–3–11; 8:45 am]

**BILLING CODE 3510–DS–P**
at the levels indicated in the “Final Results of Review” section of this notice.

DATES: Effective Date: November 4, 2011.


SUPPLEMENTARY INFORMATION:

History of the Suspension Agreement


On December 25, 1991, the USSR dissolved and the United States subsequently recognized the twelve newly independent states which emerged: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation ("Russia"), Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The Department continued the investigations against each of these twelve countries. On June 3, 1992, the Department issued an affirmative preliminary determination that uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan was being sold at less-than-fair-value by a weighted-average dumping margin of 115.82 percent, and a negative determination regarding the sale of uranium from Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Turkmenistan. See Preliminary Determinations of Sales at Less Than Fair Value: Uranium From Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine and Uzbekistan; and Preliminary Determinations of Sales at Not Less Than Fair Value: Uranium From Armenia, Azerbaijan, Belarus, Georgia, Moldova and Turkmenistan 57 FR 23380 (June 3, 1992) (1992 Preliminary Determinations).

On October 30, 1992, the Department suspended the antidumping duty investigation involving uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan on the bases of agreements by the countries’ respective governments to restrict the volume of direct or indirect exports to the United States in order to prevent the suppression or undercutting of price levels of United States domestic uranium. See Antidumping: Uranium from Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Ukraine, and Uzbekistan: Suspension of Investigations and Amendment of Preliminary Determinations, 57 FR 49220, 49235 (October 30, 1992) (1992 Suspension Agreements). The Department also amended its preliminary determination to include highly-enriched uranium ("HEU") in the scope of the investigations. See Id.

The first amendment to the Suspension Agreement, effective on March 11, 1994, authorized “matched sales” in the United States of Russian-origin and U.S.-origin natural uranium and separative work units ("SWU"). See Amendment to Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 59 FR 15373 (April 1, 1994). The amendment also extended the duration of the Suspension Agreement to March 31, 2004. See Id.

Effective on October 3, 1996, the Department and the Government of Russia agreed to two amendments to the Suspension Agreement. One amendment provided for the sale in the United States of feed associated with imports of Russian low-enriched uranium ("LEU") derived from HEU, making the Suspension Agreement consistent with the United States Enrichment Corporation Privatization Act (42 U.S.C. 2297h, et seq.) ("USEC Privatization Act"). The second amendment restored previously-unused quota for SWU and included Russian uranium which had been enriched in a third country within the scope of the Suspension Agreement. According to this second amendment, these modifications would remain in effect until the date two years after the effective date of the amendment. See Amendment to Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 61 FR 56665, 56667 (November 4, 1996).

The next amendment to the Suspension Agreement, effective on May 7, 1997, doubled the amount of Russian-origin uranium that may be imported into the United States for further processing prior to re-exportation, and lengthened the period of time uranium may remain in the United States for processing to up to three years. See Amendment to Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 62 FR 37879 (July 15, 1997).

On July 31, 1998, the Department notified interested parties of a change in the administration of the matched sales quota in that the Department would, effective immediately, use a calendar year basis (i.e., January 1–December 31) rather than the previously-used quota year basis (i.e., April 1–March 31). See Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, 63 FR 40879 (July 31, 1998).

On August 2, 1999, the Department published a notice of initiation of the first five-year sunset review of the Suspension Agreement ("First Sunset Review"). See Initiation of Five-Year ("Sunset") Reviews, 64 FR 41915 (August 2, 1999). On July 5, 2000, the Department published its notice of the final results of the full sunset review, finding that revocation of the Suspension Agreement would be likely to lead to continuation or recurrence of dumping at a percentage weighted-average margin of 115.82 percent for all Russian manufacturers/exporters. See Notice of Final Results of Full Sunset Review: Uranium from Russia, 65 FR 41439 (July 5, 2000). On August 22, 2000, the Department published a notice of continuation of the Suspension Agreement pursuant to the Department’s affirmative determination and the ITC’s affirmative determination that termination of the Suspension Agreement would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. See Notice of Continuation of Suspended Antidumping Duty Investigation: Uranium from Russia, 65 FR 50958 (August 22, 2000). See also Uranium from Russia; Corrected Continuation of Suspended Antidumping Duty Investigation 65 FR 52407 (August 29, 2000).

On July 1, 2005, the Department published a notice of initiation of the second five-year sunset review of the Suspension Agreement ("Second Sunset Review"). See Initiation of Five-year ("Sunset") Reviews, 70 FR 38101 (July 1, 2005). On June 6, 2006, the Department published its notice of the final results of the full sunset review, finding that termination of the Suspension Agreement would be likely to lead to continuation or recurrence of dumping at a percentage weighted-average margin of 115.82 percent for all Russian manufacturers/exporters. See Final Results of Full Sunset Review of Suspended Antidumping Duty Investigation on Uranium From the
Russian Federation 71 FR 32517 (June 6, 2006). On August 11, 2006, the Department published a notice of continuation of the Suspension Agreement pursuant to the Department’s affirmative determination and the ITC’s affirmative determination that termination of the suspended investigation on uranium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. See Continuation of Suspended Antidumping Duty Investigation: Uranium From the Russian Federation, 71 FR 46191 (August 11, 2006).

On February 1, 2008, the Department and the Government of Russia signed another amendment to the Suspension Agreement (“2008 Amendment”) instituting new quotas through 2020 for commercial Russian uranium exports sold directly or indirectly to U.S. utilities or otherwise. See Amendment to the Agreement Suspending the Antidumping Investigation on Uranium From the Russian Federation, 73 FR 7705 (February 11, 2008) (2008 Amendment). Of particular relevance to this sunset review, Section XII of the 2008 Amendment states in part that:

In addition, the Department shall conduct sunset reviews under 19 U.S.C. 1675(c) in the years 2011 and 2016. All parties agree that the sunset reviews shall be expedited, pursuant to 19 U.S.C. 1675(C)(4) and (C)(3)(B), respectively, at both the Department of Commerce and the International Trade Commission. See 2008 Amendment, at 7707. The Department issued its memorandum regarding the 2008 Amendment’s prevention of price suppression or undercutting on May 14, 2008. See Memorandum to David M. Spooner, Assistant Secretary for Import Administration, from Ronald K. Lorentzen, Deputy Assistant Secretary for Policy and Negotiations, regarding “Prevention of Price Suppression or Undercutting of Price Levels of Domestic Products by the Amended Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation” (May 14, 2008).


On February 2, 2010, the Department issued its Statement of Administrative Intent which contained guidelines clarifying the Department’s intent with regard to the implementation of the amended Suspension Agreement and to take into consideration the requirements of the Domenici Amendment. See “Statement of Administrative Intent,” (February 2, 2010) (“SAI”). There have been no completed administrative reviews of the Suspension Agreement. The Suspension Agreement remains in effect for all manufacturers, producers, and exporters of uranium from Russia.

Scope of Review

The merchandise covered by this Suspension Agreement (Section III, “Product Coverage”) includes the following products from Russia:

1. Natural uranium in the form of uranium ores and concentrates; natural uranium metal and natural uranium compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing natural uranium or natural uranium compounds; uranium enriched in U235 and its compounds; alloys, dispersions (including cermets), ceramic products, and mixtures containing uranium enriched in U235 or compounds of uranium enriched in U235; and any other forms of uranium within the same class or kind.

2. Uranium ore from Russia that is milled into U3O8 and/or converted into UF6 in another country prior to direct and/or indirect importation into the United States is considered uranium from Russia and is subject to the terms of this Suspension Agreement.

3. For purposes of this Suspension Agreement, uranium enriched in U235 or compounds of uranium enriched in U235 in Russia are covered by this Suspension Agreement, regardless of their subsequent modification or blending. Uranium enriched in U235 in another country prior to direct and/or indirect importation into the United States is not considered uranium from Russia and is not subject to the terms of this Suspension Agreement.

HEU is within the scope of the underlying investigation, and HEU is covered by this Suspension Agreement. For the purpose of this Suspension Agreement, HEU means uranium enriched to 20 percent or greater in the isotope uranium-235.

Imports of uranium ores and concentrates, natural uranium compounds, and all forms of enriched uranium are currently classifiable under the Harmonized Tariff Schedule of the United States (“HTSUS”) subheadings: 2612.10.00, 2644.10.20, 2644.20.00, respectively. Imports of natural uranium metal and forms of natural uranium other than compounds are currently classifiable under HTSUS subheadings: 2844.10.10 and 2844.10.50. HTSUS subheadings are provided for convenience and Customs purposes. The written description of the scope of this proceeding is dispositive.

The Department has not received any scope requests or made any scope determinations in this proceeding since the Second Sunset Review.

Statute and Regulations

This review is being conducted pursuant to sections 751(c) and 752 of the Act. The Department’s procedures for the conduct of sunset reviews are set forth in Procedures for Conducting Five-Year (“Sunset”) Reviews of Antidumping and Countervailing Duty Orders, 63 FR 13516 (March 20, 1998) (“Sunset Regulations”) and in 19 CFR Part 331 (1999) in general.

Background

On July 1, 2011, the Department initiated the third sunset review of the suspended antidumping duty investigation on uranium from Russia, pursuant to section 751(c) of the Act. See Initiation of Five-Year (“Sunset”) Review, 76 FR 38613 (July 1, 2011). The Department received a notice of intent to participate in this sunset review from USEC, on July 13, 2011, and from Power Resources, Inc. (“PRI”), and Crow Butte Resources, Inc. (“Crow Butte”), on July 18, 2011 (collectively, “domestic interested parties”), within the Russian Federation, 61 FR 56665, 56667 (November 4, 1996). 4

Section IV.M of the Suspension Agreement in no way prevents Russia from selling directly or indirectly any or all of the HEU in existence at the time of the signing of the Suspension Agreement and/or LEU produced in Russia from HEU to the U.S. Department of Energy (“DOE”), its governmental successor, its contractors, assigns, or U.S. private parties acting in association with DOE or the United States Enrichment Corporation and in a manner not inconsistent with the agreement between the United States and Russia concerning the disposition of HEU resulting from the dismantlement of nuclear weapons in Russia. See 1992 Suspension Agreements, at 49237.
DEPARTMENT OF COMMERCE  
International Trade Administration

[A–570–975]  
Galvanized Steel Wire From the People’s Republic of China: Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

DATES: Effective Date: November 4, 2011.

SUMMARY: We preliminarily determine that galvanized steel wire from the People’s Republic of China (‘‘PRC’’) is being, or is likely to be, sold in the United States at less than fair value (‘‘LTFV’’), as provided in section 733 of the Tariff Act of 1930, as amended (‘‘the Act’’). The estimated margins of sales at LTFV are shown in the ‘‘Preliminary Determination’’ section of this notice. Pursuant to a request from an interested party, we are postponing the final determination by 60 days and extending provisional measures from a four-month period to not more than six months. Accordingly, we will make our final determination not later than 135 days after publication of the preliminary determination.

FOR FURTHER INFORMATION CONTACT: Irene Gorelik, Katie Marksberry or Kabir Archuleta, AD/CVD Operations, Office 9, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC, 20230; telephone: (202) 482–6905, (202) 482–7906, or 482–2593, respectively.

SUPPLEMENTARY INFORMATION: Initiation

On March 31, 2011, the Department of Commerce (‘‘Department’’) received an antidumping duty petition concerning imports of galvanized steel wire from the PRC, filed in proper form by Davis Wire Corporation, Johnstown Wire Technologies, Inc., Mid-South Wire Company, Inc., National Standard, LLC and Oklahoma Steel & Wire Company, Inc. (collectively, ‘‘Petitioners’’). On April 20, 2011, the Department initiated an antidumping duty investigation of
APPENDIX B

COMMISSION’S STATEMENT ON ADEQUACY
EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY

in

_Uranium from Russia_
Inv. No. 731-TA-539-C (Third Review)

On October 4, 2011, the Commission determined that it should proceed to an expedited review in the subject five-year review pursuant to section 751(c)(3)(B) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(3)(B).¹ ²

The Commission received responses to its notice of institution from: (i) USEC, Inc. and the United States Enrichment Corporation (a domestic producer of natural uranium and low enriched uranium); and (ii) Power Resources, Inc. and Crow Butte Resources, Inc.(domestic producers of natural uranium).

The Commission determined that the responses described above were individually adequate. The Commission also determined that the domestic interested party group response was adequate, and that the respondent interested party group response was inadequate. The Commission did not find any circumstances that would warrant conducting a full review. Accordingly, the Commission determined to proceed to an expedited review.

A record of the Commissioners’ votes is available from the Office of the Secretary and the Commission’s web site (http://www.usitc.gov).

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¹ Chairman Okun is not participating in this review.

² Commissioner Lane voted to conduct a full review.
APPENDIX C
SUMMARY DATA
(Exact reproductions of certain tables contained in Second Review Staff Report follow; therefore, original table and page numbers are retained.)
Table I-1
Uranium: Summary data from the original investigations, first reviews, and current review, 1990-92 and 1997-2005
(Value=1,000 dollars)

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<td>Value of imports and sales from U.S. production:</td>
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<tr>
<td>Amount</td>
<td>2,538,506</td>
<td>2,844,282</td>
<td>2,833,989</td>
<td>2,642,242</td>
<td>2,749,775</td>
<td>2,633,740</td>
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<td>Producers' share$^1$</td>
<td>65.0</td>
<td>65.2</td>
<td>68.1</td>
<td>59.9</td>
<td>55.3</td>
<td>44.7</td>
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<td>Importer's share:</td>
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<td>Russia$^1$</td>
<td>0.0</td>
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<td>All other countries$^1$</td>
<td>0.0</td>
<td>0.0</td>
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<td>Total imports$^1$</td>
<td>35.0</td>
<td>34.8</td>
<td>31.9</td>
<td>40.1</td>
<td>44.7</td>
<td>55.3</td>
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<td>Value of U.S. imports from--</td>
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<td>Russia</td>
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<td>All other sources</td>
<td>( )</td>
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<td>873,023</td>
<td>964,753</td>
<td>1,202,524</td>
<td>1,761,188</td>
<td>1,459,736</td>
<td>1,945,063</td>
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<td>Total imports</td>
<td>889,520</td>
<td>989,844</td>
<td>904,856</td>
<td>1,059,150</td>
<td>1,229,376</td>
<td>1,455,725</td>
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<td>Sales from U.S. production:</td>
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<td>U.S. sales</td>
<td>1,149,494</td>
<td>1,259,555</td>
<td>1,192,721</td>
<td>842,699</td>
<td>876,694</td>
<td>546,833</td>
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<td>Exports</td>
<td>499,492</td>
<td>594,883</td>
<td>736,412</td>
<td>740,393</td>
<td>643,705</td>
<td>631,182</td>
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<tr>
<td>Total sales</td>
<td>1,648,986</td>
<td>1,854,438</td>
<td>1,929,133</td>
<td>1,583,092</td>
<td>1,520,399</td>
<td>1,118,015</td>
<td>735,070</td>
<td>816,100</td>
<td>693,912</td>
<td>663,076</td>
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<td>Production workers</td>
<td>3,462</td>
<td>3,471</td>
<td>3,361</td>
<td>5,952</td>
<td>5,806</td>
<td>5,347</td>
<td>4,838</td>
<td>3,737</td>
<td>2,799</td>
<td>2,780</td>
<td>2,743</td>
<td>2,865</td>
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<td>Hours worked</td>
<td>8,264</td>
<td>8,114</td>
<td>7,329</td>
<td>12,469</td>
<td>12,153</td>
<td>11,221</td>
<td>10,723</td>
<td>8,192</td>
<td>6,558</td>
<td>5,868</td>
<td>6,052</td>
<td>6,247</td>
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<td>Wages paid</td>
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<td>132,792</td>
<td>128,259</td>
<td>314,822</td>
<td>323,692</td>
<td>307,580</td>
<td>312,382</td>
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<td>220,038</td>
<td>204,554</td>
<td>216,949</td>
<td>223,398</td>
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<td>Hourly wages</td>
<td>$15.28</td>
<td>$16.37</td>
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<td>$33.55</td>
<td>$34.86</td>
<td>$35.85</td>
<td>$35.76</td>
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1 In percent.
2 Not available.

Source: Data for 1990-92 and 1997-99 compiled from confidential staff report INV-XX-154, July 7, 2000, table I-2; and data for 2000-05 compiled from responses to Commission questionnaires and from official Commerce statistics. Import data for Russia compiled from responses to Commission questionnaires, and data for total for all sources compiled from official Commerce statistics (HTS statistical reporting numbers 2612.10.0000, 2844.10.2025, 2844.20.0010, 2844.20.0020, 2844.20.0030, and 2844.20.0050). Data for all other import sources do not include HTS statistical reporting numbers 2844.10.1000 (uranium metal), 2844.10.2055 (other), and 2844.10.5000 (other) as the contents of these reporting numbers are unclear.
Table I-2
Uranium: U.S. imports from the original investigations, first reviews, and current review, by sources, 1990-92 and 1997-2005

(Quantity=1,000 pounds U₃O₈ or 1,000 kilograms U; value=1,000 dollars; unit values are per pound or kilogram)

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<td>Natural uranium concentrate:</td>
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<td>(Quantity=1,000 pounds U₃O₈)</td>
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Table I-2--Continued
Uranium: U.S. imports from the original investigations, first reviews, and current review, by sources, 1990-92 and 1997-2005

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1 In percent.
2 Not available.
3 Not applicable.

Table I-3
Natural uranium concentrate: Summary data from the original investigations, first reviews, and current review, 1990-92 and 1997-2005

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\(^1\) In percent.

Source: Data for 1990-92 and 1997-99 compiled from confidential staff report INV-XX-154, July 7, 2000, table I-3; and data for 2000-05 compiled from responses to Commission questionnaires and from official Commerce statistics.
Table I-4
Natural uranium hexafluoride: Summary data from the original investigations, first reviews, and current review, 1990-92 and 1997-2005

*          *          *          *          *          *          *

Table I-5
Enriched uranium hexafluoride: Summary data from the original investigations, first reviews, and current review, 1990-92 and 1997-2005

*          *          *          *          *          *          *
### Enriched uranium oxides, nitrates, and metals: Summary data from the original investigations, first reviews, and current review, 1990-92 and 1997-2005

(Quantity=1,000 kilograms U; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per kilogram)

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¹ In percent.
² Not available.