

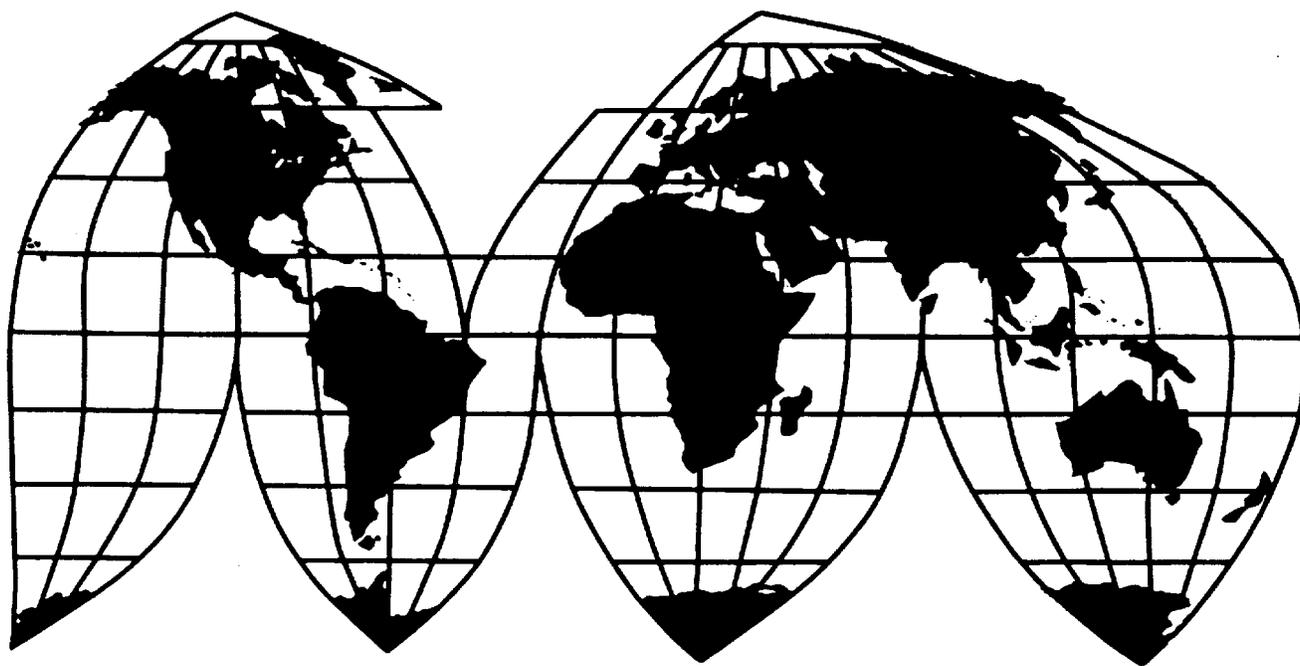
Low Enriched Uranium From France

Investigation No 731-TA-909 (Review)

Publication 3967

December 2007

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been identified with asterisks (***) in this report.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-909 (Review)

LOW ENRICHED URANIUM FROM FRANCE

DETERMINATION

On the basis of the record¹ 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 revocation of the antidumping duty order on low enriched uranium from France would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²

BACKGROUND

The Commission instituted this review on January 3, 2007 (72 F.R. 144) and determined on April 9, 2007 that it would conduct a full review (72 F.R. 27151, May 14, 2007). Notice of the scheduling of the Commission's review and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on May 31, 2007 (72 F.R. 30393). The hearing was held in Washington, DC, on October 11, 2007, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

² Commissioner Deana Tanner Okun did not participate in this review.

VIEWS OF THE COMMISSION

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 revocation of the antidumping duty order covering low enriched uranium (“LEU”) from France 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 February 4, 2002 the Commission determined that an industry in the United States was materially injured by reason of less than fair value (“LTFV”) imports of LEU from France and subsidized imports of LEU from France, Germany, the Netherlands, and the United Kingdom.² On February 6, 2002, the U.S. Department of Commerce (“Commerce”) imposed an antidumping order with respect to imports from France and countervailing duty orders with respect to imports from France, Germany, the Netherlands, and the United Kingdom.³ Commerce revoked the countervailing duty orders on LEU from Germany, the Netherlands, and the United Kingdom on July 7, 2006, and the countervailing duty order on LEU from France on May 29, 2007.⁴

The Commission instituted this review of the antidumping duty order on LEU from France on January 3, 2007.⁵ The Commission found the responses to the notice of institution filed by domestic interested party group and by the French respondent interested party group to be adequate.⁶ The Commission therefore determined to conduct a full review.⁷

LEU is an intermediate product consumed in the production of fuel rods for use in generating electricity in nuclear power plants.⁸ The four-step process used to produce nuclear fuel is known as the “fuel cycle.” In the first step, uranium ore, primarily in the form of oxides, is mined and concentrated and converted into uranium yellowcake (U₃O₈).⁹ This natural uranium concentrate is then converted chemically into natural UF₆, in the second step of the cycle.¹⁰ In the third step, natural UF₆ is enriched by increasing the concentration of U²³⁵ present from 0.7 percent to the 3-5 percent level required by most nuclear reactors, at which point it becomes LEU.¹¹ The fourth step entails converting LEU into UO₂

¹ Commissioner Deanna Tanner Okun did not participate in this review.

² See Low Enriched Uranium from France, Germany, the Netherlands, and the United Kingdom, Inv. Nos. 701-TA-409-412 and 731-TA-909 (Final), USITC Pub. 3486 (February 2002) (“Original Determination”).

³ See Confidential Staff Report (“CR”) at I-11; Public Staff Report (“PR”) at I-9..

⁴ See 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 Fed. Reg. 38626 (July 7, 2006); Low Enriched Uranium from France: Notice of Amended Final Negative Determination Pursuant to Final Court Decision, Rescission of Administrative Review, and Revocation of the Countervailing Duty Order, 72 Fed. Reg. 29301 (May 25, 2007).

⁵ 72 Fed. Reg. 144.

⁶ See LEU from France, 72 Fed. Reg. 27151 (May 14, 2007); see also CR/PR at Appendix A.

⁷ See LEU from France, 72 Fed. Reg. 27151 (May 14, 2007); see also CR/PR at Appendix A.

⁸ CR at I-18; PR at I-15-16.

⁹ CR at I-17; PR at I-14.

¹⁰ CR at I-17; PR at I-14.

¹¹ CR at I-18-19; PR at I-14.

which is then pelletized and inserted into fuel rods.¹² The scope of the antidumping duty order subject to this review is limited to LEU, the uranium product resulting from the third step of the fuel cycle.

There are currently two processes used to produce LEU from natural uranium: the gaseous diffusion process and the gaseous centrifuge method.¹³ USEC, the only domestic producer of LEU, and Eurodif, S.A., the only subject foreign producer of LEU, enrich natural uranium using the gaseous diffusion process, whereby natural uranium in gaseous form is passed through a series of filters that capture heavier U²³⁸ but permit lighter U²³⁵ to pass through until the desired concentration of U²³⁵ is achieved.¹⁴ Certain nonsubject foreign producers, including Urenco with facilities in Germany, the Netherlands, and the United Kingdom, produce LEU using the gaseous centrifuge method, through which natural uranium in gaseous form (UF₆) is spun under high pressure in cylindrical centrifuges, sending heavier U²³⁸ toward the centrifuge wall and leaving lighter U²³⁵ in the center of the centrifuge, where it is collected.¹⁵ In both cases, the work expended by the enricher to separate U²³⁸ from the uranium, thereby increasing the concentration of U²³⁵, is measured in separative work units, or “SWU.”¹⁶ All else being equal, the greater the SWU, the higher the U²³⁵ concentration of the resulting LEU.

In the United States, utilities manage the fuel cycle themselves, paying uranium processors to perform each step of the process. Utilities procure LEU in one of two ways. In most cases, utilities contract with enrichers to produce LEU from UF₆ provided by the utilities, which pay only for the desired SWU.¹⁷ These are known as SWU transactions. In other instances, utilities purchase LEU outright from enrichers, paying for both the SWU and the UF₆ used to produce the LEU.¹⁸ These are known as enriched uranium product (“EUP”) transactions. Out of U.S. apparent consumption of LEU containing *** SWU in 2006, *** SWU, or *** percent, were purchased through SWU transactions and *** SWU, or *** percent, were purchased through EUP transactions.¹⁹

The only domestic producer of LEU, USEC, participated in the review by providing briefs and hearing testimony.²⁰ Also participating in the review was the only foreign producer of LEU in France, Eurodif, and the only importer of LEU from France, Areva NC, Inc., a wholly owned subsidiary of Areva, which also controls Eurodif (collectively, the “respondent interested parties” or “Eurodif”).²¹ In addition, AHUG, a trade organization comprised of utilities that purchase LEU, provided briefs and hearing testimony as a party to the review.²²

At the outset, we note that Eurodif failed to fully cooperate with our repeated requests for data in this review. Because Eurodif was the only importer and foreign producer of LEU from France over the period of review, it was essential that the Commission obtain complete responses to the importers’ and

¹² CR at I-17; PR at I-15.

¹³ A third process, laser based enrichment, is currently under commercial development by Silex Systems, Ltd. of Australia and GE Energy. CR at I-23-24; PR at I-19-20.

¹⁴ CR at I-19-20; PR at I-16.

¹⁵ CR at I-20-21; PR at I-17.

¹⁶ See CR at I-19 n.36; PR at I-16 n.36; Ad Hoc Utilities Group (“AHUG”) Prehearing Brief at 5.

¹⁷ CR at I-18-19; PR at I-16.

¹⁸ CR at I-18; PR at I-16.

¹⁹ CR/PR at Tables C-1, 3.

²⁰ CR at I-28; PR at I-22.

²¹ CR at I-29; PR at I-23.

²² Although industrial users are not “interested parties” within the meaning of 19 U.S.C. § 1677(9), they may appear as parties in the Commission’s five-year review proceedings under section 201.11(a) of the Commission’s rules. 19 C.F.R. § 201.11(a).

foreign producers' questionnaires from Eurodif. Eurodif initially refused to complete its questionnaire responses and instead submitted extremely limited responses on August 3, 2007 with a statement explaining Eurodif's position that it was under no legal obligation to provide the Commission with the requested information.²³ Eurodif argued that, because the Court of Appeals for the Federal Circuit ("Federal Circuit") had ruled in Eurodif v. United States, 411 F.3d 1355 (Fed. Cir. 2005), that sales of LEU via SWU transactions are service transactions not subject to the antidumping law, the Commission could not include SWU transactions within the scope of its review or request information on SWU transactions.²⁴ As explained below, consistent with the statute, caselaw, and Commission practice, Commerce, not the Commission, defines the scope of five-year reviews, and we conduct this review pursuant to the last scope definition published by Commerce in the Federal Register, which includes SWU transactions.

On August 22, 2007, Commission staff contacted counsel to Eurodif and explained that Eurodif was legally obligated to complete questionnaire responses and report information on SWU transactions.²⁵ Eurodif subsequently filed a letter with the Commission, dated August 28, 2007, reasserting its position that it was not legally obligated to provide the requested information.²⁶

At the hearing held on October 11, 2007, Chairman Pearson and Vice Chairman Aranoff took the unusual step of asking Mr. Jose-Luis Carbonell, executive vice president of Areva S.A., whether Eurodif planned to complete its questionnaire responses and urging it to do so.²⁷ In response to Vice Chairman Aranoff, Mr. Carbonell stated, "I thought in fact that the information including SWUs transactions was already on the record . . . we'd be happy to complete that information so that you can see that each are SWU transactions."²⁸ Mr. Stuart Rosen, Esq., counsel to Eurodif, added that "Eurodif is willing to provide additional information, and it will do so promptly."²⁹

Although Eurodif submitted supplemental importers' and foreign producers' questionnaire responses on October 17, 2007 that included some additional information, these responses remained deficient in key respects, contrary to Eurodif's representations to the Commission.³⁰ Consequently, Commission staff again contacted Eurodif to request additional information, and Eurodif filed additional

²³ CR at I-4 n. 4; PR at I-3 n.4.

²⁴ CR at I-4 n. 4; PR at I-3 n.4.

²⁵ See Notes from Telephone Conversation between Karl von Schrittz, Esq., U.S. International Trade Commission, and Stuart M. Rosen, Esq. of Weil, Gotshal & Manges LLP, Counsel to Eurodif, August 22, 2007.

²⁶ See Letter from Weil Gotshal & Manges to Karl von Schrittz, Esq., LEU from France, Inv. No. 731-TA-919 (Review), dated August 28, 2007.

²⁷ Hearing Tr. at 173 (Vice Chairman Aranoff) ("Mr. Carbonell, a yes or no question. Does your company plan to submit a completed questionnaire in this investigation?"), 174 ("I would urge you to please fill in the entire questionnaire because at least in my opinion the weight that we can give to the additional information that you provide will depend on our assessment of the completeness of your responses."), 200-01 (Chairman Pearson) ("Going back to the first point that the Vice Chairman raised regarding what we have on the record, let me just provide another perspective on it, as to why I would support her request that we have a record that's as full as possible . . . If we had a full record here, there might be a credible argument on a negative on your side. And you have not given us, at this point, leverage to go ahead and make such a determination. So for that reason, I would just emphasize what the Vice Chairman is saying."). It is unusual for Commissioners to be in a position of urging compliance from witnesses at a hearing to written data requests made weeks or months earlier. Generally, before a party's witness appears in a hearing, that party will have complied with information requests from the Commission's staff.

²⁸ Hearing Transcript at 173.

²⁹ Hearing Transcript at 174.

³⁰ See CR at I-4 n.4; PR at I-3 n.4.

supplemental importers' and foreign producers' questionnaire responses on October 23, 2007, which, though finally including some basic data, continued to be deficient.³¹ The record of this review remains incomplete, particularly with respect to pricing data, due to Eurodif's failure to cooperate with the Commission's information requests.³² We therefore base our determination on facts available as necessary and appropriate, pursuant to 19 U.S.C. § 1677e(a).

We remind interested parties participating in proceedings before the Commission that their complete cooperation is obligatory and that the Commission alone determines whether requested information is legally relevant to its investigation. If an interested party fails to cooperate by not acting to the best of its ability to comply with a request for information, we reserve the right to use the information available or to draw adverse inferences against the party in selecting from among the facts otherwise available.³³

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. In General

In making its determination under section 751(c), the Commission defines the "domestic like product" and the "industry."³⁴ 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 investigation under this subtitle."³⁵ The Act defines the relevant industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product."³⁶

B. Product Description

In these five-year reviews, Commerce has defined the subject merchandise as follows:

[A]ll low enriched uranium (LEU). LEU is enriched uranium hexafluoride (UF₆) with a U²³⁵ product assay of less than 20 percent that has not been converted into another chemical form, such as UO₂, or fabricated into nuclear fuel assemblies, regardless of the means by which the LEU is produced (including LEU produced through the down-blending of highly enriched uranium).³⁷

Commerce specifically excluded the following products from the scope of the antidumping duty order under review:

³¹ See CR at I-4 n.4; PR at I-3 n.4. We address the specific deficiencies in Eurodif's importers' and foreign producers' questionnaire responses, as appropriate, throughout our views.

³² See, e.g., CR at IV-1 n.1, V-9 n.21; PR at IV-1 n.1, V-6 n.21.

³³ 19 U.S.C. § 1677e(b).

³⁴ 19 U.S.C. § 1677(4)(A).

³⁵ 19 U.S.C. § 1677(10). See Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991). See also S. Rep. No. 96-249 at 90-91 (1979).

³⁶ 19 U.S.C. § 1677(4)(A).

³⁷ LEU from France: Final Results of Expedited Sunset Review of the Antidumping Duty Order, 72 Fed. Reg. 26593, 26594 (May 10, 2007).

[T]his order does not cover enriched uranium hexafluoride with a U²³⁵ assay of 20 percent or greater, also known as highly enriched uranium. In addition, fabricated LEU is not covered by the scope of this order. For purposes of this order, fabricated uranium is defined as enriched uranium dioxide (UO₂), whether or not contained in nuclear fuel rods or assemblies. Natural uranium concentrates (U₃O₈) with a U²³⁵ concentration of no greater than 0.711 percent and natural uranium concentrates converted into uranium hexafluoride with a U²³⁵ concentration of no greater than 0.711 percent are not covered by the scope of this order.

Also excluded from this order is LEU owned by a foreign utility end-user and imported into the United States by or for such end-user solely for purposes of conversion by a U.S. fabricator into uranium dioxide (UO₂) and/or fabrication into fuel assemblies so long as the uranium dioxide and/or fuel assemblies deemed to incorporate such imported LEU (i) remain in the possession and control of the U.S. fabricator, the foreign end-user, or their designed transporter(s) while in U.S. customs territory, and (ii) are re-exported within eighteen (18) months of entry of the LEU for consumption by the end-user in a nuclear reactor outside the United States. Such entries must be accompanied by the certifications of the importer and end-user.³⁸

2. LEU Sold Pursuant to SWU Transactions Is Within the Scope of the Review

The respondent interested parties argue that the Commission must amend the scope of this review in accordance with Commerce's latest remand determination in the ongoing appeal of its final determination in LEU from France. In that litigation, Eurodif v. United States, the Federal Circuit ruled that SWU transactions in which the enricher never takes title to either the natural uranium or the resulting LEU constitute contracts for services, not the sale of goods, and are therefore not subject to the antidumping law.³⁹ On remand, Commerce excluded SWU transactions from its calculation of Eurodif's dumping margin, but kept SWU transactions within the scope of the antidumping duty order subject to the proviso that SWU transactions falling within the terms of the Federal Circuit's holding would be excluded through the administrative review process.⁴⁰ When Eurodif challenged this remand determination, the U.S. Court of International Trade ("CIT") held that the Federal Circuit's holding required Commerce to exclude SWU transactions from both its margin calculations and the scope of the antidumping duty order.⁴¹ In its second remand determination, Commerce indicated that the scope of the order would be amended to exclude SWU transactions "[u]pon final and conclusive court decisions."⁴² Commerce and USEC then appealed the CIT's decision to the Federal Circuit, arguing that the CIT erred in ordering that

³⁸ LEU from France: Final Results of Expedited Sunset Review of the Antidumping Duty Order, 72 Fed. Reg. 26593, 26594 (May 10, 2007).

³⁹ Eurodif, 411 F.3d at 1366. The Court also found that SWU transactions constituted service contracts under the Contract Disputes Act, as previously interpreted by the Court in Florida Power & Light Co. v. United States, 307 F.3d 1364 (Fed. Cir. 2002). Id. at 1362.

⁴⁰ LEU from France, Final Results of Redetermination Pursuant to Court Remand, Eurodif v. United States, Consol. Ct. No. 02-00219, Slip Op. 06-2 (Ct. Int'l Trade January 5, 2006), dated March 3, 2006.

⁴¹ Eurodif v. United States, 431 F. Supp. 2d 1351, 1355 (Ct. Int'l Trade 2006).

⁴² LEU from France, Final Results of Redetermination Pursuant to Court Remand, Eurodif v. United States, Consol. Ct. No. 02-00219, Slip Op. 06-2 (Ct. Int'l Trade May 18, 2006), dated June 19, 2007.

the scope of the order be amended to exclude SWU transactions, but the Federal Circuit held that the issue was not ripe for adjudication.⁴³ Because Commerce and USEC have yet to exhaust their appeals, there has been no final and conclusive court decision.

We conduct this five-year review consistently with the latest definition of the scope of the antidumping duty order on LEU from France published by Commerce in the Federal Register, 72 Fed. Reg. 26593 (May 10, 2007), consistent with the statutory scheme, controlling caselaw, and Commission practice. The courts have consistently held that Commerce has exclusive authority to define the scope of an investigation.⁴⁴ Consequently, Commerce's definition of the scope of an antidumping duty order dictates the "subject merchandise" that the Commission must examine in a five-year review of the order⁴⁵ and provides the starting point for the Commission's definition of the domestic like product.⁴⁶ Commerce establishes the scope of an investigation by publishing a detailed description of subject merchandise in the

⁴³ Eurodif v. United States, Court No. 2007-1005, -1006, slip. op. at 4 (Fed. Cir. Sept. 21, 2007).

⁴⁴ See Cleo, Inc. v. United States, Consol. Court No. 05-00336, slip. op., 2006 Ct. Int'l Trade LEXIS 143 at *8 (Ct. Int'l Trade August 31, 2006) (quoting NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998)) ("the Commission must accept the determination of Commerce as to the scope of the imported merchandise sold at less than fair value. . . ."), aff'd 2007 U.S. App. LEXIS 21642 (Fed. Cir., Sept. 10, 2007); Usinor Industeel v. United States, 26 CIT 1402, 1405 (2002) (quoting San Francisco Candle Co. v. United States, 206 F. Supp. 2d 1304, 1308 (Ct. Int'l Trade 2002)) ("It is well established . . . that 'Commerce has inherent authority to define and clarify the scope of an antidumping duty investigation.'"); NEC, 36 F. Supp. 2d at 383; Goss Graphics v. United States, 33 F. Supp. 2d 1082, 1093 (Ct. Int'l Trade 1998) (ITA included certain presses in the class of merchandise sold at LTFV and Commission properly included them in its injury analysis); Algoma Steel Corp. v. United States, 688 F. Supp. 639, 645 (Ct. Int'l Trade 1988) (ITC bases "its decision on effects of relevant imports from companies determined [by Commerce] to have sold the subject merchandise at LTFV."), aff'd 865 F.2d 240 (Fed. Cir. 1988), cert. denied, 492 U.S. 919 (1989); Makita Corp. v. United States, 974 F. Supp. 770, 783 (Ct. Int'l Trade 1997); Nippon Steel Corp. v. United States, 19 CIT 450, 467 (Ct. Int'l Trade 1995); United Engineering & Forging v. United States, 779 F. Supp. 1375, 1391 (Ct. Int'l Trade 1991).

⁴⁵ 19 U.S.C. § 1677(25) defines "subject merchandise" to mean "the class or kind of merchandise that is within the scope of an investigation, a review, a suspension agreement, [or] an order" This definition drives the Commission's consideration of the likely volume, likely price effects, and likely impact of "imports of the subject merchandise" under 19 U.S.C. § 1675a(a).

⁴⁶ 19 U.S.C. § 1677(10) 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 investigation under this title." The CIT has consistently held that "[a]lthough the Commission must accept the determination of Commerce as to the scope of the imported merchandise . . . the Commission determines what domestic product is like the imported articles Commerce has identified." Cleo, 2006 Ct. Int'l Trade LEXIS 143 at *8, aff'd 2007 U.S. App. LEXIS 21642; NEC, 36 F. Supp. 2d at 383.

Federal Register,⁴⁷ and the Commission thus defers to that description.⁴⁸ Moreover, pursuant to 19 U.S.C. § 1516a(c)(3), Commerce determinations on remand generally do not have legal effect until after the litigation process has concluded.⁴⁹ Commerce has yet to publish an amended scope definition for the antidumping duty order on LEU from France in the Federal Register and indicated in its second remand determination that it will not amend the scope of the order until the issuance of “final and conclusive court decisions” in the Eurodif litigation.⁵⁰ Accordingly, we defer to the scope as currently defined by Commerce, which includes LEU sold pursuant to SWU transactions.

We are unpersuaded by the respondent interested parties’ contention that the doctrine of stare decisis requires the Commission to exclude SWU transactions from the scope of the antidumping duty order under review consistent with the court decisions in the Eurodif litigation.⁵¹ The Commission cannot

⁴⁷ See 19 U.S.C. § 1673d(d) (“Whenever the administering authority [i.e., Commerce] or the Commission makes a determination under this section, it shall notify the petitioner, other parties, to the investigation, and the other agency of its determination and of the facts and conclusions of law upon which the determination is based, and it shall publish notice of its determination in the Federal Register.”); 19 U.S.C. §§ 1677f(i)(1) & (2)(1)(A)(ii) (“Whenever the administering authority makes a final determination under section 1671d or section 1673d of this title . . . the administering authority . . . shall publish the facts and conclusions supporting the determination, and shall publish notice of that determination in the Federal Register. The notice or determination published under paragraph (1) shall include, to the extent applicable . . . in the case of a determination of the administering authority . . . a description of the subject merchandise that is sufficient to identify the subject merchandise for customs purposes”)

⁴⁸ In the first and second reviews of the antidumping duty order on uranium from Russia, the Commission noted that “it is contrary to law for the Commission to look beyond Commerce’s determination as to what merchandise is subject to review.” See Uranium from Russia, Inv. No. 731-TA-539-C (Second Review), USITC Pub. 3872 (August 2006) (“Uranium from Russia”) at 9-10 (quoting Uranium from Russia, Ukraine, and Uzbekistan, Inv. Nos. 731-TA-539-C, E and F (Review), USITC Pub. 3334 (Aug. 2000) at 11).

⁴⁹ 19 U.S.C. § 1516a(c)(3) provides that “[i]f the final disposition of an action brought under this section is not in harmony with the published determination of the Secretary, the administering authority, or the Commission, the matter shall be remanded to the Secretary, the administering authority, or the Commission, as appropriate, for disposition consistent with the final disposition of the court.” (emphasis added). See also Hosiden Corp. v. Advanced Display Mfrs. of America, 85 F.3d 589 (Fed. Cir. 1996) (holding that an antidumping duty order could not be revoked prior to a final judicial disposition, applying 19 U.S.C. § 1516a(e)); and Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, Inv. Nos. 701-TA-417-421 and 731-TA-953, 954, 956-959, 961, and 962 (Final), USITC Pub. 3546 (Oct. 2002) at 16 n.88 (declining to give effect to a remand determination that was not yet final).

⁵⁰ LEU from France, Final Results of Redetermination Pursuant to Court Remand, Eurodif v. U.S., Consol. Ct. No. 02-00219, Slip Op. 06-2 (Ct. Int’l Trade May 18, 2006), dated June 19, 2007. Commerce’s apparent practice is to withhold publication of remand determinations until the conclusion of litigation. See Commerce, International Trade Administration, Antidumping Manual, Chapter 19 at 9, http://ia.ita.doc.gov/admanual/admanual_ch19.pdf, last checked on December 6, 2007 (“When the remand results are approved and become final (after 60 days if no appeal is filed), ITA must publish the new results in the FR.”); see also Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order Pursuant to Court Decision: Lawn and Garden Steel Fence Posts from the People’s Republic of China, 72 Fed. Reg. 32835, 32836 (June 14, 2007) (“As the litigation in this case has concluded, the Department is amending the Final Determination.”).

⁵¹ See Eurodif Prehearing Brief at 4; AHUG Prehearing Brief at 7. The respondent interested parties claim, incorrectly, that the CIT ruled in Decca v. United States that all Commerce remand determinations are immediately effective. See Eurodif Prehearing Brief at 8; AHUG Prehearing Brief at 8; Eurodif Posthearing Brief at 8-9; AHUG Posthearing Brief at 7. What the CIT actually held in Decca is that Commerce, pending a final and conclusive court decision, must immediately revise the cash deposit rate in accordance with an adverse CIT ruling and suspend

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apply the CIT's holding that Commerce must exclude SWU transactions from the scope of the antidumping duty order on LEU from France, which was predicated on the Federal Circuit's holding that SWU transactions are not subject to the antidumping law, because the Commission has no authority under the statute or controlling caselaw to amend the scope of the order.⁵² To paraphrase the CIT's recent decision in Globe Metallurgical, Inc. v. United States, "the statute does not permit [the Commission] to determine whether [Commerce's] determination contains errors, or whether [Commerce's] determination should be corrected."⁵³

Indeed, the Commission moved for the CIT to stay the appeal of its sunset review of the antidumping duty order on uranium from Russia, pending Commerce's amendment of the scope of the review on remand pursuant to the Eurodif holdings, on grounds that the Commission lacked the authority to amend the scope of the review itself.⁵⁴ The court granted the Commission's motion and stayed the proceeding over the plaintiffs' objection that the Commission had an "independent obligation to apply binding precedent."⁵⁵ We decline the respondent interested parties' invitation for us to usurp Commerce's statutory authority and amend the scope of this five-year review pursuant to the ongoing Eurodif litigation.

⁵¹ (...continued)

liquidation if it has not already been suspended. Decca, 427 F. Supp. 2d at 1261-62 (citing Timken Co. v. United States, 893 F.2d 337, 340 & n. 3). The CIT did not consider whether Commerce must immediately amend the scope of an order in accordance with an adverse CIT ruling, or wait until a final and conclusive court decision, because this was not at issue in Decca.

Nor does the Federal Circuit's decision in Bankers Trust v. United States, 225 F.3d 1368 (Fed. Cir. 2000), support the respondent interested parties' assertion that the Commission must implement the Eurodif court holdings as binding precedent. See Eurodif Prehearing Brief at 4; AHUG Prehearing Brief at 8. In Bankers Trust, the Federal Circuit held that agencies cannot promulgate regulations based upon an interpretation of a statute that is contrary to court precedent. Id. at 1376. In Eurodif, by contrast, the Federal Circuit did not purport to interpret a statutory provision, but rather assessed the applicability of the antidumping law to SWU transactions under the facts of the case. Moreover, the Commission is not promulgating a regulation here, but rather conducting a five-year review in accordance with specific statutory provisions that do not provide it with the authority to alter Commerce's scope definition. Thus, the Federal Circuit's holding in Bankers Trust is inapposite.

⁵² The respondent interested parties also make much of the fact that in Techsnabexport v. United States, the CIT remanded Commerce's final determination in its sunset review of the antidumping duty order on uranium from Russia with instructions to amend the scope of the review to exclude SWU transactions, in compliance with the Eurodif court decisions. Cons. Court No. 06-00228, slip. op., 2007 Ct. Int'l Trade LEXIS 143 at *20-21 (Ct. Int'l Trade September 26, 2007). They argue that the Commission is under no less of an obligation to comply with the Eurodif holdings and exclude SWU transactions from the scope of its review of the antidumping duty order on LEU from France. But Commerce has sole authority to define the scope of five-year reviews, whereas the Commission has no such authority. Accordingly, the Commission cannot amend the scope of the antidumping duty orders in compliance with the Eurodif holdings, as the court ordered Commerce to do in Techsnabexport.

⁵³ Court No. 07-00022, slip. op. at 7-8 (Ct. Int'l Trade October 31, 2007) (quoting Defendant's Motion to Dismiss). In Globe, plaintiff challenged Commerce's revocation of an antidumping duty order under 19 U.S.C. § 1675(d)(2) pursuant to the Commission's determination that revocation would not likely result in the recurrence or continuation of material injury, on grounds that the Commission's determination was under appeal and likely to be reversed. See id. at 3-5. Granting the defendant's motion to dismiss for failure to state a claim, the Court held that plaintiff "will get its day in court to resolve the dispute with the ITC but it cannot litigate that dispute in this action," which concerned "the narrow issue of whether Commerce's revocation of the order was appropriate." Id. at 8.

⁵⁴ See Ad Hoc Utilities Group v. United States, Court Nos. 06-0030, -00298 (Ct. Int'l Trade Aug. 8, 2007) (order granting defendant's motion to stay).

⁵⁵ Ad Hoc Utilities Group v. United States, Court Nos. 06-0030, -00298 (Ct. Int'l Trade Aug. 8, 2007) (order granting defendant's motion to stay).

C. Domestic Like Product

In the original investigations, no party contested the Commission's preliminary determination of a single domestic like product consisting of all LEU corresponding to the scope of the investigations.⁵⁶ Accordingly, the Commission defined the domestic like product as all LEU, coextensive with Commerce's scope definition.⁵⁷

USEC supports the Commission's definition of the domestic like product from the original investigation, which was a single like product coextensive with the scope of the orders, and urges its adoption in this review.⁵⁸ AHUG argues that the Eurodif court holdings that SWU transactions are not subject to the antidumping law extend to the Commission's definition of the domestic like product, which must therefore exclude LEU sold pursuant to SWU transactions.⁵⁹ Eurodif does not address the issue of the appropriate like product definition.

We define the domestic like product to include all LEU, including LEU sold through both EUP and SWU transactions, coextensive with the scope of the antidumping duty order under review. In five-year reviews, the Commission has adopted the like product definition from the original determination, without further analysis, where no party has argued for a different like product definition and the record does not suggest that any change is appropriate. Although AHUG has argued that the Commission should exclude LEU sold pursuant to SWU transactions because such transactions are outside the scope of the review under the Eurodif court holdings, we conduct this review in accordance with Commerce's scope definition, which includes both EUP and SWU transactions, as explained above. Moreover, even if the scope were amended to exclude SWU transactions, we would still define the domestic like product to include domestic LEU sold through both SWU and EUP transactions, because all LEU is interchangeable and possesses the same physical characteristics and uses, channels of distribution, manufacturing facilities, production processes and production employees, customer and producer perceptions, and price.⁶⁰ We therefore define the domestic like product as all LEU, coextensive with Commerce's scope definition.

B. Domestic Industry

In the original investigations, the Commission defined the domestic industry as the sole domestic producer of LEU, USEC.⁶¹ In rejecting the respondent interested parties' argument that the Commission was precluded from conducting an analysis of either cumulation or price effects because LEU is a service and not a good, the Commission noted that Commerce had defined the subject merchandise to include SWU transactions and that no party disputed that LEU was a tangible product.⁶²

USEC argues that the Commission should define the domestic industry to consist of USEC, as it has in the past five proceedings involving LEU.⁶³ The respondent interested parties did not comment on the appropriate definition of the domestic industry.

⁵⁶ Original Determination at 4.

⁵⁷ Original Determination at 4-5.

⁵⁸ See USEC Prehearing Brief at 18.

⁵⁹ See AHUG Prehearing Brief at 6, 10.

⁶⁰ See CR at I-18-19; PR at I-15-16.

⁶¹ Original Determination at 5. The Commission also noted that there was no related party issue in the investigations. Id. at 5 n.13.

⁶² Original Determination at 5.

⁶³ USEC Prehearing Brief at 21.

Although USEC remains the sole domestic producer at this time, Louisiana Energy Services began construction of a uranium enrichment facility in the United States in 2006, as discussed in section IV.B.2. below. That operation, known as the National Enrichment Facility (“NEF”), is projected to begin production in 2009.⁶⁴ While still other enrichment facilities are in the planning stages, the NEF is the only expected addition to the domestic industry within a reasonably foreseeable time.⁶⁵ As in the original investigations, there is no related party issue in this review.⁶⁶ We therefore define the domestic industry to include the sole current domestic producer of LEU, USEC.⁶⁷ We also consider that the industry will include the NEF within a reasonably foreseeable time.

IV. REVOCATION OF THE ANTIDUMPING DUTY ORDER ON LEU FROM FRANCE WOULD LIKELY LEAD TO THE CONTINUATION OR RECURRENCE OF MATERIAL INJURY WITHIN A REASONABLY FORESEEABLE TIME

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 duty order 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 duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”⁶⁸ 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.”⁶⁹ Thus, the likelihood standard is prospective in nature.⁷⁰ 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.^{71 72}

⁶⁴ See CR at III-4; PR at III-3.

⁶⁵ See section IV.B.2., *infra*.

⁶⁶ See CR at I-29; PR at I-23 (the only importer of LEU from France over the period of review was Areva NC, a wholly owned subsidiary of Areva, which also owns Eurodif, the only foreign producer of subject merchandise).

⁶⁷ CR at I-28; PR at I-22.

⁶⁸ 19 U.S.C. § 1675a(a).

⁶⁹ Statement of Administrative Action accompanying the Uruguay Round Agreements Act (“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.

⁷⁰ 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.

⁷¹ See *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)”), *aff’d* without opinion, 05-1019 (Fed. Cir. August 3, 2005); *Nippon Steel Corp. v. United States*, slip op. 02-153 at 7-8 (Ct. Int’l Trade Dec. 24, 2002) (same); *Usinor Industeel, S.A. v. United States*, slip op. 02-152 at 4 n.3 & 5-6 n.6 (Ct. Int’l Trade Dec. 20, 2002) (“more likely than not” standard is “consistent with the court’s opinion”; “the court has not interpreted ‘likely’ to
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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.”⁷³ 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 original investigations.”⁷⁴

Although the standard in a five-year review is not the same as the standard applied in an original antidumping duty 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.”⁷⁵ It directs the Commission to take into account its prior injury determination, 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).⁷⁶

In evaluating the likely volume of subject imports were the order to be revoked, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁷⁷ 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.⁷⁸

In evaluating the likely price effects of subject imports were the order to be revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the

⁷¹ (...continued)

imply any particular degree of ‘certainty’”); Indorama Chem. (Thailand) Ltd. v. United States, slip op. 02-105 at 20 (Ct. Int’l Trade Sept. 4, 2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); Usinor v. United States, slip op. 02-70 at 43-44 (Ct. Int’l Trade July 19, 2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

⁷² Commissioner Lane notes that, consistent with her views in Pressure Sensitive Plastic Tape from Italy, Inv. No. AA1921-167 (Second Review), USITC Pub. 3698 (June 2004), she does not concur with the U.S. Court of International Trade’s interpretation of “likely,” but she will apply the Court’s standard in this review and all subsequent reviews until either Congress clarifies the meaning or the U.S. Court of Appeals for the Federal Circuit addresses this issue.

⁷³ 19 U.S.C. § 1675a(a)(5).

⁷⁴ 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.” Id.

⁷⁵ 19 U.S.C. § 1675a(a)(1).

⁷⁶ 19 U.S.C. § 1675a(a)(1). There have been no duty absorption findings by Commerce with respect to the order under review. See Final Review Results, supra.

⁷⁷ 19 U.S.C. § 1675a(a)(2).

⁷⁸ 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁷⁹

In evaluating the likely impact of subject imports were the order to be revoked, 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: (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.⁸⁰ 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.⁸¹ 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 order at issue and whether the industry is vulnerable to material injury if the orders are revoked.⁸²

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁸³

In the original investigations, the Commission addressed several conditions of competition relevant to its analysis. The Commission found that LEU is a fungible, commodity product that is produced in the third stage of the four-stage “nuclear fuel cycle,” traditionally managed by utilities, and used to process uranium ore into nuclear reactor fuel.⁸⁴ It found that utilities obtained LEU either through SWU transactions, in which enrichers are paid for the SWU contained in the LEU and provided with uranium feedstock equal to that contained in the LEU, or through EUP transactions, in which enrichers are paid for LEU, including the uranium feedstock contained in the LEU.⁸⁵

The Commission found that the global LEU industry was highly capital-intensive and concentrated, comprised of only USEC, Urenco, Eurodif, and Russian producer Tenex.⁸⁶ USEC was the sole domestic producer of LEU and was export-oriented, supplying roughly 40 percent of global demand for LEU.⁸⁷ At the time of USEC’s creation by the U.S. government in 1992, USEC operated two

⁷⁹ 19 U.S.C. § 1675a(a)(3).

⁸⁰ 19 U.S.C. § 1675a(a)(4).

⁸¹ 19 U.S.C. § 1675a(a)(4).

⁸² 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.

⁸³ 19 U.S.C. § 1675a(a)(4).

⁸⁴ Original Determination at 8.

⁸⁵ Original Determination at 8.

⁸⁶ Original Determination at 9. Tenex sells Russian LEU abroad, while Rosatom operates the Russian LEU industry. See Uranium from Russia, Staff Report at IV-21, 24.

⁸⁷ Original Determination at 9.

enrichment plants, in Portsmouth, Ohio and Paducah, Kentucky. USEC ceased enrichment operations at Portsmouth in June 2000 and shifted all enrichment operations to Paducah in May 2001.⁸⁸

As another significant condition of competition, the Commission cited the U.S.-Russian Highly Enriched Uranium (“HEU”) Agreement, under which USEC acted as the U.S. Executive Agent and was obligated to purchase 5.5 million SWUs annually from Russia over the 1999-2014 period.⁸⁹ Because most of the LEU obtained under the Agreement could not be exported, the Commission noted, USEC had to sell most of it into the U.S. market and reduce its sales of domestically produced LEU commensurately, which increased unit costs of its domestic production.⁹⁰

The Commission found that LEU demand had increased between 1998 and 2000, but was expected to remain flat through 2003.⁹¹ In addition, the deregulation of electric utilities and the consolidation of nuclear utilities were expected to dampen LEU prices.⁹²

Finally, the Commission found that price was an important consideration for purchasers in making their purchasing decisions, along with diversity and reliability of supply, and that most LEU was sold pursuant to long-term contracts, ranging in duration from three to seven years.⁹³ Although relatively little LEU was sold on the spot market, the Commission noted that spot market sales appeared to have some effect on the pricing for long-term contracts.⁹⁴

In this review, we find the following conditions of competition relevant to our determinations, including some conditions of competition that prevailed during the original investigations and are likely to persist in the reasonably foreseeable future, and others that have changed since the original investigation.

1. Demand Conditions

We find that LEU is a fungible commodity, with a high degree of substitutability among the domestic like product, subject imports, and nonsubject imports.⁹⁵ Out of 27 purchasers accounting for nearly all U.S. consumption of LEU in 2006, almost all reported that the domestic like product is always interchangeable with subject and nonsubject imported LEU and that subject imported LEU is always interchangeable with nonsubject imported LEU.⁹⁶ USEC also reported that the domestic like product is

⁸⁸ Original Determination at 9.

⁸⁹ Original Determination at 9. We note that the record of this review indicates that the Russian HEU Agreement will expire in 2013. CR at I-27-28; PR at I-22.

⁹⁰ Original Determination at 9-10.

⁹¹ Original Determination at 10.

⁹² Original Determination at 10.

⁹³ Original Determination at 11.

⁹⁴ Original Determination at 11.

⁹⁵ CR at II-22; PR at II-16.

⁹⁶ CR/PR at Table II-8. When asked how often the domestic like product is interchangeable with subject imported LEU, 22 purchasers reported “always,” one reported “sometimes,” and four reported no familiarity. When asked how often the domestic like product is interchangeable with nonsubject imported LEU, 21 purchasers reported “always,” two reported “sometimes,” and four reported no familiarity. When asked how often subject imported LEU is interchangeable with nonsubject imported LEU, 21 purchasers reported “always,” one reported “sometimes,” and five reported no familiarity.

always interchangeable with subject and nonsubject imported LEU and that differences other than price are never significant in sales of LEU from the United States, France, and nonsubject countries.⁹⁷

Most LEU is sold through long-term contracts ranging from four to seven years or longer in duration.⁹⁸ Contracts are negotiated *** years in advance of the first contracted deliveries.⁹⁹ Purchasers reported that 97.5 percent of their purchases of the domestic like product and *** percent of their purchases of subject imported LEU were made pursuant to long-term contracts during the period of review (“POR”).¹⁰⁰ Because the annual reload (*i.e.*, fuel rod replacement) requirements of existing nuclear reactors are known, future demand for LEU can be forecast with some precision.¹⁰¹ Future demand committed to long-term contracts is known as “committed demand,” while future demand not yet committed to long-term contracts is known as “uncommitted demand.”¹⁰² The prevalence of long-term contracts enhances our ability to make reasonable inferences with respect to future developments in the LEU market. We take this fact into account in considering the likely effects of revocation of the order within a reasonably foreseeable time, which we conclude extends further into the future in this review than is ordinarily the case.¹⁰³

Long-term contracts do not entirely insulate transaction prices from current market conditions. USEC reports that, under so-called “market-based pricing provisions,” the base prices specified in long-term contracts are subject to either an adjustment for inflation or an adjustment based on ***.¹⁰⁴ Thus, transaction prices under long-term contracts containing market-based pricing provisions would be influenced by current market prices. Moreover, long-term contracts are typically renegotiated every *** years, with new purchase commitments memorialized in ***.¹⁰⁵

Most long-term contracts negotiated by domestic utilities are “open origin” and permit LEU to be supplied from any legal source.¹⁰⁶ Purchasers reported that the share of their committed demand, in SWU, slated to be satisfied through open origin contracts is 84.1 percent for 2007, 67.2 percent for 2008, 66.4 percent for 2009, and 70.1 percent for 2010.¹⁰⁷

To the extent that long-term contracts commit purchasers to satisfying their future LEU requirements with purchases from certain LEU suppliers, competition between LEU producers is most

⁹⁷ CR at II-31-32; PR at II-22-23; CR/PR at Table II-9. Eurodif failed to respond to this question in its importers’ questionnaire response. CR at II-32 n.71; PR at II-23 n.71.

⁹⁸ CR at II-15; PR at II-10.

⁹⁹ CR at II-10, 15, V-6; PR at II-7, 10, V-5; CR/PR at Table II-2. AHUG reported that utilities are seeking increasingly longer-term contracts. CR at V-6 n. 13; PR at V-5 n. 13.

¹⁰⁰ CR/PR at Table II-2.

¹⁰¹ CR at II-10; PR at II-7.

¹⁰² CR at II-17; PR at II-12.

¹⁰³ In this regard, our approach to this review is consistent with our approach in the review of the suspension agreement on uranium from Russia, in which we found that “a longer ‘reasonable period of time’ may be appropriate in this review than in other five-year reviews” due to “the factors unique to the uranium industry,” including “the prevalence of long-term contracts.” Uranium from Russia at 19-20.

¹⁰⁴ CR at V-6-7 & n.15; PR at V-5 & n.15. According to USEC, *** percent of its scheduled U.S. deliveries over the *** period and *** percent of its currently contracted U.S. backlog through *** have market-based components. CR at V-7 n.15; PR at V-5 n.15 (citing USEC Posthearing Brief at Exhibit N). AHUG claims that market-based pricing provisions that permit transaction prices to decline are rare. CR at V-7; PR at V-5; AHUG Responses to Commissioner Questions at 18.

¹⁰⁵ CR at V-6; PR at V-5.

¹⁰⁶ CR at II-17-18; PR at II-12; CR/PR at Tables II-3-4.

¹⁰⁷ CR/PR at Table II-3.

intense for uncommitted demand.¹⁰⁸ Uncommitted demand for LEU is zero in the near term, but increases into the future, beyond the duration of current long-term contracts.¹⁰⁹ NAC, a nuclear power consulting group, reports that open demand in the U.S. market is currently *** SWU for 2008, *** SWU for 2009, *** SWU for 2010, *** SWU for 2011, *** SWU for 2012, and *** SWU for 2013.¹¹⁰ According to USEC, all open demand through 2013, worth around \$*** in revenues, will be under contract by 2010.¹¹¹

We find that U.S. demand for LEU will likely increase moderately in the reasonably foreseeable future. According to the World Nuclear Association (“WNA”), U.S. demand for LEU is projected to increase irregularly from 14.6 million SWU in 2007 to 15.3 million SWU in 2010.¹¹² USEC claims that annual LEU demand is expected to average *** SWU over the 2008-2011 period, as compared to *** SWU over the 2003-2006 period, based in part on NAC data.¹¹⁴ These projections of moderate demand growth are consistent with the increased demand for LEU since 2002 reported by purchasers due to capacity factor increases, power upgrades, decreased tails assays, and improved operational efficiencies at their existing reactors, which would increase LEU consumption.¹¹⁵ In addition, AHUG reports that the increasing cost of uranium feed has created an economic incentive for purchasers to pay enrichers to use more SWU to produce more LEU from any given quantity of uranium.¹¹⁶ Although LEU demand growth may accelerate in the next decade if plans for new reactors in the United States come to fruition, we find

¹⁰⁸ CR at II-17; PR at II-12.

¹⁰⁹ CR at II-17; PR at II-12.

¹¹⁰ USEC Prehearing Brief at 34.

¹¹¹ USEC Prehearing Brief at 35; see also CR at V-6; PR at V-5 (contracts negotiated *** years in advance). NAC was acquired by USEC during the POR. We find NAC’s data on open demand to be credible, given NAC’s longstanding reputation in the nuclear industry and the fact that the trends in open demand exhibited by NAC data are consistent with the trends in open demand reported by purchasers.

¹¹² In addition, the Commission asked purchasers to report their expected demand and committed demand in kilograms for each year of the 2007-2016 period. Some purchasers responded to the question in SWU, while others responded in kilograms and SWU. According to the 21 purchasers that responded to the question in kilograms, the percentage of expected demand already committed to long-term contracts is 98.8 percent for 2007, 98.9 percent for 2008, 94.6 percent for 2009, and 78.3 percent for 2010. CR/PR at Table II-3. Based on these data, uncommitted demand for LEU is currently 22,625 kg for 2007, 25,460 kg for 2008, 181,498 kg for 2009, and 458,648 kg for 2010. Id. (calculated by subtracting committed demand from expected demand). The probative value of this information is somewhat limited by the absence of data for several major utilities and the fact that an unknown number of purchasers responded to the question in kilograms of uranium feed material rather than in kilograms of LEU. CR/PR at Table II-3 n.1. Nevertheless, USEC has indicated that it does not disagree with the general trends exhibited by these data. See USEC Responses to Commissioner Questions at Exhibit M.

According to the 10 purchasers that responded to the question in SWU, the percentage of expected demand for LEU already committed to long term contracts is 100.0 percent for 2007, 100.0 percent for 2008, 89.3 percent for 2009, and 100.0 percent for 2010. CR/PR at Table II-4. Based on these data, uncommitted demand for LEU is limited to 851,234 SWU for 2009. We attach little probative value to this information given that relatively few purchasers reported their expected demand and committed demand in SWU.

¹¹³ See World Nuclear Association, *The Global Nuclear Fuel Market Supply and Demand, 2007-2030*, at 84, Table 3.5 (2007), attached as Exhibit 4 to USEC’s Prehearing Brief.

¹¹⁴ See USEC Prehearing Brief at 26.

¹¹⁵ CR at II-13; PR at II-9.

¹¹⁶ See AHUG Prehearing Brief at 16; see also CR/PR at Figure V-1.

the prospect of a “nuclear renaissance” to be speculative, and not likely to occur within a reasonably foreseeable time.¹¹⁷

We note that global demand for LEU is also projected to increase moderately in the reasonably foreseeable future. Citing NAC data, USEC claims that global demand for LEU is projected to increase from *** SWU in 2006 to around *** SWU in 2007, increase again to *** SWU in 2009, and then decline to *** SWU in 2010.¹¹⁸ Spurring global demand for LEU are the 28 nuclear reactors currently under construction worldwide.¹¹⁹

2. Supply Conditions

As in the original investigations, over 95 percent of global enrichment capacity remains controlled by four enrichers: USEC, Eurodif, Rosatom in Russia, and Urenco, with facilities in Germany, the Netherlands, and the United Kingdom.¹²⁰ In 2005, global enrichment capacity was 55.2 million SWU, while global demand for LEU was an estimated 50.1 million SWU.¹²¹ The high concentration of the global enrichment industry has probably resulted from the high capital cost of enrichment facilities, given that a new enrichment plant can cost anywhere from \$1.5 billion to over \$3 billion.¹²²

USEC remains the lone domestic producer of LEU, although its operations have changed significantly since the original investigations. In June 2001, USEC ceased enrichment operations at its gaseous diffusion facility in Portsmouth, Ohio, and placed the facility under a cold standby under a contract with the Department of Energy (“DOE”), which would permit the plant to resume production of

¹¹⁷ See USEC Prehearing Brief at 27-28, Exhibit 5 (Remarks of John Rowe, Exelon Corporation CEO, Nuclear Energy Assembly, May 24, 2007). Eurodif claims that U.S. demand for LEU is projected to increase from 14.5 million SWU in 2007 to 16 million SWU in 2020, which is consistent with the mid-range projection reported by the WNA but beyond a reasonably foreseeable time. See Eurodif Responses to Commissioner Questions at 6. Unlike moderately rising demand from existing reactors, which can be projected with some accuracy several years into the future, the timing and amount of demand from new reactors which are not yet licensed or under construction cannot be predicted with any accuracy, except insofar as it is certain that no such facility will be operational before 2014. See USEC Prehearing Brief at 25, Exhibit 1; Hearing Transcript at 33-34 (Whitehurst) (“It is important to recognize . . . that no new reactors are expected to come on line in the United States prior to 2016 at the earliest.”).

¹¹⁸ See USEC Responses to Commissioner Questions, Exhibit T at 3 & n.56. Eurodif claims that global demand for LEU is projected to increase from 50 million SWU in 2007 to 63 million SWU in 2020. See Eurodif Responses to Commissioner Questions at 6.

¹¹⁹ CR at II-21 & n.57; PR at II-15-16 & n.57. AHUG claims that there are 50 nuclear reactors planned in China, Japan, India, Russia, and elsewhere, while USEC claims that there are 30 nuclear reactors currently under construction in 12 countries. See AHUG Responses to Commissioner Questions at 13; USEC Response to Commissioner Questions, Exhibit T at 1-2. USEC notes that many of the reactors currently under construction are heavy water reactors, which do not utilize LEU, and that seven Japanese reactors were idled indefinitely in July 2007 due to an earthquake, reducing global demand for LEU. USEC Response to Commissioner Questions, Exhibit T at 1-2. These developments are presumably reflected in the global demand forecasts that we rely upon, and are therefore consistent with our finding that global demand for LEU will increase moderately.

¹²⁰ CR at IV-6; PR at IV-5.

¹²¹ CR at IV-7; PR at IV-5. Although nameplate capacity may overstate actual capacity at certain enrichment plants, *id.*, Eurodif operated its gas diffusion plant at over 100 percent of its rated capacity in 2003, 2004, and 2005. See CR/PR at Table IV-3.

¹²² The estimated cost of each new enrichment facility planned in the United States ranges from \$1.5 billion to \$2.3 billion, CR at III-3-5; PR at III-3, while the cost of a new enrichment facility being constructed by Eurodif in France is €3 billion. CR at IV-12; PR at IV-8.

LEU at an annual rate of 3 million SWU within 18 to 24 months.¹²³ USEC continues to produce LEU at its gaseous diffusion facility in Paducah, Kentucky, which possesses a maximum capacity of 8 million SWU per year.¹²⁴

A significant proportion of U.S. demand for LEU, around *** percent of U.S. apparent consumption in 2006, is satisfied with LEU from Russia that has been downblended from HEU.¹²⁵ Through the downblending process, HEU, generally salvaged from de-commissioned nuclear warheads, is blended with other materials until the U²³⁵ concentration is reduced to LEU levels suitable for use in nuclear reactor fuel rods.¹²⁶ Most down-blended LEU sold in the U.S. market is imported from Russia under the Megatons to Megawatts program, a nonproliferation agreement between the United States and Russia signed on February 18, 1993 (the “Russian HEU Agreement”).¹²⁷ Under this agreement, USEC serves as the U.S. Executive Agent and has committed to purchase 5.5 million SWU of such LEU from Russia each year through 2013, when the agreement expires.¹²⁸ USEC must generally sell this LEU in the U.S. market, reportedly because most foreign utilities are averse to purchasing LEU down-blended from nuclear warheads or sourced from Russia.¹²⁹

USEC must abide by its obligations under the Russian HEU Agreement as well as its obligations under its 2002 agreement with the DOE (“2002 DOE Agreement”). Under that agreement, USEC must produce at least 3.5 million SWU worth of LEU each year at its Paducah, Kentucky facility and deploy a new enrichment plant based on U.S. centrifuge technology, the American Centrifuge Plant (“ACP”) currently under construction in Portsmouth, Ohio, under a strict timetable.¹³⁰ The timetable dictates that USEC must commence commercial production at the ACP in 2009, increase capacity to 1.0 million SWU by 2010, and reach a capacity of 3.5 million SWU by September 2011.¹³¹ In return, the DOE has provided USEC with the U.S. centrifuge technology through what USEC describes as a “program of intense technology transfer.”¹³²

USEC regards its completion of the ACP as essential to the company’s survival, because the gaseous-diffusion process that USEC currently utilizes at its Paducah facility is power-intensive and hence increasingly uneconomical in an environment of rising electricity prices.¹³³ According to USEC,

¹²³ CR at III-1; PR at III-1.

¹²⁴ CR at III-1; PR at III-1.

¹²⁵ See CR/PR at Table C-1.

¹²⁶ CR at I-26-27; PR at I-21-22.

¹²⁷ CR at I-26-27; PR at I-21-22.

¹²⁸ CR at I-27, II-1; PR at I-22, II-1.

¹²⁹ See USEC Responses to Commissioner Questions, Exhibit R at 5. USEC claims that it commingles domestically produced LEU with down-blended LEU from Russia and therefore does not know the true origin of the LEU that it exports. Id. at 4.

¹³⁰ USEC Prehearing Brief 37.

¹³¹ CR at III-2; PR at III-1. The ACP is projected to possess a capacity of 3.8 million SWU per year, and its modular design and license would permit a capacity expansion to 7 million SWU per year. CR at III-3; PR at III-2.

¹³² USEC Prehearing Brief at 37-39.

¹³³ USEC Prehearing Brief at 41; see also CR at V-4; PR at V-3 (the cost of electricity increased from 4.88 cents per kilowatt-hour in 2002 to 6.16 cents per kilowatt-hour in the January-April 2007 period). USEC’s shipments of domestically produced LEU were unprofitable throughout the POR, with the exception of the first half of 2006. CR/PR at Table III-9.

the ACP will reduce its electricity costs by 95 percent and its cost of producing LEU by 70 percent.¹³⁴ USEC began construction of the ACP in May 2007 and expects to satisfy its obligation to commence commercial operations in 2009.¹³⁵ Of major concern to USEC is the ACP's projected cost of \$2.3 billion, which it has financed thus far through internal cash flow and borrowing on the capital markets.¹³⁶ USEC reports that it was able to raise \$774.5 million in a stock offering and convertible senior note sale in September 2007, but will need to raise significantly more capital, around \$***, in the second half of 2008.¹³⁷ USEC has also applied to the DOE for loan guarantees.¹³⁸

Like USEC, Eurodif is in the process of replacing its outdated gaseous diffusion enrichment facility in France, Georges Besse I, with a new centrifuge enrichment plant, Georges Besse II, based on ultra-centrifuge technology from Urenco.¹³⁹ Eurodif plans to commence operations of the first cascade, or unit, in the first half of 2009 with full capacity to be reached in 2012, at which time Georges Besse I will reportedly cease production.¹⁴⁰ The construction of additional production units would increase the capacity of Georges Besse II to 7.5 million SWU by 2018, expandable to 11 million SWU.¹⁴¹ Eurodif claims that it has significantly increased its end-of-period inventories of LEU, from *** SWU in 2002 to *** SWU in 2006 and *** SWU in June 2007, in order to insure a supply of LEU to its customers during the transition to Georges Besse II, as well as during possible power supply interruptions as Eurodif negotiated to renew its power supply contract.¹⁴²

In addition to USEC's ACP, several other new enrichment facilities are planned or under construction in the United States. In June 2006, Louisiana Energy Services, a wholly owned subsidiary of Urenco, began the construction of the NEF in Lea County, New Mexico. The NEF is a new centrifuge enrichment plant expected to commence production in mid-2009 with a capacity of 1 million SWU per year and to reach full capacity of 3 million SWU per year in 2013.¹⁴³ NEF has already entered into long-term contracts and letters of intent with utilities representing about 90 percent of its expected output over its first ten years of operation.¹⁴⁴

Two other U.S. enrichment projects remain in the planning stages. Areva has submitted a proposal to the Nuclear Regulatory Commission ("NRC") for the construction of a \$2 billion centrifuge enrichment plant with an annual capacity of 3 million SWU, aiming to begin construction in late 2010 and operations in 2013.¹⁴⁵ GE-Hitachi Nuclear Energy has partnered with Silex Systems to pursue the deployment of a new laser-based enrichment technology called SILEX and hopes to commission a new facility possessing an annual capacity of between 3.5 and 6 million SWU in 2012.¹⁴⁶

¹³⁴ USEC Responses to Commissioner Questions at Exhibit C; USEC Prehearing Brief at 60.

¹³⁵ CR at III-3; PR at III-2.

¹³⁶ USEC Prehearing Brief at 42-44.

¹³⁷ USEC Prehearing Brief at 44; USEC Responses to Commissioner Questions at Exhibit E.

¹³⁸ See USEC Prehearing Brief at 41, 45.

¹³⁹ CR at IV-11 & n.27; PR at IV-8 & n.27.

¹⁴⁰ CR at IV-11; PR at IV-8.

¹⁴¹ CR at IV-12; PR at IV-8.

¹⁴² CR at IV-12-13; PR at IV-9; CR/PR at Table IV-3.

¹⁴³ CR at III-4-5; PR at III-3.

¹⁴⁴ CR at III-5; PR at III-3.

¹⁴⁵ CR at III-5; PR at III-3.

¹⁴⁶ CR at III-5; PR at III-3-4.

We note that nonsubject imports satisfied a significant share of U.S. apparent consumption during the POR.¹⁴⁷ Nonsubject imports from Russia were by far the largest source of such imports, but are restrained in terms of both price and volume by a suspension agreement and by the Russian HEU Agreement.¹⁴⁸ In addition, a significant volume of nonsubject imports during the POR were supplied by Eurodif under open source long-term contracts, which would afford Eurodif the option to serve U.S. customers with either subject product (from its French facility) or nonsubject product (from Urenco and other sources).¹⁴⁹

C. Likely Volume of Subject Imports

In the original investigations, the Commission found that cumulated subject import volume (which included imports from France, Germany, the Netherlands, and the United Kingdom) increased significantly between 1998 and 2000, while domestic industry market share declined sharply.¹⁵⁰ Focusing on contracts negotiated or re-negotiated over the period of investigation, the Commission found that cumulated subject import volume shipped pursuant to such contracts increased substantially over the period.¹⁵¹ Although recognizing that nonsubject imports from Russia increased at a rate similar to subject imports, the Commission noted that the domestic industry lost more market share to subject imports than to nonsubject imports and concluded that the volume of subject imports was significant.¹⁵²

In this review, we find that the likely subject import volume from France would be significant, both in absolute terms and relative to production or consumption in the United States, were the antidumping duty order on LEU from France to be revoked. As an initial matter, subject imports from France increased *** percent over the period examined in the original investigations, comparable to the *** percent increase in (four-country) cumulated subject import volume that the Commission found to be significant.¹⁵³ Subject imports from France increased from *** SWU in 1998, or *** percent of U.S. apparent consumption, to *** SWU in 1999, or *** percent of U.S. apparent consumption, and *** SWU

¹⁴⁷ Nonsubject import volume increased from 7.3 million SWU in 2002 to 10.3 million SWU in 2003, declined to 7.5 million SWU in 2005, and then increased to 9.9 million SWU in 2006, a level 35.4 percent higher than in 2002. CR/PR at Table C-1. Nonsubject import volume was 4.8 million SWU in the first half of 2006 and 3.8 million SWU in the first half of 2007. Id. Nonsubject import trends on a value basis are similar. See CR/PR at Table C-1. Nonsubject import market share fluctuated over the 2002-2005 period, but increased in 2006 and between the interim periods. The share of U.S. apparent consumption captured by nonsubject imports declined from *** percent in 2002 to *** percent in 2003, increased to *** percent in 2004, declined to *** percent in 2005, and then increased to *** percent in 2006. Id. The share of U.S. apparent consumption held by nonsubject imports was *** percent in the first half of 2006 compared to *** percent in the first half of 2007. Id.

¹⁴⁸ CR at II-10; PR at II-6; see also CR at II-9; PR at II-6.

¹⁴⁹ See CR/PR at Tables II-1, E-1-2; see also USEC Responses to Commissioner Questions at Exhibit I (claiming that most of the contracts that Eurodif submitted to the Commission were open origin).

¹⁵⁰ Confidential Views, Low Enriched Uranium from France, Germany, the Netherlands, and the United Kingdom, Inv. Nos. 701-TA-409-412 and 731-TA-909 (Final) (“Confidential Original Determination”) at 15. The Commission determined that cumulation was appropriate in the original investigations and analyzed subject imports from France, Germany, the Netherlands, and the United Kingdom on a cumulated basis. See Original Determination at 7.

¹⁵¹ Confidential Original Determination at 16.

¹⁵² Confidential Original Determination at 16.

¹⁵³ Original Investigations Confidential Staff Report (“OCR”) at Table IV-4.

in 2000, or *** percent of U.S. apparent consumption.¹⁵⁴ Subject imports from France were *** percent higher in the first half of 2001, at *** SWU or *** percent of U.S. apparent consumption, than in the first half of 2000, at *** SWU or *** percent of U.S. apparent consumption (although cumulated subject import volume declined *** percent between the interim periods).¹⁵⁵ Thus, prior to imposition of the order, a significant proportion of the increase in cumulated subject import volume, which the Commission found to be significant, was comprised of subject imports from France, both in absolute terms and relative to U.S. apparent consumption.¹⁵⁶

Subject imports from France maintained a significant presence in the U.S. market over the POR despite the imposition of the antidumping duty order, indicating that French producers maintain both an interest in, and the ability to serve, U.S. customers. Shipments of subject imports from France increased from 1.4 million SWU in 2002, or *** percent of U.S. apparent consumption, to 4.0 million SWU in 2003, or *** percent of U.S. apparent consumption, declined to 2.1 million SWU in 2004, or *** percent of U.S. apparent consumption, increased to 2.2 million SWU in 2005, or *** percent of U.S. apparent consumption, and then declined to 982,000 SWU in 2006, or *** of U.S. apparent consumption.¹⁵⁷ The decline in subject import shipments that began in 2006 appears to have continued into 2007, given that subject import shipments were only 24,000 SWU in the first half of 2007, or *** percent of U.S. apparent consumption, as compared to 462,000 SWU in the first half of 2006, or *** percent of U.S. apparent consumption.¹⁵⁸ We recognize that a significant proportion of subject import shipments over the POR were purchased pursuant to long-term contracts that predate the imposition of the order, but nonetheless find the significant presence of subject imports in the U.S. market to be probative of Eurodif's interest in the U.S. market, given the frequent renegotiation of long-term contracts and Eurodif's ability to ship nonsubject imports instead of subject imports under open source contracts.

Other record information indicates that Eurodif has both the ability and interest to serve U.S. customers. Eurodif's LEU capacity and production remained significant throughout the POR. Eurodif reported that its annual capacity remained constant over the POR at *** SWU, while its production increased from *** SWU in 2002 to *** SWU in 2003, *** SWU in 2004, and *** SWU in 2005, before declining to *** SWU in 2006. Production also declined from *** SWU in the first half of 2006 to *** SWU in the first half of 2007.¹⁵⁹ Accordingly, Eurodif reported that its capacity utilization rate increased from *** percent in 2002 to *** percent in 2003, *** percent in 2004, and *** percent in 2005, before

¹⁵⁴ OCR at Tables IV-4-5.

¹⁵⁵ OCR at Tables IV-4-5.

¹⁵⁶ We are unpersuaded by Eurodif's argument that the Commission would have had to issue a negative determination under the negligibility provision in the original investigations had subject imports from France not been cumulated with subject imports from Germany, the Netherlands, and the United Kingdom. See Eurodif Prehearing Brief at 10; Eurodif Posthearing Brief at 10-11. What the Commission might have done in the original investigations if Germany, the Netherlands, and the United Kingdom were not subject to the investigations is irrelevant for purposes of this review, because the applicable legal standard is whether revocation of the order "would be likely to lead to the recurrence or continuation of material injury within a reasonably foreseeable time." 19 U.S.C. § 1675a(a); see also *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 n.47 (Ct. Int'l Trade 2003) (holding that the negligibility provision is inapplicable to the Commission's five-year reviews).

¹⁵⁷ CR/PR at Tables I-3-4.

¹⁵⁸ CR/PR at Tables I-3-4.

¹⁵⁹ CR/PR at Table IV-3.

declining to *** percent in 2006.¹⁶⁰ It also declined from *** percent in the first half of 2006 to *** percent in the first half of 2007.¹⁶¹

We find that Eurodif possesses the ability to significantly increase its production of LEU above the level prevailing at the end of the POR, notwithstanding its reportedly *** capacity utilization rate. That Eurodif was able to *** suggests that Eurodif's actual capacity to produce LEU is greater than its reported capacity.¹⁶² In the absence of an alternative explanation from Eurodif, we find that Eurodif could likely increase its annual production of LEU to the level attained in 2005, or by *** SWU over the level attained in 2006, equivalent to *** percent of U.S. apparent consumption that year, and by *** SWU over the level attained in the first half of 2007, equivalent to *** percent of U.S. apparent consumption in the period.¹⁶³

Eurodif could also increase its exports of LEU to the United States using its significant inventories of LEU. As mentioned above, Eurodif's end-of-period inventories of LEU increased *** percent between 2002 and 2006, from *** percent of shipments in 2002 to *** percent of shipments in 2006.¹⁶⁴ They also increased *** percent between the interim periods, from *** percent of shipments in the first half of 2006 to *** percent of shipments in the first half of 2007.¹⁶⁵ Eurodif's stockpile of LEU at the end of the first half of 2007, at *** SWU, was equivalent to *** percent of U.S. apparent consumption in the first half of 2007.¹⁶⁶

Eurodif claims that it expanded its inventories of LEU to cope with the possibility of a power outage during negotiations to renew its power supply contract and to ensure a smooth transition from Georges Besse I to Georges Besse II.¹⁶⁷ But once Eurodif's power supply contract has been secured, it may be able to draw down the portion of its inventories earmarked for power outages, permitting increased shipments.¹⁶⁸ Eurodif also likely possesses substantial flexibility with respect to maintaining inventories earmarked for the transition from Georges Besse I to Georges Besse II. Georges Besse II is not scheduled to commence production until the first half of 2009, and then only on a limited basis.¹⁶⁹ Georges Besse I is capable of remaining in operation into the next decade and is not scheduled to be fully decommissioned until 2020.¹⁷⁰ Thus, nothing would prevent Eurodif from using its significant inventories of LEU to increase exports to the United States.

We disagree with AHUG that the substantial proportion of LEU demand in the U.S. market already committed to long term contracts would prevent subject imports from increasing significantly

¹⁶⁰ CR/PR at Table IV-3.

¹⁶¹ CR/PR at Table IV-3.

¹⁶² CR/PR at Table IV-3.

¹⁶³ See Supplemental Staff Table IV-3. Commission staff was limited in its ability to seek an explanation of these data, because Eurodif provided data on capacity and production two and a half months late and only after multiple attempts to obtain its cooperation. CR at IV-13 & n.37; PR at IV-9 & n.37.

¹⁶⁴ CR/PR at Table IV-3.

¹⁶⁵ CR/PR at Table IV-3.

¹⁶⁶ CR/PR at Tables IV-3, C-1.

¹⁶⁷ CR at IV-12-13; PR at IV-9; Hearing Transcript at 225 (Carbonell).

¹⁶⁸ In 2006, Eurodif and Electricite de France signed a one year amendment to extend the electricity supply contract that has been in force since 1996, but there is no information on the record to suggest that a new long term electricity supply contract has been concluded. See CR at IV-11; PR at IV-7-8.

¹⁶⁹ CR at IV-11; PR at IV-8. Eurodif's first cascade is expected to commence operations in the first half of 2009, but will not be totally operational until the end of 2012. Id.

¹⁷⁰ CR at IV-11; PR at IV-8.

within a reasonably foreseeable time.¹⁷¹ We find, to the contrary, that uncommitted demand over the 2007-2010 period, addressed in section IV.B.1. above, is significant. NAC data indicates that overall uncommitted demand is *** SWU for 2008, *** SWU for 2009, and *** SWU for 2010.¹⁷²

Uncommitted demand is significant relative to USEC's U.S. shipments of domestically produced LEU in 2006, which were *** SWU.¹⁷³ Consequently, uncommitted demand in the U.S. market would permit subject import volume to increase significantly in the sense that imports would displace a significant volume of USEC's shipments of the domestic like product.

Moreover, it is likely that long-term contracts for deliveries occurring several years beyond 2010 will be finalized in the next few years.¹⁷⁴ To the extent these long-term contracts were to be awarded to Eurodif on the basis of price competition, this would represent sales lost to USEC in the reasonably foreseeable time, even if the actual deliveries occur later.¹⁷⁵ We find these sales to represent a substantial market opportunity available to Eurodif in the event of revocation.

It is also likely that Eurodif would significantly increase imports of LEU from France under existing contracts after revocation. Purchasers that had long-term contracts with Eurodif reported that the proportion of LEU purchased under these contracts that was sourced from France declined over the POR, from *** percent in 2002 to *** percent in 2005 and *** percent in 2006 and 2007, as the proportion that was purchased from either another origin or an unknown origin increased commensurately.¹⁷⁶ Subject imports from France declined in 2006 and 2007, while purchasers reported significant deliveries from Eurodif of LEU from nonsubject countries or of unknown origin. These data indicate that Eurodif reduced its shipments of LEU from France under its long-term contracts with U.S. customers since the antidumping duty order's imposition, presumably to reduce its exposure to antidumping duties, and replaced them with nonsubject imports of LEU pursuant to open source contracts. Purchasers reported that they do not know the origin of *** percent of the LEU that will be delivered under contracts with Eurodif over the 2007-2010 period, on a SWU basis, suggesting that *** of these contracts are open origin.¹⁷⁷

Consequently, revocation of the order would permit Eurodif to significantly increase its shipments of LEU from France to U.S. customers under the same open source contracts, in lieu of

¹⁷¹ AHUG Prehearing Brief at 20.

¹⁷² USEC Prehearing Brief at 34. Purchasers reported that their uncommitted demand for LEU is currently 22,625 kg for 2007, 25,460 kg for 2008, 181,498 kg for 2009, and 458,648 kg for 2010. CR/PR at Table II-3 (calculated by subtracting committed demand from expected demand). Data on uncommitted demand collected from purchasers is more recent than the data on uncommitted demand reported by NAC and that this could partly account for NAC's higher values. See USEC Responses to Commissioner Questions at Exhibit M (noting that NAC data was based on information available as of April 2007, whereas the Commission's questionnaire responses were due on August 3, 2007).

¹⁷³ CR/PR at Table I-3. Uncommitted demand reported by NAC as a percentage of USEC's domestic shipments in 2006 is *** percent for 2008, *** percent for 2009, and *** percent for 2010. See id. at Tables I-3, II-3.

¹⁷⁴ See USEC Prehearing Brief at 35.

¹⁷⁵ In the original investigations, the Commission followed a similar approach, finding that contracts awarded to subject producers over the period of investigation for future deliveries nevertheless represented sales lost to the domestic industry during the period of investigation. See Original Determination at 17.

¹⁷⁶ CR/PR at Table E-1.

¹⁷⁷ See CR/PR at Table E-1. Purchasers reporting their committed demand in SWUs reported that 92.5 percent of shipments scheduled for the 2007-2010 period are of unknown origin. Id. (6,253,280 SWU out of 6,757,280 SWU). Id.

shipments of nonsubject imports of LEU. Even Eurodif's contracts with U.S. customers that are not open source could be renegotiated to provide for increased imports of LEU from France. We therefore find that the high proportion of future demand already committed to long-term contracts would not prevent subject imports from increasing significantly after revocation.

Eurodif not only has the ability to increase exports to the United States significantly within a reasonably foreseeable time, but ample incentive to do so. In a document titled "Business & Strategy Overview" dated July 2007, Areva lists among its "strategic priorities" the doubling of its uranium production by 2011, the replacement of its existing gaseous diffusion plant with a new centrifuge plant, and an increase in its share of the nuclear fuel market in the United States and Asia.¹⁷⁸ With respect to the latter goal, Areva reports that it expects "strong growth in the U.S. over a five year period" and indicates that, for North and South America, the "[n]umber of reactors fueled by Areva" will increase from 28 in 2005 to an estimated 43 in 2010, which would represent an increase from the 32 reactors committed as of July 2007.¹⁷⁹

Were Areva to significantly expand its share of the nuclear fuel market in the United States, it is likely to also significantly expand its share of the U.S. LEU market, given that Areva promotes the fact that it is vertically integrated into all four stages of the nuclear fuel cycle and offers "possible one-stop shopping for utilities."¹⁸⁰ Record evidence indicates that Eurodif has offered to bundle different stages of the nuclear fuel cycle for its U.S. customers; *** long-term contracts submitted by Eurodif with its supplemental importers' questionnaire response offer ***.¹⁸¹ Given Eurodif's clear intent to leverage its status as "the only fully integrated player on the Nuclear value chain,"¹⁸² Eurodif would likely offer similar inducements for customers to bundle their purchases from Eurodif of both LEU and fuel rods, the fourth stage of the nuclear fuel cycle, as a means of increasing its share of the U.S. nuclear fuel market.

That Eurodif would target the U.S. market for expansion is unsurprising given its declining fortunes in Europe. Areva's 2007 Business and Strategy Overview indicates that Eurodif has provided LEU to a declining number of nuclear reactors in Europe and predicts significant further declines through 2010, "due to the opening of the French market" to suppliers other than Eurodif.¹⁸³ Moreover, Eurodif's

¹⁷⁸ See Areva's Business & Strategy Overview, July 2007, at 22, attached to USEC's Prehearing Brief at Exhibit 10; see also *id.* (touting itself as "the only fully integrated player on the nuclear value chain.").

¹⁷⁹ See Areva's Business & Strategy Overview, July 2007, at 58, attached to USEC's Prehearing Brief at Exhibit 10.

¹⁸⁰ See Areva's Business & Strategy Overview, October 2006, at 17, attached to USEC's Prehearing Brief at Exhibit 10.

¹⁸¹ See Eurodif Importers' Questionnaire Responses, attached contracts between Eurodif and ***; see also USEC's Supplemental Brief at 5-7 (explaining the provisions of these contracts that encourage utilities to bundle purchases of conversion services and LEU).

¹⁸² See Areva's Business & Strategy Overview, October 2006, at 17, attached to USEC's Prehearing Brief at Exhibit 10.

¹⁸³ Areva's Business & Strategy Overview, July 2007, at 58, attached to USEC's Prehearing Brief at Exhibit 10. Areva provides a chart indicating that the number of reactors that it fuels in Europe declined from 96 in 2001 to 93 in 2005 and is projected to decline to 83 in 2010, "due to the opening of the French market." *Id.* USEC claims that there will be no open demand in France until 2012. USEC Prehearing Brief at 84. We note that Eurodif failed to respond to the Commission's questions concerning conditions in the French market for LEU, including competition from imports of LEU in the French market. See Eurodif's Foreign Producers' Questionnaire at Questions III-23 and III-24.

share of the U.S. LEU market remains far lower than its share of the global LEU market,¹⁸⁴ suggesting room for improvement, and NAC reports that nearly *** of global uncommitted demand for LEU over the 2008-2010 period is in the U.S. market.¹⁸⁵

We find additional support for our conclusion that subject import volume would likely increase significantly after revocation of the order in purchasers' responses regarding the order's impact and the likely result of its revocation. Eleven purchasers reported that the order has had a restraining effect on imports of LEU from France.¹⁸⁶ Sixteen purchasers reported that revocation of the order would intensify subject import competition in the U.S. market, of which four reported that they would consider increasing their purchases of LEU from France.¹⁸⁷

In sum, we find that Eurodif possesses the market presence, the available capacity and inventories, and the incentive to significantly increase its exports of LEU to the United States, such that the likely volume of imports would be significant both in absolute terms and relative to production or consumption in the United States were the antidumping duty order revoked.

D. Likely Price Effects of Subject Imports

In the original investigations, the Commission observed that analyzing the price effects of subject imports was complicated by the fact that prices in the U.S. market over the period examined resulted from both long-term contracts entered into prior to the period and contracts negotiated or re-negotiated during the period.¹⁸⁸ Consequently, the Commission collected three sets of pricing data: bid-price data on contracts entered into over the period of investigation, quarterly pricing data broken down by type of contract (specifically, spot sales and long-term contracts with three different types of pricing provisions), and annual pricing data over the 1998-2004 period broken down by type of contract (specifically, EUP, SWU, preexisting contracts, new contracts, and newly re-negotiated contracts).¹⁸⁹

Based on annual pricing data and average spot prices, the Commission found that USEC's prices for U.S. shipments generally declined over the period of investigation.¹⁹⁰ To assess the source of these price declines, the Commission examined bid-price data and found that contracts had almost always been awarded to the lowest bidder after "intense price competition," with USEC winning a larger number of contracts but subject enrichers winning a larger volume of SWU and EUP.¹⁹¹ The Commission concluded that the intense price competition evident from the bidding data and the significant volume of SWU and

¹⁸⁴ Compare CR/PR at Table I-4 (subject imports captured *** percent of the U.S. market in 2006) with Areva's Business & Strategy Overview, October 2006, at 17 (Eurodif's global share of the LEU market is 25 percent).

¹⁸⁵ See NAC International, "NAC's Nuclear Industry Status Report," Vol. 4, April 2007, Section F-1, at 1, and Section F-3, at 35-36, attached as Exhibit 8 to USEC's Prehearing Brief (indicating that *** SWU of the *** SWU in worldwide open demand for the 2008-2010 period is in the United States).

¹⁸⁶ See Purchasers' Questionnaire Responses of *** at Question IV-6, *** at Questions II-6, IV-9, *** at Questions II-6 and II-4.b., *** at Questions IV-1.a., IV-1.b., *** at Question IV-9, *** at Question IV-9, *** at Question II-2, *** at Question V-5, *** at Question V-5, and *** at Questions IV-1, IV-1.b.

¹⁸⁷ CR at D-8-13; PR at D-4-8 (responses of ***).

¹⁸⁸ Original Determination at 13.

¹⁸⁹ Original Determination at 13-14.

¹⁹⁰ Original Determination at 14.

¹⁹¹ Original Determination at 14-15.

EUP won by subject enrichers over the period of investigation had depressed domestic LEU prices to a significant degree.¹⁹²

In this review, we find that LEU from France and the domestic like product are highly substitutable¹⁹³ and that price is an important factor in purchasing decisions.¹⁹⁴ More purchasers cited price as the most important factor in making purchasing decisions, and as among the three most important factors in making purchasing decisions, than any other factor.¹⁹⁵ Twenty-five of 27 purchasers reported that price is a “very important” factor in their purchasing decisions; only “reliability of supply” was cited more frequently as a “very important” purchasing factor.¹⁹⁶ When asked how often they purchase LEU offered at the lowest price, 19 of 27 purchasers reported “always” or “usually,” while only 5 reported “sometimes” and 3 reported “never.”^{197 198}

Most LEU is sold pursuant to long-term contracts ranging in duration from four to seven years or longer, which are typically renegotiated every *** years.¹⁹⁹ Pricing in the negotiation of new contracts and the renegotiation of existing contracts is influenced by ***.²⁰⁰

The prevalence of long-term contracts does not entirely insulate USEC’s transaction prices on shipments of the domestic like product from current market conditions, as addressed in section IV.A.1. above. As we found in the original investigation, the spot market for LEU, which accounted for *** percent of reported purchases of LEU over the POR,²⁰¹ influences pricing in the negotiation of new contracts and the renegotiation of existing contracts.²⁰² Transaction prices for shipments made pursuant to existing contracts can also be influenced by current market conditions through market-based pricing mechanisms.²⁰³

Based on pricing data from the original investigations and the limited pricing data on the record of this review, we find that Eurodif is likely to undersell the domestic like product significantly if the antidumping duty order on LEU from France were revoked. In the original investigation, the record indicated that subject imports from France generally undersold the domestic like product over the period

¹⁹² Original Determination at 15-16. The Commission acknowledged that purchasers considered certain non-price factors to be important and generally identified USEC as the price leader, but found that neither factor significantly detracted from its conclusion. Id.

¹⁹³ See CR at II-22; PR at II-16; CR/PR at Tables II-7-8; Section IV.B.1., supra.

¹⁹⁴ See CR at II-24-25; PR at II-17; CR/PR at Tables II-5, 6, and 7.

¹⁹⁵ CR at II-24; PR at II-17; CR/PR at Table II-5 (of 26 purchasers, 11 ranked price as the most important factor, 7 ranked price as the second most important factor, and 5 ranked price as the third most important factor).

¹⁹⁶ CR/PR at Table II-6.

¹⁹⁷ CR at II-24-25; PR at II-18.

¹⁹⁸ USEC reported that differences other than price between subject imports and the domestic like product are “never” important, and that price differences between subject imports and the domestic like product are “always” important, in its sales of LEU in the U.S. market. CR at II-32; PR at II-23; CR/PR at Tables II-9-10. Eurodif failed to provide this requested information.

¹⁹⁹ CR at II-15 & n.46; PR at II-10 & n.46 (only 7 of 27 responding purchasers reported purchases on the spot market during the POR); CR/PR at Table II-2.

²⁰⁰ CR at V-5; PR at V-4.

²⁰¹ CR/PR at Table II-2 (*** SWU out of *** SWU were purchased on the spot market).

²⁰² CR at V-6-7 & n.15; PR at V-5 & n.15.

²⁰³ CR at V-6-7 & n.15; PR at V-5 & n.15. AHUG argues that most long-term contracts set a base price that is adjusted for inflation, but that most contracts do not have a mechanism for reducing prices. CR at V-7; PR at V-5. Eurodif failed to respond to the question asking it to report how it determines the import purchase price for LEU. CR at V-6; PR at V-4.

examined. With respect to deliveries made during the original period of investigation pursuant to long-term contracts entered into between 1994 and 1999, subject imports from France were priced less than the domestic like product in four of five comparisons at margins ranging from 4.2 to 9.0 percent.²⁰⁴ With respect to deliveries under contracts entered into during the original period of investigation, the average unit value of \$87.87 per SWU for LEU from France was 9.4 percent less than the average unit value of \$97.00 per SWU for shipments under USEC's contracts, of which an estimated 38.0 percent was of domestic origin and 62.0 percent was of Russian origin.²⁰⁵

In this review, subject imports undersold the domestic like product in the one possible price comparison between subject imports and the domestic like product under enrichment category three for the contract year 2002, with a margin of *** percent.²⁰⁶ Our pricing data in this review limits us to one comparison, because Eurodif refused to report pricing data on shipments made pursuant to contracts entered into in 2001 and 2005.²⁰⁷ We therefore rely on the one price comparison on the record as facts available and find that subject imports undersold the domestic like product during the period of review at a significant margin, notwithstanding the imposition of the antidumping duty order.²⁰⁸

We thus find that Eurodif would likely undersell the domestic like product to a significant degree were the order to be revoked. We base this finding on record information showing that Eurodif undersold the domestic like product during the original period of investigation, prior to the imposition of the order, and continued to undersell the domestic like product during the POR, notwithstanding the imposition of the order. Absent the restraining effect of the order, Eurodif would have greater latitude to undersell the domestic like product and would likely do so to a significant degree as a means of significantly increasing its exports of LEU from France to the U.S. market.

We further find that the significant subject import underselling likely to occur after revocation of the order would likely depress or suppress prices for the domestic like product to a significant degree. Significant price depression is likely because LEU is a fungible product sold primarily on the basis of price and subject imports are highly substitutable with the domestic like product. Were the order to be

²⁰⁴ OCR at V-33-36, Table V-6.

²⁰⁵ OCR at V-45-47, Tables V-9a-9c. We recognize that LEU from France delivered under contracts that were renegotiated during the period of investigation had a higher unit value than LEU delivered under USEC's contracts that were renegotiated during the period of investigation. Id. at V-47.

²⁰⁶ CR at V-20-21; PR at V-9; CR/PR at Tables V-3, 6.

²⁰⁷ Eurodif attached copies of its contracts from 2001, 2002, and 2005 to its importers' questionnaire response. CR at V-9 & n.21; PR at V-6 & n.21; CR/PR at Table V-6 n.2. However, the contracts alone did not provide enough information to determine transaction prices. See id. In addition, what little pricing information Eurodif did provide was submitted two and a half months late, providing Commission staff with little time to analyze the data or seek clarifications and corrections. CR at V-9 n.21; PR at V-6 n.21. In analyzing likely price effects, we do not rely on average unit value data or base prices extracted from the contracts submitted by Eurodif because neither data set offers an accurate measure of market prices. We cannot rely on the average unit value data reported by Eurodif because Eurodif could not convincingly explain the substantial divergence between the volume and value data that it reported on imports of LEU from France and the volume and value data reported by Commerce. CR at IV-1 n.1; PR at IV-1 n.1. The average unit value of LEU from France based on Commerce data is of limited probative value because Commerce collects import data on the basis of kilograms, not SWUs, and there is no reliable means of converting kilograms into SWUs since the SWU content of LEU imports can vary widely depending on purchaser requirements. See CR/PR at Table IV-1 n.2; Eurodif Final Comments at 3 n.1. Nor do we rely on the pricing comparisons proposed by USEC, comparing base prices from Eurodif's and USEC's contracts and spot market prices for LEU, because contract base prices are not an accurate indication of actual transaction prices. See USEC Supplemental Brief at 4-5.

²⁰⁸ We note that category 3 contracts, long-term contracts in which fees for enrichment are fixed or subject to escalator clauses specified in the contract, accounted for the bulk of LEU sales over the POR. CR at V-9; PR at V-6.

revoked, the significant likely volume of subject imports, coupled with their significant likely underselling margins, would likely depress both USEC's transaction prices for shipments under existing contracts with market-pricing provisions and the prices established in new and renegotiated contracts for shipments of the domestic like product in the foreseeable future. Moreover, the likely significant increase in subject import volume would occur against a backdrop of only moderate growth in LEU demand,²⁰⁹ placing additional downward pressure on domestic prices. Six purchasers reported that revocation of the order would likely result in lower LEU prices.²¹⁰

Revocation of the order would likely result in price suppression, because USEC's electricity costs increased dramatically toward the end of the POR and are expected to remain high into the foreseeable future. USEC's gaseous diffusion plant in Paducah is extremely energy intensive.²¹¹ Although electricity prices increased significantly over the POR, USEC benefitted from "fixed, below market prices" for electricity under an agreement with TVA between 2000 and mid-2006.²¹² This agreement expired in June 2006, however, and USEC then entered into a new, less advantageous agreement with TVA that increased its electricity costs as a share of production cost per SWU from an average of *** percent over the 2002-2005 period to an average of *** percent in the first half of 2007.²¹³ USEC's cost of electricity per SWU increased from \$*** in 2002 to \$*** in 2006 and \$*** in the first half of 2007.²¹⁴ Consequently, USEC's ratio of cost of goods sold to net sales for LEU sold pursuant to SWU transactions increased from *** percent in 2002 to *** percent in 2006 and *** percent in the first half of 2007.²¹⁵ Given that USEC has been unable to fully recoup its higher cost of electricity through higher prices with the order in place,²¹⁶ revocation of the order would likely result in the suppression of prices for the domestic like product by further reducing the domestic industry's ability to pass increased electricity costs through to its customers.²¹⁷ The moderate growth in LEU demand that is likely within a reasonably foreseeable time would provide the domestic industry with some leverage to pass on its higher electricity costs through higher prices.²¹⁸ Intensified competition from low-priced subject imports after revocation, however, would likely eliminate this leverage.

²⁰⁹ See section IV.B.1., *supra*.

²¹⁰ CR at D-10-12; PR at D-6-7 (Purchaser Questionnaire Responses of ***).

²¹¹ See CR at I-22; PR at I-19.

²¹² CR at III-28 & n.63, V-4; PR at III-13 & n.63, V-3.

²¹³ CR at III-28 & n.63; PR at III-13 & n.63; CR/PR at Table III-11; *see also* USEC Prehearing Brief at 50.

²¹⁴ CR/PR at Table III-11.

²¹⁵ CR/PR at Table III-9. We note that, for unknown reasons, the ratio of cost to net sales declined for shipments of LEU pursuant to EUP transactions from *** percent in 2002 to *** percent in 2006. Because the majority of USEC's shipments of LEU over the POR were pursuant to SWU transactions, we attach greater weight to the trend in the ratio of cost to net sales for USEC's SWU transactions. *See id.*

²¹⁶ See CR at III-28; PR at III-13 ("The substantial increase in power costs at the end of the period put increased pressure on USEC's U.S-produced LEU gross profit margins . . .").

²¹⁷ As noted above in section III.D., a second domestic enricher, NEF, is expected to become a member of the domestic industry in 2009. Nevertheless, USEC will continue to account for a large majority of domestic production within the reasonably foreseeable future. NEF has yet to begin operation, and is scheduled to produce only a relatively small amount of LEU starting in 2009 (estimated 1 million SWU by mid-2009 versus over 4 million SWU by USEC every year from 2002 to 2006). CR at III-4-5; PR at III-3; CR/PR at Table C-1. Accordingly, we have focused our analysis of the likely effects of subject imports on data pertaining to USEC. Because USEC will account for the bulk of domestic production within the reasonably foreseeable future, we generally consider that the likely effects of subject imports will be the same for both USEC and the domestic industry as a whole.

²¹⁸ See section IV.B.1., *supra*.

We consequently conclude that revocation of the antidumping duty order on LEU from France would likely result in significant adverse price effects.

E. Likely Impact of Subject Imports

In the original investigations, the Commission noted that USEC's production, sales, and employment declined and its capacity utilization remained low, as it lost market share to subject imports over the period of investigation.²¹⁹ The Commission also found that USEC's loss of long-term contracts to subject foreign producers over the period of investigation would likely further depress USEC's market share for years to come and increase subject import market share to over 40 percent by 2002.²²⁰ Subject imports had also contributed to USEC's declining operating income over the period of investigation, the Commission noted, by reducing both domestic sales volume and unit prices.²²¹ Although it acknowledged that USEC had also lost sales to nonsubject imports and that USEC's export shipments had attenuated the impact of subject imports on USEC's operations to some degree, the Commission concluded that subject imports were having a significant adverse impact on the domestic industry.²²²

In this review, we find the domestic industry vulnerable to the continuation or recurrence of material injury. Most indicators of USEC's performance, and particularly its financial performance, were negative over the POR with respect to U.S.-produced LEU. USEC's domestic LEU operations suffered operating losses of \$*** in 2002, or *** percent of sales, \$*** in 2003, or *** percent of sales, \$*** in 2004, or *** percent of sales, \$*** in 2005, or *** percent of sales, and \$*** in 2006, or *** percent of sales.²²³ Although USEC earned an operating profit of \$*** in the first half of 2006, or *** percent of sales, it fell back into the red in the first half of 2007 with a \$*** operating loss, or *** percent of sales – the largest operating loss of the POR as a percentage of sales.²²⁴ Accordingly, USEC's return on investment was negative *** -- with the exception of the first half of 2006 when it was a positive *** percent -- at -*** percent in 2002, -*** percent in 2003, -*** percent in 2004, -*** percent in 2005, -*** percent in 2006, and -*** percent in the first half of 2007.²²⁵

USEC's flagging financial performance was reflected in its declining capacity utilization over the POR. While USEC's annual capacity remained at *** SWU, its production declined from *** SWU in 2002 to *** SWU in 2003, *** SWU in 2004, and *** SWU in 2005, before increasing slightly in 2006 to a level still *** percent below that in 2002.²²⁶ USEC's production was around *** SWU in both the first half of 2006 and the first half of 2007.²²⁷ USEC's capacity utilization rate declined *** over the POR in tandem with production, from *** percent in 2002 to *** percent in 2003, *** percent in 2004, and *** percent in 2005, before increasing *** (along with production) to *** percent in 2006.²²⁸ In line with its significant financial losses and declining production, USEC's workforce shrank *** percent over

²¹⁹ Original Determination at 17.

²²⁰ Original Determination at 17.

²²¹ Original Determination at 17-18.

²²² Original Determination at 18.

²²³ CR/PR at Table III-9.

²²⁴ CR/PR at Table III-9.

²²⁵ CR/PR at Table III-14.

²²⁶ CR/PR at Table III-1.

²²⁷ CR/PR at Table III-1.

²²⁸ CR/PR at Table III-1.

the POR, from *** production workers in 2002 to *** production workers in 2006, increasing *** to *** production workers in the first half of 2007.²²⁹

USEC's overall net sales quantity declined only slightly over the POR, because USEC's increased export shipments compensated for its flagging domestic shipments and market share. USEC's net sales quantity of U.S.-produced LEU sold via SWU transactions declined from *** SWU in 2002 to *** SWU in 2004, before increasing to *** SWU in 2005 and *** SWU in 2006, a level still *** percent below that in 2002.²³⁰ USEC's net sales quantity of U.S.-produced LEU sold via SWU transactions was *** SWU in the first half of 2006 and *** SWU in the first half of 2007.²³¹ USEC's net sales quantity of LEU sold via EUP transactions increased over the POR, but remained a fraction of USEC's sales of LEU sold via SWU transactions.²³²

Domestic shipments of U.S.-produced LEU, both SWU and EUP, declined from *** SWU in 2002, or *** percent of U.S. apparent consumption, to *** SWU in 2004, or *** percent of U.S. apparent consumption, before rebounding somewhat to *** SWU in 2005, or *** percent of U.S. apparent consumption, and *** SWU in 2006, or *** percent of U.S. apparent consumption, a level *** percent below that in 2002.²³³ USEC's domestic shipments resumed their decline between the interim periods, from *** SWU in the first half of 2006, or *** percent of U.S. apparent consumption, to *** SWU in the first half of 2007, or *** percent of U.S. apparent consumption.²³⁴ USEC's domestic shipments of U.S.-produced LEU as a share of U.S. apparent consumption declined *** percentage points between 2002 and 2006, or *** percent, and *** percentage points between the interim periods, or *** percent.²³⁵

Partially compensating for its declining shipments and market share in the U.S. market, USEC's exports of LEU increased *** percent between 2002 and 2006 and another *** percent between the interim periods.²³⁶ USEC's exports as a share of net shipments of LEU sold via SWU transactions increased from *** percent in 2002 to *** percent in 2006 and were *** percent in the first half of 2006 and *** percent in the first half of 2007.²³⁷

A few indicators of USEC's performance over the POR were more positive, but insufficient to compensate for the negative trends addressed above. USEC's net sales value increased *** percent from \$*** in 2002 to \$*** in 2006, before declining between the interim periods from \$*** in the first half of 2006 to \$*** in the first half of 2007.²³⁸ The increase in USEC's net sales value between 2002 and 2006 entirely resulted from an increase in the unit value of LEU shipments pursuant to EUP transactions (from

²²⁹ CR/PR at Table III-5. Although USEC's labor productivity increased over the POR, wages increased at a faster rate, resulting in a *** percent increase in labor costs per SWU between 2002 and 2006 and another *** percent increase between the interim periods. Id.

²³⁰ CR/PR at Table III-9.

²³¹ CR/PR at Table III-9.

²³² CR/PR at Table III-9. The domestic industry's net sales quantity of LEU sold via EUP transactions increased from *** kg in 2002 to *** kg in 2004, declined to *** kg in 2005, and increased to *** kg in 2006. Id. It was *** kg in the first half of 2006 and *** in the first half of 2007. Id.

²³³ CR/PR at Tables I-3-4.

²³⁴ CR/PR at Tables I-3-4.

²³⁵ CR/PR at Table I-4.

²³⁶ CR/PR at Table III-9. The domestic industry's exports of LEU sold via EUP transactions were negligible. Id.

²³⁷ CR/PR at Table III-9. The domestic industry exported *** kg of LEU via EUP transactions over the POR, *** . Id.

²³⁸ CR/PR at Table III-9.

**** per kg in 2002 to **** per kg in 2006) and an increase in the volume of such shipments.²³⁹ By contrast, the unit value of USEC's shipments of LEU via SWU transactions declined from **** per SWU in 2002 to **** per SWU in 2006, and the volume of such shipments declined as well.²⁴⁰ Even with this slight increase in USEC's net sales value, USEC's revenues remained insufficient to cover its cost of production and sales, general, and administrative expenses, resulting in operating losses in every full year of the period examined, as well as in the first half of 2007.²⁴¹

USEC's R&D and capital expenditures with respect to its domestic operations also increased over the POR, as work progressed on the ACP.²⁴² USEC's R&D expenditures increased *** percent over the POR, from **** in 2002 to **** in 2006 and another *** percent between the interim periods, from **** in the first half of 2006 to **** in the first half of 2007.²⁴³ USEC's capital expenditures were **** in 2002, fluctuated between **** and **** over the 2003-2005 period, and then increased to **** in 2006.²⁴⁴ Capital expenditures were **** in the first half of 2006 and **** in the first half of 2007.²⁴⁵

Rather than a sign of strength, however, the substantial investments in the ACP over the POR point to the greatest source of the industry's vulnerability: the critical importance of the ACP to the health of the domestic industry.²⁴⁶ As addressed in section IV.B.2 above, USEC's gaseous diffusion enrichment plant in Paducah, Kentucky is not economically viable due to its energy intensity and generated *** operating losses over the POR. The ACP promises to reduce USEC's energy consumption by 95 percent and its cost of producing LEU by 70 percent, thereby securing USEC's viability as a LEU producer, but will cost an estimated \$2.3 billion to complete.²⁴⁷ Although USEC succeeded in raising \$775 million on the capital markets in late 2007, USEC will need to raise an additional **** in the second half of 2008 for the ACP to remain on schedule, and its ability to do so will depend in large part on investor expectations with respect to the LEU market and USEC's financial condition.²⁴⁸ Standard & Poor's ("S&P") downgraded USEC's debt from B+ to B- with a negative outlook in June 2006.²⁴⁹ Likewise, Moody's downgraded USEC's debt from B1 to B3 with a negative outlook in April 2007.²⁵⁰ The S&P and Moody's actions indicate that USEC's ability to raise capital for the ACP has become increasingly tenuous.

²³⁹ CR/PR at Tables III-9-10.

²⁴⁰ CR/PR at Tables III-9-10.

²⁴¹ CR/PR at Table III-9.

²⁴² CR at III-35; PR at III-15.

²⁴³ CR/PR at Table III-14.

²⁴⁴ CR/PR at Table III-14.

²⁴⁵ CR/PR at Table III-14.

²⁴⁶ As noted previously, USEC will account for a large majority of domestic production for the reasonably foreseeable future. Accordingly, the ACP is critical not only to the survival of USEC in the LEU market, but to the health of the overall domestic industry as well.

²⁴⁷ CR at III-3; PR at III-2; USEC Responses to Commissioner Questions at Exhibit C; USEC Prehearing Brief at 60.

²⁴⁸ See USEC Prehearing Brief at 44-45; USEC Responses to Commissioner Questions at Exhibit E. USEC has applied for loan guarantees from the DOE, but the status of this application is unknown. See USEC Prehearing Brief at 41, 45. We also note that USEC has financed the ACP from its cash flow generated by sales of both domestically produced LEU and LEU from Russia imported under the HEU Agreement. Its continued ability to generate cash flow for investment in the ACP will depend upon LEU prices in the U.S. and global markets.

²⁴⁹ USEC Prehearing Brief at 51.

²⁵⁰ USEC Prehearing Brief at 51.

Another, related source of the domestic industry's vulnerability is USEC's need to comply with its obligations under the Russian HEU Agreement and the 2002 DOE Agreement.²⁵¹ Were USEC to lose sales volume to subject imports, it would have to reduce its domestic production, or else increase its exports, in order to satisfy its commitment to purchase 5.5 million SWU worth of Russian LEU, given that nearly all the LEU that USEC imports from Russia must be sold in the U.S. market.²⁵² Reducing domestic production, however, would cause USEC to suffer increased unit costs, and consequently steeper financial losses, and would also risk breaching the 2002 DOE Agreement, which requires USEC to maintain annual LEU production of 3.5 million SWU in the United States.²⁵³ Both agreements are vital to USEC. The Russian HEU Agreement provides USEC's only current means of generating positive cash flow;²⁵⁴ the 2002 DOE Agreement is the basis for USEC's access to the U.S. centrifuge technology used in the ACP project.²⁵⁵ We therefore conclude that the domestic industry is vulnerable to material injury if the order were to be revoked.

We also find that there is some evidence that the domestic industry has benefitted from the imposition of the antidumping duty orders on LEU from France. The decline in subject import volume toward the end of the POR, resulting in part from Eurodif's apparent decision to import LEU from nonsubject countries instead of France under open source contracts, suggests that the order has had a restraining effect on subject import volume.²⁵⁶ In addition, prices on shipments of U.S.-produced LEU improved somewhat over the POR,²⁵⁷ and price indicators published by the Ux Consulting Company and TradeTech indicate that both spot and long-term contract prices for LEU increased over the POR.²⁵⁸ Consistent with these trends, 11 purchasers reported that the order has had a restraining effect on imports of LEU from France.²⁵⁹

We find that if the order on LEU from France were to be revoked, the likely significant increase in the volume of subject imports, coupled with their likely adverse price effects, would likely have a significant negative impact on the domestic industry in terms of output, sales, market share, profits, productivity, return on investments, utilization of capacity, cash flow, inventories, employment, wage growth, ability to raise capital, investment, and the industry's development and production efforts.

²⁵¹ See section IV.B.2., *supra*.

²⁵² See section IV.B.2., *supra*.

²⁵³ See section IV.B.2., *supra*.

²⁵⁴ Compare CR/PR at Table III-7 with *id.* at Table III-9. AHUG argues that USEC need not balance its obligations under the 2002 DOE Agreement and the Russian HEU Agreement, because USEC could relinquish its role as the Executive Agent under the HEU Agreement by giving 30 days notice of its intention to do so. AHUG Posthearing Brief at 14. But as AHUG itself recognizes, USEC's revenues under the Russian HEU Agreement are essential to its financial health and the financing of the ACP. AHUG Prehearing Brief at 25. Were USEC to quit the HEU Agreement, it would forego these revenues and find it no easier to satisfy the minimum production requirement of the 2002 DOE Agreement in the face of intensified subject import competition, because the new Executive Agent would be under the same obligation to purchase 5.5 million SWU of LEU from Russia for the U.S. market each year. Thus, as a practical matter, USEC is constrained from giving up its role as Executive Agent under the Russian HEU Agreement.

²⁵⁵ See section IV.B.2., *supra*.

²⁵⁶ See CR/PR at Tables I-3, E-1-2.

²⁵⁷ See CR at V-19; PR at V-8; CR/PR at Figures V-3, 5.

²⁵⁸ See CR at V-19; PR at V-8; CR/PR at Figure V-7.

²⁵⁹ See Purchasers' Questionnaire Responses of *** at Question IV-6, *** at Questions II-6, IV-9, *** at Questions II-6 and II-4.b., *** at Questions IV-1.a., IV-1.b., *** at Question IV-9, *** at Question IV-9, *** at Question II-2, *** at Question V-5, *** at Question V-5, and *** at Questions IV-1, IV-1.b.

Although the prevalence of long-term contracts might blunt the immediate financial impact of intensified subject import competition, the domestic industry would likely have to accept lower prices to secure new long-term contracts for open demand and renegotiated contracts for committed demand, and the adverse financial impact of these lower contract prices would increase with the volume of shipments made pursuant to the new and renegotiated contracts in the reasonably foreseeable future.²⁶⁰ The domestic industry would experience a more immediate adverse impact from intensified subject import competition under long-term contracts containing market-based pricing provisions, as declining spot market prices would translate directly into lower transaction prices.²⁶¹ In addition, customers would likely decline options to purchase additional volumes of LEU under existing long-term contracts with USEC in favor of purchasing greater volumes of lower-priced LEU from France.²⁶² Due to lower sales volumes and transaction prices, the domestic industry would likely suffer a significant decline in its financial performance, including reduced cash flow and profitability.

Given the likely significant decline in the domestic industry's financial performance after revocation, we also find it likely that revocation would have a significant negative effect on USEC's ability to deploy the ACP, which is critical to the health of the domestic industry. The ability to proceed with the ACP project will hinge on USEC's ability to borrow large sums of money on the capital markets -- reportedly \$*** in the second half of 2008 alone.²⁶³ Given that two rating agencies recently downgraded USEC's outstanding debt with a negative outlook, any additional declines in USEC's financial performance would likely impede its ability to raise capital to a significant degree by further undermining investor confidence in USEC's ability to service its debt load.²⁶⁴ Revocation would also make it more difficult for USEC to satisfy its obligation to produce 3.5 million SWU worth of LEU domestically under the 2002 DOE Agreement, on which its access to the U.S. centrifuge technology depends. Thus, revocation would likely imperil USEC's ability to complete the ACP and hence its survival as a LEU producer.

We disagree with the respondent interested parties' argument that the Russian HEU Agreement would insulate the domestic industry from any adverse impact from subject imports after revocation of the order.²⁶⁵ Under the statute, the focus of our likely impact analysis is the "industry," defined as "domestic producers as a [w]hole of a domestic like product."²⁶⁶ Accordingly, we have analyzed the domestic industry's vulnerability and the likely adverse impact of subject imports after revocation of the order with respect to the industry's domestic operations, excluding USEC's activities as the Executive Agent under the Russian HEU Agreement. USEC's domestic operations, and particularly its shipments of domestically produced LEU in the U.S. market, are significant relative to its shipments of LEU from Russia.²⁶⁷

²⁶⁰ See section IV.B.1., *supra*.

²⁶¹ See section IV.B.1., *supra*.

²⁶² See USEC Posthearing Brief at 8-9.

²⁶³ See USEC Responses to Commissioner Questions at Exhibit E.

²⁶⁴ We recognize that USEC has applied for financial assistance from the U.S. government, but do not rely on this fact because the status of USEC's application and its prospects for success are unknown.

²⁶⁵ See AHUG Prehearing Brief at 25-27; Eurodif Prehearing Brief at 11-12.

²⁶⁶ 19 U.S.C. 1675a(a)(4), 1677(4)(A).

²⁶⁷ In 2006, *** percent of the domestic industry's total net sales value of \$***, or \$***, was generated by sales of U.S.-produced LEU. Compare CR/PR at Table III-7 with CR/PR at Table III-9. That same year, the industry's shipments of U.S.-produced LEU accounted for *** percent of its total domestic shipments via SWU transactions and *** percent of its total domestic shipments via EUP transactions. *Id.*

In fact, as we have already noted, USEC's position as Executive Agent under the Russian HEU Agreement is a two-edged sword. On the one hand, USEC's sales of LEU from Russia under the Agreement have been profitable, helping to finance the ACP and compensate for USEC's losses on sales of U.S.-produced LEU.²⁶⁸ On the other hand, USEC's obligation under the Agreement to purchase 5.5 million SWU of LEU from Russia each year has forced it to scale back its domestic operations, with the closure of its enrichment plant in Portsmouth, Ohio. This obligation would also make it more difficult for USEC to maintain domestic production of 3.5 million SWU per year after revocation of the order, as required for continued access to the U.S. centrifuge technology under the 2002 DOE Agreement.²⁶⁹

Nor would USEC's significant exports of domestically produced LEU significantly mitigate the adverse impact of subject imports on the domestic industry after revocation, as the respondent interested parties contend.²⁷⁰ U.S. shipments of domestically produced LEU were significant relative to its exports of domestically produced LEU throughout the POR.²⁷¹ Thus, the industry's exports, while significant, would not shield it from the likely adverse impact of subject imports after revocation.²⁷²

Finally, we find that the significant presence of nonsubject imports in the U.S. market would not mitigate the likely adverse impact of subject imports on USEC after revocation.²⁷³ Most competition for open demand in the U.S. market will be between USEC and Eurodif in the reasonably foreseeable future, because nonsubject foreign producer Urenco reportedly has no spare capacity with which it could increase exports to the United States until 2010,²⁷⁴ NEF has already committed 90 percent of its projected output through 2019,²⁷⁵ and nonsubject imports from Russia are restrained by both the HEU Agreement and a suspension agreement.²⁷⁶ There are no other significant sources of nonsubject imports in the U.S. market.²⁷⁷ Consequently, nonsubject imports would not mitigate the likely significant adverse impact of subject imports on USEC after revocation of the order.

²⁶⁸ See CR/PR at Table III-7.

²⁶⁹ See footnote 253, *supra*.

²⁷⁰ See AHUG Prehearing Brief at 26-27; Eurodif Prehearing Brief at 12.

²⁷¹ With respect to shipments of U.S.-produced LEU pursuant to SWU transactions, the percentage of total shipments comprised of domestic shipments was *** percent in 2002, *** percent in 2003, *** percent in 2004, *** percent in 2005, *** percent in 2006, *** percent in the first half of 2006, and *** percent in the first half of 2007. CR/PR at Table III-9. With respect to shipments of U.S.-produced LEU pursuant to EUP transactions, the percentage of total shipments comprised of domestic shipments was *** percent in 2002, *** percent in 2003, *** percent in 2004, *** percent in 2005, *** percent in 2006, and *** percent in the first half of 2006. *Id.* USEC made *** shipments of LEU pursuant to EUP transactions in the first half of 2007. *Id.*

²⁷² Our finding in this regard is consistent with our finding in the five-year review of the suspension agreement on uranium from Russia, including LEU from Russia, that "enough of USEC's production has been directed to the U.S. market to enable us to conclude that subject imports are likely to have a significant negative impact on the company's U.S. production operations." Uranium from Russia at 33.

²⁷³ Eurodif argues that nonsubject foreign producers, not USEC's domestic operations, would be the primary beneficiaries were the order to be maintained. Eurodif Prehearing Brief at 12. But as we have found, USEC's shipments of domestically produced LEU in the U.S. market are significant enough that USEC would likely be adversely impacted by subject imports if the order were to be revoked.

²⁷⁴ See Hearing Transcript at 70-71 (Van Namen), 213 (Church); CR at II-10 n.30. NAC data indicates that Urenco possesses ***, whereas Eurodif possesses ***. USEC Prehearing Brief at 84.

²⁷⁵ CR at III-4-5; PR at III-3. Although NEF is expected to commence production in mid-2009, it is not projected to reach full capacity until 2013. *Id.*

²⁷⁶ CR at II-10; PR at II-6.

²⁷⁷ CR at II-10; PR at II-6.

We conclude that, if the antidumping duty order on LEU from France were revoked, subject imports from France would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on LEU from France would likely lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On January 3, 2007, the Commission gave notice, pursuant to section 751(c) of the Tariff Act of 1930 (the Act), that it had instituted reviews to determine whether revocation of the antidumping and countervailing duty orders on low enriched uranium (“LEU”) from France would likely lead to the continuation or recurrence of material injury to a domestic industry within a reasonably foreseeable time. Effective May 8, 2007, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act. On May 29, 2007, the Department of Commerce (“Commerce”) revoked the countervailing duty order and the Commission terminated its review of that order on June 7, 2007.¹ Information relating to the background and schedule of the review is provided in the following tabulation.²

Effective date	Action
February 13, 2002	Commerce’s antidumping and countervailing duty orders (67 FR 6680 and 6689)
June 8, 2006	Commerce’s revocation of countervailing duty order (72 FR 29301, May 25, 2007)
January 3, 2007	Commission’s institution of reviews (72 FR 144)
April 9, 2007	Commission’s decision to conduct full reviews (72 FR 27151, May 14, 2007)
May 10, 2007	Commerce’s final results of expedited reviews (72 FR 26593 and 26603)
May 25, 2007	Commission’s scheduling of the reviews (72 FR 30393, May 31, 2007)
May 25, 2007	Commission’s termination of countervailing duty review (72 FR 31606, June 7, 2007)
October 11, 2007	Commission’s hearing ¹
November 29, 2007	Commission’s vote
December 13, 2007	Commission’s determination transmitted to Commerce

¹ App. B contains a list of witnesses appearing at the hearing.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation “would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury.”

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

¹ *Low Enriched Uranium from France: Notice of Amended Final Negative Determination Pursuant to Final Court Decision, Rescission of Administrative Review, and Revocation of the Countervailing Duty Order*, 72 FR 29301, May 25, 2007; *Low Enriched Uranium from France: Termination of Five-year Review*, 72 FR 31606. A discussion of the Court proceedings is presented in *The Original Investigations* section of this part of the report.

² The Commission’s notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy appear in app. A and may also be found at the Commission’s web site (internet address www.usitc.gov). Commissioners’ votes on whether to conduct expedited or full reviews may also be found at the web site.

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and

(D) in an antidumping proceeding . . . , (Commerce's findings) regarding duty absorption

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) 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.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise 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.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) 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.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement.” Information obtained during the course of the review that relates to the above factors is presented throughout this report.

SUMMARY DATA

A summary of data collected in the review is presented in appendix C.³ U.S. industry data are based on the questionnaire response of USEC which accounted for all U.S. production of LEU during 2006. U.S. import data are based on official statistics of the Department of Commerce.^{4 5} Responses by

³ Tables C-1 and C-2 presents both SWU and EUP data. Table C-3 presents only EUP data.

⁴ The sole importer of subject merchandise, Eurodif/Areva, provided three separate submissions in response to the Commission's U.S. importer and foreign producer questionnaires: August 3, 2007 (initial responses), October 17, 2007 (first supplemental response pursuant to direct requests from Commissioners), and October 23, 2007 (second supplemental response pursuant to staff requests for clarifications).

An extremely limited response was received on August 3, 2007. Areva provided trade data regarding EUP transactions only, supplied no usable price data, and provided very limited useable narrative information with most responses noting that Eurodif does not import or sell LEU in the United States. Areva stated that in light of the decision of CAFC and the CIT, “SWU transactions are not subject to the antidumping law,” and that the proper scope considered by the Commission should exclude LEU imported pursuant to SWU transactions. Weil, Gotshal & Manges submission of August 28, 2007, p. 2.

Following further requests by Commission staff for additional information (see Karl von Schrilz telephone interview with Stuart Rosen of Weil, Gotshal and Manges, August 22, 2007), counsel for Eurodif/Areva reported that “{b}ecause it is clear that under the Eurodif decisions SWU transactions are irrelevant to the Commission's determination, Eurodif has indicated that it will not provide information regarding the same.” Weil, Gotshal & Manges submission of August 28, 2007, p. 3.

In response to direct requests by Chairman Pearson and Vice Chairman Aranoff for complete questionnaire responses (hearing transcript, pp. 173-174 and pp. 200-201), Eurodif/Areva stated that it would “be more than happy to complete that information so that you can see it right even on SWU transactions.” Hearing transcription pp. 173-174 and 200-201(Carbonell and Rosen).

Following these requests, Areva provided supplemental U.S. importer and foreign producer questionnaire responses on October 17, 2007. In the first supplemental U.S. importer questionnaire response, Areva supplied additional trade data pertaining to SWU contracts, but it was limited to the quantity of SWUs and the percentage of sales represented by sales of LEU. While Areva provided no useable price data in its supplemental response, it did include copies of the actual SWU contracts of all imports of SWUs from France during the period of review. In addition, Areva supplied extremely limited narrative information on trade, pricing and market factors.

(continued...)

the U.S. producer of LEU to a series of questions concerning the significance of the existing antidumping duty order and the likely effects of revocation are presented in appendix D.

Table I-1 presents a summary of data from the original investigations and from this review; and figure I-1 and figure I-2 show U.S. imports of LEU since 1998 in Separative Work Units (“SWUs”) and kilograms of uranium, respectively.⁶

⁴ (...continued)

Following a request from staff for further clarification of its questionnaire responses, Areva submitted second supplemental questionnaire responses on October 23, 2007, that continued to be deficient. Specifically, while Areva supplied limited useable price data, and more responses for the pricing and market factors section, these responses were still incomplete; some responses continued to refer to the attachment of individual contracts without answering the question, and other responses stated that Areva does not import LEU or otherwise did not contain any useable information. In several of the responses, Areva changed trade and pricing data that had previously been reported. Areva did provide additional trade data pertaining to SWU contracts, completing all requested trade data except inventory in kgs of enriched U, explaining that Eurodif does not record quantities in terms of kg of enriched uranium.

⁵ Because of the late-arriving questionnaire responses from Eurodif/Areva, the Commission provided parties with an opportunity to submit supplemental posthearing briefs to address the late-arriving information. On November 2, 2007, the Commission received supplemental posthearing briefs from USEC and Eurodif/Areva.

USEC contends in its supplemental post hearing brief, that Areva has not provided complete responses to the foreign producer’s and importer’s questionnaires, and that the omissions render Areva’s questionnaire responses unreliable and unusable. As a result, petitioner argues that the Commission has no choice but to apply adverse inferences. USEC asserts that if the Commission does consider any data from Areva’s questionnaire responses, the Commission should place particular emphasis on the evidence of *** by Areva. In addition, USEC argues that in several of the contracts Areva offers *** that provide ***. USEC contends that these***, as well as the Areva’s refusal to supply information on natural uranium, which it is capable of also selling as an integrated provider and source for one-stop shopping, constitute evidence that Areva has failed to provide adequate factual basis for the Commission conclude that Areva’s imports are pursuant to contracts that meet the terms of exclusion under Eurodif.

USEC also argues that given the *** percent increase in Areva LEU inventories over the period of review, sales of LEU produced by Urenco, and the lack of information to substantiate Areva’s assertion that demand in the United States and worldwide will grow significantly, the Commission should conclude that material injury would occur should the antidumping order be revoked.

In its supplemental posthearing brief, Eurodif/Areva once again argues that the Commission should, in adherence to the holding of CAFC, treat LEU imported to fulfill SWU transactions as nonsubject merchandise, and that Eurodif/Areva has not, nor has any intention of becoming, engaged in the sale of subject merchandise. Moreover, Eurodif/Areva argues that all of its contracts involving LEU during the period of review meet the SWU transaction exclusion requirements noted in Commerce’s remand redetermination. Eurodif/Areva contends that, despite its assertion that LEU pursuant to SWU transactions involve nonsubject merchandise, it has provided full and complete information pertaining to both EUP and SWU transactions in its questionnaire responses.

⁶ SWUs are a standard of measure of effort or service employed in the uranium enrichment.

Table I-1
LEU: Summary data from the original investigations and current review, 1998-2001 and 2002-06

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

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. consumption quantity: Amount	***	***	***	(¹)	***	***	***	***	***
Producers' share ²	***	***	***	(¹)	***	***	***	***	***
Importer's share: ²									
France (subject)	***	***	***	(¹)	***	***	***	***	***
Russia	***	***	***	(¹)	***	***	***	***	***
All other sources	***	***	***	(¹)	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	(¹)	***	***	***	***	***
Total imports	***	***	***	(¹)	***	***	***	***	***
U.S. consumption value: Amount	***	***	***	(¹)	***	***	***	***	***
Producers' share ²	***	***	***	(¹)	***	***	***	***	***
Importer's share: ²					***	***	***	***	
France (subject)	***	***	***	(¹)	***	***	***	***	***
Russia	***	***	***	(¹)	***	***	***	***	***
All other sources	***	***	***	(¹)	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	(¹)	***	***	***	***	***
Total imports	***	***	***	(¹)	***	***	***	***	***
U.S. imports from ³ -- France (subject):									
Quantity	***	***	***	(¹)	1,431	4,004	2,109	2,223	982
Value	***	***	***	(¹)	250,357	555,019	346,789	456,198	274,491
Unit value	***	***	***	(¹)	\$174.97	\$138.62	\$164.42	\$205.21	\$279.65
Russia:									
Quantity	***	***	***	(¹)	3,830	4,706	4,107	3,778	3,843
Value	***	***	***	(¹)	762,181	911,943	825,843	827,334	841,074
Unit value	***	***	***	(¹)	\$199.02	\$193.80	\$201.09	\$218.97	\$218.88
All other sources:									
Quantity	***	***	***	(¹)	3,485	5,618	5,508	3,680	6,063
Value	***	***	***	(¹)	596,838	871,972	796,923	843,462	1,662,581
Unit value	***	***	***	(¹)	\$171.28	\$155.21	\$144.69	\$229.23	\$274.22

Table continued on next page.

Table I-1--continued

LEU: Summary data from the original investigations and current review, 1998-2001 and 2002-06

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

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. imports from-- Subtotal (nonsubject):									
Quantity	***	***	***	(¹)	7,314	10,324	9,615	7,458	9,906
Value	***	***	***	(¹)	1,359,019	1,783,915	1,622,766	1,670,797	2,503,655
Unit value	***	***	***	(¹)	\$185.80	\$172.80	\$168.78	\$224.03	\$252.75
All sources:									
Quantity	***	***	***	(¹)	8,745	14,328	11,724	9,681	10,887
Value	***	***	***	(¹)	1,609,376	2,338,934	1,969,555	2,126,995	2,778,147
Unit value	***	***	***	(¹)	\$184.03	\$163.25	\$167.99	\$219.71	\$255.18
U.S. producer ² -- Capacity quantity	***	***	***	(¹)	***	***	***	***	***
Production quantity	***	***	***	(¹)	***	***	***	***	***
Capacity utilization ²	***	***	***	(¹)	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	(¹)	***	***	***	***	***
Value	***	***	***	(¹)	***	***	***	***	***
Unit value	***	***	***	(¹)	***	***	***	***	***
Ending inventory quantity	***	***	***	(¹)	***	***	***	***	***
Inventories/total shipments ²	***	***	***	(¹)	***	***	***	***	***
Production workers	***	***	***	(¹)	***	***	***	***	***
Hours worked (1,000 hours)	***	***	***	(¹)	***	***	***	***	***
Wages paid (1,000 dollars)	***	***	***	(¹)	***	***	***	***	***
Hourly wages	***	***	***	(¹)	***	***	***	***	***
Productivity (SWUs produced per hour)	***	***	***	(¹)	***	***	***	***	***
Unit labor costs	***	***	***	(¹)	***	***	***	***	***

Table continued on next page.

Table I-1--continued

LEU: Summary data from the original investigations and current review, 1998-2001 and 2002-06

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

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. producer-- Net sales: Quantity									
Enrichment (1,000 SWUs)	(¹)	***	***	***	***	***	***	***	***
EUP (1,000 kgs of U)	(¹)	***	***	***	***	***	***	***	***
Value									
Enrichment	(¹)	***	***	***	***	***	***	***	***
EUP	(¹)	***	***	***	***	***	***	***	***
Uranium	(¹)	***	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***	***
Cost of goods sold	(¹)	***	***	***	***	***	***	***	***
Gross profit or (loss)	(¹)	***	***	***	***	***	***	***	***
Operating income or (loss)	(¹)	***	***	***	***	***	***	***	***
Unit enrichment sales (per SWU)	(¹)	***	***	***	***	***	***	***	***
Unit EUP sales (per kgU)	(¹)	***	***	***	***	***	***	***	***
Cost of goods sold/sales ²	(¹)	***	***	***	***	***	***	***	***
Operating income or (loss)/sales ²	(¹)	***	***	***	***	***	***	***	***

¹ Not applicable/available.

² In percent.

³ Import quantities are reported in kilograms ("kgs") in official Commerce statistics, used for 2002-06. The conversion factor to SWUs is kg*0.67618*6. USEC, *What is a SWU?* at http://www.usec.com/v2001_02/HTML/Aboutusec_swu.asp, retrieved on September 10, 2007.

Note 1.--Because of rounding, figures may not add to the totals shown.

Note 2.--The U.S. production decline in the current review compared to the original investigation was partially due to USEC reporting the rollforward SWU quantities in the original investigation, while in the current review reporting the quantities of SWU related to completed LEU for the specified period.

Source: Data for 1998-2000 compiled from the confidential staff report of the original investigations (INV-Z-004, January 4, 2002, Table C-1), and data for 2002-06 compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Figure I-1
LEU: U.S. imports, SWU, 1998–2006

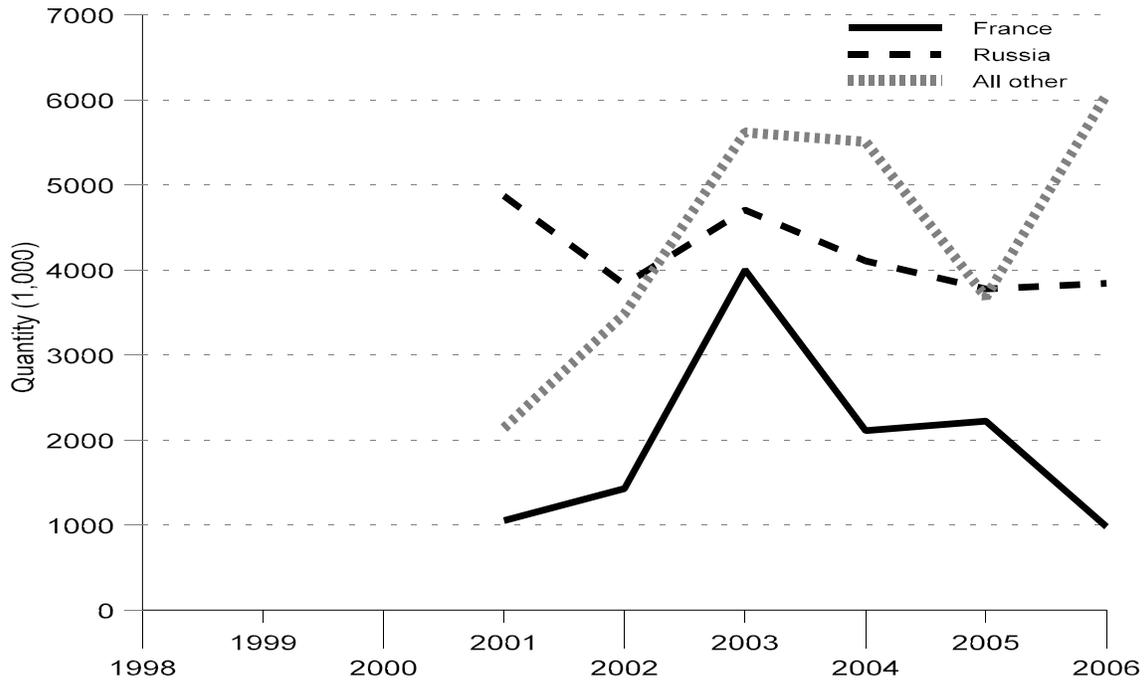
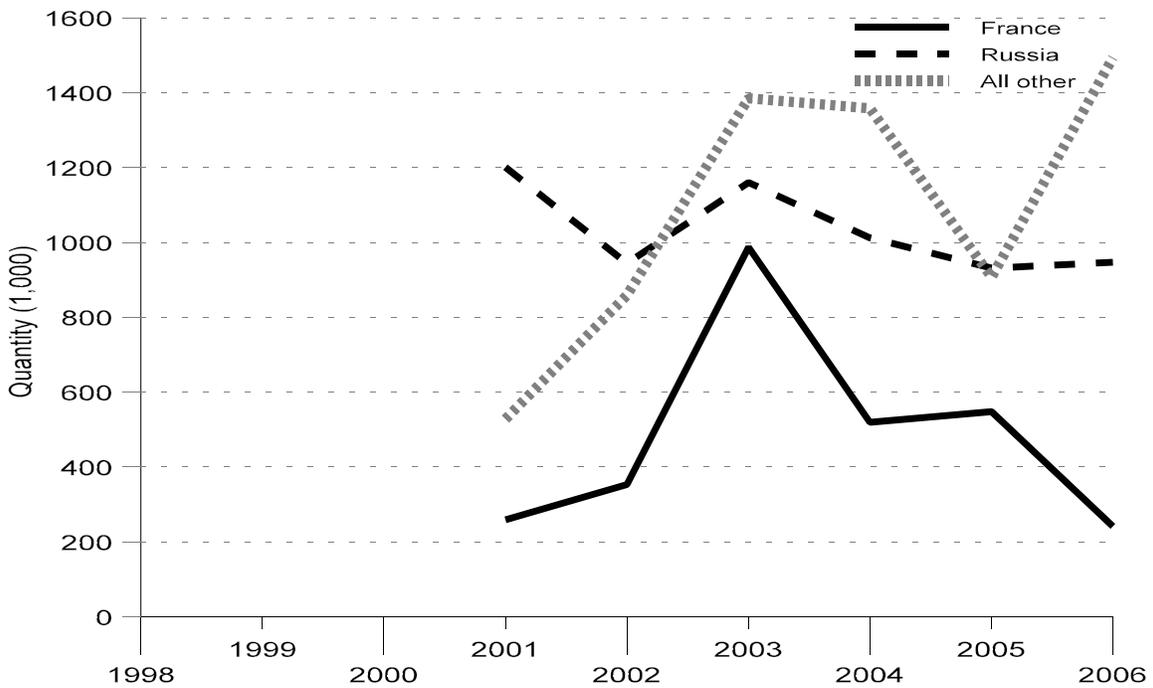


Figure I-2
LEU: U.S. imports, kilograms of U, 1998–2006



Source for Figures I-1 and I-2: Confidential staff report INV-Z-004, January 4, 2002, p. IV-4 for 1998-2000 (which were compiled from data submitted in response to Commission questionnaires), and official Commerce statistics for 2001-06.

THE ORIGINAL INVESTIGATIONS

On December 7, 2000, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of dumped and subsidized imports of LEU from France, Germany, the Netherlands, and the United Kingdom.⁷ On December 21, 2001, Commerce published its final negative determination in the antidumping duty investigations of LEU from Germany, the Netherlands, and the United Kingdom.⁸ On the same day, Commerce published its final affirmative countervailing determinations on LEU from France, Germany, the Netherlands, and the United Kingdom. The countervailing duty orders on LEU from Germany, the Netherlands, and the United Kingdom were revoked by Commerce on July 7, 2006, based on a finding that all the programs providing countervailing subsidies had been abolished.⁹

On December 21, 2001, Commerce published its final LTFV determination in the investigation of LEU from France, finding dumping margins of 19.57 percent for Eurodif/Areva,¹⁰ and 19.57 percent for “All Others.”¹¹ On February 13, 2002, Commerce amended its final determinations and the antidumping duty order on LEU from France, revising the dumping margin for Eurodif/Areva and “All Others” as follows:¹²

Exporter/manufacturer	Weighted-average dumping margin	Net countervailable subsidy rate
	<i>Percent ad valorem</i>	
Cogema/Euordif	19.95	12.15
All others	19.95	12.15

The Commission made its final affirmative injury determinations on February 4, 2002, and Commerce issued an antidumping duty order with respect to imports from France, and countervailing duty orders with respect to imports from France, Germany, the Netherlands, and the United Kingdom, on February 6, 2002.

The Commission’s injury determinations were appealed by Eurodif, the sole enricher of LEU in France, and by Urenco, the sole enricher in Germany, the Netherlands, and the United Kingdom. Those appeals have been stayed pending the outcome of the litigation challenging Commerce’s final determinations in the LEU investigations.

⁷ The petition was filed by USEC Inc., and its wholly owned subsidiary United States Enrichment Corp.

⁸ *Notice of Final Determination of Sales at Less Than Fair Value: Low Enriched Uranium from the United Kingdom, Germany, and the Netherlands*, 66 FR 65886, December 21, 2001.

⁹ *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.

¹⁰ Eurodif S.A. and its affiliate Areva NC (formerly Compagnie Generale Des Matieres Nucleaires (COGEMA)).

¹¹ *Notice of Final Determination of Sales at Less Than Fair Value: Low Enriched Uranium from France*, 66 FR 65877, December 21, 2001.

¹² 67 FR 6680, February 13, 2002.

On May 29, 2007, Commerce issued an amended final negative determination, revoking the countervailing duty order for LEU from France.¹³ The Commission, on June 7, 2007, terminated the five-year review concerning the countervailing duty order on imports of LEU from France.¹⁴

In the Commerce antidumping litigation, the U.S. Court of International Trade (“CIT”) and the Court of Appeals for the Federal Circuit (“CAFC”) held that “the SWU contracts in this case were contracts for services and not for goods or merchandise.”¹⁵ The CAFC explained that “the sale of goods (or ‘merchandise’) is covered by the antidumping duty statute” and that “[t]he provision of services, however, is not covered by that statute.”¹⁶ The CAFC’s holding was based on two considerations. First, the Court found that because “ownership of either the unenriched uranium or the LEU is not meant to be vested in the enricher during the relevant time periods that the uranium is being enriched . . . the ‘transfer of ownership’ required for a sale under *** is not present here.”¹⁷ The second basis for the CAFC’s holding was its decision in a case dealing with SWU contracts and the Contract Disputes Act (Florida Power & Light Co. v. United States, 307 F. 3d 1364 (Fed. Cir. 2002)), in which it agreed with the government’s argument that a SWU contract for the enrichment of uranium is a service contract.¹⁸ Commerce subsequently issued a remand determination that removed SWU transaction from its margin calculations, but not from the scope of the antidumping duty order.¹⁹

Eurodif challenged Commerce’s remand determination on the grounds that Commerce should have excluded SWU transactions from the scope of the order, and the CIT agreed, remanding to Commerce with instructions to amend the scope accordingly.²⁰ In response, Commerce issued a second remand determination indicating that the scope of the order would be amended to exclude SWU transactions “{u}pon final and conclusive court decisions.”²¹ The CIT affirmed Commerce’s second remand determination.²²

Commerce and USEC then appealed the CIT’s decision to the CAFC on the grounds that the CIT erred in ordering Commerce to amend the scope of the order to exclude SWU transactions.²³ The CAFC held that the issue raised by appellants was not ripe for adjudication.²⁴

¹³ *Low Enriched Uranium from France: Notice of Amended Final Negative Determination Pursuant to Final Court Decision, Rescission of Administrative Review, and Revocation of the Countervailing Duty Order*, 72 FR 29301, May 25, 2007.

¹⁴ *Low Enriched Uranium from France: Termination of Five-year Review*, 72 FR 31606.

¹⁵ Eurodif S.A. v. United States, 411 F.3d 1355, 1366 (Fed. Cir. 2005) (“Eurodif I”), *aff’d on reh’g*, Eurodif S.A. v. United States, 423 F. 3d 1275 (Fed. Cir. 2005).

¹⁶ Eurodif I, 411F. 3d at 1361.

¹⁷ *Ibid.* at 1362.

¹⁸ *Ibid.*

¹⁹ *Low Enriched Uranium from France*, Final Results of Redetermination Pursuant to Court Remand, Eurodif S.A. v. United States, Consol. Ct. No. 02-00219, Slip. Op. 06-2 (Ct. Int’l Trade January 5, 2006), dated March 3, 2006.

²⁰ Eurodif S.A. v. United States, 431 F. Supp. 2d 1351, 1355 (Ct. Int’l Trade. 2006).

²¹ *Low Enriched Uranium from France*, Final Results of Redetermination Pursuant to Court Remand, Eurodif S.A. v. United States, Consol. Ct. No. 02-00219, Slip. Op. 06-75 (Ct. Int’l Trade May 18, 2006), dated June 19, 2006.

²² Eurodif S.A. v. United States, 442 F. Supp. 2d 1367 (Ct. Int’l Trade. 2006).

²³ *See Eurodif S.A. v. United States*, No. 2007-1005, -1006, slip. op. at 4 (Fed. Cir. Sept. 21, 2007).

²⁴ Eurodif, No. 2007-1005, -1006, slip. op. at 4 (Fed. Cir. Sept. 21, 2007).

COMMERCE'S RESULTS OF EXPEDITED REVIEW

On May 3, 2007, Commerce found that revocation of the antidumping duty order on LEU from France would likely lead to continuation or recurrence of dumping as follows:²⁵

Exporter/manufacturer	Weighted-average margin (<i>percent ad valorem</i>)
Eurodif/Areva	19.95
All others	19.95

COMMERCE'S ADMINISTRATIVE REVIEWS

Commerce has conducted three administrative reviews of the antidumping duty order on LEU from France as shown in the following tabulation:

Period of review	Date results published	Margin (<i>percent ad valorem</i>)
07/13/01-01/31/03	September 29, 2004 (69 FR 58128)	4.56
02/1/03 - 01/31/04	October 21, 2005 (70 FR 61253)	9.75
02/1/04 - 01/31/05	September 5, 2006 (71 FR 52318)	14.60

CONTINUED DUMPING AND SUBSIDY OFFSET ACT

During the period of review, no antidumping duties on imports of LEU from France were distributed under the Continued Dumping and Subsidy Offset Act of 2000 ("CDSOA").²⁶

²⁵ *Low Enriched Uranium from France: Final Results of Expedited Sunset Review of the Antidumping Duty Order*, 72 FR 26593, May 10, 2007. Commerce's notices are presented in app. A.

²⁶ During the period of investigation, USEC received CDSOA distributions for the previously existing countervailing duty orders on imports of LEU from Germany, Netherlands, and the United Kingdom as follows: \$4.4 million in Federal fiscal year (October-September) 2004 (\$2.0 million for imports of LEU from the United Kingdom, \$1.6 million for imports from Germany, and \$815,000 for imports from the Netherlands), and \$997,000 in fiscal year 2005 (\$972,000 for imports of LEU from the United Kingdom and \$25,000 for imports from Germany). No countervailing duties on imports of LEU from France were distributed under CDSOA during the period of investigation. U.S. Customs and Border Protection's *CDSOA Annual Reports*, found at www.cbp.gov/xp/cogv/import/add_cvd, retrieved on August 28, 2007.

THE SUBJECT PRODUCT

The imported LEU subject to the antidumping order under review, as defined by Commerce, is:

“enriched uranium hexafluoride (UF_6) with a U^{235} product assay of less than 20 percent that has not been converted into another chemical form, such as UO_2 , or fabricated into nuclear fuel assemblies, regardless of the means by which the LEU is produced (including LEU produced through the downblending of highly enriched uranium).

Certain merchandise is outside the scope of this order. Specifically, this order does not cover enriched uranium hexafluoride with a U^{235} assay of 20 percent or greater, also known as highly enriched uranium. In addition, fabricated LEU is not covered by the scope of this order. For purposes of this order, fabricated uranium is defined as enriched uranium dioxide (UO_2), whether or not contained in nuclear fuel rods or assemblies. Natural uranium concentrates (U_3O_8) with a U^{235} concentration of no greater than 0.711 percent and natural uranium concentrates converted into uranium hexafluoride with a U^{235} concentration of no greater than 0.711 percent are not covered by the scope of this order.

Also excluded from this order is LEU owned by a foreign utility end-user and imported into the United States by or for such end-user solely for purposes of conversion by a U.S. fabricator into uranium dioxide (UO_2) and/or fabrication into fuel assemblies so long as the uranium dioxide and/or fuel assemblies deemed to incorporate such imported LEU (i) remain in the possession and control of the U.S. fabricator, the foreign end-user, or their designed transporter(s) while in U.S. customs territory, and (ii) are reexported within eighteen (18) months of entry of the LEU for consumption by the end-user in a nuclear reactor outside the United States. Such entries must be accompanied by the certifications of the importer and end-user.”²⁷

Tariff Treatment

Table I-2 presents the tariff rate for LEU. The subject merchandise is imported under the Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting number 2844.20.0020. Subject merchandise may also be reported under statistical reporting numbers 2844.20.0030, 2844.20.0050, and subheading 2844.40.00.²⁸

²⁷ *Low Enriched Uranium From France: Final Results of Expedited Sunset Review of the Antidumping Duty Order*, 72 FR 26593, May 10, 2007.

²⁸ Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise is dispositive.

Table I-2
LEU: Tariff rates, 2007

HTS subheading	Article description	General ¹	Special ²	Column 2 ³
		Rates (percent <i>ad valorem</i>)		
2844	Radioactive chemical elements and radioactive isotopes (including the fissile or fertile chemical elements and isotopes) and their compounds; mixtures and residues containing these products:			
2844.20.00	Uranium enriched in U235 and its compounds; plutonium and its compounds; alloys, dispersions (including cermet), ceramic products and mixtures containing uranium enriched in U235, plutonium or compounds of these products:			
	Uranium compounds:			
2844.20.0020	Fluorides	Free	(4)	Free
2844.20.0030	Other	Free	(4)	Free
2844.20.0050	Other	Free	(4)	Free
2844.40.00	Radioactive elements and isotopes and compounds other than those of subheadings 2844.10, 2844.20, and 2844.30; alloys, dispersions(including cermet), ceramic products and mixtures containing these elements, isotopes or compounds; radioactive residues.	Free	(4)	Free
¹ Normal trade relations, formerly know as most-favored-nation duty. 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 Not applicable.				
Source: 2007 Harmonized Tariff Schedule of the United States.				

THE DOMESTIC LIKE PRODUCT

In its original determinations, the Commission found that there was one domestic like product consisting of all LEU corresponding to Commerce’s scope.²⁹ In response to a question soliciting comments regarding the appropriate domestic like product in the Commission’s notice of institution of this review, USEC agreed with the definition of the domestic like product set forth in the original determination. The respondent interested parties argued that the definition of the domestic like product should be revised to reflect Commerce’s remand determination to exclude “LEU produced and imported pursuant to a SWU transaction.”³⁰

²⁹ *LEU from France, Germany, the Netherlands, and the United Kingdom, Inv. Nos. 701-TA-409-412 (Final) and 731-TA-909 (Final)*, USITC Publication 3486, February 2002, p. 5.

³⁰ *LEU from France: Final Results of Redetermination Pursuant to Second Court Remand in Eurodif, S.A. v. United States*, filed in CIT Consol. Ct. No. 02-00219, June 16, 2006. USEC and Commerce appealed the CIT’s affirmation of Commerce’s remand determination to the CAFC, and the CAFC has held that amendment of the scope (continued...)

Physical Characteristics and Uses

The subject product, LEU, is one of four intermediate products containing elemental uranium that are used to produce fuel for electric power generation in nuclear reactors. The four products include, in order of processing: (1) natural uranium concentrate or concentrated U_3O_8 (generally referred to as “concentrate” or “yellowcake”); (2) natural UF_6 ; (3) the subject product (also known as enriched UF_6 , EUP, or LEU-HF); and (4) enriched uranium oxide or enriched UO_2 (also known as LEU-DO). Each is successively consumed in the manufacture of the other in the production of the fuel. A discussion of elemental uranium, the fuel production process, and LEU in particular follows.

Elemental Uranium

LEU and the other three basic forms of uranium are manufactured products consisting of elemental uranium in combination with other elements. Uranium consists of three principal isotopes, U^{238} , U^{235} , and U^{234} , which constitute 99.285 percent, 0.71 percent, and 0.005 percent, respectively, of the element’s weight in its natural elemental state. The properties of its U^{235} isotope are particularly important for uranium’s use as a fuel to generate electricity in nuclear power plants.

Processing Uranium into Fuel

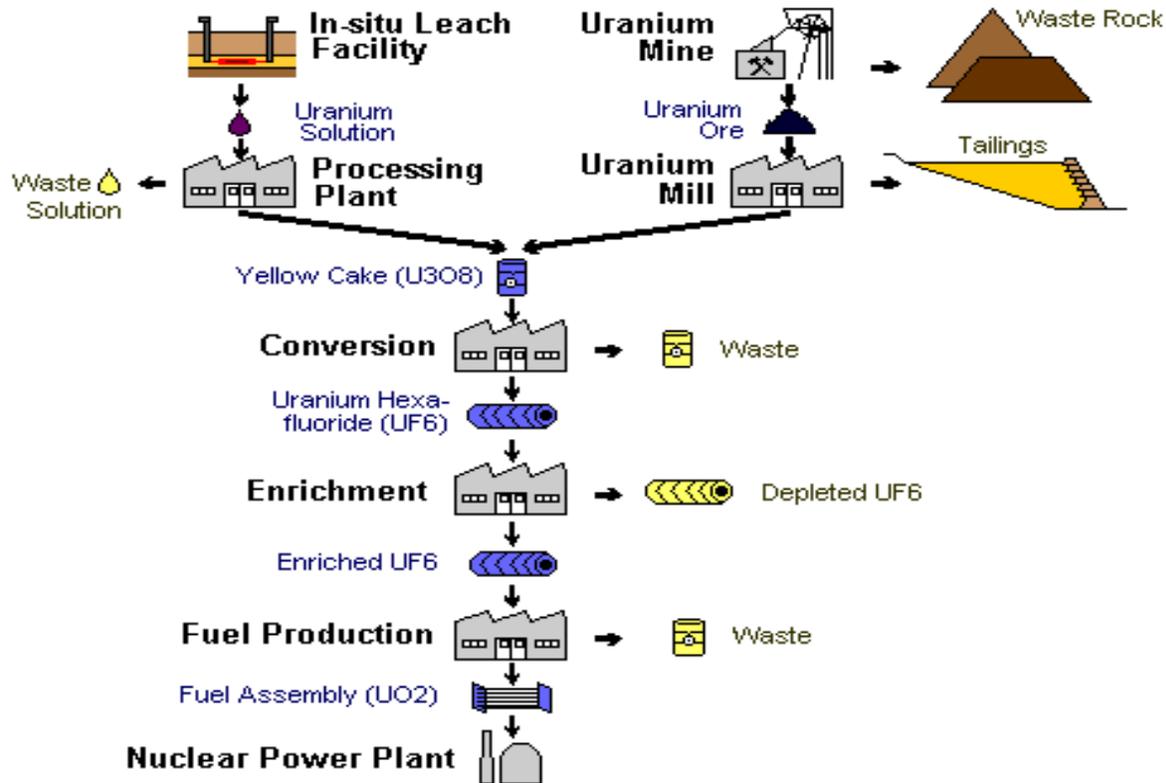
Uranium is generally found throughout the world in chemical combination with oxygen, embedded in various concentrations in rock formations, known as uranium ores. To bring it to usable form, four successive and distinct processes by four types of independent companies are required, each resulting in a different uranium product and each successive product being closer to the product required for actual use (the various steps in converting uranium ore to nuclear fuel suitable for use in light water reactors is shown in figure I-3). The processes and products are as follows: (1) mining and concentrating the uranium into the chemical form U_3O_8 (three atoms of uranium combined with eight atoms of oxygen); (2) converting the concentrate into natural UF_6 ; (3) enriching the natural UF_6 to LEU by increasing the proportion of U^{235} in its constituent uranium; and (4) fabricating the LEU into fuel rods and fuel rod assemblies that can be incorporated in a nuclear reactor for final use.³¹

³⁰ (...continued)

of the order was not ripe for adjudication. To date, Commerce has not adopted the amended scope of its remand determination. *Eurodif*, No. 2007-1005, -1006, slip. op. at 4 (Fed. Cir. Sept. 21, 2007).

³¹ The two commercial uranium converters in North America, Cameco and ConverDyn, deliver and hold title to uranium at USEC’s enrichment facility. Utility customers also provide uranium as part of their enrichment contracts. This is generally done by acquiring title to uranium from converters or other suppliers. Title to uranium provided by customers remains with the customer until delivery of LEU, at which time title to LEU is transferred to the customer, and USEC takes title to the uranium. USEC 2006 10-K, p. 8.

Figure I-3
Nuclear fuel production chain for light water reactors



Source: WISE, *Uranium Project Nuclear Fuel Chain Calculators*, found at <http://www.wise-uranium.org/nfp.html>, retrieved on August 15, 2007.

The latter process consists of two phases. First, the enriched UF_6 is transformed into enriched UO_2 , and then manufactured into ceramic pellets, a relatively standardized product. The second phase, which prepares the uranium for final use in power generation, encapsulates the pellets into fuel rods and assembles the rods into working units in accordance with the design specifications of individual nuclear power plants.³² As the designs of nuclear reactors differ, the product, uranium encapsulated in nuclear fuel assemblies, is no longer considered a commodity product.

The forms of uranium produced prior to encapsulation and assembly, including LEU, are made to standard specifications worldwide and are generally considered global commodities. Each form is both produced in and imported from various countries into the United States. Concentrated U_3O_8 , natural UF_6 , LEU, and enriched UO_2 have no major civilian use or marketable value other than for nuclear fuel, and the equipment and production workers used to produce them are specific to the subject product.

LEU

LEU is an intermediate product in the nuclear fuel cycle having distinct physical and/or chemical characteristics from all other forms of uranium, such as natural uranium oxide (uranium concentrate),

³² Utilities typically schedule shutdown of their reactors for refueling to coincide with the low electricity demand periods of spring and fall.

natural uranium hexafluoride, and uranium in fabricated fuel.³³ However, as previously indicated, prior to fabrication into fuel rods, LEU from one manufacturer is highly interchangeable with LEU produced by other enrichers. The domestic product and the subject merchandise are chemically and physically identical and have the same use, namely, as fuel for the production of electric power in nuclear reactors. The channels of trade for all LEU, imported and domestic, are similar and the product is sold to the same customers, i.e., to U.S. utilities for fabrication and manufacture into fuel assemblies (by fuel fabricators), which are used as fuel for nuclear reactors in the production of electricity. U.S. utilities can purchase LEU from an enricher either by purchasing the entire LEU (including the uranium component), referred to as Enriched Uranium Product (“EUP”),³⁴ or the utilities can pay only for the processing deemed to be contained in the LEU.³⁵ In the latter arrangement, known as SWU transactions, as partial compensation, the utilities provide the enricher with an equivalent quantity of natural uranium hexafluoride (UF₆). In the majority of cases, U.S. utilities procure LEU through SWU transactions.³⁶

As noted, 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.³⁷ 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. Most nuclear utilities operating in the world today require LEU fuel with a U²³⁵ concentration in this 3-5 percent range for use in generating electricity.

There are two principal methods of uranium enrichment: gaseous diffusion enrichment and gas centrifuge (“centrifuge”) enrichment.

Gaseous Diffusion

Gaseous diffusion, illustrated in figure I-4, involves the passage of UF₆ in a gaseous form through thousands of barriers or cascades (as the amount of separation of the UF₆ gas passing through one barrier is very small), 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.

The components for a single diffusion stage include a large cylindrical vessel containing the barrier called a diffuser, a gas compressor driven by an electric motor, a heat exchanger and an auxiliary system consisting of pipes and valves, interstage connections and process control system. However, the heart of a gaseous diffusion system is the barrier membrane containing holes in the order of a millionth of an inch which should be of uniform size. In addition, the barrier membrane must be porous enough to allow sufficiently high flow rates, be resistant to corrosive UF₆ gas, and be durable enough to last years.

³³ Natural uranium oxide and natural uranium hexafluoride, regardless of form, have a U²³⁵ assay of 0.711 percent, which is a lower U²³⁵ assay than LEU. Similarly, the uranium in fabricated fuel has the same U²³⁵ assay as the LEU it was made from; however, the chemical and physical properties of the two materials are different.

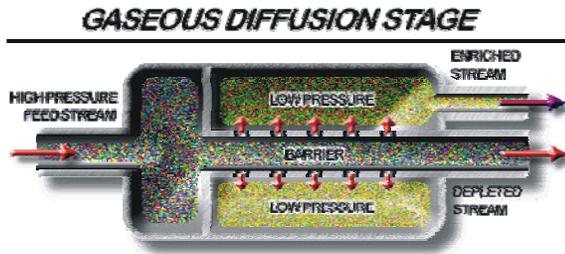
³⁴ This is called an EUP purchase.

³⁵ This is called a SWU purchase. SWUs, a measure of the amount of processing, is defined below.

³⁶ SWUs, or separative work units, are a standard of measure of effort or service employed in the uranium enrichment. 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 (the subject product) and the other depleted in the U²³⁵ isotope (referred to as depleted uranium; currently used commercially as tails).

³⁷ Most of the world’s and all of the United States’ nuclear power plants are so-called “light-water” reactors (“LWR”) and require enriched uranium for fuel; however, there are a small number of others, known as “heavy-water” reactors (“HWR”), that are capable of using natural uranium. According to the International Atomic Energy Agency (“IAEA”), there are currently 347 LWR in 27 countries and 42 HWR in 7 countries.

Figure I-4
Uranium enrichment: Gaseous diffusion method



Source: USEC, *Uranium Enrichment and the Gaseous Diffusion Process*, found at http://www.usec.com/v2001_02/HTML/Aboutusec_enrichment.asp, retrieved on August 15, 2007.

Gaseous Centrifuge

The centrifuge method of enrichment, illustrated in figure I-5, employs rapidly spinning cylinders containing UF_6 under high pressure to separate the U^{235} (which, being a lighter isotope, moves at a greater velocity in the centrifuge) from the U^{238} . The heavier U^{238} tends to move toward the outer walls of the centrifuge, whereas the lighter U^{235} tends to remain near the center.³⁸ A casing encloses the centrifuge and provides two important functions – leak tightness to preserve a vacuum and physical protection from the spinning rotor. To reduce friction, the rotor spins in a vacuum. The rotor is a thin wall right circular cylinder that spins in response to a drive motor. The suspension system holds the rotor upright within the casing. The rotation of the rotor generates the centrifugal force acting on the UF_6 gas to be enriched.

Separative performance of a cascade is related to among other things, its rotor velocity and length. As either rotor velocity or length increase so does the centrifuge's separative performance.³⁹ The centrifuges currently used by Urenco, called the TC12, have an annual performance of 40 SWU per machine. The American Centrifuge, which is longer and faster than the TC12, produces 350 SWU per machine.⁴⁰ As with gaseous diffusion, individual centrifuges are connected in series and parallel cascades to increase enrichment levels and capacity, although commercial enrichment levels can be reached in about one hundred times fewer stages in a centrifuge cascade.⁴¹

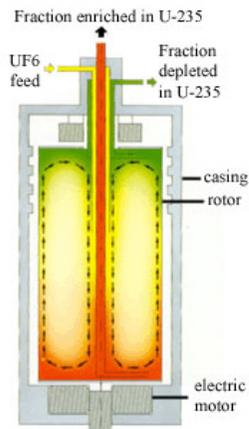
³⁸ World Nuclear Association ("WNA"), *Global Nuclear Fuel Market, 2007*, p. 81.

³⁹ According to a mathematical expression derived by Dirac, the separative power produced by an individual gas centrifuge is proportional to the length of the rotor in the centrifuge times the peripheral rotor velocity raised to the fourth power. Thus by increasing the rotor length and by increasing the rotor velocity, the separative power of the centrifuge can be significantly enhanced.

⁴⁰ USEC, "USEC updates progress on Lead Cascade, American Centrifuge Project," news release, August 1, 2007. The American Centrifuge, at more than 40 feet high, is reportedly more than three times longer than the TC12 used by Urenco. In addition, the American Centrifuge is designed to have a faster rotor speed, probably exceeding 1,000 miles per hour, achieved by increasing the tensile strength of the rotor utilizing materials which are known to have high tensile strengths such as carbon fiber or other composite materials. Nuclear Engineering International, *Back to the Future: American Centrifuge*, September 2003, pp. 37-38, and Dan Charles, "U.S. Centrifuge Work Revived in Updated Form," *The Washington Post*, April 23, 2007.

⁴¹ Nuclear Engineering International, *Back to the Future: American Centrifuge*, September 2003, pp. 37-38.

Figure I-5
Uranium enrichment: Centrifuge method



Source: Institute for Science and International Security, *What is a Gas Centrifuge*, found at http://www.exportcontrols.org/cent_diagram1.html, retrieved on August 15, 2007.

Regardless of the technology used, the enriched UF_6 that results from either process is chemically and functionally identical. However, technically and economically, the two processes differ significantly. Gas centrifuge plants use substantially less electricity than gaseous diffusion plants,⁴² though the cost benefit is partially offset by higher capital costs per unit for gas centrifuges. 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.⁴³ Both methods of LEU production come with relatively high capital costs, although producers employing the gaseous diffusion enrichment process, such as Eurodif and USEC, have lower fixed costs per unit of LEU than centrifuge producers, such as Urenco. 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 assay product, whereas the Western European-based enricher, Urenco, which uses centrifuge enrichment technology, ***.

As an illustrative example, the following table included in a report issued in 1990 provides an estimate of power usage and power cost for diffusion, centrifuge, and the related laser enrichment technologies, atomic vapor laser isotope separation (“AVLIS”) and separation of isotopes by laser excitation (“SILVA”).⁴⁴

⁴² Urenco estimates that its centrifuges use 50 kWh per SWU compared with 2,400 kWh using diffusion technology. Urenco 2006 Annual Report, p. 36.

⁴³ WNA, *Global Nuclear Fuel Market, 2007*, p. 145.

⁴⁴ Edison Electric Institute, *EI Enrichment Handbook*, 1990, pp. 8-13.

Technology	Power usage	Power cost
	(Kilowatt-hour electric per SWU)	(per SWU) ¹
Diffusion	2,400	\$60.00
Centrifuge	50	1.25
AVLIS/SILVA	100	2.50

¹ Assuming 25 mills per kilowatt-hour.

On balance, the global enrichment industry is moving toward a consensus that state-of-the-art centrifuge technology is superior to gaseous diffusion technology. Centrifuge technology is predicted to replace gaseous diffusion technology as the method of enrichment within the next ten years as illustrated in the following tabulation.⁴⁵

Supply source	2007	2017
	Share of total supply (percent)	
Diffusion	25	0
Centrifuge	65	96
HEU ex-weapons	10	4

In the United States there are currently no operating centrifuge plants, but two centrifuge plants are under construction, the American Centrifuge plant by USEC, and the National Enrichment Facility (“NEF”) by Louisiana Energy Services (“LES”). USEC expects to begin commercial operations at the American Centrifuge Plant in late 2009 and to complete the installation of 11,500 machines with a 3.8 million SWU capacity by 2012. Production at the National Enrichment Facility is expected to reach 1 million SWU in mid-2009, and the plant is expected to reach its full capacity of 3 million SWU by 2013. A more detailed discussion of these two plants is presented in *Part III: Conditions of the U.S. industry*. In addition, according to the Nuclear Regulatory Commission (“NRC”), AREVA intends to apply for a license to construct and operate a gas centrifuge facility in the United States.⁴⁶

Laser-Based Enrichment

Laser-based enrichment involves using a specific wavelength of light to excite U²³⁵ atoms in a source material, causing the desired atoms to be separated from the source material. Laser enrichment is potentially more cost effective than either gas diffusion or centrifuge technology due to its lower energy inputs, lower capital costs and lower tails assays.⁴⁷ Four main laser enrichment methods have been pursued, AVLIS, molecular laser isotope separation (“MLIS”), chemical reaction isotope selective laser

⁴⁵ WNA, *Uranium Enrichment*, found at <http://www.world-nuclear.org/info/inf28.html>, retrieved on June 26, 2007.

⁴⁶ NRC, AREVA NC Gas Centrifuge Facility found at <http://www.wise-uranium.org/epusaf.html>, retrieved on June 26, 2007.

⁴⁷ WNA, *Uranium Enrichment*, found at <http://www.world-nuclear.org/info/inf28.html>, retrieved on June 26, 2007.

activation (“CRISLA”), and separation of isotopes by laser excitement (“SILEX”). None of these is currently in commercial use, and only SILEX is presently under commercial development. Both the U.S. Department of Energy (“DOE”) and the French Atomic Energy Commission investigated AVLIS technology, and both concluded that it was not economically viable compared to enrichment technologies that are commercially available.

The only laser enrichment process that is currently being commercially pursued is SILEX. This third-generation uranium enrichment technology has several potential advantages over existing gaseous and centrifuge enrichment technologies, including lower power consumption and capital costs, relatively simple separation modules, and a modular, scalable technology.⁴⁸ In the SILEX process, the UF₆ is mixed with a carrier gas, cooled to a low temperature, and is fed to a separator system. The U²³⁵ component is selectively excited, which results in a separation of the two isotopic forms into an enriched product and a U²³⁸-rich “tails” stream, both of which are mechanically removed into a collection system. The separator system is cascaded to enrich the U²³⁵ concentration.⁴⁹ In November 1996, USEC secured the exclusive rights to evaluate and develop SILEX technology for uranium enrichment. USEC ended its agreement with Australia’s Silex Systems, Ltd. on April 30, 2003, due to the numerous technological hurdles and decided to focus on the deployment of its American Centrifuge program. Silex Systems, in May 2006, signed an exclusive agreement with GE Energy’s nuclear business to complete the process of development and commercial deployment. In October 2006, GE received the required U.S. government authorizations to proceed with the technology exchange. The startup of a test loop at GE’s nuclear energy headquarters in Wilmington, NC is expected in November 2007. GE reportedly intends to submit a license application for a full-scale enrichment facility as early as December 2007, with approval anticipated in 2009. The test loop facility would be about half-scale, and would use no more than 200 kilograms (440 pounds) of UF₆. The small quantities of enriched material produced in the test loop would be reblended with depleted tails and recycled back into the test loop, for no net enrichment.⁵⁰

Enrichment of Reprocessed Uranium and Plutonium

Another method of obtaining enriched uranium is to enrich reprocessed uranium. Countries involved in reprocessing include France, Russia, Japan, and the United Kingdom. Nuclear fuel elements, after having been used in a reactor, are discharged and cooled down for some time in a pool. Such spent nuclear fuel can then be reprocessed in order to extract the remaining uranium and the plutonium that has been generated during irradiation of the fuel in the reactor. The recovered or reprocessed uranium (RepU), can then be re-enriched to form new nuclear fuel elements useable in reactors. This process is complicated by the presence of impurities and the isotopes U²³² and U²³⁶ which necessitate shielding, and requires a higher level of U²³⁵ enrichment than ordinary LEU. Because of these impurities, reprocessed uranium which is re-enriched for fuel must be segregated from enriched fresh uranium. The presence of U²³⁶ in particular means that reprocessed uranium can be recycled only once.

Plutonium is also extracted from spent fuel and, as noted, is also obtained (in a different isotopic form) from military warheads. When this plutonium is combined with uranium dioxides to form what is referred to as mixed oxide fuel (“MOX”), the product can be “burnt” in a reactor to generate electricity. Both the United States and Russia are planning to install MOX fabrication plants.

⁴⁸ See http://www.silex.com.au/s03_about_silex/s30_1_content.html, retrieved on July 3, 2007.

⁴⁹ WNA, *Uranium Enrichment*, found at <http://www.world-nuclear.org/info/inf28.html>, retrieved on June 26, 2007. Certain elements of SILEX have been classified as secret restricted data by the U.S. Department of Energy, and are covered by a September 2000 security arrangement between the United States and Australia.

⁵⁰ *Status of the SILEX project proposed by General Electric Nuclear*, Nuclear Regulatory Commission, Policy Issue SECY-07-0031, February 9, 2007.

Although the United States has been in recent years relatively inactive in nuclear fuel reprocessing and recycling, new efforts are being made by the DOE which has the potential to revolutionize the technology. Under the Global Nuclear Energy Partnership initiative (“GNEP”) the DOE has embarked on a major effort to among other things, encourage the move from a once-through fuel cycle to a closed fuel cycle. To accomplish this, GNEP will demonstrate and deploy new technologies to recycle nuclear fuel, such as employing a recycling technology referred to as uranium extraction plus (UREX+). In addition, the GNEP also includes the developing and demonstrating of new Generation-IV nuclear power plants in the United States, such as the Advanced Burner Reactor, which could more effectively use the fuel from UREX+ recycling.⁵¹

A major goal of these efforts, with important non-proliferation benefits, is to develop a process in which the plutonium from spent fuel is not separated out (where it could potentially be used to make nuclear weapons), but rather is extracted with other transuranic elements (neptunium, americium and curium) from the remaining fission products, so they could be fabricated into fuel for an Advanced Burner Reactor, a “fast reactor.” Another important benefit that could be realized by the successful development of these new technologies is to drastically reduce the amount of high level radioactive wastes that would be needed to be stored in Yucca mountain (the proposed national waste depository for high level radioactive waste) and increasing the amount of spent fuel that is successfully transformed into usable fuel for the generation of electricity.⁵²

Down blending of HEU

In the down-blending process, the U²³⁵ in highly enriched uranium (“HEU”) often derived from weapons-grade materials is diluted with other materials so that the U²³⁵ concentration after blending is reduced to LEU levels that are suitable for use in commercial power plants. Both Russia and the United States are engaged in down-blending HEU. A major down-blending program instituted by Russia is called Megatons to Megawatts, a nonproliferation agreement between the United States and Russia signed on February 18, 1993.⁵³ Under the U.S.-Russia HEU agreement, USEC, as the U.S. Executive Agent, purchases LEU blended down in Russia from HEU derived from dismantled Russian nuclear warheads.

The first step in the down-blending program in Russia from nuclear warheads involves the removal of the warheads and their HEU metal components in several nuclear installations in Russia. At the Siberian Chemical Enterprise (“SChE”) and the Mayak Production Association, the HEU metal components are machined into metal shavings which are then purified and oxidized to form highly-enriched U₃O₈. At SChE and the Electrochemical Plant (“ECP”) near Krasnoyarsk, the HEU oxide is fluorinated to form highly enriched uranium hexafluoride which is then transported to SChE, ECP, and the Urals Electrochemical Integrated Plant where the HEU is vaporized and blended with slightly enriched uranium (about 1.5 percent U²³⁵) to form a blended-down LEU suitable for generating electricity in a nuclear power plant. The product is then checked, transferred into cylinders, shipped to St. Petersburg where USEC takes possession of the cylinders, and then shipped to USEC’s facilities at Paducah, KY.

⁵¹ This will be accomplished through the Nuclear Power 2010 program which was authorized funding through the Energy Policy Act of 2005. The Nuclear Power 2010 program is a joint government/industry, cost-shared effort to identify sites for new nuclear power plants, develop and bring to market advanced standardized nuclear power plant designs, and demonstrate streamlined regulatory processes. www.gnep.energy.gov, retrieved on July 11, 2007.

⁵² Ibid.

⁵³ The down-blending of 500 metric tons of HEU, the equivalent of approximately 20,000 nuclear warheads, is estimated to produce about 15,000 tons of LEU, enough to generate 6 trillion kilowatt hours of electricity.

Finally, the LEU is shipped to fabricators where the LEU is assembled into fuel assemblies suitable to be used by utilities.⁵⁴

In June 1995, the first shipment of LEU derived from Russian HEU arrived at Portsmouth, OH. As of June 2007, about 306 metric tons of HEU in about 12,231 nuclear warheads were converted into 8,930 metric tons of LEU fuel.⁵⁵ The LEU delivered to the United States derived from Russian HEU has become a critical source of supply to U.S. utilities. The question of what will happen after 2013 when the HEU agreement is scheduled to expire has become a major source of concern to the nuclear power industry.^{56 57}

In the United States, USEC and DOE were also involved on a smaller scale in blending down HEU of U.S. origin for dilution to fuel-grade LEU products of less than 5 percent U²³⁵.⁵⁸ USEC contracted with BWX Technologies (“BWXT”) to dilute 46.6 metric tons of HEU oxide and metal to yield the equivalent of 660 metric tons of LEU, in a facility in Lynchburg, VA during 1999-2005. This program was completed in September 2006.⁵⁹ Other downblending projects are being planned by the United States. For example, more than 17 tons of highly enriched uranium currently stored at the Y-12 nuclear weapons plant will be “down blended” into about 290 short tons of low enriched uranium with an estimated value of \$750 million.⁶⁰

U.S. MARKET PARTICIPANTS

U.S. Producer

USEC is currently the only producer of LEU in the United States. 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 remained a publicly held corporation until July 1998. In June 2001, during the period of the original investigation, USEC ceased production at one of its two gaseous diffusion enrichment plants in Piketon, OH. Only the gaseous diffusion enrichment plant in Paducah, KY remains in operation; however, a demonstration gas centrifuge plant in Piketon, OH, is scheduled to commence commercial operations in late 2009.

In addition to enriching uranium in the United States, USEC is required, as noted above, to import large quantities of Russian enriched UF₆ (in the form of LEU blended down from Russian HEU) and to purchase the SWU component thereof pursuant to a special agreement between the governments of Russia and the United States.

⁵⁴ USEC, *Megatons to Megawatts*, found at <http://www.usec.com> and Center for Defense Information, “*Megatons to Megawatts*,” *The U.S.-Russia Highly Enriched Uranium Agreement*, found at <http://www.cdi.org>, retrieved on June 26, 2007.

⁵⁵ USEC History, *Megatons to Megawatts* at http://www.usec.com/v2001_02/HTML/Megatons_history.asp.

⁵⁶ USEC stated that Russia has indicated that it has no intention of expanding or extending the HEU agreement. Hearing transcript, p. 71 (Sewell).

⁵⁷ The former Soviet Union is thought to have produced about 1,400 tons of HEU, almost all of which is held by Russia. WNA, *Global Nuclear Fuel Market*, 2007, p. 124.

⁵⁸ The U.S. down-blending process differs from the Russian down-blending process in several aspects including the chemical form of the diluent, and the range of the U²³⁵ contained in the HEU materials to be down-blended.

⁵⁹ USEC History, *Megatons to Megawatts*, found at http://www.usec.com/v2001_02/HTML/Megatons_DOEstatus.asp, retrieved on July 11, 2007.

⁶⁰ The Wise Uranium project, *Nuclear Fuel Fabrication. Current Issues*, Aug. 11, 2007, found at <http://www.wise-uranium.org/epusaf.html>, retrieved on August 16, 2007.

U.S. Importer

Areva NC was the only importer of LEU from France during the January 2002-June 2007 period. Areva NC is a wholly owned subsidiary of Areva, which is also the majority owner of the only French producer of LEU, Eurodif.⁶¹

U.S. Purchasers

In response to purchaser questionnaires issued by the Commission to 28 firms, 27 purchasers supplied usable data.⁶² All 27 purchasers were electric utilities, the majority of which were located in either the Midwest or in the South, with the remainder in the West or the Northeast.

APPARENT U.S. CONSUMPTION, MARKET SHARES, AND RATIOS OF U.S. IMPORTS TO PRODUCTION

Table I-3 presents apparent U.S. consumption for the review period and table I-4 presents U.S. market shares for the same period.⁶³ The quantity of apparent U.S. consumption of LEU, on a SWU basis, increased by *** percent from 2002 to 2003, then declined in 2004 and 2005 by *** percent and *** percent, respectively, before rising in 2006. The value of apparent U.S. consumption followed a similar pattern, except for an increase in 2005.

U.S. producers' share of the U.S. market, in terms of quantity and value, on a SWU basis, was at its highest for 2002-06, at *** percent and *** percent, respectively, in 2002, the year the antidumping duty order took effect, then decreased in 2003 and 2004, before rising in 2005 and 2006 to a level still below 2002. The market share of LEU imports from France, in terms of quantity and value, increased sharply in 2003, fluctuated in 2004 and 2005, and ended in 2006 below 2002 levels. The market share for imports from all other sources fluctuated from 2002 to 2006, ending with 2006 levels higher than 2002 levels, in terms of both quantity and value.

⁶¹ *Areva Reference Document 2006*, section 3.5, Organization chart of Areva group companies, p. 23

⁶² ***.

⁶³ Caution should be used when interpreting 6-month data trends for LEU consumption since most contracts cover deliveries over a three-to-five year period. In addition, the purchasing patterns of utilities involve reload cycles of 18 to 24 months.

Table I-3
LEU: U.S. shipments of domestic LEU, U.S. imports, and apparent U.S. consumption, 2002-06, January-June 2006, and January-June 2007

Item	Calendar year					Jan-June	
	2002	2003	2004	2005	2006	2006	2007
Quantity (1,000 SWUs)							
U.S. producers' U.S. shipments	***	***	***	***	***	***	***
U.S. imports from--							
France	1,431	4,004	2,109	2,223	982	462	24
Russia	3,830	4,706	4,107	3,778	3,843	1,699	1,370
Other sources	3,485	5,618	5,508	3,680	6,063	3,107	2,430
Total imports	8,745	14,328	11,724	9,681	10,887	5,268	3,823
Apparent consumption	***	***	***	***	***	***	***
Quantity (1,000 kgs of enriched U)							
U.S. producers' U.S. shipments	***	***	***	***	***	***	***
U.S. imports from--							
France	353	987	520	548	242	114	6
Russia	944	1,160	1,012	931	947	419	338
Other sources	859	1,385	1,358	907	1,494	766	599
Total imports	2,156	3,532	2,890	2,386	2,683	1,298	942
Apparent consumption	***	***	***	***	***	***	***
Value (\$1,000)							
U.S. producers' U.S. shipments	***	***	***	***	***	***	***
U.S. imports from--							
France	250,357	555,019	346,789	456,198	274,491	118,444	14,337
Russia	762,181	911,943	825,843	827,334	841,074	354,515	308,342
Other sources	596,838	871,972	796,923	843,462	1,662,581	742,804	1,013,570
Total imports	1,609,376	2,338,934	1,969,555	2,126,995	2,778,147	1,215,762	1,336,249
Apparent consumption	***	***	***	***	***	***	***
Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.							

Table I-4
LEU: U.S. market shares, 2002-06, January-June 2006, and January-June 2007

* * * * * * *

Ratios of Imports to Production

U.S. production and ratios of U.S. imports to U.S. production during the period of review are presented in table I-5. The ratio of imports from France to U.S. production fluctuated over the period of review, cresting in 2003 and ending the period at the lowest point. The ratio of total imports to U.S. production also crested in 2003, up from its lowest point in 2002, then fluctuated over the remaining period.

Table I-5

LEU: U.S. production and ratios of imports to U.S. production, 2002-06, January-June 2006, and January-June 2007

* * * * *

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET SEGMENTS

Uranium is consumed commercially in the United States and throughout the world primarily in its low-enriched state as fuel for nuclear reactors producing electricity. The traditional production stages required to produce LEU are called the nuclear fuel cycle, where electric utilities typically purchase uranium concentrates, contract with converters and enrichers to produce natural UF₆ and LEU, respectively, and then contract with fabricators to produce low-enriched uranium dioxide to pelletize and construct fuel assemblies. Additionally, electric utilities may purchase the entire LEU product as EUP, which includes enrichment and the feedstock.¹

Although the LEU fuel cycle remains the dominant process by which electric utilities obtain LEU, a significant alternative source of supply is LEU produced directly by blending down HEU, which, in the U.S. market, is derived largely from the Russian HEU agreement.² Additionally, some domestic HEU also has been blended down.³ Under the Russian agreement, USEC is committed to purchasing 5.5 million SWU annually through 2012 along with an as-yet undetermined quantity in 2013.⁴ USEC sells only the SWU component of the LEU it imports through the HEU agreement, while the natural UF₆ feed component of the imports is sold separately under the provisions of the USEC Privatization Act and the U.S.-Russian HEU agreement.⁵

There are currently 104 licensed-to-operate nuclear power plants in the United States (69 pressurized water reactors and 35 boiling water reactors), which generate about 20 percent of electrical use in the United States.⁶ Increased competition in marketing electricity, partly due to deregulation of the production and sale of electricity, has led to the consolidation of a number of nuclear operators in the United States and the purchase of nuclear reactor facilities by utilities committed to operating nuclear

¹ AHUG reported that most U.S. utilities make separate purchases of uranium feed and enrichment services as a way to control the nuclear fuel cycle, but that there may be certain circumstances where enrichers offer discounts on feed material when purchased as EUP. AHUG's posthearing brief, appendix A, pp. 6-7.

² In 1994, the U.S. government, with USEC as its executive agent, and the Russian government, with the state-controlled corporation TENEX as its executive agent, agreed that by 2014, the United States would buy 500 metric tons of bomb-grade Russian HEU from dismantled nuclear weapons that were blended down to LEU in Russia.

³ USEC and Nuclear Fuel Services have downblended some HEU to LEU. In addition, Wesdyne and Nuclear Fuel Services have been awarded contracts by the U.S. Department of Energy to downblend HEU into LEU, which will be available for use in civilian reactors and sold at market prices in the event of supply disruptions. "U.S. Nuclear Power Industry." World Nuclear Association, August 2007, found at <http://www.world-nuclear.org/info/inf41.html>, and Australian Uranium Association Weekly Digest, July 6, 2007, found at <http://www.uic.com.au/wns0706.htm>, retrieved on September 4, 2007.

⁴ USEC reported that 5.5 million SWU represents approximately one-half of the annual U.S. consumption of LEU. Most of this LEU is re-sold in the U.S. market due to limitations on its sale in other major markets.

⁵ USEC pays TENEX for the enrichment component of the Russian LEU and transfers natural UF₆ from its inventory to TENEX for the natural feed component of the Russian product.

⁶ Four more reactors are partly built and have valid construction licenses. One existing nuclear reactor was returned to operation in 2007, and the Energy Policy Act of 2005 offered several incentives that have stimulated interest in new nuclear power plant construction. The first application to build a new U.S. nuclear power plant in three decades was filed with the NRC in July 2007. "Firm Applies to Expand Nuclear Plant in Maryland." *The Washington Post*, July 31, 2007. There are tentative plans for 28 new nuclear reactors in 19 locations in the United States. "Energy Bill Aids Expansion of Atomic Power," *The New York Times*, July 31, 2007.

power plants.⁷ For example, according to the U.S. Nuclear Regulatory Commission,⁸ Exelon owns and operates 17 reactors; Entergy, 11 reactors; FPL Group, 8 reactors; Duke, 7 reactors; Dominion, 7 reactors; Tennessee Valley Authority, 6 reactors; Southern Nuclear, 6 reactors; and Constellation, 5 reactors.⁹

CHANNELS OF DISTRIBUTION

USEC reported that it shipped *** of its LEU sold under enrichment contracts and *** of its LEU sold as EUP to utilities during the review period.¹⁰ In addition, USEC reported that it shipped *** of its LEU imports from Russia as sales under enrichment contracts and *** of its imports from Russia of EUP to utilities during the review period.¹¹ Areva reported that it shipped *** of its LEU imports from France to utilities during the review period.

SUPPLY AND DEMAND CONSIDERATIONS

Both supply of and demand for LEU are frequently measured by the weight of uranium and the number of SWUs for enrichment. Supply and demand measures are difficult to estimate, especially for future supply and demand. Long supply lead times, long-term purchase contracts, inventories, and purchases of EUP have complicated efforts to estimate supply and demand.¹² Further complicating estimates is the use of two alternative concepts of LEU demand: nuclear reactor requirements and the volume of LEU purchases. Long-term contracts and varying amounts of inventory can cause purchased quantities of uranium to be quite different from reactor requirement quantities at any given time. In terms of SWUs, overfeeding and underfeeding by enrichers based on current and expected input pricing can complicate efforts to measure supply and demand.¹³

⁷ According to the World Nuclear Association, by late 2005, only 27 companies in the United States were nuclear utility operators (down from 87 in 1999) and the top 10 firms had 68 percent of capacity. “U.S. Nuclear Power Industry.” World Nuclear Association, August 2007, found at <http://www.world-nuclear.org/info/inf41.html>, retrieved on September 4, 2007.

⁸ See <http://www.nrc.gov/reactors/operating/list-power-reactor-units.html>, retrieved on August 30, 2007.

⁹ The Nuclear Management Company (“NMC”), which provides operating and support services for the owner utilities, operated seven nuclear reactors during the original investigation in 2002 but only operates three in 2007. Several of the NMC member utilities sold their nuclear plants during the review period.

¹⁰ USEC reported ***.

¹¹ USEC reported ***.

¹² In addition, refueling cycles are generally 18 or 24 months in length, and so annual data may show somewhat large fluctuations, depending on when deliveries are scheduled during these refueling cycles. Apparent consumption data, reported in *Part I* of this report, show that U.S. demand for LEU increased from 2002 to 2003, fell in 2004 and 2005, and increased in 2006.

¹³ Underfeeding is a mode of operation that uses or feeds less uranium but requires more SWU in the enrichment process, which requires more electric power. In producing the same amount of LEU, the enricher varies its production process to underfeed uranium based on the relative economics of the cost of electric power versus the cost of uranium. Underfeeding increases the inventory of uranium that can be sold. Conversely, overfeeding increases the amount of natural uranium feed used to produce LEU and reduces the amount of SWU required. USEC, 2006 Annual Report, found at <http://library.corporate-ir.net/library/93/936/93662/items/238264/USU06AR.pdf>, retrieved on September 4, 2007.

U.S. Supply

Domestic Production

USEC is the only domestic producer of LEU, and it supplies both domestic and foreign utilities with LEU for use in approximately 150 nuclear reactors worldwide.¹⁴ When asked if any changes have occurred in factors affecting supply or factors that affected the availability or competitiveness of U.S.-produced LEU in the U.S. market since 2002, USEC reported that *** have affected U.S. supply since 2002.¹⁵ USEC reported that during the review period, ***. It also reported that ***. USEC also reported that its inventories of uranium *** a significant impact on supply conditions in the U.S. market since 2002.¹⁶

Purchasers were asked if there have been changes in any factors that affected the availability of U.S.-produced LEU in the U.S. market since 2002. Seventeen purchasers reported that there had been changes, with 11 purchasers citing the increased costs of electricity and uranium during the review period. Four purchasers reported that USEC is dependent on the Russian HEU agreement for supply of LEU,¹⁷ and three purchasers reported that there have been moves to increase the supply of LEU in the U.S. market during the review period, with USEC, Urenco, and Areva building or planning to build new facilities in the United States. Seven purchasers reported there have been no changes in factors affecting supply during the review period, and three purchasers did not respond to the question.

When asked to identify and discuss any improvements or changes in the U.S. uranium industry since 2002, 17 purchasers responded,¹⁸ with 11 purchasers reporting that, due to various factors, the prices of both uranium and SWU have increased during the review period. Seven purchasers reported that there have been improvements or changes in either uranium production, in terms of new sources/mines, or in new enrichment facilities in the United States. *** reported that a futures market for uranium was established by NYMEX, giving the uranium industry a means of hedging their expectations of future prices.¹⁹ In its importer questionnaire response to the same question, USEC reported that ***.

¹⁴ There are three possible future new supply sources of LEU in the United States: Urenco has begun construction of a new enrichment facility in the United States (LES/the National Enrichment Facility); GE Energy has signed an agreement to license laser-based enrichment technology for production in the United States; and Areva has announced that it will construct an enrichment facility in the United States. See *Part III* of this report for a discussion of these activities.

¹⁵ Information on *** is included in *Part V* of this report. Areva reported that because it does not import LEU for sale as LEU, it is not in a position to respond to the question asking if there have been changes in any factors that affected supply or availability of LEU in the U.S. market.

¹⁶ USEC reported that ***.

¹⁷ *** reported that the Russian HEU agreement is subsidizing USEC's production and with USEC's centrifuge project falling behind schedule, there are questions as to how USEC will continue to supply its contracts after the expiration of the HEU agreement in 2013.

¹⁸ This question asked specifically about improvements or changes in the U.S. uranium industry, but many purchasers responded with details on foreign industries, many of which have been described elsewhere in this report, and with events that did not relate to improvements or changes in the U.S. industry.

¹⁹ The New York Mercantile Exchange ("NYMEX") partnered with the Ux Consulting Company to provide financially settled on- and off-exchange traded uranium futures contracts. This trading began in May 2007. See http://www.nymex.com/UX_pre_agree.aspx, retrieved on August 29, 2007.

USEC reported that *** when it was unable to provide enrichment or EUP to a U.S. customer in a timely manner or at the prevailing market price.²⁰ Purchasers were asked if they had experienced any short supplies or unavailability of certain products or if they had been placed on allocation since 2002. No purchaser reported that there had been problems with domestic supply during the period.²¹

When asked if it anticipated any changes in the availability or competitiveness of U.S.-produced LEU in the U.S. market, USEC reported that under current market conditions, ***. In addition, USEC reported that it anticipates a trend toward ***.

Purchasers also were asked if there had been any changes, or if they anticipate any changes, in the product range or marketing of LEU in the United States. None of the responding purchasers reported specific changes in the product range or marketing of LEU, per se,²² but 23 purchasers reported that there had been some changes or that they expect them in the future, with 18 purchasers citing new capacity in the United States and others citing the expiration of the Russian HEU agreement in 2013. *** reported that it anticipates that changes in the dollar-euro exchange rate, changes in barriers to imports, and the increased availability of supply will ameliorate existing supply constraints. *** reported that the levels of secondary sources of uranium, such as government weapons stockpiles and commercial inventories, have declined during the review period.

Twelve purchasers reported that they were concerned about the ability of specific suppliers to supply the quantity and tails assays that they required, with 10 purchasers reporting that they had concerns about USEC's ability to supply them with LEU. Purchasers reported that these concerns centered around USEC's deployment of the centrifuge technology and its financial stability. *** reported that it is concerned about the availability of LEU from 2011 to 2015 because of the current restrictions on French-produced LEU and because of questions about the success of any new enrichment facility in the United States. *** reported that it is concerned about USEC's reliance on Russian LEU, especially since the HEU agreement ends in 2013. However, only one purchaser reported that it declined to accept a proposal or bid for LEU from a potential supplier because of uncertainty about the quality of the LEU or the reliability of the supplier.²³ *** reported that it declined to request a proposal from USEC because it was concerned about future supply reliability.

The sensitivity of domestic supply of LEU to changes in price depends on such factors as the existence of excess capacity, the level of inventories in relation to sales, the ease of shifting production to other products, and the existence of export markets. Based on available information, USEC is likely to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced LEU to the U.S. market. The main contributing factors to the moderate-to-high degree of responsiveness of supply are the availability of some unused capacity, large export shipments, high levels of inventories, and no production alternatives.

²⁰ Areva reported that because it does not import LEU for sale as LEU, it is not in a position to respond to the question that asked if it was ever unable to supply LEU it imported from France to a U.S. customer during the review period.

²¹ AHUG reported that currently, the supply of enrichment is tight, with Urenco, LES, and Areva limiting sales for delivery in the next two or three years because they do not have available capacity. AHUG also reported that USEC could expand its output from the Paducah plant, but only at high costs. AHUG's posthearing brief, pp. 11-12 and app. A, p. 15.

²² However, *** reported that GE's plans to construct a new plant using laser enrichment technology represents a change in the product range or marketing of LEU. It also reported that first production could occur in 2011 with potential production reaching 1 million SWU per year in 2013.

²³ *** reported that it had declined a proposal for uranium feed material but not for LEU.

Industry Capacity

USEC's reported capacity utilization for LEU decreased irregularly from *** percent in 2002 to *** percent in 2006 (*see* table III-1). USEC's reported capacity utilization was slightly higher at *** percent in January to June 2007 than it was in January to June 2006 (*** percent). The level of capacity utilization suggests that USEC has the ability to expand output in response to changes in price.²⁴ In addition, USEC reported that ***.²⁵

Alternative Markets

USEC's export shipments, as a share of total deliveries, increased irregularly from *** percent in 2002 to *** percent in 2006 (*see* table III-2), and this level of exports during the period indicates that USEC has the ability to shift shipments of LEU between the United States and other markets in response to price changes. USEC reported that ***.²⁶ In addition, USEC reported that ***.

Inventory Levels

USEC's inventories, as a share of total deliveries, increased from *** percent in 2002 to *** percent in 2005 before decreasing to *** percent in 2006 (*see* table III-3). Inventories, as a share of total deliveries, were *** percent in January to June 2007, as compared to *** percent during the same period in 2006. USEC reported that *** , and therefore, inventories play a *** role in its operations.

Production Alternatives

USEC reported that it is not able to shift production from LEU to other products in response to changing market conditions. The machinery and equipment used to make LEU cannot be used to manufacture any other product. USEC reported that it can only ***.

Foreign Supply

Purchasers were asked to identify any supply factors that affected the availability or competitiveness of both LEU from France and LEU from nonsubject countries in the U.S. market since 2002. Fourteen purchasers named factors that affected the supply of LEU from France, with nine purchasers citing the antidumping duties as a factor limiting the availability of French-produced LEU in the U.S. market. Three purchasers reported that the exchange rate of the euro has been a factor limiting French supply. Three purchasers reported that the increased price of electricity has affected the supply of

²⁴ TradeTech reported that worldwide enrichment capacity exceeds requirements by one-third but that not all capacity is operable, citing USEC's Portsmouth plant that is in cold shutdown as an example. "Uranium Enrichment — What's Driving Prices Higher?" TradeTech, March 31, 2006, found at <http://www.uranium.info/news/release.html#enrich>, retrieved on September 4, 2007.

²⁵ USEC also reported that it is obligated under the 2002 agreement with the U.S. Department of Energy to produce LEU containing at least 3.5 million SWU per year at its Paducah plant and to maintain the ability to operate at an annualized rate of 5.5 million SWU per year. USEC's response to the notice of institution, p. 35.

²⁶ USEC reported that ***. According to the Office of the U.S. Trade Representative, since 1992, the EU has maintained strict quantitative restrictions on imports of enriched uranium to protect its domestic producers, limiting imports to only about 20 percent of the European market. USTR, 2007 National Trade Estimate Report on Foreign Trade Barriers, found at http://www.ustr.gov/Document_Library/Reports_Publications/2007/2007_NTE_Report/Section_Index.html?ht=, retrieved September 4, 2007.

French-produced LEU. *** reported that LEU from France is limited because the French supplier has required that purchasers provide the required block of electricity in order to purchase enrichment.²⁷

Fifteen purchasers named factors that affected the supply of LEU from nonsubject countries in the U.S. market since 2002, with six purchasers citing the Russian suspension agreement and four purchasers citing increased prices of uranium and LEU as factors limiting the supply of nonsubject-produced LEU. *** reported that Urenco has capitalized on the supply limitations on French-produced LEU and expanded capacity at its enrichment plants in Germany, the Netherlands, and the United Kingdom.

Four purchasers reported that they experienced supply problems with LEU from Areva and Urenco during the review period.²⁸ In addition, *** reported that Areva's enrichment services are unavailable for supply of LEU from 2008 to 2011.

Subject Imports

Limited and incomplete questionnaire information was received from the sole foreign producer and importer of subject merchandise, Areva.²⁹ Based on available information, the foreign producer is likely to respond to changes in demand with moderate changes in the quantity of shipments of French-produced LEU to the U.S. market. The main contributing factors to the moderate degree of responsiveness of supply are high capacity utilization, large export shipments, high levels of inventories, and no production alternatives. Areva's reported data and additional public information on the industry in France is contained in *Part IV* of this report.

Nonsubject Imports

As indicated earlier, Russia is the principal source of U.S. imports of LEU. Russia is unable to expand its exports to the United States pursuant to the HEU and Suspension agreements. Urenco supplies LEU from its enrichment plants in Germany, the Netherlands, and the United Kingdom.³⁰ There are also smaller producers of LEU in China and Japan that primarily serve their respective domestic markets; China has exported small quantities of LEU to the United States. Total imports from nonsubject countries increased irregularly from 7.3 million SWUs in 2002 to 9.9 million SWUs in 2006 (*see* table IV-1).

²⁷ For some of Areva's customers, including EDF, its biggest customer, SWU sales are made under a processing contract in which the customer provides the electricity necessary for its own enrichment requirements. These arrangements include approximately one-half of the volumes processed by Areva. Areva 2006 Reference Document, found at

<http://www.aveva.com/servlet/BlobProvider?blobcol=urloploadedfile&blobheader=application%2Fpdf&blobkey=id&blobtable=Downloads&blobwhere=1177488957949&filename=doc+de+ref+2006+aveva+UK.pdf>, retrieved on September 4, 2007.

²⁸ *** reported that when it contacted suppliers in 2003 for supply of LEU from 2005 to 2007, Areva/Cogema and Urenco reported that they were "sold out." Similarly, *** reported that Areva was unable to fully respond to a request for proposal in March 2006 and that both Areva and Urenco, for supplies from both Urenco and LES, were unable to fully respond in May 2007. *** also reported that its reload schedule was unaffected but that it had to use "borrowed" SWU from a fabricator in 2007.

²⁹ In addition, Areva submitted its substantive importer and foreign producer questionnaires two and a half months after the Commission had requested all responses to be submitted, thus limiting the time for analysis and any data clarifications or corrections. *See* footnotes 4 and 5 of *Part I* of this report for additional information.

³⁰ USEC reported that Urenco's order backlog extends through at least 2013 and that it is effectively "sold out" in the near term. In addition, USEC reported that Urenco's pricing policies have become more disciplined and reflective of market forces. Hearing transcript, p. 57 (Whitehurst).

U.S. Demand

Demand Characteristics

U.S. electric utilities typically obtain LEU through long-term contracts for enrichment, but they also may purchase LEU in the spot market and buy EUP. Electric utilities' annual reload requirements, expressed as the quantity of uranium and as the number of SWU required, are widely used measures of the demand for LEU. Numerous industry reports forecast annual reload requirements for individual countries and for the world. Uranium demand in the United States for 2007 is estimated to be 20,050 metric tons of uranium and 12.7 million SWU, according to the World Nuclear Association.³¹ Information on purchases of uranium and enrichment by owners and operators of U.S. nuclear plants, as reported by the Energy Information Agency ("EIA"), are contained in the following tabulation:

Item	2002	2003	2004	2005	2006
Purchases of uranium by owners and operators of nuclear power reactors <i>(in million pounds U3O8 equivalent)</i>	52.7	56.6	64.1	65.7	66.5
Purchases of enrichment <i>(in thousands of SWUs)</i>	11,492	11,993	11,785	11,394	13,437
Purchases of U.S. enrichment <i>(percent)</i>	14.7	13.9	11.7	9.2	12.1
Purchases of foreign enrichment <i>(percent)</i>	85.3	86.1	88.3	90.8	87.9
Source: <i>Uranium Marketing Annual Report</i> , EIA, 2003 and 2006, tables S1A and 16.					

In their questionnaire responses, purchasers reported information on LEU deliveries³² since 2002 and those expected through 2012 that they anticipate receiving on contracted-for requirements based on reload schedules and based on the supplier and the origin of the LEU supplied (*see* table II-1).³³

Sixteen purchasers reported that the relative levels of their annual deliveries of LEU from different sources had changed since 2002, with most citing changes in LEU requirements and the fact that some long-term contracts ended during the review period. Two purchasers also reported that they have open-origin requirements and so the relative levels change frequently.

³¹ "U.S. Nuclear Power Industry." WNA, August 2007, found at <http://www.world-nuclear.org/info/inf41.html>, retrieved on September 4, 2007.

³² The total amount of annual deliveries from all sources varies from year to year based on utilities' refueling schedules, and fluctuations in total annual shipments should not be misinterpreted as growth or shrinkage in overall LEU consumption.

³³ As with all country-of-origin data throughout this section of the report, it should be noted that purchasers reported deliveries from Areva/Cogema as "other" origin, rather than French origin, in cases where the shipping documents did not contain country-of-origin information. For additional information on deliveries from Areva/Cogema, by origin of the LEU as specified in the shipping documents, please see app. E.

Table II-1

LEU: Annual deliveries and expected deliveries of LEU, by supplier and by origin of LEU, 2002-12¹

Year	USEC				Areva/Cogema				All other suppliers ²	
	U.S. origin		Other origin		French origin		Other origin			
	<i>in SWUs</i>	<i>in kgs of U</i>	<i>in SWUs</i>	<i>in kgs of U</i>						
2002	1,644,394	616,411	4,607,037	1,263,122	1,418,940	***	***	***	2,759,660	1,243,228
2003	885,494	733,636	4,864,750	1,101,678	906,297	***	1,843,031	***	3,019,978	1,391,227
2004	***	346,080	4,871,600	1,585,215	***	***	2,348,904	657,050	3,417,033	1,631,499
2005	962,513	956,020	5,097,679	1,778,247	489,948	***	1,936,115	***	3,386,521	1,360,988
2006	1,817,860	323,034	4,867,144	1,733,539	601,210	237,685	2,082,959	371,512	4,144,801	1,242,471
2007	***	***	5,984,166	832,862	246,946	119,932	2,206,393	299,530	4,121,777	758,619
2008	***	***	4,921,066	538,201	147,681	***	1,985,314	***	3,645,042	781,640
2009	920,818	***	6,163,377	628,973	***	***	1,771,406	***	5,870,965	1,722,914
2010	***	⁽³⁾	4,722,907	542,962	--	--	1,692,434	***	5,671,050	1,368,843
2011	733,952	***	3,582,877	335,327	--	--	1,540,000	***	5,229,319	1,624,584
2012	843,918	***	3,580,265	154,899	--	--	880,000	***	7,513,322	1,838,079

¹ Purchasers that reported quantities in SWUs but not in kilograms of uranium included ***. In addition, not all purchasers reported associated quantities of uranium for each year where they reported SWU quantities. It is unclear how many purchasers reported data in kilograms of the feed material versus in kilograms of the final enriched product.

² All other suppliers may include Urenco, some shipments of LEU from Areva where the country of origin information was not reported, and other suppliers.

³ Not reported.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, purchasers were asked specifically whether their purchasing patterns for LEU from France and from nonsubject sources had changed since 2002. Sixteen purchasers reported that they did not purchase LEU from France before or after the antidumping duty order. Seven purchasers reported that their purchasing pattern of LEU from France is essentially unchanged. Two purchasers reported that they reduced purchases of LEU from France because of the antidumping duty order, and two reported that they changed their purchasing pattern from France for other reasons.³⁴ Seventeen purchasers reported that their pattern of purchasing LEU from nonsubject countries is essentially unchanged, while six changed their purchasing pattern for other reasons,³⁵ and three reported that they did not purchase LEU from nonsubject countries before or after the antidumping duty order.

Producers, importers,³⁶ and purchasers were asked how demand for LEU in the U.S. market had changed since 2002. USEC reported that demand *** during the review period.³⁷ Among purchasers, 18 reported that demand for LEU had increased since 2002, with most citing capacity factor increases, power uprates, decreased tails assays, and operational efficiencies as factors.³⁸ Four purchasers reported that license extensions and plans for new nuclear power plants have played a role in the increased demand for LEU. *** reported that the current perceived lack of supply of LEU has prompted many U.S. utilities to change their inventory policies by entering the market to secure supply for future deliveries and putting additional demand on the market. Two purchasers reported that demand is unchanged, and seven purchasers did not respond to the question.

All of the responding purchasers reported that the sole end use for LEU is fuel for nuclear reactors. Purchasers were asked to describe ways in which changes in their demand for fuel affected their purchases of LEU since 2002. Many purchasers reported that higher capacity factors, power uprates, longer operating cycles, and changes in fuel design have impacted their purchases of LEU. In describing changes in their nuclear power plant operations, 16 purchasers reported that capacity factors³⁹ have increased since 2002; 20 purchasers reported that tails assays⁴⁰ have decreased; 9 purchasers reported that

³⁴ These two purchasers reported signing new contracts with Areva/Cogema in 2006 and 2007, respectively.

³⁵ Four of the six purchasers reported that these changes resulted from signing new contracts or renegotiating contracts.

³⁶ Areva reported that it is not in a position to answer questions about the demand for LEU in the United States or globally.

³⁷ USEC reported that ***.

³⁸ Purchasers reported that these factors have increased enrichment requirements and thus increased the demand for SWU.

³⁹ Capacity factors measure the amount of electricity actually produced compared with the maximum output achievable.

⁴⁰ The enrichment process not only produces the enriched product, but also a waste stream of UF₆ depleted in the U²³⁵. The degree of depletion of U²³⁵, or the tails assay, in this depleted uranium waste is a parameter that can be adjusted to economical needs, depending on the cost of fresh natural uranium and on the enrichment cost. Using a lower tails assay means that less natural uranium is needed but increases the requirement for enrichment effort, as measured in SWUs, and vice versa. The increase in the price of uranium during the review period has made lower tails assays attractive; at any price level, an optimum tails assay can be calculated that will minimize the cost of producing a given quantity of enriched uranium. This optimal level will vary with time as prices change, but it also varies between different utilities even at the same time because the prices paid for both uranium and enrichment will depend on the particular mix of contracts which each utility holds. In addition, some enrichment contracts contain terms that limit the range of tails assays which a utility can choose.

burn-up rates⁴¹ have increased; and 16 purchasers reported that reactor power⁴² has increased. Purchasers reported that changes in one or more of these factors have resulted in increased energy production. Nine purchasers reported that either their firm's demand for fuel had not changed since 2002 or that changes in their demand for fuel had no effect on their firm's purchases of LEU during the review period.

Eighteen purchasers reported that the average enrichment level in the core design of their nuclear fuel has changed since 2002, with most saying that enrichment levels have increased. Purchasers reported that higher enrichment levels result in better fuel utilization, longer reload cycles, lower cycle costs, fewer fuel assemblies in a reload batch, and increased energy production.⁴³

Electric utilities' reload cycles are generally anywhere from 18 to 24 months in length. Each reload typically refuels between one-quarter and one-half of the fuel assemblies and generally takes 20 to 40 days to complete. Some purchasers reported that it was possible to extend or reduce the reload frequency,⁴⁴ and some purchasers reported that the cost of uranium products affected their reload cycles.⁴⁵ *** reported that the refueling frequency is established to balance the entire utility's energy requirements with each reactor's resource requirements and licensing conditions while minimizing overall production cost.

A majority of electric utilities' purchases of LEU are based on long-term contracts; in the United States, these contracts run 4 to 7 years or longer (*see* table II-2). Long-term contracts provide for a secure future supply of LEU and reflect the need to accommodate long lead times in the fuel cycle and a concern to maintain reactor operations. Spot purchases make up the balance of a utility's total LEU purchases.⁴⁶ The majority of responding purchasers' supply of LEU, when measured in SWUs, came in the form of long-term enrichment and EUP contracts from Russia and other nonsubject countries during the review period.⁴⁷

⁴¹ The amount of energy extracted from nuclear fuel is called its "burn up," which is expressed in terms of the heat energy produced per initial unit of fuel weight. Higher burn-up rates result in savings in fuel cycle costs.

⁴² To increase the power output of a reactor, typically a more highly enriched uranium fuel is added. According to the NRC, utilities have been using power uprates since the 1970s as a way to increase the power output of their nuclear plants. As of July 2004, the NRC had completed 101 such reviews resulting in a gain of approximately 12,548 megawatts thermal or 4,183 megawatts electric at existing plants. NRC licensees have indicated they plan to ask for power uprates over the next five years, that if approved, would add another 2,841 megawatts thermal (947 megawatts electric) to the nation's generating capacity. See <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/power-uprates.html>, retrieved on August 30, 2007.

⁴³ Purchasers also reported that enrichment levels are regulated by the U.S. Nuclear Regulatory Commission and limited to 5 percent product assay.

⁴⁴ Extending the reload cycle, according to purchasers, would require extensive analysis and new licensing and would be limited by the plant equipment. Some purchasers reported that reload cycles were extended on some reactors during the review period.

⁴⁵ *** reported that the expensed cost of nuclear fuel represents one-third or more of the total production cost of a nuclear plant and that of this one-third, the portion directly attributable to uranium products can be as much as two-thirds. *** reported that the costs of uranium, conversion, and enrichment are approximately 80 percent of the total fuel cost for their reactor.

⁴⁶ In practice, only 7 of the 27 responding purchasers reported spot purchases of LEU, either as enrichment or EUP, during the review period. Of those, four purchasers reported that their spot purchases of LEU have decreased as a share of their total purchases since 2002, with three of them citing a lack of availability as the reason for the decrease.

⁴⁷ As with all country-of-origin data throughout this section of the report, it should be noted that purchasers reported deliveries from Areva/Cogema with all other nonsubject countries in cases where the shipping documents did not contain country-of-origin information.

Table II-2
LEU: Purchases of LEU, by category of enrichment purchase agreement and country of origin,
January 2002-June 2007¹

Category of enrichment purchase agreement	Purchases on an enrichment basis		Purchases of EUP	
	<i>in SWUs</i>	<i>in kgs of U</i>	<i>in SWUs</i>	<i>in kgs of U</i>
United States				
Spot purchases	259,473	29,535	--	--
Long-term contract purchases	9,149,627	593,017	1,048,461	294,503
Other types of purchases	--	--	--	--
France				
Spot purchases	--	--	--	--
Long-term contract purchases	5,796,590	380,748	--	--
Other types of purchases ²	***	***	--	--
Russia				
Spot purchases	998,547	***	--	--
Long-term contract purchases	18,567,006	3,213,508	5,215,256	1,281,417
Other types of purchases	--	--	--	--
All other countries				
Spot purchases	720,761	76,585	97,721	16,295
Long-term contract purchases	21,494,144	5,904,330	1,258,714	171,013
Other types of purchases	--	--	--	--
¹ Not all purchasers reported quantities in kilograms of uranium. In addition, it is unclear how many purchasers reported data in kilograms of the feed material versus in kilograms of the final enriched product. ² ***.				
Note.--Purchasers reported deliveries from Areva/Cogema with all other nonsubject countries in cases where the shipping documents did not contain country-of-origin information.				
Source: Compiled from data submitted in response to Commission questionnaires.				

All but three purchasers reported that 100 percent of their LEU requirements by quantity for 2007 through 2008 were contracted for by December 31, 2006.⁴⁸ Generally, purchasers reported that they prefer long-term contracts and, as mentioned previously, that relatively few make spot purchases of LEU and few purchase LEU as EUP in significant quantities. *** reported that suppliers were offering limited quantity flexibility a few years ago but that recently, the market has moved to fixed quantity contracts. Only two purchasers reported that they have received offers of LEU bundled with other products or services, and one purchaser reported that bundled offers are rare.

Purchasers were asked if the LEU market is subject to business cycles or conditions of competition distinctive to LEU. Eleven purchasers reported that there are distinctive business cycles or conditions of competition, and 12 purchasers reported that there were not; the other 4 purchasers did not answer the question. Among those purchasers that reported the LEU market is subject to business cycles or distinct conditions of competition, four cited the limited number of suppliers and high costs of entry. Three purchasers reported that the LEU market is unique in terms of the level of government involvement. Two purchasers reported that there are significant changes in the demand for enrichment based on the price of uranium.

In describing changes in the business cycle or conditions of competition since 2002, most purchasers reported that the increased price of uranium has led to increased demand for enrichment and higher SWU prices. *** reported that the market has evolved into a production-cost-driven market with a tight supply-demand balance, and *** reported that it has become more of a suppliers' market. *** reported that there has been a worldwide focus on reducing greenhouse gas emissions in order to deal with the effects of global warming and that this has stimulated renewed interest in nuclear power.

Electric utility procurement strategies and contracting practices give rise to a future demand indicator known as "uncommitted demand." The proportion of a utility's future reactor requirements represented by the minimum deliveries which it has to take according to its contracts (plus any material which it plans to use from its inventory), is referred to as its committed demand. The remainder of the requirements forms the uncommitted demand, which approaches zero in the very short term and becomes progressively higher looking several years into the future. In their questionnaire responses, purchasers reported their anticipated total purchases of LEU over the next 10 years, and included the total quantity of LEU that is filled by existing contracts (or committed demand) and the quantity that is open origin (or where the contract does not require LEU of a particular origin to be supplied).⁴⁹ Some purchasers reported quantities in kilograms of uranium as requested in the questionnaire instructions (*see* table II-3), other purchasers did not report kilograms of enriched uranium but reported quantities in SWUs (*see* table II-4),⁵⁰ and other purchasers reported both.

⁴⁸ *** reported that 98 percent of its requirements for 2007 through 2008 were contracted for by December 31, 2006; *** reported 93 percent and *** reported 70 percent.

⁴⁹ USEC reported that, according to ***, the United States accounts for *** of uncommitted demand worldwide in 2007 through 2009. USEC's response to the notice of institution, p. 41.

⁵⁰ *** reported that U.S. committed demand was *** million SWU in 2007 and will be *** million SWU in 2016. Commission questionnaires did not ask for expected demand data in SWUs, and with only 10 purchasers reporting such data in table II-4, it is not possible to explain differences between the *** data and the reported questionnaire data.

Table II-3

LEU: Annual expected demand, committed demand, and demand that is open origin, in kgs of U, 2007-16¹

Year	Total expected demand for LEU	Total quantity of LEU currently committed		Total quantity of committed demand that is of open origin	
	<i>in kgs of enriched U</i>	<i>in kgs of enriched U</i>	<i>as percent of total expected demand</i>	<i>in kgs of enriched U</i>	<i>as percent of LEU currently committed</i>
2007	1,917,306	1,894,681	98.8	1,592,480	84.1
2008	2,282,816	2,257,356	98.9	1,517,024	67.2
2009	3,356,248	3,174,750	94.6	2,106,597	66.4
2010	2,118,202	1,659,554	78.3	1,163,872	70.1
2011	2,356,577	1,630,978	69.2	727,639	44.6
2012	3,245,603	1,738,864	53.6	806,076	46.4
2013	1,960,874	970,967	49.5	480,546	49.5
2014	2,485,028	872,102	35.1	222,283	25.5
2015	3,052,230	983,375	32.2	332,158	33.8
2016	2,054,279	712,043	34.7	296,784	41.7

¹ There were 21 purchasers that reported quantity data in kilograms of uranium, as specified in the questionnaire. However, it is unclear how many purchasers reported data in kilograms of the feed material versus in kilograms of the final enriched product.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-4

LEU: Annual expected demand, committed demand, and demand that is open origin, in SWUs, 2007-16¹

Year	Total expected demand for LEU	Total quantity of LEU currently committed ²		Total quantity of committed demand that is of open origin	
	<i>in SWUs</i>	<i>in SWUs</i>	<i>as percent of total expected demand</i>	<i>in SWUs</i>	<i>as percent of LEU currently committed</i>
2007	6,690,566	6,690,566	100.0	5,971,566	89.3
2008	6,172,713	6,172,713	100.0	5,482,713	88.8
2009	7,970,847	7,119,613	89.3	6,536,613	91.8
2010	8,076,505	8,076,505	100.0	6,380,735	79.0
2011	6,370,505	5,400,561	84.8	5,138,561	95.1
2012	7,865,337	5,678,592	72.2	5,068,592	89.3
2013	7,840,960	3,811,129	48.6	2,617,129	68.7
2014	6,284,556	2,588,685	41.2	2,008,685	77.6
2015	8,834,883	3,521,070	39.9	2,219,070	63.0
2016	8,133,236	3,512,954	43.2	2,287,062	65.1

¹ There were 10 purchasers that reported quantity data in SWUs.
² *** reported quantities currently committed in years when it did not report any expected demand, as per its schedule of deliveries versus its reload schedule.

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute Products

Currently, there are effectively no substitutes for LEU as a final enriched product. Twenty-one purchasers *** reported that there are no substitutes for LEU. One proposed substitute in making fuel for power plants is mixed oxide fuel (MOX), which contains plutonium oxide and depleted or natural uranium. USEC reported that MOX is currently not used to fuel reactors in the United States⁵¹ but may be used in the future.⁵² USEC also reported that surplus fabricated fuel, or existing unused fabricated fuel

⁵¹ MOX derived from spent fuel from commercial reactors is currently used internationally.

⁵² One of the goals of the U.S. Department of Energy’s Advanced Fuel Cycle Initiative, launched in 2002, is to seek an alternative technology to create MOX in order to develop a sustainable closed nuclear fuel cycle. In 2002, the U.S. government chose Areva technology to dispose of all its excess military plutonium stocks in the form of MOX fuel. For this purpose, it decided to build a MOX manufacturing plant in South Carolina with which Areva is associated through the Duke-Cogema-Stone & Webster consortium. Construction of the plant began in August 2007 and the plant is owned by the National Nuclear Security Association. Australian Uranium Association Weekly

(continued...)

assemblies that can be refabricated into nuclear fuel assemblies suitable for reactors, can be used in lieu of newly purchased LEU but that it does not believe there are significant quantities available. Four purchasers cited MOX as a substitute product for LEU, and one purchaser cited plutonium.

In discussing the price sensitivity of possible substitute products, USEC reported that the alternate fuel forms are generally not available in the U.S. market, but it noted that substitution would occur only with a relatively small price differential if these products, specifically MOX, were available. One purchaser reported that MOX would be significantly more expensive than LEU, and one purchaser reported that there is not a price threshold for substitutes of LEU.

Purchasers generally reported that their reactors could be converted to use MOX as a fuel source, but purchasers are not licensed to do so, have not completed any studies or analysis related to a switch to MOX, and have no plans to switch to MOX in the near future⁵³. ***.

When asked more generally about their evolving strategy with regard to reprocessing and recycling, 24 of the 27 responding purchasers reported that they do not have plans in this area and anticipate no changes in the future. *** reported that it is working to ***, and *** reported that they are open to the possibility of pursuing reprocessing and recycling in the future.

Demand Outside the United States

According to the IAEA, as of June 2007, there were 437 nuclear reactors in the world, with 104 in the United States, 59 in France, 55 in Japan, and 31 in Russia.⁵⁴ USEC reported that demand for LEU outside the United States is *** since 2002.⁵⁵ Thirteen purchasers reported that the demand for LEU outside the United States has increased since 2002 due to improved capacity factors, decreased tails assays, and improved operating efficiencies; factors similar to those reportedly driving demand growth in the United States.⁵⁶ Purchasers also reported that new reactors in foreign countries have been a factor in increasing demand. The other 14 purchasers reported that they did not know how demand has changed outside of the United States.

Purchasers reported that new reactors, generally in the next 10 to 15 years, will keep worldwide demand for LEU strong⁵⁷. *** reported that it expects the demand for LEU in the United States and

⁵² (...continued)

Digest, August 10, 2007, found at <http://www.uic.com.au/wns0810.htm>, retrieved on September 4, 2007.

⁵³ The impact of MOX is expected to be relatively minor. WNA, *The Global Nuclear Fuel Market*, September 2007.

⁵⁴ See <http://www.iaea.org/cgi-bin/db.page.pl/pris.oprconst.htm>, retrieved on August 31, 2007.

⁵⁵ Areva reported that world market growth is limited in volume but relatively secure, especially in Asia, where nuclear power programs are growing faster than in other regions of the world. Areva 2006 Reference Document, found at <http://www.areva.com/servlet/BlobProvider?blobcol=urluploadedfile&blobheader=application%2Fpdf&blobkey=id&blobtable=Downloads&blobwhere=1177488957949&filename=doc+de+ref+2006+areva+UK.pdf>, retrieved on September 4, 2007.

⁵⁶ AHUG reported that both U.S. and global demand for LEU is increasing and will continue to increase in the next 10 to 15 years, citing new reactors in the United States and several other countries. AHUG posthearing brief, app. A, p. 12.

⁵⁷ There are 28 new nuclear reactors currently under construction worldwide. "Nuclear Ambitions," Kiplinger's, February 2007. In addition, according to the IAEA, 168 new nuclear reactors will be built in the next 15 years. "Uranium Price Jumps to Record 40-Year High," found at <http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/04/11/cnuranium11.xml>, retrieved on September 4, 2007. Much of this growth is expected to occur in Asia and Russia, particularly in China, which intends to build

(continued...)

worldwide to increase at a rate close to 2 percent per year through 2025, citing plans for new nuclear plants, concerns over global warming, and the U.S. government’s focus on long-term nuclear energy.⁵⁸

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported LEU depends upon such factors as relative prices, quality, and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a high degree of substitution between LEU produced in the United States and France and between LEU produced in the United States and that which is produced in nonsubject countries.

This section is based primarily on the responses of 27 purchasers that accounted for nearly all of the total consumption of LEU in 2006.⁵⁹ All 27 purchasers described themselves as electric utilities. Purchasers reported buying LEU, as both enrichment and EUP, from the United States, France, and nonsubject countries,⁶⁰ as shown in the following tabulation:

Source	Number of purchasers responding	
	Enrichment	EUP
United States	16	6
France	11	0
Nonsubject (Russia)	23	8
Nonsubject (Germany)	14	3
Nonsubject (the Netherlands)	18	1
Nonsubject (United Kingdom)	18	2
Nonsubject (China)	3	2

Twenty-five purchasers reported that they bought LEU from more than one country since January 2002, although some purchasers noted that they had only one supplier during the review period, as Urenco has production facilities in three countries and USEC supplies both U.S.-produced LEU and LEU

⁵⁷ (...continued)

32 nuclear plants by 2020. “China Embraces Nuclear Future.” *The Washington Post*, May 29, 2007. In terms of countries in Western Europe, France is still committed to nuclear power; Italy has given up on nuclear power; Sweden, Finland, and Germany are debating the future of nuclear power in their countries; and the United Kingdom is thinking of building new nuclear plants. “Nuclear Fallout,” *The Economist*, August 4, 2007. USEC reported that some of the nuclear reactors being built around the world are heavy water reactors, which do not require LEU as fuel. USEC’s posthearing brief, exh. T.

⁵⁸ In its reference scenario, the International Energy Agency reported that world nuclear electricity generation is projected to increase by an average annual growth rate of 0.7 percent per year through 2030. International Energy Agency, *Energy Outlook 2006*, p. 361.

⁵⁹ Purchasers reported a total LEU quantity in SWU that was greater than the amount of LEU consumed in the United States in 2006. This may be partly due to the fact that some purchasers only were able to report estimates for quantity data.

⁶⁰ Some purchasers of LEU from Urenco may have specified all three countries where Urenco has production facilities: Germany, the Netherlands, and the United Kingdom.

from Russia. Only two purchasers reported that they bought LEU from only one country since 2002, and one of the purchasers reported that they will have more than one supplier in the future.

In addition, 13 of the 27 responding purchasers reported buying LEU as EUP since 2002, and 5 of those purchasers reported that their purchases of EUP have decreased relative to their purchases of enrichment. One purchaser reported that its deliveries of EUP have increased relative to its deliveries of enrichment, and the other seven purchasers reported that their levels are relatively unchanged.

Factors Affecting Purchasing Decisions

Purchasers were asked to describe their firm's process of choosing a supplier of LEU and the factors that it considers. Many purchasers reported that they issue requests for proposals or contact suppliers, use a competitive bid process, and use multiple rounds of negotiation to improve the offers. None of the purchasers reported mentioning competing prices to other suppliers,⁶¹ and none reported that suppliers distribute price lists.⁶² With regard to the role of published LEU prices,⁶³ purchasers were divided; some reported that published prices are used as a benchmark and others reported that published prices are not that helpful in negotiations.⁶⁴ Some purchasers reported that they consider the total evaluated cost of LEU⁶⁵. *** reported that because of the limited number of suppliers in the LEU market, transaction prices are dictated by the supplier and competitive bidding does not occur. *** reported that it penalizes Russian-origin LEU in bid evaluations because they have associated trade limitations. *** reported that prices are largely irrelevant in a tight supply market since all contracts are market-related and the flexibility of the contract provisions are important to the amount of risk accepted. *** reported that it does not negotiate price, but rather negotiates quantity, flexibility, and tails assay ranges.

Purchasers were asked to identify the three major factors considered by their firm in selecting suppliers of LEU (table II-5). Price was the most commonly cited factor overall, with 11 of 26 responding purchasers reporting that price is the most important factor in their purchasing decisions. Eight purchasers reported that reliability or security of supply was most important, three reported that availability was most important, and three reported that contract terms and conditions were most important. Diversity of supply, flexibility, lead times, and tails assay options also were cited as important factors in purchasing decisions.

⁶¹ Although some purchasers reported using terms and conditions of competitors as a base for final negotiations.

⁶² Although some purchasers reported that some suppliers offer a price list for services not included in the base price, such as shipping, packaging, and handling.

⁶³ Purchasers reported that spot and/or long-term prices are published by TradeTech, Ux Weekly, and Nukem.

⁶⁴ Two purchasers reported that published prices are "too thin" to form a basis for negotiation.

⁶⁵ The evaluated cost included such things as the price for uranium feed if the offers are at different tails values, an assessment of quantity flexibility and reduced lead times, and payment terms. USEC reported that escalation provisions, credit extensions, and the ability to adjust transactional tails assays factor in to the evaluated price of LEU. Hearing transcript, p. 51 (Klett).

Table II-5**LEU: Most important factors in selecting a supplier, as reported by purchasers**

Factor	First	Second	Third
Price	11	7	5
Reliability/security of supply	8	3	5
Availability	3	2	1
Contract terms and conditions	3	3	2
Diversity of supply	1	3	1
Flexibility	0	2	2
Tails assay option/flexibility	0	1	2
Lead times	0	0	2
Other	0	3	4

Note.—Not all purchasers named first, second, and/or third most important factors. Other category includes past performance, proven capability, risk, traditional supplier, industry standards, quantity, and quality.

Source: Compiled from data submitted in response to Commission questionnaires.

Purchasers were asked to identify the factors that determined the quality of LEU. Almost all of the purchasers, 25 of the 27 that responded, reported that LEU must meet ASTM specifications or meet the fabricator's standards. One purchaser reported that the product and tails assay determined the quality of the LEU, and one purchaser did not respond to the question.

Purchasers were asked if they always, usually, sometimes, or never purchased LEU that is offered at the lowest evaluated price. Nineteen purchasers reported always or usually purchasing the lowest-priced LEU. Five purchasers reported that they sometimes purchased the lowest-priced LEU, and three reported never purchasing the lowest-priced product. Purchasers also were asked if they purchased LEU from one source although a comparable product was available from another source at a lower price. Eleven purchasers responded in the affirmative, reporting reasons why they purchased from a source that might be more expensive. Reasons provided included supply diversity, reliability of supply, international shipping risk, and the obligation of contracts. *** reported that reliability of supply and diversity of its supplier base are more important than price but that these factors have not precluded buying from the supplier offering the lowest price. *** reported that it has awarded business to Areva, USEC, and LES even though they were not the lowest-priced suppliers in an attempt to minimize risk through a diverse supplier network.

In rating the importance of 19 factors in their purchasing decisions (table II-6), all 27 of the responding purchasers rated reliability of supply as very important; 25 reported that price is very important; 23 reported that availability is very important; and 22 reported that quality meets industry standards is very important.

Purchasers were asked for a country-by-country comparison using the same 19 factors. Nine purchasers completed this comparison for the United States and France (table II-7), with two reporting that the U.S. and French products were comparable in all categories. Half or more of the responding purchasers reported that the U.S. and French products were comparable in all categories, with the exception of tails assay option, where seven purchasers rated the French product superior.

Seven purchasers completed the comparison for the United States and nonsubject Russia, and eight for the United States and Germany, the Netherlands, and the United Kingdom, collectively (table II-7). More than half of the purchasers reported that the product from the United States and the product from Russia were comparable in all categories, with the exception of availability, where three purchasers

reported that the U.S. product was superior and two reported that the Russian product was superior. In addition, six of the eight responding purchasers reported that Germany, the Netherlands, and the United Kingdom were superior for tails assay option.

Table II-6

LEU: Importance of purchase factors, as reported by purchasers

Factor	Very important	Somewhat important	Not important
	<i>Number of firms responding</i>		
Availability	23	3	0
Delivery terms (for feed)	12	13	2
Delivery terms (for LEU)	12	13	1
Delivery time	13	12	2
Discounts offered	11	12	4
Diverse source of supply	18	8	1
Escalation provisions	15	11	1
Extension of credit	2	6	18
Minimum quantity requirements	7	16	4
Packaging	3	12	12
Price	25	2	0
Product consistency	14	8	5
Product range	5	16	6
Quality meets industry standards	22	4	1
Quality exceeds industry standards	2	10	14
Reliability of supply	27	0	0
Tails assay option	20	5	1
Technical support/service	5	13	9
U.S. transportation costs	6	9	12

Note.--Not all purchasers responded for each factor. Purchasers also reported that production cost influences, plans for/execution of new capacity, experience with supplier, floor and ceiling limits, enrichment technology, and balance of contract risk factors were very important purchasing factors. One purchaser reported that quantity flexibility was somewhat important.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-7

LEU: Comparisons of the U.S. and French products and the U.S. and nonsubject products, as reported by purchasers

Factor	U.S. vs France			U.S. vs nonsubject (Russia)			U.S. vs nonsubject (Germany, the Netherlands, United Kingdom)		
	S	C	I	S	C	I	S	C	I
	<i>Number of firms responding</i>								
Availability	0	9	0	3	2	2	1	6	1
Delivery terms (for feed)	0	5	4	1	6	0	0	6	2
Delivery terms (for LEU)	0	9	0	1	6	0	0	8	0
Delivery time	1	8	0	1	6	0	1	7	0
Discounts offered	0	9	0	0	6	0	0	6	1
Diverse source of supply	0	7	2	1	5	1	0	4	4
Escalation provisions	0	6	3	1	5	0	0	4	4
Extension of credit	0	8	1	1	5	0	0	7	0
Lower price	0	7	2	1	5	1	0	5	3
Lower U.S. transportation costs	1	8	0	1	6	0	1	7	0
Minimum quantity requirements	0	9	0	1	5	1	0	7	1
Packaging	0	8	1	1	6	0	0	8	0
Product consistency	0	9	0	0	7	0	0	8	0
Product range	0	8	1	0	6	1	0	7	1
Quality meets industry standards	0	9	0	0	7	0	0	8	0
Quality exceeds industry standards	0	8	0	1	6	0	0	8	0
Reliability of supply	1	6	2	2	4	1	0	5	3
Tails assay option	0	2	7	0	4	3	0	2	6
Technical support/service	0	9	0	1	6	0	0	8	0
<p>Note.--Not all purchasers responded for every factor. S=first-listed country's product is superior; C=both countries' products are comparable; I=first-listed country's product is inferior.</p> <p>Source: Compiled from data submitted in response to Commission questionnaires.</p>									

Purchasers were asked if they make purchasing decisions involving LEU based on the country of origin of the producer or based on the identity of the producer, and their responses are summarized in the following tabulation:

Factor	Always	Usually	Sometimes	Never
Based on producer's country of origin?	0	3	8	16
Based on identity of the producer?	2	7	7	11

The vast majority of purchasers reported that they sometimes or never make purchasing decisions involving LEU based on the country of origin of the producer but, on the whole, they are more likely to make purchasing decisions based on the identity of the producer. Several purchasers reported that they sometimes consider the country of origin of the producer and the identity of the producer in order to diversify their supply of LEU. Other purchasers reported that the identity of the producer is important in order to gauge risk and the reliability of the supplier.

Twenty-three purchasers reported that 100 percent of their total purchases of LEU, as both enrichment and EUP, that were delivered since 2002 did not specify a particular country of origin but permitted delivery of any LEU of legally acceptable origin. The other four purchasers reported that all of their purchases did specify a specific country of origin.

Only two purchasers reported specifically ordering LEU from one country in particular over other possible sources of supply. *** reported that it would order LEU from a country for diversity of supply reasons, and *** reported that it has some preference for U.S.-produced LEU, but not at any price.

Purchasers were asked if they required certification or prequalification for suppliers of certain LEU. Only three purchasers required it for all of their purchases. These purchasers reported that the certification or prequalification process may involve becoming part of an approved supplier list or meeting ASTM standards. *** reported that, for both enrichment and EUP, the supplier must certify that it will provide material that meets the specifications of the next entity in the nuclear fuel processing chain.

Although most purchasers reported that they did not require suppliers to become certified or prequalified, 20 purchasers responded to the question asking for factors considered in qualifying a new supplier. Reported factors included meeting industry specifications, reliability, price, and risk. *** reported that it performs a qualitative or quantitative assessment of the supplier's ability to provide the product, which includes reviewing the supplier's performance history and financial statements. *** reported that it considers the political stability and regulatory structure of the country of the supplier, and *** reported that it considers the supplier's past issues with default or force majeure and the current regulatory status. *** reported that since there are only four major suppliers of LEU, it looks to their expected future reliability, which includes financial stability, technology, the ownership structure, and management and business plans. Purchasers were asked if any suppliers had failed to qualify their product or lost their approved status, and none of the responding purchasers reported that suppliers had failed to qualify.

Ten purchasers reported contacting all available suppliers before making a purchase. Others reported contacting 1 to 3 suppliers for spot purchases and 2 to 4 for long-term purchases. Fifteen of the 27 responding purchasers reported changing suppliers since 2002. Six reported adding LES; six reported adding Urenco; four reported adding Areva/Cogema; and three reported dropping USEC. *** reported adding and dropping suppliers throughout the bid process, and *** reported that it had not added or dropped any suppliers but that it had no constant supplier during the review period.

Eleven purchasers reported that LES had entered the market since 2002 as a new supplier.⁶⁶ The remaining purchasers reported that they were unaware of new suppliers, either domestic or foreign. When asked if they anticipate new suppliers entering the market in the near future, some purchasers cited LES, but seven purchasers cited GE's laser enrichment technology,⁶⁷ and five purchasers cited Areva's intentions to build an enrichment facility in the United States in the near future.⁶⁸

Lead Times

USEC reported that imported and U.S.-produced LEU ***. It also reported that lead times are *** for spot and long-term contracts. USEC reported that LEU delivery lead times have increased since 2002, from *** days in 2002 to *** days under new contracts. This increase in lead times has resulted from ***.⁶⁹

Purchasers were asked to explain the importance of delivery lead times for spot purchases of LEU and if lead times had changed since 2002. The vast majority of purchasers reported that they had not made spot purchases of LEU or did not know if lead times had changed. Three purchasers reported that lead times were relatively unimportant. Two purchasers reported that lead times have increased during the review period, and one purchaser reported that lead times have decreased. *** reported that lead times have increased from 90 to 150 days, but because purchases are planned so far in advance, this increase is not especially burdensome.

Comparisons of Domestic Products, Subject Imports, and Nonsubject Imports

Producers, importers,⁷⁰ and purchasers were asked to assess how interchangeable LEU from the United States is with LEU from both subject and nonsubject countries. Their responses are summarized in table II-8. Most producers, importers, and purchasers reported that LEU from the United States and from other countries is always interchangeable.

⁶⁶ Purchasers reported that LES entered the market in 2002-03 and that production should begin in 2009. Purchasers also reported that LES' production is fully committed for its first 10 years of operation.

⁶⁷ GE has a phased approach to commercializing the laser enrichment technology, beginning with the construction and operation of a test loop, with test runs planned for early 2008, to demonstrate engineering scale enrichment at GE's existing nuclear energy headquarters and technology site in Wilmington, North Carolina. The lead cascade (the initial commercial production module) and a full commercial plant are planned to follow. *See* http://www.gepower.com/prod_serv/products/nuclear_energy/en/downloads/uranium_enrichment.pdf, retrieved on August 29, 2007.

⁶⁸ Areva announced that a 3 million SWU enrichment plant could begin operation in 2013 and reach full capacity by 2017. "Areva's American Enrichment Plant," found at http://www.world-nuclear-news.org/explorationNuclearFuel/Areva_s_American_enrichment_plan_290607_printer.s.html, retrieved on August 29, 2007.

⁶⁹ USEC also reported that delivery lead times for natural uranium feed material also have increased since 2002, from *** days prior to delivery in 2002 to *** days prior to delivery in new contracts.

⁷⁰ Areva did not respond to the questions in this section that asked about interchangeability of LEU produced in the United States, France, and nonsubject countries. As an importer of LEU from Russia, the importer data in the table were reported by USEC.

Table II-8

LEU: U.S. producers', importers', and purchasers' perceived degree of interchangeability of products produced in the United States and in other countries¹

Country comparison	U.S. producers					U.S. importers					U.S. purchasers				
	A	F	S	N	0	A	F	S	N	0	A	F	S	N	0
U.S. vs. France	1	0	0	0	0	1	0	0	0	0	22	0	1	0	4
U.S. vs. other countries	1	0	0	0	0	1	0	0	0	0	21	0	2	0	4
France vs. other countries	1	0	0	0	0	1	0	0	0	0	21	0	1	0	5

¹ Producers, importers, and purchasers were asked if LEU produced in the United States and in other countries is used interchangeably.

Note.--"A" = Always, "F" = Frequently, "S" = Sometimes, "N" = Never, and "0" = No familiarity.

Source: Compiled from data submitted in response to Commission questionnaires.

USEC reported that LEU from the United States and other countries is always interchangeable. Among purchasers, 22 of 27 reported that LEU from the United States and France is always interchangeable, with 4 purchasers reporting that they had no knowledge of the interchangeability of the U.S. and French products. *** reported that agreements for cooperation are required before LEU can be completely interchangeable from one country to another and that U.S. trade restrictions limit interchangeability. *** reported that it had purchased LEU only from USEC but that it suspected that, for the most part, LEU from most countries is interchangeable. *** reported that as long as the LEU from any source meets ASTM specifications, it should be interchangeable.

Producers and importers⁷¹ were asked to assess how often differences other than price (table II-9) and how differences in price (table II-10) were significant in sales of LEU from the United States, France, and nonsubject countries. USEC reported that differences other than price between U.S.-produced LEU and LEU produced in other countries are never a significant factor in its sales of LEU. It also reported that differences in price are always a significant factor, explaining that ***.⁷²

⁷¹ Areva did not respond to the questions in this section that asked about interchangeability of LEU produced in the United States, France, and nonsubject countries. As an importer of LEU from Russia, the importer data in the table were reported by USEC.

⁷² USEC also reported that ***.

Table II-9**LEU: U.S. producers' and importers' perceived importance of factors other than price in sales of product produced in the United States and in other countries¹**

Country comparison	U.S. producers					U.S. importers				
	A	F	S	N	0	A	F	S	N	0
U.S. vs. France	0	0	0	1	0	0	0	0	1	0
U.S. vs. other countries	0	0	0	1	0	0	0	0	1	0
France vs. other countries	0	0	0	1	0	0	0	0	1	0

¹ Producers and importers were asked if differences in product characteristics or sales conditions between LEU produced in the United States and in other countries are a significant factor in their sales of the products.

Note.--"A" = Always, "F" = Frequently, "S" = Sometimes, "N" = Never, and "0" = No familiarity.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-10**LEU: U.S. producers' and importers' perceived importance of price differences in sales of product produced in the United States and in other countries¹**

Country comparison	U.S. producers					U.S. importers				
	A	F	S	N	0	A	F	S	N	0
U.S. vs. France	1	0	0	0	0	1	0	0	0	0
U.S. vs. other countries	1	0	0	0	0	1	0	0	0	0
France vs. other countries	1	0	0	0	0	1	0	0	0	0

¹ Producers and importers were asked if differences in price between LEU produced in the United States and in other countries are a significant factor in their sales of the products.

Note.--"A" = Always, "F" = Frequently, "S" = Sometimes, "N" = Never, and "0" = No familiarity.

Source: Compiled from data submitted in response to Commission questionnaires.

ELASTICITY ESTIMATES

U.S. Supply Elasticity

The domestic supply elasticity for LEU measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of LEU. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which U.S. producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced LEU. Earlier analysis of these factors indicates that, based principally on factors involving enrichment capacity, export shipments, and inventories of LEU, the U.S. producer has significant flexibility to alter its supply of LEU in the U.S. market; an estimate in the range of 4 to 8 is suggested.

U.S. Demand Elasticity

The U.S. demand elasticity for LEU measures the sensitivity of the overall quantity demanded to changes in the U.S. market price of LEU. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products. Based on the available information, the aggregate demand elasticity for LEU is likely to be in a range of -0.1 to -1.5.⁷³

Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.⁷⁴ Product differentiation, in turn, depends upon such factors as quality and conditions of sale. Based on available information, the elasticity of substitution between domestic and subject LEU is likely to be in the range of 4 to 6 for products from France. These estimates are based on unfettered access to the U.S. market and sales made on a similar basis. Producers, importers, and purchasers indicated that long-term contract prices, both market-related and fixed (the latter with or without a price escalator),⁷⁵ and spot purchase prices are typically negotiated and based on a number of factors, including availability and consideration of various published spot prices at the time of negotiation. Long-term contract prices are affected by spot prices at the time of delivery and by the spot prices at the time the contract was negotiated.⁷⁶ To account for the relationships between spot prices and long-term contract prices, both at the time long-term contracts are negotiated and at the time of delivery (the latter only for contracts with market-related price provisions), the staff estimates that an elasticity of substitution between U.S. and subject imported LEU be reduced by half, for an adjusted range of 2 to 3, when comparing the impact of the subject imported LEU spot prices in the current period on U.S. producers' long-term contract prices negotiated in the current period and deliveries of LEU under long-term contracts with market-related prices.⁷⁷

⁷³ In the short run, electric utilities could delay purchases of LEU by extending their reload cycle; this could be done by operating at a lower output level and buying electricity to meet their sales contracts. Fifteen purchasers reported that they have at least some flexibility in changing the length of their reload cycles. Such flexibility on the input side is based on contracts offering flexibility in the purchase volumes and the amount of purchases made with spot contracts.

⁷⁴ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

⁷⁵ Market-related prices in long-term contracts usually involve a variety of formulations such that the price at the time of delivery under a long-term contract is based on but not necessarily equal to the specified reported spot price existing at the time of delivery.

⁷⁶ To the extent that market conditions are similar during the time that the contract was negotiated and at the time of delivery under the contract, spot prices may actually be quite similar in both periods and give the impression that spot prices in the initial period were the primary factor affecting prices at the time of delivery. All types of long-term contracts are also negotiated based on buyer and seller perceptions of future demand and supply and the buyer's perceptions of the reliability of individual suppliers.

⁷⁷ This adjustment acknowledges that any subject imported LEU that is sold in the United States on a spot basis may still impact domestic LEU sold on a long-term contract basis.

PART III: CONDITION OF THE U.S. INDUSTRY

DEVELOPMENTS IN THE INDUSTRY

The only enrichment facilities in the United States currently operational are owned and operated by USEC. USEC, a global energy company headquartered in Bethesda, MD, estimates that it supplies more than half of the U.S. market and a quarter of the world market for enriched uranium services.¹ USEC currently enriches uranium at one gaseous enrichment plant in Paducah, KY. With existing equipment, the Paducah plant has a maximum capacity estimated at 8 million SWU per year, and is certified by the Nuclear Regulatory Commission (“NRC”) to produce LEU up to an assay of 5.5 percent U²³⁵.^{2,3} USEC’s other gaseous enrichment facility in Piketon, OH, which ceased uranium enrichment in 2001, is maintained in cold standby under a contract with DOE. Under cold standby, the plant could be returned to production of 3 million SWU capacity within 18 to 24 months, if the U.S. government determined that additional domestic enrichment capacity was necessary.⁴

American Centrifuge⁵

In October 2001, USEC announced plans to demonstrate and deploy a U.S. enrichment plant that would employ advanced gas centrifuge technology. The plant, to be known as the “American Centrifuge,” would be based on USEC upgraded existing DOE technology. In June 2002, USEC and the DOE entered into a memorandum of agreement (“MOA”) committing USEC to deploy a 1 million SWU enrichment facility at Paducah, KY, or Portsmouth, OH, which was to be expanded to a 3.5 million SWU facility within two years, with facility-dependent time frames to achieve these goals. In late 2002, USEC selected the Portsmouth plant as the site for the American Centrifuge test plant facility, and leased what became known as the Centrifuge Technology Center from DOE in Oak Ridge, TN. USEC applied to the Nuclear Regulatory Commission to license the facility in 2003, and the license was received in February 2004. In January 2004, USEC selected the Portsmouth, OH facility as the site for the American Centrifuge commercial facility. Under the DOE-USEC MOA, USEC is required to commence commercial operation by January 2009, to achieve 1 million SWU capacity by March 2010, and 3.5 million SWU capacity by September 2011. In August 2004, USEC filed an application with the NRC to license the American Centrifuge commercial plant, and the application was accepted by the NRC. In 2004 and 2005, USEC selected a number of key contractors for the American Centrifuge project, and in March 2006, USEC notified the NRC that it anticipated operating a test centrifuge with UF₆ at the American Centrifuge Demonstration Facility in June 2006.

¹ USEC, *Investor Fact Sheet*, Summer 2006.

² The Paducah plant has a nameplate annual capacity of *** SWU. Enrichment facilities that employ the gaseous diffusion method of production, such as USEC’s, typically operate below the reported nameplate capacity due to multiple factors, including the need to accommodate seasonal fluctuations in availability and prices of power, cooling constraints, and normal and unanticipated maintenance. ***.

³ Under the DOE-USEC Agreement signed on June 17, 2002, USEC agreed to operate the Paducah plant at a production rate at or above 3.5 million SWU per year. The 3.5 million annual production level may not be reduced until six months before USEC has completed a centrifuge enrichment facility capable of producing 3.5 million SWU per year. USEC expects to produce about 5 million SWU in 2007. USEC 2006 10-K, p.11.

⁴ The cold standby program is periodically extended, and is anticipated by USEC to continue through 2008. USEC 10-Q, June 30, 2007, p. 21.

⁵ The discussion in this section is from USEC’s 10-K, 2002-06.

In mid-2006, USEC announced that it was delaying the building of its Lead Cascade of centrifuges to allow for additional testing of individual machines at its Oak Ridge facility. The Lead Cascade consists of fewer than 20 full-size prototype machines that serve as the basic building block of a commercial plant, and are used for testing and demonstration purposes. In October 2006, USEC announced that it had successfully tested the centrifuges with an output of approximately 350 SWU per year. This was a gain over the original target output of 320 SWU per year, which was about eight times higher than the next best commercially deployed centrifuge.⁶ This improved performance in output would also result in an increase of the plant capacity from 3.5 million SWU to 3.8 million SWU.

USEC was unable to meet the DOE-USEC MOA milestone for satisfactory reliability and performance data from the Lead Cascade in October 2006, and for a financing commitment secured for a 1 million SWU centrifuge plant in January 2007. In March 2007, DOE accepted USEC's proposal that these two milestones be rescheduled.⁷ The reliability and performance data of the lead cascade was revised to October 2007, and the financial commitment was rescheduled to January 2008.

In May 2007, USEC began construction of the plant, after being granted a construction and operating licence by the Nuclear Regulatory Commission ("NRC") the previous month. USEC increased its target estimate for the cost of deployment from an initial estimate of \$1.7 billion to \$2.3 billion. USEC expects commercial plant operations to commence in late 2009, and have approximately 11,500 centrifuge machines deployed by 2012. The plant is projected to provide about 3.8 million SWU of production, though its license application is for 7 million SWU, which, particularly given the plant's modular design, allows for future expansion. Its license, furthermore, allows for up to an assay level of 10 percent U²³⁵, an increase over the typical enrichment plant level of 5 percent. The plant is expected to use 95 percent less electricity than a comparably sized gaseous diffusion plant.⁸ In addition, the centrifuges are designed to enrich uranium four times as fast as the existing advanced centrifuges commercially deployed, such as those operated by Urenco.⁹

USEC has committed with the DOE to have a test Lead Cascade operational and generating product assay in a range usable by commercial nuclear power plants by October 2007.¹⁰ Commencement of commercial operations of the American Centrifuge Plant is anticipated in late 2009, with approximately 11,500 machines, with a production rate of about 3.8 million SWU, deployed by 2012.¹¹

In conjunction with the anticipated deployment of the American Centrifuge Plant, USEC reported anticipated changes in the character of its operations or organization relating to production of enriched uranium in the future. ***. Under the DOE-USEC MOA, USEC is obligated to produce at least 3.5 million SWU per year at the Paducah plant until six months before the American Centrifuge plant, capable of producing 3.5 million SWU per year, is deployed.¹² ***.¹³

⁶ USEC estimates that the ACP machines will cost about twice as much as the latest generation of competing technology, but the higher output results in a lower capital cost per SWU. USEC, "Paving a way today for new enrichment tomorrow," speech by USEC CFO, Dennis Spurgeon, October 2, 2001.

⁷ USEC 10-Q, March 31, 2007, p. 22.

⁸ USEC, "USEC receives American Centrifuge Plant License," news release, April 13, 2007.

⁹ Dan Charles, "U.S. Centrifuge Work Revived in Updated Form," *The Washington Post*, April 23, 2007.

¹⁰ USEC 10-Q, March 31, 2007, p. 11.

¹¹ While these dates are later than the schedule established by the milestones in the DOE-USEC MOA, USEC anticipates reaching an agreement with DOE regarding these milestones at a later date. USEC 10-Q, June 30, 2007, p. 11.

¹² USEC's 2002 10-K, p. 9.

¹³ USEC indicated in its testimony that USEC intends to operate both plants concurrently. Hearing transcript, p. 139 (Whitehurst).

In August 2007, the DOE informed USEC and Energy Solutions that it had rejected their October 2006 proposal for a \$9.5 billion sole-source contract to decontaminate and decommission the Portsmouth and Paducah plants. The proposal also called for Energy Solutions to acquire USEC and invest in the American Centrifuge project.¹⁴

Other Anticipated U.S. Facilities

In addition to USEC's American Centrifuge plant, there are several other facilities with anticipated production start dates in the next five to seven years, including the National Enrichment Facility, an enrichment plant by AREVA, and deployment of Silex/GE's laser-based technology.

Louisiana Energy Services, a wholly owned subsidiary of Urenco, gained approval from the NRC in June 2006 to construct and operate a gas centrifuge enrichment facility in Lea County, New Mexico. The plant, named the National Enrichment Facility ("NEF"), employs a new license that combines the construction and operation, allowing LES to transition from one stage directly to the other. In August 2006 construction was started on the plant, with first production of 1 million SWU expected in mid-2009, reaching full capacity of 3 million SWU by 2013.¹⁵ Accepted and committed contracts for NEF exceed \$3 billion.¹⁶ The contracts with six major U.S. utilities, along with letters of intent signed with five additional U.S. utilities, represent around 90 percent of NEF's output in the first ten years of operation.¹⁷ The construction of NEF is expected to cost around \$1.5 billion, and will use the same sixth generation centrifuge technology currently used at Urenco's enrichment plants in Europe. NEF is licensed to enrich uranium up to 5 percent.

In May 2007, Areva NC submitted proposals to the NRC to build a \$2 billion centrifuge enrichment plant in the United States with the initial capacity of 3 million SWU.¹⁸ The proposed enrichment plant would use the same technology that is used in the National Enrichment Facility and in Areva's Georges Besse II centrifuge enrichment plant under construction in France. The centrifuge technology would be provided by the Enrichment Technology Company ("ETC"), a joint venture between Urenco and Areva. Areva aims to select a site by the end of 2007, submit a license application to the NRC in mid-2008, have a licence issued by mid-2010, begin construction in late-2010, and begin commercial operation in 2013.¹⁹

Finally, GE-Hitachi Nuclear Energy ("GEH"), in partnership with Silex Systems, is pursuing the development and commercial deployment of the laser-based enrichment technology, SILEX. As described in *Part I*, SILEX has several potential advantages over gaseous and centrifuge enrichment, including lower power consumption and capital costs, relatively simple separation modules, and a modular, scalable technology. A test loop to demonstrate engineering scale enrichment is expected to be

¹⁴ U.S. House of Representatives, Committee on Energy and Commerce, "Stupak, Dingell applaud Energy Department decision to reject \$9.5 billion sole source contract proposal from Energy Solutions and USEC," news release, October 2, 2007.

¹⁵ Urenco, *2006 Annual Report*, p. 20.

¹⁶ NEF press release, June 23, 2006.

¹⁷ Urenco requires long-term commitments from these U.S. utilities, translating into the typical NEF contracts ranging from five to eight years. Urenco Eurobond prospectus, December 2, 2005, p. 41.

¹⁸ In its proposal, Areva pointed out its projected U.S. demand for enriched uranium is larger than the combined capacity of the NEF and the American Centrifuge, especially given the end of the Russian-HEU Agreement in 2013.

¹⁹ Nuclear Regulatory Commission, *Memorandum; May 21, 2007, Areva meeting summary*, June 21, 2007.

completed in Wilmington, NC by November 2007, with a projected start-up in 2012.^{20, 21} Target capacity for the facility is between 3.5 and 6 million SWUs.²²

U.S. PRODUCER’S CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

USEC’s LEU production, capacity, and capacity utilization data are presented in table III-1. The U.S. producer’s production capacity was well below apparent U.S. consumption of LEU in each year during the review period. Over the review period, USEC reported steady production capacity, while production, on a SWU basis, declined from 2002 through 2005, before increasing *** percent in 2006, although still *** percent lower than 2002. Capacity utilization declined over the period, from *** percent in 2002 to *** percent in 2006.

Table III-1
LEU: U.S. production capacity, production, and capacity utilization, 2002-06, January-June 2006, and January-June 2007

* * * * *

USEC has experienced several changes in its operations since February 6, 2002, including increases in the price of inputs, employment restructuring, acquisition of NAC, and the development and deployment of a new enrichment plant.

***, USEC stated that its two key inputs in the production of LEU, natural uranium and electricity, have increased in price over the period of review. The average market price of natural uranium (UF₆) rose from \$30.60 per kgU in January 2002, to \$358 per kgU in June 2007.²³ The average price for electricity increased from \$0.488 per kilowatt-hour in 2002 to \$0.616 per kilowatt-hour in January-April 2007.²⁴ A more detailed discussion of these two factors is presented in *Part V: Pricing and Related Information*.

In February 2002, USEC announced a consolidation of its transfer and shipping operations, resulting in the elimination of 440 positions at the Portsmouth plant and the creation of 30 to 50 new positions at the Paducah plant.²⁵ In November 2002, USEC announced a voluntary reduction of 200 employees at the Paducah plant to be completed in 2003.²⁶ USEC’s union workforce at the Paducah plant

²⁰ Nuclear Regulatory Commission, *Status of the SILEX project proposed by General Electric Nuclear*, Policy Issue SECY-07-0031, February 9, 2007.

²¹ Two of the United States’ largest nuclear utilities signed non-binding letters of intent to contract for uranium enrichment services from GEH. GE-Hitachi Nuclear Energy press release, October 4, 2007.

²² Ibid.

²³ Uranium prices from TradeTech, LLC, found at <http://www.uranium.info/prices/uf6spot.html>, retrieved on August 23, 2007.

²⁴ Electricity industrial prices from U.S. Energy Information Administration, found at <http://www.eia.doe.gov>, retrieved on August 23, 2007. The Paducah plant uses the equivalent of approximately 6 million kilograms of uranium each year in the production of LEU, and had an average power load in 2006 of 1,370 megawatts. USEC’s 2006 10-K, pp. 7-8.

²⁵ USEC, “USEC to consolidate its transfer and shipping operations at Paducah plant,” news release, February 13, 2002.

²⁶ USEC, “USEC offers early retirement program to Paducah, KY plant employees,” news release, November 26, 2002.

went on strike in February 2003, but the strike did not affect production operations.²⁷ The strike ended in June 2003 with ratification of an 8-year labor agreement. USEC subsequently executed a 6-year agreement with its union at the Portsmouth plant in March 2004,²⁸ and later negotiated a 5-year contract with the guards union which will run until March 2012.²⁹ In November 2004, USEC acquired NAC International for \$16.1 million. NAC is a provider of consulting services, spent nuclear fuel storage, and nuclear fuels transportation.³⁰ In September 2005, USEC announced a restructuring involving reducing its 132 person headquarters by one-third, and a voluntary reduction of 50 people at the Paducah plant.³¹

The tabulation below presents the change in employment from June 30, 2002 to January 1, 2007.

Facility	June 30, 2002	January 1, 2007
Number of employees		
Paducah, KY plant	1,471	1,147
Portsmouth, OH plant ¹	1,288	1,082
American Centrifuge	37	295
Bethesda, MD headquarters	117	85
NAC	n/a	68
Total USEC employment	2,913	2,677
¹ These employees were employed in the ***. Source: USEC 2002 10-K and 2006 10-K.		

U.S. PRODUCER’S DOMESTIC SHIPMENTS AND EXPORT SHIPMENTS

*** of USEC’s U.S. shipments of LEU under both SWU and EUP contracts were made under contracts with utilities. The share of total U.S. shipments represented by SWU contracts ranged from a low of *** percent in 2004 to *** percent in 2002, with each of the remaining years between *** and *** percent. The quantity and value of U.S. deliveries declined between 2002 and 2004, before increasing in 2005 and 2006. Both the quantity and value of U.S. deliveries declined from interim 2006 to interim 2007. USEC exported more LEU, in terms of both quantity and value, than it delivered domestically over the period of review, ranging from a high of *** percent in 2004, to a low of *** percent in 2002. Export markets included ***. Table III-2 presents shipments of U.S.-produced LEU by type.

Table III-2
LEU: U.S. producer’s U.S.-produced LEU shipments, by type, 2002-06, January-June 2006, and January-June 2007

* * * * *

²⁷ This represented 635 plant employees or approximately half of all plant employees. USEC 10-K, December 31, 2003, pp. 20, 36.

²⁸ USEC, “PACE Local 5-689 membership ratifies six-year contract with USEC,” news release, March 11, 2004.

²⁹ USEC 10-Q, March 31, 2007, p. 21.

³⁰ USEC 10-K, December 31, 2004, p. 35. USEC also acquired 83 NAC employees in Atlanta, Georgia. p. 21.

³¹ USEC, “USEC announces company realignment to prepare for the future,” news release, September 7, 2005.

U.S. PRODUCER'S INVENTORIES

Data provided on end-of-period inventories by USEC are presented in table III-3. Inventories of LEU, owned and held by USEC, started the period of review at a low, then increased from 2003 through 2005, before declining in 2006. The ratio of inventories to production followed a similar trend. Inventories also declined during the interim periods.

Table III-3

LEU/natural uranium: U.S.-produced end-of-period inventories owned and/or held by U.S. producer, 2002-06, January-June 2006, and January-June 2007

* * * * *

U.S. PRODUCER'S IMPORTS AND PURCHASES

USEC reported that it *** non-import SWU or EUP purchases. In addition to enriching uranium in the United States, USEC, as the U.S. Executive Agent, is required to import large quantities of Russian 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 Russia HEU agreement.”³² In January 1994, USEC, as Executive Agent for the U.S. Government, and Techsnabexport (“Tenex”), as Executive Agent for the Russian Ministry of Atomic Energy (“MINATOM”), executed a contract for the delivery of LEU blended down from 500 metric tons of HEU with a U²³⁵ assay of 90 percent from nuclear weapons of the former USSR.³³ About 15,260 metric tons of LEU (assuming a product assay of 4.4 percent and a tails assay of 0.3 percent), containing over 92 million SWUs and over 152 million kilograms of natural uranium equivalent, will ultimately be delivered to USEC by the year 2014.³⁴

USEC began ordering LEU under the Russian HEU Agreement in June 1995. Since then, orders have increased from 1.1 million SWUs in the last half of 1995 to 5.5 million SWUs in 2001 and for the remainder of the agreement. In late 1996, the agreement was amended to establish specific quantities and prices through 2001. In 2000 and again in 2002, USEC and Tenex agreed to amend the agreement and adopt market-based principle terms for the remaining period effective 2003.³⁵ From June 1995 through

³² In addition to this material, USEC also has purchased Russian SWU for matched sales under the antidumping suspension agreement.

³³ Although the extent of inventories of HEU in Russia are not precisely known, reportedly at the time of the HEU agreement, the Russian Government held 770 metric tons, in addition to the HEU designated as part of the HEU agreement. *Uranium from Russia, Ukraine, and Uzbekistan, Inv. No. 731-TA-539-C, E, and F (Review)*, USITC Publication 3334, August 2000, p. II-14.

³⁴ DOE, Report to Congress on the HEU Agreement, December 31, 2005. USEC expects the total purchase value of the enrichment portion of the material to be about \$8 billion, and the total program value, including the natural uranium portion, to be approximately \$12 billion.

http://www.usec.com/v2001_02/HTML/megatons_howitworks.asp, retrieved on July 24, 2007.

³⁵ In October 1998, a U.S. law (PL 105-277) was signed that, in part, provided for the United States to spend up to \$325 million to buy about 11,000 tons U, equivalent to the HEU feed component contained in the 1997 and 1998 deliveries of the blended-down HEU. With the goal of preventing natural uranium prices from falling, the material is being kept off the market by DOE until March 24, 2009.

June 2007, USEC received from Russia about 8,930 metric tons of LEU blended down from approximately 306 metric tons of HEU.³⁶

After the end of 2007, the Russian HEU Agreement provides that the parties may agree on appropriate adjustments, if necessary, to ensure that Tenex received at least approximately \$7.6 billion for the SWU component over the 20-year period of the Russian HEU agreement. USEC does not expect that any adjustments will be required.³⁷

Under the terms of the USEC Privatization Act and the USEC-Tenex Implementing Agreement, only the SWU component is to be purchased by USEC, the U.S. executive agent for the Russia HEU agreement. To carry out this procedure, USEC takes delivery and title of the LEU down-blended from HEU in St. Petersburg, Russia and then transfers the equivalent of the natural uranium component of the LEU, in the form of natural UF₆, from its stockpiles in the United States to Tenex, the authorized Russian agent for the HEU agreement.³⁸ The UF₆ transferred to Tenex, referred to as HEU feed, is considered Russian material and cannot be sold in the United States unless it meets U.S. quota restrictions under the USEC Privatization Act.³⁹ Physically, the LEU is delivered to a U.S. fabricator which is then delivered to utilities after fabrication.

Data provided by USEC concerning the direct imports and domestic purchases of Russian LEU are presented in table III-4.

Table III-4
LEU: U.S. producer's direct imports of Russian LEU, 2002-06, January-June 2006, and January-June 2007

* * * * *

U.S. PRODUCER'S EMPLOYMENT, WAGES, AND PRODUCTIVITY

Employment data provided by USEC are presented in table III-5. The reported data indicate a decline in the number of workers employed by USEC and in the number of hours worked by these employees during the period of review, while productivity fluctuated between *** and *** SWUs per hour. As previously mentioned, USEC had several reductions in employment due to restructuring of the company, and the end of uranium enrichment operations at its Portsmouth plant in Piketon, OH.

Table III-5
LEU: U.S. producer's employment-related indicators, 2002-06, January-June 2006, and January-June 2007

* * * * *

³⁶ USEC estimates that this represents the equivalent amount of material from 12,231 nuclear warheads. http://www.usec.com/v2001_02/HTML/megatons_howitworks.asp, retrieved on July 24, 2007.

³⁷ USEC 2006 10-K, p. 10.

³⁸ This is approximately nine million kilograms per year. The uranium is provided to an account at USEC's Paducah plant maintained on behalf of Tenex. Tenex holds, sells, or otherwise exchanges this uranium in transactions with other suppliers or utility customers. USEC 2006 10-K, p. 10.

³⁹ In March 1999, to better enable the HEU feed to enter the U.S. market in a nondisruptive manner, the Commercial Feed Agreement was signed. This agreement allowed Western companies, Cameco, Cogema/Arveva, and Nukem to purchase some of the feed material from Tenex and resell this material to the United States, provided that quota restrictions were not exceeded.

FINANCIAL EXPERIENCE OF THE U.S. PRODUCER

Background

USEC's LEU financial results were reported for calendar year periods on the basis of U.S. generally accepted accounting principles. The following activity is presented in this section of the report: overall establishment financial results, financial results on combined U.S. and Russian-produced LEU, financial results on U.S.-produced LEU, and financial results on Russian-produced LEU.^{40 41} In addition to LEU country of origin, LEU is divided into aggregate SWU and EUP transactions and designated as either domestic or export sales.⁴²

USEC's Overall Establishment Operations

Table III-6 presents overall establishment operations and is based on consolidated income statements and statements of cash flows as reported by USEC in its public SEC filings.⁴³

⁴⁰ This presentation is consistent with the initial investigation and the sunset review related to the Russian suspension agreement. With respect to this format in general, USEC states that it "****." Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007. "****" Ibid.

⁴¹ A traditional variance analysis relies on unitized values. Because volumes associated with EUP and SWU revenue and costs are measured differently, a variance analysis is not presented in this section of the report.

⁴² USEC explained that "****." Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007.

⁴³ In its consolidated income statements, USEC effectively classifies advanced technology costs and special charges (credit) as operating items. In order to be consistent with the Commission's traditional income statement format, these items are included in the other income and expense section of table III-6, table III-7, table III-9, and table III-12.

Table III-6

USEC's overall establishment operations on U.S.-produced LEU: 2002-06, January-June 2006, and January-June 2007

Item	Calendar year					January-June	
	2002	2003	2004	2005	2006	2006	2007
Value (\$1,000)							
Revenue:							
Separative work units	1,181,500	1,110,800	1,027,300	1,085,600	1,337,400	638,300	550,900
Uranium	75,300	159,900	224,000	261,300	316,700	146,800	32,000
U.S. government contracts and other	123,400	166,000	165,900	212,400	194,500	101,500	93,200
Total revenue	1,380,200	1,436,700	1,417,200	1,559,300	1,848,600	886,600	676,100
Cost of sales:							
Separative work units and uranium	1,174,200	1,124,100	1,071,600	1,148,400	1,349,200	630,200	496,000
U.S. government contracts and other	115,200	150,200	151,500	181,400	162,500	84,800	79,200
Total cost of sales	1,289,400	1,274,300	1,223,100	1,329,800	1,511,700	715,000	575,200
Gross profit	90,800	162,400	194,100	229,500	336,900	171,600	100,900
Selling, general, and administrative expenses	54,100	69,400	64,100	61,900	48,800	25,800	24,000
Operating income	36,700	93,000	130,000	167,600	288,100	145,800	76,900
Other income and expenses:							
Special charges (credit)	(6,700)	0	0	7,300	3,900	1,500	0
Advanced technology costs	22,900	44,800	58,500	94,500	105,500	47,100	69,300
Interest expense	36,500	38,400	40,500	40,000	14,500	8,200	5,900
Interest income	7,000	5,400	3,900	10,500	6,200	2,300	17,800
Other income, net	0	0	1,700	1,000	0	0	0
Net income (loss) before income taxes	(9,000)	15,200	36,600	37,300	170,400	91,300	19,500
Cash flow from operations as per USEC's consolidated statements of cash flows	201,000	109,900	52,600	188,900	278,100	39,700	(82,800)
Ratio to item-specific net sales (percent)¹							
Cost of SWU and uranium to associated revenue	93.4	88.5	85.6	85.3	81.6	80.3	85.1
Cost of U.S. government contracts and other to associated revenue	93.4	90.5	91.3	85.4	83.5	83.5	85.0
Ratio to net sales (percent)							
Total cost of sales to total revenue	93.4	88.7	86.3	85.3	81.8	80.6	85.1
Gross profit	6.6	11.3	13.7	14.7	18.2	19.4	14.9
SG&A expense	3.9	4.8	4.5	4.0	2.6	2.9	3.5
Operating income	2.7	6.5	9.2	10.7	15.6	16.4	11.4
Net income (loss)	(0.7)	1.1	2.6	2.4	9.2	10.3	2.9
¹ LEU segment gross profit and related information is presented in table III-7.							
Source: Compiled from USEC SEC 10-K and 10-Q filings. As presented in this table, staff reclassified advanced technology costs and special charges (credit) to the other income and expenses section of all relevant tables in this section of the report.							

USEC's overall establishment operations are divided into two segments: LEU and U.S. government contracts.⁴⁴ The LEU segment generates the majority of USEC's consolidated revenue and is itself subdivided into SWU and Uranium components.⁴⁵ According to USEC, "***."⁴⁶ While the sale of uranium has enhanced USEC's earnings and cash flow during the period, future uranium sales reportedly will be limited due to reduced uranium inventory.⁴⁷ As shown in table III-6, uranium sales increased during the full-year periods and then declined substantially in interim 2007 compared to interim 2006.

USEC's overall revenue moved within a relatively broad range during the review period. With regard to this pattern in general the company stated in its 2005 10-K that "{o}ur revenues and operating results can fluctuate significantly from quarter to quarter, and in some cases, year to year . . . Customer requirements and orders are more predictable over the longer term, and we believe our performance is best measured on an annual, or even longer, business cycle."⁴⁸

Overall profitability generally improved during the full-year periods with gross profit and operating income increasing in both absolute terms and as a percent of sales. From its low point in 2004, corresponding cash flow from operations also increased in the subsequent full-year periods. While these financial measures appear robust, USEC's net income was impacted by large and increasing levels of advanced technology costs and to a lesser extent by special (non-recurring) charges.^{49 50}

USEC's advanced technology costs are related primarily to the American Centrifuge project, as described in detail in a previous section of this report. According to the company, while the American Centrifuge project has been financed throughout the period using internally generated cash flow, full-year 2007 funding of expenditures is expected to be supplemented with a credit facility. As USEC continues towards commercial deployment, higher expenditure levels will reportedly require additional capital from outside sources.⁵¹

⁴⁴ The U.S. government contracts segment represents work performed for DOE and DOE contractors, as well as activity of USEC's subsidiary NAC. USEC 2006 10-K, p. 6. DOE-related work includes maintaining the Portsmouth, OH plant in "cold standby" mode, processing out-of-specification uranium, and providing infrastructure services. NAC designs, fabricates, and implements spent nuclear fuel technologies, as well as provides nuclear materials transportation, and nuclear fuel cycle consulting services.

⁴⁵ USEC 2006 10-K, p. 56.

⁴⁶ Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007.

⁴⁷ In its 2006 10-K, USEC states that ". . . an inventory of natural uranium that has provided us with substantial earnings and cash flow in recent years will be substantially depleted by the end of 2007, further pressuring our profitability." USEC 2006 10-K, p. 44.

⁴⁸ USEC 2005 10-K, p. 39.

⁴⁹ As noted previously and while the naming convention is the same, USEC's advanced technology costs and special charges (credit) were reclassified as other expenses (income) items for purposes of this report. The amounts reported for these items match the amounts reported in USEC's consolidated income statements.

⁵⁰ The special credit of \$6.7 million in 2002 represented a change in the previous cost estimate for consolidating plant operations, while the 2005 special charge of \$7.3 million primarily consisted of severance benefits related to the company's restructuring of headquarters and field operations. USEC 2002 10-K, p. 30 and USEC 2005 10-K, p. 37. In 2006, the \$3.9 million special charge was related to several items including the impairment of an intangible asset related to USEC's 2004 purchase of NAC, as well as an additional charge related to the 2005 restructuring plan. USEC 2006 10-K, p. 42.

⁵¹ USEC 2006 10-K, p. 13. According to USEC "{d}uring the past four years, we have spent \$371 million from internally generated cash to develop and demonstrate the American Centrifuge technology. To fund the balance of the American Centrifuge project, our plan has been to use internally generated cash flow together with funds raised through equity and debt offerings. Given the declining level of cash generated by our existing operations due primarily to increases in electric power costs, the increase in cost to complete the American Centrifuge project and

(continued...)

As shown in table III-6, the substantial decline in USEC’s interest expense, which partially offset higher advanced technology costs and special charges, was primarily due to the repayment of \$288.8 million in senior notes at the beginning of 2006. Part of the decline in interest expense was also due to an increase in capitalized interest related to the American Centrifuge project.⁵²

At the end of the period, USEC’s long-term debt consisted of \$150 million in senior notes rated CCC by Standard and Poor’s, while the company’s corporate credit rating was B- with a negative outlook. This corporate credit rating is marginally lower compared to USEC’s BB rating at the beginning of the review period.⁵³

As shown in table III-6, in interim 2007 compared to interim 2006 USEC’s profitability was lower and its cash flow from operations was negative. The factors related to this relative decline in USEC’s interim 2007 financial results are discussed in the LEU country-of-origin sections below.

Combined Operations on U.S. and Russian-produced LEU

Table III-7 presents the combined financial results on USEC’s U.S. and Russian-produced LEU operations. For comparative purposes table III-7 also includes information related to USEC’s LEU segment financial results. Average unit values for selected items are presented in table III-8.

Table III-7
USEC’s combined operations on U.S. and Russian-produced LEU: 2002-06, January-June 2006, and January-June 2007

* * * * *

Table III-8
USEC’s combined operations on U.S. and Russian-produced LEU: 2002-06, January-June 2006, and January-June 2007

* * * * *

⁵¹ (...continued)

the current level of perceived risk in the project, we will need some form of investment or other participation by a third party and/or the U.S. government to raise the capital required in 2008 and beyond to complete the project on our deployment schedule.” Ibid.

⁵² USEC 2006 10-K, p. 62.

⁵³ USEC 2006 10-K, p. 68. USEC 2002 10-K, p. 35. During the latter half of September 2007 (subsequent to the period of review) USEC issued \$500 million in convertible unsecured senior notes which were also rated CCC by S&P. “New Senior Debt Rated “CCC” by S&P”, found at http://biz.yahoo.com/ap/070926/usec_ratings.html?.v=1, retrieved on October 24, 2007.

A CCC rating on long-term debt would be in the middle of the Standard and Poor’s rating scale (BB, B, CCC, CC, and C) of obligations considered to have significant speculative characteristics. According to Standard and Poor’s “{a}n obligation rated ‘CCC’ is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.” Standard and Poor’s definitions, found at www2.standardandpoors.com, retrieved on August 14, 2007.

With respect to creditworthiness generally, Standard and Poor’s states “{a}n obligor rated ‘B’ is more vulnerable than the obligors rated ‘BB’, but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor’s capacity or willingness to meet its financial commitments.” Ibid. A “negative outlook” indicates that the long-term credit rating may be lowered over the intermediate term (typically six months to two years).

As shown in table III-8, domestic average SWU values were generally higher compared to export values and also followed a somewhat different pattern. While the overall trend reflects declining average SWU values from 2002 through 2004, base year prices for SWU under new long-term contracts generally increased during the period.⁵⁴

In addition to the lowest average SWU value, 2004 also reflects USEC's lowest level of annual SWU volume. According to USEC, 2004 volume was affected by "... temporary shutdowns of certain nuclear reactors in Japan, lower contractual commitments from customers, and the timing of customer orders."⁵⁵ As shown in table III-8, EUP average sales value generally increased during the period. The exception to this pattern was the *** in interim 2007 compared to interim 2006.⁵⁶

Although operations on U.S. and Russian-produced LEU accounted for the majority of USEC's overall establishment operations and LEU segment operations, these three combinations of financial results reflect somewhat different patterns of profitability. Most notably the absolute level of gross profit of overall establishment operations and LEU segment operations increased in 2004 and 2005, ***.⁵⁷ The ***.⁵⁸

Operations on U.S.-Produced LEU

Table III-9 presents the financial results on USEC's U.S.-produced LEU. Table III-10 presents average unit values for selected items. Table III-11 presents USEC's U.S.-produced LEU cost of production.

**Table III-9
USEC's operations on U.S.-produced LEU: 2002-06, January-June 2006, and January-June 2007**

* * * * * * *

**Table III-10
Operations on U.S.-produced LEU: 2002-06, January-June 2006, and January-June 2007**

* * * * * * *

**Table III-11
U.S.-produced LEU average production costs: 2002-06, January-June 2006, and January-June 2007**

* * * * * * *

⁵⁴ In its 2004 10-K, USEC noted that "... our backlog includes contracts awarded to USEC when prices were lower. As a result, the average SWU price billed to customers has declined in recent years, but began to level off in 2004. USEC expects that sales under new contracts will in time increase the average SWU price billed to customers." USEC 2004 10-K, p. 31.

According to USEC and based on price information published by Trade Tech, SWU under new long-term contracts at year end were \$105 in 2002 and 2003, \$107 in 2004, \$115 in 2005, and \$136 in 2006. USEC 2004 10-K, p. 31. USEC 2006 10-K, p. 47.

⁵⁵ USEC 2004 10-K, p. 38.

⁵⁶ According to USEC and with respect to EUP sales, "***." Letter from Steptoe and Johnson on behalf of USEC, August 31, 2007. For full-year 2007 the referenced submission indicated that USEC projects an *** on EUP transactions. Ibid.

⁵⁷ Letter from Steptoe and Johnson on behalf of USEC, August 28, 2007.

⁵⁸ As noted previously, USEC confirmed that LEU segment "Uranium revenue" ***. According to USEC, "***." Ibid.

As shown in table III-9, the majority of U.S.-produced LEU was classified as ***. With regard to this pattern USEC stated that “***.”⁵⁹ As indicated previously, LEU effectively *** once it is delivered by USEC to the fabricator for pre-production.

According to USEC, U.S.-produced LEU “{p}roduction costs consist principally of electric power, labor and benefits, depleted uranium disposition cost estimates, materials, depreciation and amortization and maintenance and repairs.”^{60 61} As noted previously, electricity costs, which represent the single largest component of USEC’s production costs, increased during the period.⁶² As shown in table III-11, higher average SWU energy costs at the end of the period are largely due to the mid-2006 expiration of USEC’s multi-year power agreement with TVA, USEC’s primary power supplier.⁶³

The substantial increase in power costs at the end of the period put increased pressure on USEC’s U.S.-produced LEU gross profit margins which, as shown in table III-9, were only marginally above break- even throughout most of the full-year period. With respect to efforts to offset higher power costs, USEC states that “{a}lthough we are currently signing new contracts in which prices for future deliveries are adjusted, in part, on the basis of changes in a power cost index, most of our sales contracts do not include provisions that permit us to pass through increases in power prices to our customers. As a result, our gross profit margin and cash flow under these sales contracts will be significantly reduced by the higher power costs under the amended TVA contract.”⁶⁴ In this regard, USEC’s first half 2007 10-Q attributed the decline in interim 2007 gross profit as primarily due to higher power costs which began in June 2006 and which were only partially offset by higher SWU prices.⁶⁵

As shown in table III-9 and with the exception of interim 2006, USEC’s U.S.-produced LEU operations ***. To the extent that traditional SG&A expense ratios remained within a relatively narrow range, *** were due to low and generally declining gross margins during the review period. In broad terms, gross margins during the review period were lower compared to the original investigation due to a combination of higher average COGS, notably at the beginning and end of the period, and average SWU values which generally declined through 2004.^{66 67}

⁵⁹ Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007.

⁶⁰ USEC 2006 10-K, p. 83.

⁶¹ USEC operated a single gaseous diffusion plant at Paducah, KY, and maintained its former enrichment operations in Portsmouth, OH in cold standby mode. In 2002, USEC was also still in the process of eliminating the shipping and transfer operations at the Portsmouth, OH facility. USEC 2002 10-K, p. 6.

⁶² As a percentage of total production costs, electricity increased from 58 percent in 2002 to 70 percent in 2006. USEC 2002 10-K, p. 30 and USEC 2006 10-K, pp. 7-8. In 2001 the percentage of electricity cost to total production cost was 52 percent. USEC 2001 10-K, p. 19. USEC notes that “{t}he gaseous diffusion technology that we use at the Paducah plant is an older, high-operating cost technology that requires substantially greater amounts of electric power than the centrifuge technology used by our competitors.” USEC 2006 10-K, p. 21.

⁶³ According to USEC, the initial TVA agreement (2000 through mid 2006) represented “fixed, below market prices,” while the subsequent 1-year pricing agreement with TVA “. . . is about 50% higher than the previous pricing and also is subject to a fuel cost adjustment to reflect changes in TVA’s fuel costs, purchased power costs, and related costs.” USEC 2006 10-K, pp. 7-8.

⁶⁴ USEC 2006 10-K, p. 24.

⁶⁵ USEC 2nd quarter 2007 10-Q, p. 28.

⁶⁶ ***.

⁶⁷ USEC’s U.S.-produced COGS (as a percent of sales) increased in 2002 compared to 2001 (see table C-1). With respect to the components of this increase, table III-11 shows that during the current review period average SWU direct labor costs were highest in 2002. According to USEC, “***.” Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007. Similarly, USEC’s 2002 10-K stated that U.S. production costs in 2002 were also
(continued...)

In conjunction with initially low and declining gross margins, USEC's *** on its U.S.-produced LEU operations largely reflect unallocated advanced technology costs and special charges, as previously described. While it appears generally reasonable to attribute these costs entirely to U.S.-produced LEU operations (e.g., on the grounds that they are related directly to prospective U.S. LEU operations), USEC's *** are substantially higher as a result.

Operations on Russian-Produced LEU

Table III-12 presents the financial results on USEC's Russian-produced LEU. Table III-13 presents average unit values for selected items.

Table III-12
USEC's operations on Russian-produced LEU: 2002-06, January-June 2006, and January-June 2007

* * * * * * *

Table III-13
Operations on Russian-produced LEU: 2002-06, January-June 2006, and January-June 2007

* * * * * * *

In contrast with U.S.-produced LEU, the majority of Russian-produced LEU was classified as ***. Additionally, while ***. Also in contrast with U.S.-produced LEU operations, Russian-produced LEU sales increased throughout the period and, with the exception of 2002, was greater than U.S.-produced LEU revenue in absolute terms.

With respect to the cost of Russian SWU recognized in USEC's financial statements ". . . the SWU component of LEU purchased under the Russian Contract is recorded at acquisition cost plus related shipping costs."⁶⁸ An equivalent amount of natural uranium embodied in the LEU purchased by USEC is given back to the Russian Executive Agent such that USEC effectively only purchases the SWU component. As shown in table III-13, the average cost of Russian SWU declined in 2003 compared to 2002 which is largely a function of a new pricing agreement between USEC and the Russian Executive Agent which went into effect in 2003.⁶⁹

⁶⁷ (...continued)
 affected by lower production volume. USEC 2002 10-K, p. 30.

As noted previously, higher energy costs in 2006 and 2007 are generally attributable to the new 1-year TVA purchase agreements. With regard to the increase in average SWU energy costs in 2005, as shown in table III-11, USEC stated that, "***." Letter from Steptoe and Johnson on behalf of USEC, August 20, 2007.

⁶⁸ USEC 2006 10-K, p. 83.

⁶⁹ USEC states in its 2003 10-K, that "{a}n amendment to the Russian Contract created a market-based mechanism to determine prices beginning in 2003 and continuing through 2013. In consideration for this stable and economic structure for the future, USEC agreed to extend the calendar year 2001 price of \$90.42 per SWU through 2002. Beginning in 2003, prices are determined using a discount from an index of international and U.S. price points, including both long-term and spot prices." USEC 2003 10-K, p. 31.

As shown in table III-12 and *** with USEC’s U.S.-produced LEU operations, Russian-produced LEU operations were *** throughout the period. In addition to generally higher SWU and EUP values, associated SWU and EUP average costs were also consistently lower ***. The result of this favorable combination was *** gross and operating income margins for Russian-produced LEU throughout the period.⁷⁰

Research and Development Expenses, Capital Expenditures, Assets, and Return on Investment

Data on research and development (“R&D”) expenses, capital expenditures, total assets, and return on investment (“ROI”) are presented in table III-14.

**Table III-14
 USEC’s U.S.-produced LEU operations, Russian-produced LEU operations, combined LEU operations, and overall establishment operations: R&D expenses, capital expenditures, total assets, and return on investment, 2002-06, January-June 2006, and January-June 2007**

* * * * *

USEC’s R&D expenses increased substantially during the period and were related primarily to the American Centrifuge project. As shown in table III-14, the majority of R&D expenses were attributed to U.S. LEU operations, while *** R&D expenses related to Russian-produced LEU operations were ***.

Capital expenditures declined to their lowest point in 2004 and subsequently increased. By the end of the period, as with R&D expenses, the majority of USEC’s capital expenditures were related to the American Centrifuge project.⁷¹ According to the company, capital expenditures for full-year 2007 are projected to be substantially higher compared to full-year 2006: “{t}otal spending on the American Centrifuge project in 2007 is expected to be approximately \$340 million, initially split between \$130 million in expense, \$190 million in capital expenditures and the remainder in prepayments for specialty materials and new manufacturing facilities. The allocation of spending between expense and capital expenditures will ultimately be dependent on our ability to move the project from a demonstration phase to a commercial plant phase in which significant expenditures will be capitalized.”⁷² Like R&D expenses, USEC reported *** capital expenditures related to Russian-produced LEU operations.

USEC’s U.S.-produced LEU operations are supported by current and long-term fixed assets. Since most of the buildings and facilities related to gaseous diffusion at the Paducah, KY, and Portsmouth, OH, plants are covered by a long-term lease with DOE, USEC’s fixed production assets primarily reflect capitalized leasehold improvements and machinery/equipment.^{73 74} The majority of Russian-produced LEU assets represents ***.

⁷⁰ ***.

⁷¹ USEC 2006 10-K, p. 51.

⁷² USEC 2006 10-K, p. 63.

⁷³ USEC 2006 10-K, p. 7.

⁷⁴ In response to a staff question regarding the continued lease of the non-operational enrichment facilities at Portsmouth, OH, USEC explained that “***.” Letter from Steptoe and Johnson on behalf of USEC, August 28, 2007.

PART IV: U.S. IMPORTS AND THE INDUSTRY IN FRANCE

U.S. IMPORTS

Imports of LEU into the United States from all sources based on official import statistics of the Department of Commerce are presented in table IV-1. Official statistics are presented in this report because they are believed to be the most accurate measure of imports of LEU, as limited information was received in response to the Commission's questionnaires.¹ Although some subject merchandise may be imported under other HTS subheadings, it is believed that the vast majority of imports of subject product are reported under the subject HTS subheading.² Official import statistics include imports under both SWU and EUP contracts.

The quantity of imports of subject LEU from France, on a SWU basis, fluctuated over the period of review, increasing 180 percent from 2002 to 2003, and declining 75 percent from 2003 to 2006. The subject imports' share of total imports followed a similar pattern, cresting in 2003 at 27.9 percent of imports and falling to 9.0 percent in 2006, and 0.6 percent in interim 2007. The quantity of nonsubject imports also followed a similar pattern, increasing 41.1 percent from 2002 to 2003, then declining 27.8 percent between 2003 and 2005, and increasing 32.8 percent from 2005 to 2006. Imports from Germany, the Netherlands, and the United Kingdom fluctuated over the period of review, but all ended at or near their highest levels in 2006 in terms of SWU, and all at their highest share of imports. The United Kingdom, in particular, increased its share of imports, from 13.2 percent in 2002 to 28.1 percent in 2006.

¹ The sole importer of subject merchandise, Eurodif/Areva, provided three separate submissions in response to the Commission's U.S. importer and foreign producer questionnaires: August 3, 2007 (initial responses), October 17, 2007 (first supplemental response pursuant to direct requests from Commissioners), and October 23, 2007 (second supplemental response pursuant to staff requests for clarifications). Essentially, Eurodif/Areva submitted its substantive importer and foreign producer questionnaires two and a half months after the Commission had requested all responses to be submitted, thus limiting the time for analysis and any data clarifications or corrections. See footnotes 4 and 5 of *Part I* of this report for additional information.

In its supplemental questionnaire responses, Areva reported imports of LEU from France based on ***, which Areva was "****." Weil, Gothshal & Manges submission of October 25, 2007, pp. 1-2. *** reported imports of LEU from France were made pursuant to SWU contracts and *** commercial shipments were made to utilities. (See tabulation below).

* * * * *

² Subject merchandise is classifiable under HTS statistical reporting number 2844.20.0020. Subject merchandise may also enter under statistical reporting numbers 2844.20.0030, 2844.20.0050, and subheading 2844.40.00.

Table IV-1

LEU: U.S. imports, by sources, 2002-06, January-June 2006, and January-June 2007¹

Item	Calendar year					January-June	
	2002	2003	2004	2005	2006	2006	2007
	Quantity (1,000 SWUs)²						
France	1,431	4,004	2,109	2,223	982	462	24
Russia	3,830	4,706	4,107	3,778	3,843	1,699	1,370
Germany	557	973	1,092	934	1,004	322	573
Netherlands	478	1,011	734	830	1,509	696	1,022
United Kingdom	1,158	2,083	3,224	1,512	3,057	1,668	713
Other sources	1,292	1,551	459	403	494	421	121
Subtotal, nonsubject	7,314	10,324	9,615	7,458	9,906	4,805	3,799
Total imports	8,745	14,328	11,724	9,681	10,887	5,268	3,823
	Quantity (1,000 kgs of enriched U)						
France	353	987	520	548	242	114	6
Russia	944	1,160	1,012	931	947	419	338
Germany	137	240	269	230	247	79	141
Netherlands	118	249	181	205	372	171	252
United Kingdom	285	513	795	373	753	411	176
Other sources	318	382	113	99	122	104	30
Subtotal, nonsubject	1,803	2,545	2,370	1,838	2,442	1,184	936
Total imports	2,156	3,532	2,890	2,386	2,683	1,298	942
	Value of SWUs (\$1,000)						
France	250,357	555,019	346,789	456,198	274,491	118,444	14,337
Russia	762,181	911,943	825,843	827,334	841,074	354,515	308,342
Germany	105,677	145,253	214,835	210,174	260,926	71,163	206,378
Netherlands	78,315	153,802	154,631	209,664	450,484	188,825	428,273
United Kingdom	202,605	325,891	346,439	350,682	885,485	434,686	305,361
Other sources	210,240	247,026	81,018	72,942	65,687	48,129	73,559
Subtotal, nonsubject	1,359,019	1,783,915	1,622,766	1,670,797	2,503,655	1,097,318	1,321,912
Total imports	1,609,376	2,338,934	1,969,555	2,126,995	2,778,147	1,215,762	1,336,249

Table continued on next page.

Table IV-1--Continued

LEU: U.S. imports, by sources, 2002-06, January-June 2006, and January-June 2007¹

Item	Calendar year					January-June	
	2002	2003	2004	2005	2006	2006	2007
	Unit value (per SWU)						
France	\$175	\$139	\$164	\$205	\$280	\$256	\$589
Russia	199	194	201	219	219	209	225
Germany	190	149	197	225	260	221	360
Netherlands	164	152	211	253	299	271	419
United Kingdom	175	156	107	232	290	261	429
Other sources	163	159	177	181	133	114	607
Subtotal, nonsubject	186	173	169	224	253	228	348
Total imports	184	163	168	220	255	231	349
	Share of quantity in SWUs (percent)						
France	16.4	27.9	18.0	23.0	9.0	8.8	0.6
Russia	43.8	32.8	35.0	39.0	35.3	32.2	35.8
Germany	6.4	6.8	9.3	9.6	9.2	6.1	15.0
Netherlands	5.5	7.1	6.3	8.6	13.9	13.2	26.7
United Kingdom	13.2	14.5	27.5	15.6	28.1	31.7	18.6
Other sources	14.8	10.8	3.9	4.2	4.5	8.0	3.2
Subtotal, nonsubject	83.6	72.1	82.0	77.0	91.0	91.2	99.4
Total imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Share of quantity in kgs of enriched U (percent)						
France	16.4	27.9	18.0	23.0	9.0	8.8	0.6
Russia	43.8	32.8	35.0	39.0	35.3	32.2	35.8
Germany	6.4	6.8	9.3	9.6	9.2	6.1	15.0
Netherlands	5.5	7.1	6.3	8.6	13.9	13.2	26.7
United Kingdom	13.2	14.5	27.5	15.6	28.1	31.7	18.6
Other sources	14.8	10.8	3.9	4.2	4.5	8.0	3.2
Subtotal, nonsubject	83.6	72.1	82.0	77.0	91.0	91.2	99.4
Total imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table IV-1--Continued

LEU: U.S. imports, by sources, 2002-06, January-June 2006, and January-June 2007¹

Item	Calendar year					January-June	
	2002	2003	2004	2005	2006	2006	2007
	Share of value (percent)						
France	15.6	23.7	17.6	21.4	9.9	9.7	1.1
Russia	47.4	39.0	41.9	38.9	30.3	29.2	23.1
Germany	6.6	6.2	10.9	9.9	9.4	5.9	15.4
Netherlands	4.9	6.6	7.9	9.9	16.2	15.5	32.1
United Kingdom	12.6	13.9	17.6	16.5	31.9	35.8	22.9
Other sources	13.1	10.6	4.1	3.4	2.4	4.0	5.5
Subtotal, nonsubject	84.4	76.3	82.4	78.6	90.1	90.3	98.9
Total imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes imports under SWU contracts and EUP contracts.

² Import quantities are reported in kgs in official Commerce statistics. The conversion factor to SWUs is kg*0.67618*6. USEC, *What is a SWU?*, found at http://www.usec.com/v2001_02/HTML/Aboutusec_swu.asp, retrieved on September 10, 2007.

Source: Compiled from data from official Commerce statistics.

U.S. IMPORTER'S INVENTORIES

The U.S. importer's end-of-period inventories of LEU from France are reported in table IV-2.

Table IV-2

LEU: U.S. importer's end-of-period inventories from France, 2002-06, January-June 2006, and January-June 2007

* * * * *

THE WORLD MARKET

There are 437 nuclear reactors in operation throughout the world,³ most of them owned by electric utility companies that generate electricity by a variety of means and distribute it throughout defined regions. Approximately one-quarter of these are in the United States, followed by France with just over one-eighth.⁴ About 20 percent of U.S. electricity is generated by nuclear fuel,⁵ and the United States accounts for about one-quarter of the world's nuclear electric power generation.⁶

³ See <http://www.iaea.org/cgi-bin/db.page.pl/pris.oprconst.htm>, retrieved on June 25, 2007.

⁴ Ibid. The United States had 104 operational nuclear power reactors in 2006. France obtains approximately 78 percent of its electricity from nuclear fuel.

⁵ EIA, *Monthly Energy Review*, June 2007, p. 97. The United States' total annual power production in 2006 was 4,052,968 GWh(e), of which 787,219 GHw(e) was nuclear power production.

⁶ IAEA Power Reactor Information System ("PRIS") database, found at <http://www.iaea.org/programmes/a2/index.html>, retrieved on June 26, 2007.

Over 95 percent of the world's enrichment capacity is controlled by four entities: USEC in the United States; Eurodif/Areva in France; Rosatom in Russia; and Urenco with facilities in Germany, the Netherlands, and the United Kingdom. The enrichment nameplate capacity for the primary supplier of uranium enrichment for 2005, consisting of facilities employing both gaseous centrifuge and gaseous diffusion technology, is presented in the following tabulation:⁷

Location	Diffusion	Centrifuge
Quantity (1,000 SWU)		
China (CNNC)	(¹)	1,000
France (Eurodif/Areva)	10,800	(¹)
Germany (Urenco)	(¹)	1,800
Japan (JNFL)	(¹)	1,050
Netherlands (Urenco)	(¹)	3,500
Russia (Rosatom)	(¹)	25,000
UK (Urenco)	(¹)	3,700
USA (USEC)	8,000	(¹)
Others ²	(¹)	300
Totals	18,800	36,350
Grand total		55,150
¹ Not applicable.		
² Includes Argentina, Brazil, India, and Pakistan.		

As shown, estimated global capacity in 2007, 55.1 million SWU, appears to be slightly greater than the global demand figure of 50.1 million SWU estimated by the WNA; this is in contrast with the demand-supply balance for primary uranium.⁸ In actuality, global SWU production may not be greater than global SWU demand, ignoring the impact of inventories, as actual SWU production may be substantially below nameplate capacity, particularly for diffusion plants.⁹

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, especially the more up-to-date technologies. 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. As previously described, USEC plans to install a gas centrifuge plant

⁷ WNA, *Global Nuclear Fuel Market, 2007*, Table 4.21. USEC's capacity was reduced from 11.3 million SWU as reported by the WNA to 8 million SWU as reported by USEC's 2006 10-K to reflect the fact that USEC's design capacity has not been reached. USEC's capacity for the Portsmouth, OH gaseous enrichment plant was not included as it is in cold standby.

⁸ WNA, *Global Nuclear Fuel Market, 2007*, Table IV.1 (Reference Scenario).

⁹ Although the annual capacity of USEC's gaseous diffusion enrichment plant in Paducah, KY, is about 8 million SWU, annual production was reported to be only about 5 million SWU. USEC 2006 10-K, p. 11.

with a capacity of 3.8 million SWU. The plant is expected to commence commercial operations in late 2009, and is based on DOE's previous research on this technology. In France, Areva, using Urenco centrifuge technology, is building a gas centrifuge plant. The plant, which will have a capacity of at least 7.5 million SWU, is expected to reach full capacity by 2016. Urenco, through its subsidiary LES, is planning a gaseous centrifuge plant near Hobbs, NM with a capacity of 3 million SWU, which is expected to be completed by 2013.

The centrifuge plants, based on a cascade of individual centrifuges, reportedly are not equal in efficiency. A Russian centrifuge has a capacity of about 4 SWU per year per machine, which is being upgraded to 6 SWU; whereas in Western Europe, centrifuges are being deployed with a capacity of 40 SWU per year per machine; and the American Centrifuge project will deploy an array of centrifuges which would have a capacity of about 350 SWU per year per machine.¹⁰

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 11 million SWU at its European facilities by the end of 2010, whereas representatives of the Russian enricher, Rosatom (formerly Minatom), announced plans to increase capacity from 20 to 26 million SWU presumably because of newer and more efficient centrifuge technology design, and increase capacity at the Angarsk enrichment plant from 2.5 to 10 million SWU by 2015. R&D to improve gas centrifuge technology is currently ongoing in tandem with expansion plans.¹¹ In addition, GEH has indicated plans to commercialize the SILEX laser technology. Plans are for a full scale Global Laser Enrichment facility by 2012, with the eventual production target of 3.5 to 6.0 million SWU.¹² 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.¹³

THE INDUSTRY IN FRANCE

Eurodif, the sole producer of LEU in France, is a large, well established global competitor in the LEU market.¹⁴ Eurodif is majority owned by Areva NC, which is a wholly owned subsidiary of the Areva group.¹⁵ Prior to March 2006, Areva NC was known as COGEMA. The Areva group, which was established in September 2001, is a global leader in nuclear power and ranks number three worldwide for electricity transmission and distribution. It is the only international group to be active in every stage of

¹⁰ *Uranium from Russia, Inv. No. 731-TA-539-C (Second Review)*, USITC Publication 3872, August 2006, pp. IV-12-13

¹¹ WNA, *Global Nuclear Fuel Market, 2005*, pp. 155-156, and WNA, *Global Nuclear Fuel Market, 2007*, pp. 143-146.

¹² GE-Hitachi Nuclear Energy press release, October 4, 2007.

¹³ WNA, *Global Nuclear Fuel Market, 2007*, p. 146.

¹⁴ The sole importer of subject merchandise, Eurodif/Areva, provided three separate submissions in response to the Commission's U.S. importer and foreign producer questionnaires: August 3, 2007 (initial responses), October 17, 2007 (first supplemental response pursuant to direct requests from Commissioners), and October 23, 2007 (second supplemental response pursuant to staff requests for clarifications). Essentially, Eurodif/Areva submitted its substantive importer and foreign producer questionnaires two and a half months after the Commission had requested all responses to be submitted, thus limiting the time for analysis and any data clarifications or corrections. See footnotes 4 and 5 of *Part I* of this report for additional information.

¹⁵ Eurodif is 44.65-percent owned by Areva NC, while Sofidif, which is itself 59.6 -percent owned by Areva NC, holds 25 percent, thereby effectively placing Areva NC's ownership of Eurodif at 59.7 percent. The remaining shareholders of Eurodif are Enusa, an entity of the Spanish government, Synatom, an entity of the Belgian government, and Enea, an entity of the Italian government. Areva, *2006 Reference Document*, p. 28.

the nuclear cycle.¹⁶ Areva estimates that it has 25 percent of the world's available enrichment capacity, and has the largest share of the Western European enrichment market.¹⁷ The French public sector owns 87 percent of Areva, of which the Commissariat à l'Énergie Atomique ("CEA") (French Atomic Energy Commission) owns 79 percent. Of the 13 percent not owned by the public sector, 2.42 percent is owned by the French utility, EDF.¹⁸

Eurodif was formed in 1973 by France and four other countries, Belgium, Italy, Spain, and Sweden, to conduct studies and research in the field of gaseous diffusion enrichment, to build and operate plants, and to market enriched uranium.¹⁹ Unlike Urenco, which is oriented towards an external market, Eurodif was intended to serve the domestic fuel requirements of its members. The level of investment of each member corresponded to its percentage share of the product, and sensitive barrier technology was held by only one member: France. Thus, while excluding the transfer or sharing of sensitive technology, Eurodif did provide European participants with an assurance of supply, and an equity share in a production enterprise utilizing proven advanced technology. Unlike Urenco, Eurodif has never been a manufacturer of enrichment equipment. Changes in the pace of national nuclear power programs in some of the member countries, particularly Italy and Iran,²⁰ affected the timing of the enrichment requirements, and in turn their ability to absorb their share of production. This in turn altered their relationship to Eurodif, and dramatically increased France's share in Eurodif.²¹

Eurodif's gaseous diffusion enrichment plant, named Georges Besse, is located on the Tricastin nuclear site in southern France. The Georges Besse plant started commercial operation in 1979, and has a capacity of 10.8 million SWU per year, with capacity utilization between 40 and 100 percent, depending on the period of the year. The plant consists of an enrichment cascade with 1,400 stages divided in 70 groups.²² The plant has a direct connection to the adjacent Electricité de France's ("EDF") Tricastin nuclear power station, which consists of four nuclear reactors that supply electricity to the enrichment plant, almost exclusively during peak operations. The plant consumes an average of 3 to 4 percent of France's entire generation of electricity. For some customers, including EDF, Areva's enrichment business unit's biggest customer representing about 50 percent of its business, SWU sales are made under a processing contract in which the customer provides the electricity necessary for its own enrichment requirements. These arrangements concern approximately half of the volumes processed. Consequently, the customer only pays for the enrichment service, and not for the cost of the electricity.²³ In 2006,

¹⁶ Areva, *2006 Reference Document*, p. 34.

¹⁷ Areva, *2006 Reference Document*, p. 77.

¹⁸ http://www.arevagroup.com/servlet/ContentServer?pagename=arevagroup_en%2FPage%2FPageFreeHtmlFullTemplate&c=Page&cid=1140584426332, retrieved on August 28, 2007.

¹⁹ Areva, *2006 Reference Document*, p. 28.

²⁰ In 1974, Sweden withdrew from Eurodif and was replaced by Iran through the joint enterprise, Sofidif, which was 60-percent owned by Cogema and 40-percent by the Iranian Atomic Energy Commission. Consequently, Iran acquired Sweden's 10-percent share in Eurodif. Uranium Enrichment and Nuclear Weapon Proliferation by Allan S. Krass, Peter Boskma, Boelie Elzen and Wim A. Smit, 1983, p. 200.

²¹ IAEA, *Multilateral Approaches to the Nuclear Fuel Cycle*, April 2005, pp. 61-62.

²² Areva, *2006 Reference Document*, p. 76.

²³ Areva, *2006 Reference Document*, p. 77. Eurodif and EDF signed an amendment to the enrichment services supply contract in January 2007 to set terms for 2007 and to extend the contract for at least one more year. The contract has been in force since 1996. Areva, *2006 Reference Document*, p. 79.

Eurodif and EDF signed a one-year amendment to extend the contract to supply electricity to Areva for its export operations (i.e. non-EDF), which had been in force since 1996.²⁴

The Georges Besse plant was initially designed for a useful life of 20 years, though through additional investments and maintenance, the plant's technical sustainability is reportedly assured until early in the next decade. However, due to economic reasons, primarily the price of electricity, the plant's main cost component, Areva plans to have completed decommissioning of the plant by 2020, and replace it with a new facility using centrifuge technology.²⁵ Areva expects the new facility to consume 50 times less electricity.²⁶

The replacement plant, Georges Besse II, an ultra-centrifuge enrichment technology-based enrichment plant, is anticipated to be brought into service with its first cascade in the first half of 2009.²⁷ By the end of 2012, the first unit is expected to be totally operational, and the gaseous diffusion plant, Georges Besse I, will cease production and the decommissioning of its operations will commence. When the first two units are completed in 2018, the plant is anticipated to have a capacity of 7.5 million SWU, with a possible third unit bringing capacity to 11 million SWU. Construction of the new centrifuge plant was started in September 2006. In April 2007, the Georges Besse II plant was granted a nuclear license to produce 8.2 million SWU per year at a maximum assay level of 6 percent.²⁸ The total overall cost of the Georges Besse II plant is estimated to be 3 billion euros.

The centrifuge technology to be used in the Georges Besse II plant and the National Enrichment Facility in the United States is being provided by Enrichment Technology Company, Ltd. ETC was formed in October 2003 as a result of a reorganization of Urenco. ETC was established as a stand-alone subsidiary of Urenco to supply Urenco with centrifuge technology and equipment.²⁹ In July 2006, Areva and Urenco signed an agreement that established ETC as a joint venture between the two companies. This agreement was subject to competition clearance from the European Commission, as well as intergovernmental agreements between the governments of Germany, the Netherlands, the United Kingdom, and France. Under the agreement, Urenco and Areva will continue to compete in the provision and marketing of uranium enrichment services.³⁰

²⁴ Areva, *2006 Reference Document*, p. 79. When the original contract expired at the end of 2005, EDF reportedly sought to increase the price it charged Areva, possibly as high as 130 percent. Nuclear Fuel, *Urenco, Areva close ETC deal; GB II startup targeted for 2009*, July 17, 2006, p. 4.

²⁵ Areva, *2006 Reference Document*, p. 58. Power represents approximately 60 percent of the production costs. Areva, *2006 Reference Document*, p. 168.

²⁶ Areva, *2006 Reference Document*, p. 76. The centrifuge enrichment facility is expected to consume 75 MW compared with over 3,000 MW for the gaseous diffusion plant. The new plant will also use 40,000 cubic meters of groundwater and none from the Rhone River, compared with 70,000 cubic meters of groundwater and 26 million cubic meters from the Rhone. In addition, the new centrifuge plant is expected to save Areva 21,000 megawatt-hours equivalent of natural gas. Nuclear Fuel, *Urenco, Areva close ETC deal; GB II startup targeted for 2009*, July 17, 2006, p. 3.

²⁷ The centrifuge plant will start up with Urenco's current generation TC-12 centrifuge, rather than the more advanced TC-21 machines, which are still in the testing phase. Georges Besse II is designed to accommodate the taller TC-21. Nuclear Fuel, *Urenco, Areva close ETC deal; GB II startup targeted for 2009*, July 17, 2006, pp. 3-4.

²⁸ Areva, "Expanding the U.S. nuclear infrastructure by building a new uranium enrichment facility" (presentation, pre-application meeting with the NRC, May 21, 2007), p. 22.

²⁹ ETC, *History of ETC*, found at <http://www.enritec.com/FullStory.aspx?m=73>, retrieved on July 30, 2007.

³⁰ Urenco and Areva press release, July 3, 2007.

Areva's enrichment business unit, of which ETC and Eurodif are a part, had 1,902 employees in 2006, up from 1,498 employees in 2005.³¹ Sales revenue over the same period increased from 727 million euros to 844 million euros.³² The Eurodif plant is reportedly operating near full capacity, producing 10.4 million SWU in 2005. This was down from a high of 10.6 million SWU in 2003.³³ Part of production was an effort by Areva to stockpile LEU for the possibility of a power supply interruption, given the negotiation to renew Areva's EDF power supply contract, and to secure a supply so that customers will continue to be served after the diffusion plant is shut down and before the centrifuge plant is operating a full capacity.³⁴ As of the end of 2006, Areva reported an average export backlog equal to five years of sales.³⁵ Areva reported that it has been selling LEU in the United States since 1982, and that virtually all of Areva's transactions involving the delivery of LEU to the United States are made pursuant to "enrichment services" in the form of SWU transactions.³⁶

The Commission went to extraordinary lengths to obtain usable and complete questionnaire responses from Areva. After multiple attempts to obtain such a response, Areva provided limited data in its response to both the Commission's importer and foreign producer questionnaires.³⁷ Table IV-3 presents the data of the LEU industry in France, based on the information provided by Areva in its responses to the Commission's questionnaire. Areva reported that sales of LEU represented *** percent of its total sales and deliveries in its most recent fiscal year, all of which were under SWU contracts. As illustrated, Areva's capacity utilization started the period of review at a low of *** percent, then rose to its highest level of *** percent in 2005, then declined in 2006 to *** percent. Areva's exports to the United States as a share of total shipments peaked in 2005 at *** percent, and then fell to *** percent in 2006, and *** percent in interim 2007. Over the period of review, home market shipments represented between *** and *** percent of Areva's total shipments.

Table IV-3
LEU: Data on the industry in France, 2002-06, January-June 2006, and January-June 2007

* * * * *

³¹ This increase includes the addition of 50 percent of ETC workforce of 959 employees. Approximately 80 percent of the employees work at the Georges Besse plant. Areva, *2006 Reference Document*, p. 76. This was an increase from 1,516 employees in 2002. Areva, *2002 Reference Document*, p. 38.

³² Areva, *2006 Reference Document*, p. 76. This was an increase from 662 million euros in 2002. Areva, *2002 Reference Document*, p. 38.

³³ Nuclear Fuel, *Urenco, Areva close ETC deal; GB II startup targeted for 2009*, July 17, 2006, p. 4. The volume of SWU sales fluctuated from 9.55 million SWU in 2004, to 10.6 million SWU in 2003, and to 10.4 million SWU in 2004 and 2005. Areva, *2003-05 Reference Documents*.

³⁴ Hearing transcript, p. 225 (Carbonell).

³⁵ Areva, *2006 Reference Document*, p. 79.

³⁶ Areva reported only two or three insignificant spot sales of "LEU" in 1999 and 2000. Hearing transcript, p. 154 (Carbonell).

³⁷ The sole importer of subject merchandise, Eurodif/Areva, provided three separate submissions in response to the Commission's U.S. importer and foreign producer questionnaires: August 3, 2007 (initial responses), October 17, 2007 (first supplemental response pursuant to direct requests from Commissioners), and October 23, 2007 (second supplemental response pursuant to staff requests for clarifications). Essentially, Eurodif/Areva submitted its substantive importer and foreign producer questionnaires two and a half months after the Commission had requested all responses to be submitted, thus limiting the time for analysis and any data clarifications or corrections. See footnotes 4 and 5 of *Part I* of this report for additional information.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

U.S. electric utilities are the primary end users of LEU, and they typically purchase uranium concentrates and processing services at each successive stage of the uranium fuel cycle. Some utilities also buy EUP for part of their requirements. The total cost of LEU purchased via the uranium fuel cycle is the sum of the prices utilities pay for uranium concentrates, conversion of uranium concentrates to natural UF₆, and enrichment, which is based on the number of SWUs required to enrich the natural UF₆.¹ The number of SWUs associated with a given quantity of LEU depends on the product and tails assays,² specified by the contracting electric utility.³ The higher the product assay and/or the lower the tails assay, the greater the number of SWUs required, and thus the greater the cost of enrichment. In addition, USEC reported that ***.

Swaps and loans of LEU are less frequent than those for natural uranium products and are normally undertaken by industry participants to minimize transportation costs, to ensure that the product is available to a customer in a timely manner at contract-specified quantities, to meet unexpected demand requirements, to optimize inventories, and to change the country of origin of the uranium products.⁴ USEC reported that the use of swaps and loans *** since 2002. The vast majority of purchasers reported that the use of swaps and loans in the LEU market is unchanged since 2002, with many purchasers reporting that they did not use swaps or loans in their LEU transactions during the review period.⁵ *** reported that their use of swaps and loans has increased for uranium feed material.

Raw Materials

Natural UF₆ is the primary material input used to produce LEU in the United States, and prices of UF₆ have increased dramatically since 2002, especially since mid-to-late 2003 (*see* figure V-1). USEC reported that when uranium prices began increasing in late 2003, ***.⁶

Fourteen purchasers reported that uranium inventories have affected the supply of LEU in the U.S. market since 2002, with nine of the purchasers reporting that inventories of uranium have decreased during the review period and some reporting that fewer uranium inventories have been a factor in the

¹ SWU is an international unit of measure for enrichment service and sales. The electric utility pays for conversion and enrichment; the utility owns and supplies the material input, uranium concentrates and natural UF₆, respectively, to the converter and enricher. For EUP, the utility does not supply any natural UF₆ to the enricher.

² Product assays refer to the increased level of concentration of the U²³⁵ isotope required in the LEU, and the tails assays refer to the depleted level of concentration of this isotope in the waste product. It takes 9 kilograms of UF₆ and 5 SWUs to produce 1 kilogram of enriched uranium at a 4 percent enrichment level with 8 kilograms of depleted uranium with a tails assay of 0.3 percent.

³ According to purchasers, USEC and foreign enrichers restrict the requested tails assays to specified ranges. USEC reported that ***. In addition, USEC reported that ***.

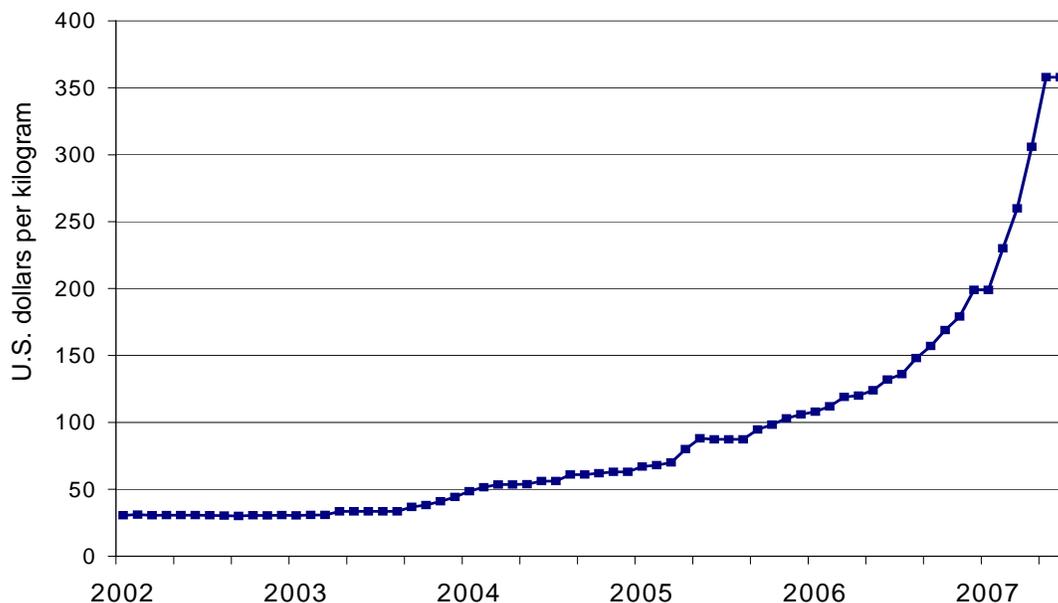
⁴ Although swaps can be used to circumvent import restrictions, the U.S. government regulates swaps of restricted uranium to prevent any such circumvention.

⁵ Duke reported that swaps of LEU are uncommon but do occur on occasion to save on transportation costs. Hearing transcript, p. 204 (Church).

⁶ USEC reported that its Paducah plant uses the equivalent of approximately 6 million kilograms of uranium each year in the production of LEU. USEC, 2006 Annual Report, found at <http://library.corporate-ir.net/library/93/936/93662/items/238264/USU06AR.pdf>, retrieved on September 4, 2007.

increased price of uranium.⁷ Two purchasers reported that hedge funds and brokers have had some effect on uranium inventories and thus the supply of LEU in the U.S. market.⁸ *** reported that reduced inventories have prompted an increase in lead times and affect the amount of carrying cost associated with fabricating fuel assemblies. *** reported that the decrease in inventories of uranium, along with an announcement by the U.S. Department of Energy that it will release additional inventory in the market, have contributed to the perception of supply shortages.⁹

Figure V-1
LEU: Monthly spot value of UF₆ as reported by Trade Tech, as of the last day of the month, January 2002-June 2007



Source: TradeTech, found at <http://www.uranium.info/prices/uf6spot.html>, retrieved on August 16, 2007.

⁷ In contrast, according to the EIA, inventories of uranium held by owners and operators of nuclear reactors have increased from 53 million pounds in 2002 to 78 million pounds in 2006. Uranium Marketing Annual Report, EIA, 2004 and 2006. TradeTech reported that when uranium supplies become scarce and the price is high, utilities are likely to implement policies to increase their inventories. “Uranium Market Transitions to Higher Prices and Tighter Supplies,” TradeTech, July 2005, found at <http://www.uranium.info/news/release.html#enrich>, retrieved on September 4, 2007.

⁸ The New York Mercantile Exchange partnered with the Ux Consulting Company to provide financially settled on- and off-exchange traded uranium futures contracts. This trading began in May 2007. See http://www.nymex.com/UX_pre_agree.aspx, retrieved on August 29, 2007. USEC reported that, according to EIA data, brokers and traders held title to 13 million pounds of uranium inventory (or approximately 12 percent of the uranium inventory held in the United States) at the end of 2006. USEC’s posthearing brief, exh. B.

⁹ The U.S. Department of Energy prepared to auction 200 tons of uranium hexafluoride in August 2007. Uranium prices dropped in August 2007 due to factors such as the introduction of supply from the U.S. government, hedge funds, producers, and intermediaries. “Uranium Falls to Lowest Since March, TradeTech Says,” found at <http://www.bloomberg.com/apps/news?pid=20601082&sid=aXIX6qebO53Y&refer=canada>, retrieved on August 29, 2007. The U.S. Department of Energy reportedly has approximately 16,000 metric tons of uranium inventories, which may be available to the commercial nuclear fuel market over the next decade. WNA, *The Global Nuclear Fuel Market*, September 2007, p. 123.

Electricity is the single most important cost factor for the production of LEU using the gaseous diffusion process. USEC ***,¹⁰ but public data show that electricity prices in the United States have increased since 2002 and were higher in January to April 2007 than in any of the full years between 2002 and 2006, as shown in the following tabulation:

Item	2002	2003	2004	2005	2006	2007 ¹
	<i>Cents per kilowatt-hour</i>					
Industrial price of electricity	4.88	5.11	5.25	5.73	6.09	6.16
¹ Monthly average for January through April.						
Source: EIA, found at http://www.eia.doe.gov , retrieved on August 30, 2007.						

Transportation Costs to the United States

Transportation costs of imported LEU shipped from France to the United States (excluding U.S. inland costs) are estimated to be equivalent to less than 1 percent of customs values in each year of the period 2002 through 2006. This estimate is derived from official import data and represents the transportation and other charges on imports valued on a c.i.f. basis, as compared with customs value.

U.S. Inland Transportation Costs

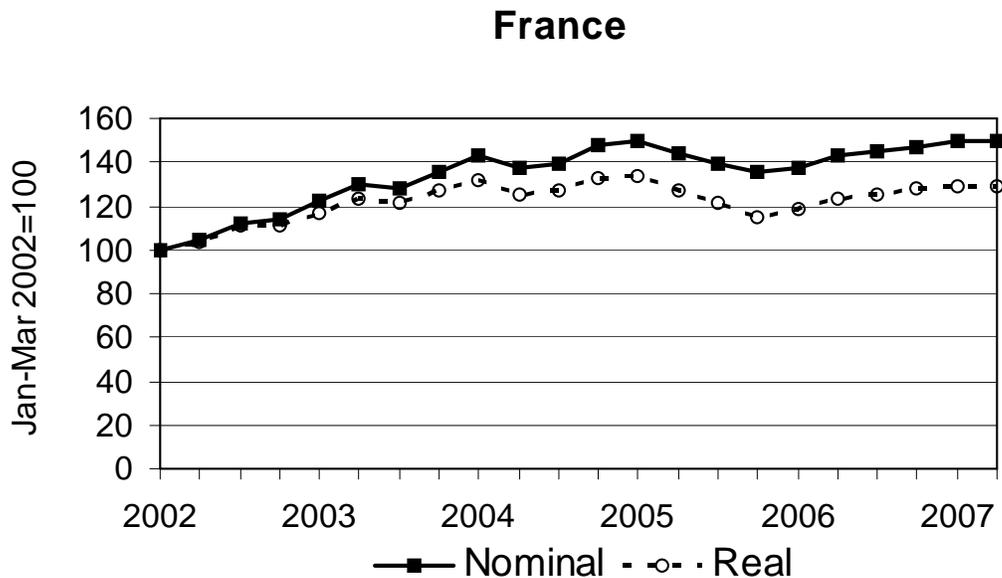
As noted in the original investigations, U.S. inland transportation costs typically account for a very small percentage of the total delivered price of LEU, which is shipped primarily by truck.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that both the real and nominal values of the euro have appreciated relative to the U.S. dollar since 2002 (*see* figure V-2).

¹⁰ USEC reported that up until May 2006, prices of the vast majority of its electricity purchases for its gaseous diffusion plant were ***. In June 2007, USEC ***. USEC also reported that electricity currently accounts for approximately *** percent of its production costs.

Figure V-2
Exchange rate: Indexes of the nominal and real exchange rates of the French currency relative to the U.S. dollar, by quarters, January 2002-June 2007



Source: International Monetary Fund, *International Financial Statistics*, found at <http://ifs.apdi.net/imf/about.asp>, retrieved on August 17, 2007.

PRICING PRACTICES

Pricing Methods

USEC reported that contract provisions for LEU are determined by ***. It also reported that prices are influenced by ***. USEC reported that *** publish SWU price lists but that it ***. In addition, USEC reported that, when selling under similar market conditions, it charged *** for enrichment or EUP from its own production as that which it imported from Russia under the HEU agreement.¹¹

For its imports from Russia under the HEU agreement, USEC reported that ***.

Areva did not respond to the question asking how it determines the import purchase price for LEU that it imports, but rather referred to the individual contracts that it included with its questionnaire response.¹² In addition, it responded similarly for questions regarding average duration of contracts, how far in advance the contracts are negotiated, how frequently the contracts are renegotiated, and other questions relating to its LEU supply contracts, and so no useable information on these details is available.

¹¹ USEC also reported that ***.

¹² Areva reported that the contracts it included in its submission proved that all imports of LEU from France involved SWU transactions. Areva's supplemental posthearing brief, p. 3 and exh. 1. However, USEC reported that the contracts submitted by Areva ***. USEC's supplemental posthearing brief, p. 10.

USEC reported that contracts are generally *** years in length¹³ and that contracts are negotiated *** years in advance.¹⁴ In addition, contract amendments for new sales are typically renegotiated every ***. USEC reported that ***.¹⁵ Some of the utilities reported that most long-term contracts set a base price, which is increased on a regular basis to adjust for inflation, but that most contracts do not have a mechanism for reducing contract prices if market prices fall during the duration of the contract.¹⁶

USEC also reported that there *** meet-or-release provisions, standard quantity requirements, or premiums for sub-minimum SWUs or kilograms of uranium in LEU. In addition, USEC reported that it *** a discount policy. The importer, Areva, reported that it *** a discount policy.

USEC reported that *** and that payment terms are *** in all cases.

USEC reported that prices at which it sells LEU under new contracts are *** and that price trends in the U.S. and Asian markets are *** based on the time of the contract signing. USEC also reported that pricing data for ***,¹⁷ and that there is ***.

USEC reported that in 2000 and 2001, *** set the SWU price for LEU sold in the U.S. market by *** and thus securing market share through long-term contracts. It also reported that from 2001 to the present, prices have been determined ***. Areva reported that, even though it imports LEU to the United States, it does not track market prices for LEU and thus does not know if individual producers or importers have influenced U.S. market prices.

Among purchasers, 14 reported that they considered USEC a price leader in the LEU market since 2002, with many noting that USEC has controlled its own supply and the Russian supply as per the HEU agreement, and with Urenco and Areva declining to respond to bids for supply, USEC has a dominant position in terms of price. *** reported that USEC increased LEU prices for supply from 2009 through 2013 because it was the only supplier with enrichment to offer. *** reported that USEC has controlled the U.S. LEU market since 2002 and has been able to set prices.

Two purchasers reported that they considered Urenco a price leader in the U.S. LEU market, with one reporting that Urenco was a price leader earlier in the review period but USEC was a price leader more recently. *** reported that, because there are so few suppliers, any one supplier can act as a price leader at any time.

¹³ USEC reported that utilities are looking for reliability of supply and suppliers are looking for solid revenue streams, and so there is a trend in the market for contracts of longer than seven years. Hearing transcript, p. 79 (Van Namen). AHUG also reported that utilities are seeking increasingly longer-term contracts. AHUG's posthearing brief, p. 11.

¹⁴ In its questionnaire response, USEC reported details of its three largest multi-year sales contracts with *** for enrichment and with *** for EUP.

¹⁵ USEC reported that only now is it beginning to see revenue benefit from the sustained increase in market SWU prices over the last five years because the majority of its long-term contracts include base prices that reflect market prices at the time the contracts were signed. USEC's response to the notice of institution, p. 25. In addition, USEC reported that it has been introducing price adjusters into new sales contracts that share with customers the risk for higher future electricity prices and SWU market prices. USEC 2006 Annual Report, at p. 2. USEC reported that *** percent of its U.S. deliveries in *** and *** percent of its currently contracted U.S. backlog through *** have market-based components. USEC's posthearing brief, exh. N.

¹⁶ AHUG's posthearing brief, app. A, p. 18.

¹⁷ USEC reported that ***.

PRICE DATA REPORTED BY U.S. PRODUCERS AND IMPORTERS

The Commission asked U.S. producers and importers of LEU from France to provide quarterly data for the total quantity and f.o.b. value of LEU, on both an enrichment basis and as EUP, that was shipped to unrelated customers in the U.S. market. Data were requested for the period January 2002 to June 2007. The product for which pricing data were requested is as follows:

Low enriched uranium hexafluoride.—Uranium hexafluoride enriched in the U²³⁵ isotope, usually in the range of 3-5 percent enrichment, but always less than 20 percent.

Because of the importance of long-term contracts in this industry, separate price data were requested for three categories of transactions. Enrichment agreement category 1 consisted of a combination of spot contracts and those long-term contracts for LEU where the prices are based on market prices at the time of production and the contracts do not specify a price/cost-based floor or a price ceiling. Enrichment agreement category 2 consisted of long-term contract sales where prices are based on market prices at the time of production, but the contracts specify a price/cost-based floor, a price ceiling, a discount from the market price, or some combination of these. Enrichment agreement category 3, which accounts for the bulk of LEU sales,¹⁸ consisted of long-term contract sales where prices are fixed or subject to escalator clauses specified in the contract. In addition, producers and importers were asked to report quarterly price and quantity data separately for each contract year in multi-year contracts.

One U.S. producer¹⁹ provided usable pricing data for sales of the requested product. Pricing data reported by this firm, shown in tables V-1 to V-5 and figures V-3 to V-6, accounted for *** of the U.S. producer's production of LEU in 2006.²⁰ Limited and incomplete questionnaire information was received from the sole importer of subject merchandise from France, Areva.²¹ Pricing data reported by this firm, shown in table V-6, accounted for *** of the imports from France in 2006.

Table V-1

LEU: USEC's net delivered selling prices and quantities of spot sales and certain contract sales to U.S. electric utilities of U.S. enrichment services, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 2000-06

* * * * *

¹⁸ USEC reported that *** percent of its U.S. production falls into this category; *** percent falls into category 1, and *** percent falls into category 2. Areva reported that *** percent of its sales fell into category 3.

¹⁹ *** responded to the importer questionnaire for its imports from ***.

²⁰ ***.

²¹ Areva submitted an incomplete importer questionnaire response. The firm reported combined questionnaire data only for contracts signed in *** but submitted copies of contracts signed in ***. In addition, the firm did not report average product and tails assays, total net f.o.b. values, or weighted-average net f.o.b. prices in dollars per kilogram of enriched uranium, as requested in the importer questionnaire. Based on the nature of these contracts, it is not possible for staff to develop quarterly pricing data as requested in the importer questionnaire. Areva submitted its substantive importer and foreign producer questionnaires two and a half months after the Commission had requested all responses to be submitted, thus limiting the time for analysis and any data clarifications or corrections. See footnotes 4 and 5 of *Part I* of this report for additional information.

Table V-2

LEU: USEC's net delivered selling prices and quantities of restricted market-related contract sales to U.S. electric utilities of U.S. enrichment services, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 2001 and 2003

* * * * *

Table V-3

LEU: USEC's net delivered selling prices and quantities of fixed or escalated price contract sales to U.S. electric utilities of U.S. enrichment services, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 1995-2007

* * * * *

Table V-4

LEU: USEC's net delivered selling prices and quantities of restricted market-related contract sales to U.S. electric utilities of EUP, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 1999

* * * * *

Table V-5

LEU: USEC's net delivered selling prices and quantities of fixed or escalated price contract sales to U.S. electric utilities of EUP, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 1995, 1999-2001, 2003-04, and 2006

* * * * *

Table V-6

LEU: Areva's net delivered selling prices and quantities of fixed or escalated price contract sales to U.S. electric utilities of French enrichment services, measured in SWUs of enrichment, by quarters, January 2002-June 2007, for contracts by the year negotiated, 2002

* * * * *

Figure V-3

LEU: USEC's weighted-average net delivered selling prices of LEU to U.S. electric utilities of U.S. enrichment services, by enrichment agreement category and by contract year, 1995-2007

* * * * *

Figure V-4

LEU: USEC's net delivered quantities of LEU to U.S. electric utilities of U.S. enrichment services, by enrichment agreement category and by contract year, 1995-2007

* * * * *

Figure V-5

LEU: USEC’s weighted-average net delivered selling prices of LEU to U.S. electric utilities of U.S. EUP, by enrichment agreement category and by contract year, 1995-2007

* * * * *

Figure V-6

LEU: USEC’s net delivered quantities of LEU to U.S. electric utilities of U.S. EUP, by enrichment agreement category and by contract year, 1995-2007

* * * * *

Price Trends

For the Commission pricing product,²² the weighted-average price of U.S.-produced LEU in enrichment agreement category 1 increased from *** per SWU for 2000 contracts to *** per SWU for 2005 contracts.²³ With few contracts in enrichment agreement category 2, the weighted-average price of U.S.-produced LEU increased from *** per SWU for 2001 contracts to *** per SWU for 2003 contracts. The weighted-average price of U.S.-produced LEU in enrichment agreement category 3 fluctuated, with a low of *** per SWU for 2000 contracts and a high of *** per SWU for 2002 contracts. For U.S.-produced EUP sales in enrichment agreement category 3, the weighted-average price fluctuated from a high of *** per kilogram of uranium for 1995 contracts to a low of *** per kilogram of uranium for 2006 contracts.²⁴ With only one contract year of data, it is not possible to make comparisons for the data reported for imports from France.

There is no formal exchange for LEU as there is for other commodities. Price indicators are developed by a small number of private business organizations, like TradeTech (*see* figure V-7) and the Ux Consulting Company²⁵ that independently monitor uranium market activities, including offers, bids, and transactions. Such price indicators are owned by and proprietary to the business that has developed them. As reported by TradeTech, both spot and long-term SWU prices increased during the review period, especially during 2006. USEC reported that market price increases ***.²⁶

²² Trends in the selling price data should be used with caution because of the existence of long-term contracts of differing contract periods, differences in contract volumes, and a myriad of contract terms and conditions.

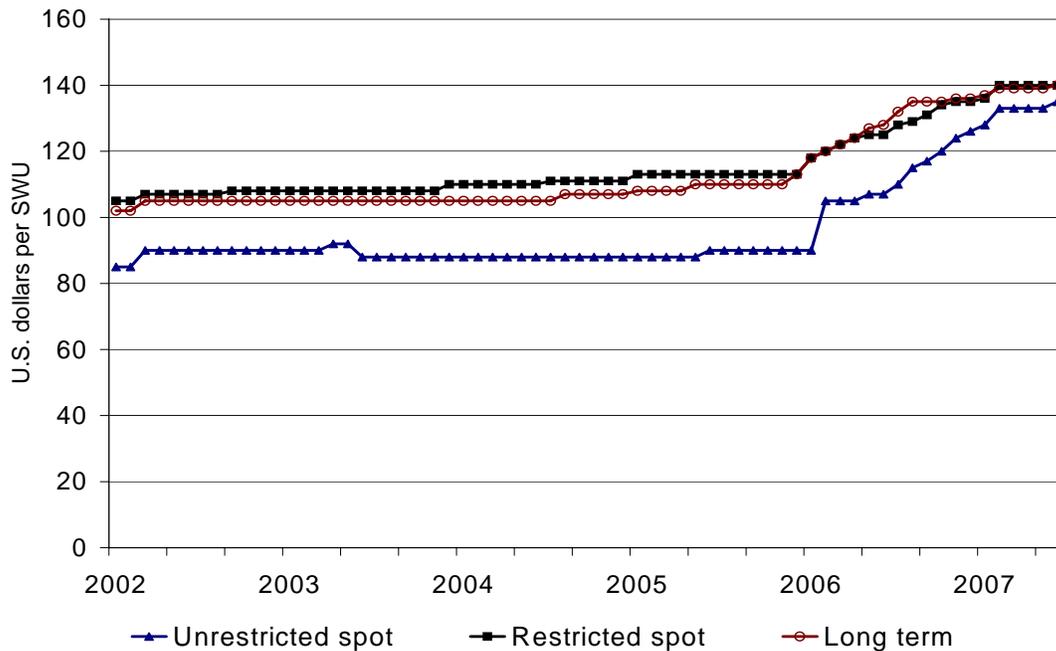
²³ ***.

²⁴ USEC reported that ***.

²⁵ The monthly spot SWU price reported by the Ux Consulting Company varies little from the TradeTech monthly spot SWU price and so is not shown in figure V-7.

²⁶ USEC reported that *** and that in new contracts, it has sought to include ***. USEC reported that it expects steady increases in its average SWU price billed to customers with increasing sales under newer contracts and that SWU prices will remain firm as supply of and demand for LEU seek a balance. USEC 2006 Annual Report, at p. 48.

Figure V-7
LEU: Monthly spot and long-term SWU values as reported by TradeTech, January 2002-June 2007



Note.--The spot restricted SWU value applies to all services delivered in the United States and European Union, as well as non-Russian enrichment services delivered outside the United States and European Union. The spot unrestricted SWU value applies to all enrichment services delivered outside the United States and European Union. The long-term SWU value is TradeTech's judgment of the base price at which transactions for long-term delivery could be concluded as of the last day of the month, for transactions in which the price at the time of delivery would be an escalation of the base price from a previous point in time.

Source: TradeTech, found at http://www.uranium.info/prices/enr_spot.html and <http://www.uranium.info/prices/longterm.html>, retrieved on August 17, 2007.

Price Comparisons

The reported selling price data should be used with caution in making meaningful price comparisons; the existence of long-term contracts of differing contract periods, differences in contract volumes, and a myriad of contract terms and conditions make it difficult to determine whether price differences between the different countries of origin are based on direct competition. The only possible price comparison was under enrichment agreement category 3 for the contract year ***, and that price comparison showed the imported product from France to be priced lower than the domestic product, with a margin of *** percent.²⁷ It is not possible to compare the number of contracts, total SWUs delivered

²⁷ USEC reported that ***. USEC's supplemental posthearing brief, pp. 3-5.

under the contracts, and beginning and ending dates for deliveries under the contracts because the importer of LEU from France did not report this information.²⁸

PRICE DATA REPORTED BY PURCHASERS

Sixteen purchasers reported that all of their LEU purchases in 2002 through 2008 were through long-term contracts where prices are fixed or subject to escalator clauses specified in the contract. Three purchasers reported that all of their purchases of LEU in 2002 through 2008 were through long-term contracts where prices were partially based on market prices at the time of delivery and where the contracts specify a price floor or ceiling. The remaining eight purchasers reported that their purchases were split between the two types of long-term contracts described above.

Purchasers reported the total quantity and value of LEU purchased on an enrichment basis and as EUP and delivered to them during January 2002 through June 2007 (*see* tables V-7 and V-8).²⁹ These data were reported on an annual basis and by country of origin, where available.³⁰

Purchasers also were asked to report information for LEU contracts newly negotiated and entered into since January 2002 or where terms of a signed contract or accepted proposal were renegotiated in or after January 2002 where, in each case, U.S. and/or French LEU has been or will be delivered under the contract (*see* tables V-9 and V-10).³¹

Nineteen purchasers reported that they modified the terms of long-term contracts for LEU or replaced all or some of such contracts with new contracts since 2002. Reported reasons for contract changes included extension of the length of the contract, changes in the pricing formula, increased coverage of requirements, rescheduling deliveries, and changes in quantities. Some purchasers reported that contracts were modified to take into account the sale or purchase of a reactor. In addition, some purchasers reported that contracts were modified only once, whereas others reported that contracts were modified on several different occasions.

When asked if they had solicited, negotiated, signed, or been solicited to negotiate or sign any firm or contingent contracts for the future supply of French-produced LEU, 15 purchasers reported that they had, with 9 responding that they signed contracts for French-produced LEU and 6 responding that no contract was, or has yet been, signed.³²

²⁸ Areva did not report this information in its importer questionnaire response where it was requested, but rather attached copies of its contracts and referred to these contracts in its questionnaire responses. Based on the nature of these contracts, it is not possible for staff to develop the data that was requested in the importer questionnaire but not provided by Areva.

²⁹ The existence of long-term contracts of different contract lengths and periods, differences in contract volumes, and a myriad of contract terms make it difficult to compare price data between different countries of origin.

³⁰ AHUG members reported that ***. See app. E for additional information on purchases of LEU from Areva/Cogema by origin.

³¹ Not all purchasers that reported newly or renegotiated contracts in table V-9 reported detailed annual data for table V-10. For example, *** did not report annual data for its renegotiated enrichment contract with *** but did report that as part of a 2009 to 2013 contract extension, the 2008 base price *** and the long-term base price ***. In addition, *** did not report annual data for its renegotiated EUP contract with *** but did report that the 2008 SWU value *** and the UF₆ feed value ***.

³² Based on purchaser responses to this question, it is unclear if the contracts signed were actually “contingent” contracts.

Table V-7

LEU: Electric utility purchases of LEU via enrichment contracts, 2002-06 and January-June 2006 and 2007¹

Item	Calendar year					January-June ²	
	2002	2003	2004	2005	2006	2006	2007
United States³							
Quantity (SWUs)	1,800,448	1,017,494	969,704	1,012,911	2,336,331	610,250	555,018
Quantity (kgs U)	350,647	110,621	***	200,749	945,792	388,087	***
Price (per SWU)	\$98.65	\$100.59	\$97.39	\$106.86	\$105.03	\$109.34	\$109.37
France							
Quantity (SWUs)	1,418,940	1,109,127	453,715	489,948	***	***	***
Quantity (kgs U)	1,302,560	1,315,064	322,934	***	***	***	***
Price (per SWU)	\$90.71	\$91.63	\$95.37	\$98.05	***	***	***
Russia							
Quantity (SWUs)	4,328,335	4,041,785	4,016,137	3,523,027	3,523,599	2,501,560	1,049,703
Quantity (kgs U)	1,590,257	905,193	923,128	651,461	1,216,637	728,808	563,818
Price (per SWU)	\$102.13	\$104.80	\$99.59	\$104.20	\$111.56	\$110.97	\$113.74
All other countries							
Quantity (SWUs)	2,502,801	4,509,650	4,451,719	4,989,446	5,313,931	1,806,567	1,837,902
Quantity (kgs U)	882,085	3,256,583	2,815,938	2,474,047	1,883,123	334,036	478,925
Price (per SWU)	\$96.33	\$92.98	\$96.26	\$97.22	\$103.86	\$96.40	\$104.62
<p>¹ Not all purchasers reported data for quantities in kilograms of uranium. In addition, some purchasers reported quantities in kilograms of uranium of the feed material and others reported the quantities of uranium in the LEU.</p> <p>² Not all purchasers reported data for January-June 2006 and January-June 2007. Data in these columns should not be compared with data reported for full calendar years.</p> <p>³ The quantities of U.S.-produced LEU in this table do not match with U.S. delivery data reported by USEC. It is possible that some purchasers reported Russian-origin LEU as U.S.-origin LEU.</p>							
Source: Compiled from data submitted in response to Commission questionnaires.							

Table V-8

LEU: Electric utility purchases of EUP, 2002-06 and January-June 2006 and 2007¹

Item	Calendar year					January-June ²	
	2002	2003	2004	2005	2006	2006	2007
United States							
Quantity (SWUs)	--	***	--	--	299,425	***	--
Quantity (kgs U)	--	***	--	--	252,034	***	--
Price (per SWU)	--	***	--	--	\$170.29	***	--
France							
Quantity (SWUs)	--	--	--	--	--	--	--
Quantity (kgs U)	--	--	--	--	--	--	--
Price (per SWU)	--	--	--	--	--	--	--
Russia							
Quantity (SWUs)	689,744	1,078,197	1,337,247	1,696,852	1,094,523	***	***
Quantity (kgs U)	700,916	534,911	856,043	1,384,433	797,916	***	***
Price (per SWU)	\$116.98	\$107.07	\$161.73	\$157.33	\$186.88	***	***
All other countries							
Quantity (SWUs)	325,729	***	***	***	***	***	--
Quantity (kgs U)	57,095	***	***	***	***	***	--
Price (per SWU)	\$155.22	***	***	***	***	***	--
<p>¹ Not all purchasers reported data for quantities in kilograms of uranium. In addition, some purchasers reported quantities in kilograms of uranium of the feed material and others reported the quantities of uranium in the LEU. It is for this reason that the price is reported in dollars per SWU rather than in dollars per kilogram of uranium.</p> <p>² Not all purchasers reported data for January-June 2006 and January-June 2007. Data in these columns should not be compared with data reported for full calendar years.</p>							
Source: Compiled from data submitted in response to Commission questionnaires.							

Table V-9
LEU: Summary of new and renegotiated contracts entered into by purchasers of LEU since
January 1, 2002¹

Type of contract	Total number of contracts	Total quantity		Beginning delivery period	Ending delivery period
		<i>in kgs of U</i>	<i>in SWUs</i>		
United States (enrichment contracts)					
Newly negotiated	17	2,263,646	20,346,806	2005 through 2010	2003 through 2020
Renegotiated (pre-existing terms)	***	***	***	***	***
Renegotiated (renegotiated terms)	9	***	2,407,932	2004 through 2009	2008 through 2013
France (enrichment contracts)					
Newly negotiated	13	1,556,578	13,560,420	2002 through 2008	2005 through 2014
Renegotiated (pre-existing terms)	--	--	--	--	--
Renegotiated (renegotiated terms)	***	***	***	***	***
United States (EUP contracts)					
Newly negotiated	***	***	***	***	***
Renegotiated (pre-existing terms)	--	--	--	--	--
Renegotiated (renegotiated terms)	***	***	***	***	***
France (EUP contracts)					
Newly negotiated	--	--	--	--	--
Renegotiated (pre-existing terms)	--	--	--	--	--
Renegotiated (renegotiated terms)	--	--	--	--	--
¹ Not all purchasers reported data for quantities in kilograms of uranium. In addition, some purchasers reported quantities in kilograms of uranium of the feed material and others reported the quantities of uranium in the LEU.					
Source: Compiled from information submitted in response to Commission questionnaires.					

Table V-10

LEU: Quantities purchased and weighted average unit values of new and renegotiated enrichment contracts¹ entered into by purchasers of LEU since January 1, 2002, by period of delivery, 2002-06 and January-June 2007

Item	Period of delivery					
	2002	2003	2004	2005	2006	Jan.-June 2007
United States (newly negotiated enrichment)						
Kgs of U	--	***	--	***	***	***
SWUs	--	***	--	***	1,399,247	***
Weighted average net f.o.b. price (per SWU)	--	***	--	***	\$112.81	***
France (newly negotiated enrichment)						
Kgs of U	(²)	***	***	***	***	--
SWUs	***	774,795	***	400,773	***	--
Weighted average net f.o.b. price (per SWU)	***	\$90.59	***	\$99.00	***	--
United States (renegotiated enrichment)						
Kgs of U	--	***	***	--	***	***
SWUs	--	***	***	--	***	***
Weighted average net f.o.b. price (per SWU)	--	***	***	--	***	***
France (renegotiated enrichment)						
Kgs of U	(²)	***	***	--	--	--
SWUs	***	***	***	--	--	--
Weighted average net f.o.b. price (per SWU)	***	***	***	--	--	--
<p>¹ No purchaser reported information for EUP from France or for renegotiated EUP contracts from the United States. *** was the only purchaser to report information for newly negotiated EUP contracts from the United States, and the provisions included ***.</p> <p>² Not reported.</p>						
Source: Compiled from information submitted in response to Commission questionnaires.						

APPENDIX A

***FEDERAL REGISTER* NOTICES AND
THE COMMISSION'S STATEMENT ON ADEQUACY**

France 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;¹ to be assured of consideration, the deadline for responses is February 21, 2007. Comments on the adequacy of responses may be filed with the Commission by March 19, 2007. For further information concerning the conduct of these reviews 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).

EFFECTIVE DATE: January 2, 2007.

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 202-205-1810. 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 February 13, 2002, the Department of Commerce issued countervailing and antidumping duty orders on imports of low enriched uranium from France (67 FR 6689-6691 and 6680-6681). The Commission is conducting reviews to determine whether revocation of the orders 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 full reviews or expedited reviews. The Commission's determinations in any expedited

¹ No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117-0016/USITC No. 07-5-165, expiration date June 30, 2008. Public reporting burden for the request is estimated to average 10 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436.

reviews will be based on the facts available, which may include information provided in response to this notice.

Definitions. The following definitions apply to these reviews:

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

(2) The *Subject Country* in these reviews is France.

(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 determinations, the Commission determined that there was one Domestic Like Product consisting of all low enriched uranium corresponding to 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 determinations, the Commission determined that there was a single Domestic Industry consisting of the sole domestic producer of low enriched uranium, USEC.

(5) The *Order Date* is the date that the countervailing and antidumping duty orders under review became effective. In these reviews, the Order Date is February 13, 2002.

(6) 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 reviews 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 reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 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 reviews.

Former Commission employees who are seeking to appear in Commission five-year reviews are reminded that they are required, pursuant to 19 CFR 201.15, to seek Commission approval if the

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 701-TA-409 and 731-TA-909 (Review)]

Low Enriched Uranium From France

AGENCY: United States International Trade Commission.

ACTION: Institution of five-year reviews concerning the countervailing and antidumping duty orders on low enriched uranium from France.

SUMMARY: The Commission hereby gives notice that it has instituted reviews pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether revocation of the countervailing and antidumping duty orders on low enriched uranium from

matter in which they are seeking to appear was pending in any manner or form during their Commission employment. The Commission's designated agency ethics official has advised that a five-year review is the "same particular matter" as the underlying original investigation for purposes of 19 CFR 201.15 and 18 U.S.C. 207, the post employment statute for Federal employees. Former employees may seek informal advice from Commission ethics officials with respect to this and the related issue of whether the employee's participation was "personal and substantial." However, any informal consultation will not relieve former employees of the obligation to seek approval to appear from the Commission under its rule 201.15. For ethics advice, 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 § 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in these reviews available to authorized applicants under the APO issued in the reviews, 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 reviews. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification. Pursuant to § 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these reviews 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 reviews or investigations 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 § 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 February 21, 2007. Pursuant to § 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 expedited or full reviews. The deadline for filing such comments is March 19, 2007. All written submissions must conform with the provisions of §§ 201.8 and 207.3 of the Commission's rules and any submissions that contain BPI must also conform with the requirements of §§ 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 § 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Also, in accordance with §§ 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (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 reviews you do not need to serve your response).

Inability to provide requested information. Pursuant to § 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 determinations in the reviews.

Information to be Provided in Response to This Notice of Institution: As used below, the term "firm" includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address if available) 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 these reviews by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the countervailing and antidumping duty orders on the Domestic Industry in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(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 since the Order Date.

(7) 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 2006 (report quantity data in separate work units ("SWUs") and 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/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the Domestic Like Product accounted for by your firm's(s') production;

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

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

(8) 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 2006 (report quantity data in SWUs 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 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.

(9) 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 2006 (report quantity data in SWUs 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 the Subject Country accounted for by your firm's(s') production; and

(b) 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.

(10) 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 since the Order Date, 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.

(11) (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 § 207.61 of the Commission's rules.

Issued: December 26, 2006.

By order of the Commission.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E6-22423 Filed 12-29-06; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF COMMERCE**International Trade Administration**

[A-427-818]

**Low Enriched Uranium From France:
Final Results of Expedited Sunset
Review of the Antidumping Duty Order**

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

EFFECTIVE DATE: May 10, 2007.

FOR FURTHER INFORMATION CONTACT:
Myrna Lobo or Douglas Kirby, Office 6,
AD/CVD Operations, Import
Administration, International Trade
Administration, U.S. Department of
Commerce, 14th Street and Constitution
Avenue, NW., Washington, DC 20230;
telephone: (202) 482-2371, or (202)
482-3782, respectively.

SUMMARY: On January 3, 2007, the Department of Commerce (the Department) initiated a sunset review of the antidumping duty order on low enriched uranium (LEU) from France pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act). On the basis of a notice of intent to participate and an adequate substantive response filed on behalf of domestic interested parties and an inadequate response from respondent interested party, the Department has conducted an expedited (120-day) sunset review of this order pursuant to section 751(c)(3)(B) and section 351.218(e)(1)(ii)(C)(2) of the Department's regulations. As a result of this sunset review, the Department finds that revocation of the antidumping duty order is likely to lead to continuation or recurrence of dumping at the level indicated in the "Final Results of Review" section of this notice.

SUPPLEMENTARY INFORMATION:**Background**

On January 3, 2007, the Department published the notice of initiation of the first sunset review of the antidumping duty order on LEU from France pursuant to section 751(c) of the Act. *See Initiation of Five-year (Sunset) Reviews*, 72 FR 100 (January 3, 2007). The Department received a notice of intent to participate from USEC Inc. and its subsidiary United States Enrichment Corporation (collectively USEC), the domestic party, within the deadline specified in section 351.218(d)(1)(i) of the Department's regulations (Sunset Regulations). USEC claimed interested party status under section 771(9)(C) of the Act, as a domestic producer of LEU. The Department also received a timely notice of appearance from respondent

interested party Eurodif S.A.¹ (Eurodif), a French producer and exporter of LEU. Eurodif claimed interested party status under section 771(9)(A) of the Act. On February 2, 2007, the Department received a complete substantive response from USEC, within the 30-day deadline specified in section 351.218(d)(3)(i) of the Department's regulations. On the same day, the Department received a substantive response from Eurodif. In addition, on the same day, the Department received a notice of appearance and a substantive response from the Ad Hoc Utilities Group² (AHUG), an industry group comprised of owners and operators of U.S. nuclear power plants. Although AHUG claimed respondent interested party status under section 771(9)(A) of the Act, the Department determined it was not a respondent or an interested party pursuant to section 771(9)(A) of the Act. See *Memorandum to Stephen J. Claeys, Deputy Assistant Secretary for Import Administration; Sunset Review of the Antidumping Duty Order on Low Enriched Uranium from France: Adequacy Determination* dated February 22, 2007 (*Adequacy Memorandum*), which is on file in B-099, the Central Records Unit of the main Commerce building (CRU). Also see *Memorandum to Stephen J. Claeys, Deputy Assistant Secretary for Import Administration; Comments Regarding Adequacy Determination: Sunset Review of the Antidumping Duty Order on Low Enriched Uranium from France*, dated April 5, 2007 (*Comments to Adequacy Memorandum*), which is also on file in the CRU. The Department found that Eurodif's response was not adequate and therefore determined to conduct an expedited review. See *Adequacy Memorandum*. Subsequently, comments to the Department's *Adequacy Memorandum* were received from all parties. In those comments, USEC supported the Department's determination to conduct an expedited review, while Eurodif and AHUG argued in favor of a full sunset review. The Department responded to these comments, affirming it would not

¹ Eurodif S.A.'s affiliate companies are AREVA (formerly Compagnie Generale des Matieres Nucleaires (COGEMA)), an owner of Eurodif, AREVA NC and AREVA NC, Inc., sellers of enrichment services.

² The members of AHUG are Constellation Energy Group, Inc., Dominion Energy Kewaunee, Inc., Dominion Nuclear Connecticut, Inc., Duke Energy Corp., Entergy Services, Inc., Exelon Generation Co., LLC, Nebraska Public Power District, Pacific Gas & Electric Co., PPL Susquehanna, LLC, Progress Energy Carolinas, Inc., Progress Energy Florida, Inc., Southern California Edison Co., Southern Nuclear Operating Co., Union Electric Co. (d/b/a/ Ameren UE), TXU Generation Co. LP, and Virginia Electric & Power Co.

reverse its decision to conduct an expedited review in its *Comments to Adequacy Memorandum*. Accordingly, pursuant to section 751(c)(3)(B) of the Act and section 351.218(e)(1)(ii)(C)(2) of the Department's regulations, the Department conducted an expedited (120-day) sunset review of this order.

Scope of the Order

The product covered by this order is all low enriched uranium (LEU). LEU is enriched uranium hexafluoride (UF₆) with a U²³⁵ product assay of less than 20 percent that has not been converted into another chemical form, such as UO₂, or fabricated into nuclear fuel assemblies, regardless of the means by which the LEU is produced (including LEU produced through the down-blending of highly enriched uranium).

Certain merchandise is outside the scope of this order. Specifically, this order does not cover enriched uranium hexafluoride with a U²³⁵ assay of 20 percent or greater, also known as highly enriched uranium. In addition, fabricated LEU is not covered by the scope of this order. For purposes of this order, fabricated uranium is defined as enriched uranium dioxide (UO₂), whether or not contained in nuclear fuel rods or assemblies. Natural uranium concentrates (U₃O₈) with a U²³⁵ concentration of no greater than 0.711 percent and natural uranium concentrates converted into uranium hexafluoride with a U²³⁵ concentration of no greater than 0.711 percent are not covered by the scope of this order.

Also excluded from this order is LEU owned by a foreign utility end-user and imported into the United States by or for such end-user solely for purposes of conversion by a U.S. fabricator into uranium dioxide (UO₂) and/or fabrication into fuel assemblies so long as the uranium dioxide and/or fuel assemblies deemed to incorporate such imported LEU (i) remain in the possession and control of the U.S. fabricator, the foreign end-user, or their designed transporter(s) while in U.S. customs territory, and (ii) are re-exported within eighteen (18) months of entry of the LEU for consumption by the end-user in a nuclear reactor outside the United States. Such entries must be accompanied by the certifications of the importer and end-user.

The merchandise subject to this order is currently classifiable in the Harmonized Tariff Schedule of the United States (HTSUS) at subheading 2844.20.0020. Subject merchandise may also enter under 2844.20.0030, 2844.20.0050, and 2844.40.00. Although the HTSUS subheadings are provided for convenience and customs purposes,

the written description of the merchandise is dispositive.

Analysis of Comments Received

All issues raised in this review are addressed in the *Issues and Decision Memorandum for Final Results of Expedited Sunset Review of the Antidumping Duty Order on Low Enriched Uranium from France (Decision Memorandum)* from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, to David M. Spooner, Assistant Secretary for Import Administration, dated May 3, 2007, which is hereby adopted by this notice. The issues discussed in the *Decision Memorandum* include the likelihood of continuation or recurrence of dumping and the magnitude of the margins likely to prevail if the order were to be revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in this public memorandum which is on file in the CRU. In addition, a complete version of the *Decision Memorandum* can be accessed directly on the Web at <http://ia.ita.doc.gov/frn>. The paper copy and electronic versions of the *Decision Memorandum* are identical in content.

Final Results of Review

The Department determines that revocation of the antidumping duty order on low enriched uranium from France would be likely to lead to continuation or recurrence of dumping at the following weighted-average percentage margins:

Manufacturers/exporters/producers	Weighted average margin (percent)
Eurodif/AREVA	19.95
All Others	19.95

International Trade Commission (ITC) Notification

Pursuant to section 752(c)(3) of the Act, we will notify the ITC of the final results of this expedited sunset review.

Notification Regarding Administrative Protective Order

This notice 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. Timely notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations

and the terms of an APO is a violation which is subject to sanction.

This notice is issued and published in accordance with sections 751(c), 752, and 777(i)(1) of the Act.

Dated: May 3, 2007.

David M. Spooner,

Assistant Secretary for Import Administration.

[FR Doc. E7-9038 Filed 5-9-07; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE**International Trade Administration****[C-427-819]****Final Results of Expedited Sunset Review: Countervailing Duty Order on Low Enriched Uranium from France**

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

SUMMARY: On January 3, 2007, the Department of Commerce (“the Department”) initiated a sunset review of the countervailing duty (“CVD”) order on low enriched uranium (“LEU”) from France, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”). On the basis of a notice of intent to participate and an adequate substantive response filed on behalf of a domestic interested party and inadequate response from respondent interested parties (in this case, no response), the Department determined to conduct an expedited sunset review of this CVD order pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(B). As a result of this sunset review, the Department finds that revocation of the CVD order would be likely to lead to continuation or recurrence of a countervailable subsidy at the level indicated in the “Final Results of Review” section of this notice.

EFFECTIVE DATE: May 10, 2007.

FOR FURTHER INFORMATION CONTACT: Kristen Johnson or Brandon Farlander, AD/CVD Operations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street & Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482-4793 or (202) 482-0182, respectively.

SUPPLEMENTARY INFORMATION:**Background**

On January 3, 2007, the Department initiated a sunset review of the CVD order on LEU from France pursuant to section 751(c) of the Act. *See Initiation of Five-year (“Sunset”) Reviews*, 72 FR 100 (January 3, 2007). On January 16, 2007, the Department received a notice of appearance on behalf of Eurodif S.A., a French producer of LEU, and its affiliated companies, including AREVA, an owner of Eurodif, and AREVA NC and AREVA NC, Inc., (collectively, “Eurodif/AREVA”).¹ Eurodif/AREVA is an interested party under section 771(9)(A) of the Act. On January 18,

2007, the Department received a notice of intent to participate on behalf of USEC Inc. and its subsidiary, United States Enrichment Corporation (collectively, “USEC”), a domestic interested party. USEC, a domestic producer of LEU, is an interested party under section 771(9)(C) of the Act.

On February 2, 2007, the Department received a complete substantive response from USEC within the 30-day deadline specified in 19 CFR 351.218(d)(3)(i). However, the Department did not receive a substantive response from any government or respondent interested party to this proceeding. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), the Department conducted an expedited sunset review of this CVD order.

Scope of the Order

The product covered by this order is all LEU. LEU is enriched uranium hexafluoride (UF₆) with a U²³⁵ product assay of less than 20 percent that has not been converted into another chemical form, such as UO₂, or fabricated into nuclear fuel assemblies, regardless of the means by which the LEU is produced (including LEU produced through the down-blending of highly enriched uranium).

Certain merchandise is outside the scope of this order. Specifically, this order does not cover enriched uranium hexafluoride with a U²³⁵ assay of 20 percent or greater, also known as highly enriched uranium. In addition, fabricated LEU is not covered by the scope of this order. For purposes of this order, fabricated uranium is defined as enriched uranium dioxide (UO₂), whether or not contained in nuclear fuel rods or assemblies. Natural uranium concentrates (U₃O₈) with a U²³⁵ concentration of no greater than 0.711 percent and natural uranium concentrates converted into uranium hexafluoride with a U²³⁵ concentration of no greater than 0.711 percent are not covered by the scope of this order.

Also excluded from this order is LEU owned by a foreign utility end-user and imported into the United States by or for such end-user solely for purposes of conversion by a U.S. fabricator into uranium dioxide (UO₂) and/or fabrication into fuel assemblies so long as the uranium dioxide and/or fuel assemblies deemed to incorporate such imported LEU (i) remain in the possession and control of the U.S. fabricator, the foreign end-user, or their designated transporter(s) while in U.S. customs territory, and (ii) are re-exported within eighteen (18) months of entry of the LEU for consumption by the

¹ AREVA was previously known as Compagnie Generale des Matieres Nucleaires (“COGEMA”).

end-user in a nuclear reactor outside the United States. Such entries must be accompanied by the certifications of the importer and end user.

The merchandise subject to this order is currently classifiable in the Harmonized Tariff Schedule of the United States (“HTSUS”) at subheading 2844.20.0020. Subject merchandise may also enter under 2844.20.0030, 2844.20.0050, and 2844.40.00. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise is dispositive.

We are issuing and publishing the results and notice are in accordance with sections 751(c), 752, and 777(i)(1) of the Act.

Dated: May 2, 2007.

David M. Spooner,
Assistant Secretary for Import Administration.

[FR Doc. E7-9037 Filed 5-9-07; 8:45 am]

BILLING CODE 3510-DS-S

Analysis of Comments Received

All issues raised in this review are addressed in the Issues and Decision Memorandum (“Decision Memorandum”) from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, to David M. Spooner, Assistant Secretary for Import Administration, dated May 2, 2007, which is hereby adopted by this notice. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendation in this public memorandum which is on file in the Central Records Unit room B-099 of the main Commerce building. In addition, a complete version of the Decision Memorandum can be accessed directly on the Web at <http://ia.ita.doc.gov/frn>. The paper copy and electronic version of the Decision Memorandum are identical in content.

Final Results of Review

The Department determines that revocation of the CVD order would be likely to lead to continuation or recurrence of a countervailable subsidy at the rates listed below:

Producers/Exporters	Net Countervailable Subsidy (percent)
Eurodif S.A. and AREVA NC	12.15 <i>ad valorem</i>
All Others	12.15 <i>ad valorem</i>

Notification Regarding Administrative Protective Order

This notice serves as the only 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 notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

**INTERNATIONAL TRADE
COMMISSION****[Investigation Nos. 701-TA-409 and 731-TA-909 (Review)]****Low Enriched Uranium From France****AGENCY:** United States International Trade Commission.**ACTION:** Notice of Commission determinations to conduct full five-year reviews concerning the antidumping and countervailing duty orders on low enriched uranium ("LEU") from France.**SUMMARY:** The Commission hereby gives notice that it will proceed with full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping and countervailing duty orders on LEU from France would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the reviews will be established and announced at a later date. For further information concerning the conduct of these reviews 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:* April 9, 2007.**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 202-205-1810. 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:** On April 9, 2007, the Commission determined that it should proceed to full reviews in

the subject five-year reviews pursuant to section 751(c)(5) of the Act.¹ The Commission found that both the domestic and respondent interested party group responses to its notice of institution (72 F.R. 144, January 3, 2007) were adequate.² A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's Web site.

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.

By order of the Commission.

Issued: May 8, 2007.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E7-9148 Filed 5-11-07; 8:45 am]

BILLING CODE 7020-02-P

¹ Commissioner Okun did not participate.

² Commissioner Williamson dissented with respect to the adequacy of the respondent interested party group response, finding that the respondent interested party group response was inadequate. Commissioner Williamson also found that other circumstances warranted conducting full reviews.

DEPARTMENT OF COMMERCE**International Trade Administration**

(C-427-819)

Low Enriched Uranium from France: Notice of Amended Final Negative Determination Pursuant to Final Court Decision, Rescission of Administrative Review, and Revocation of the Countervailing Duty Order**AGENCY:** Import Administration, International Trade Administration, Department of Commerce.**SUMMARY:** On May 18, 2006, the United States Court of International Trade (“the CIT”) sustained the Department of Commerce’s (“the Department’s”) March 2, 2006, Final Results of Redetermination on Remand pursuant to *Eurodif S.A., Compagnie Generale Des Matieres Nucleaires, and Cogema Inc., et. al. v. United States*, Slip. Op. 06-3 (CIT, January 5, 2006), which pertains to the Final Affirmative Countervailing Duty Determination on Low Enriched Uranium (“LEU”) from France.

Because all litigation in this matter has concluded, the Department is issuing an amended final negative determination for LEU from France and revoking the countervailing duty (“CVD”) order. The Department is also rescinding the ongoing administrative review covering the period January 1, 2006, through December 31, 2006, and will not initiate the deferred administrative review covering the period January 1, 2005, through December 31, 2005.

EFFECTIVE DATE: June 8, 2006.**FOR FURTHER INFORMATION CONTACT:**

Kristen Johnson, AD/CVD Operations, Office 3, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482-4793.

SUPPLEMENTARY INFORMATION:**Background**

On December 21, 2001, the Department published a notice of final determination in the CVD investigation on LEU from France. See *Notice of Final Affirmative Countervailing Duty Determination: Low Enriched Uranium from France*, 66 FR 65901 (December 21, 2001) (“*LEU Final Determination*”) and accompanying Issues and Decision Memorandum. The *LEU Final Determination* was subsequently amended. See *Amended Final Determination and Notice of Countervailing Duty Order: Low*

Enriched Uranium from France, 67 FR 6689 (February 13, 2002).

Eurodif, S.A., Compagnie Generale Des Matieres Nucleaires (“COGEMA”), and COGEMA Inc., et. al.¹ (collectively, “Eurodif” or “respondents”) challenged the Department’s final determination before the CIT. The case was later appealed to the U.S. Court of Appeals for the Federal Circuit (“Federal Circuit”). The Federal Circuit ruled in favor of respondents in *Eurodif S.A., Compagnie Generale Des Matieres Nucleaires, and Cogema Inc., et. al. v. United States*, 411 F.3d 1355 (Fed. Cir. 2005) (“*Eurodif I*”). The court panel later clarified its ruling, issuing a decision in *Eurodif S.A., Compagnie Generale Des Matieres Nucleaires, and Cogema Inc., et. al. v. United States*, 423 F.3d 1275 (Fed. Cir. 2005) (“*Eurodif II*”), which affirmed *Eurodif I*.

On January 5, 2006, the CIT remanded the case to the Department for action consistent with the decisions of the Federal Circuit in *Eurodif I* and *Eurodif II*. See *Eurodif S.A., Compagnie Generale Des Matieres Nucleaires, and Cogema Inc., et. al. v. United States*, Slip. Op. 06-3 (CIT, January 5, 2006) (“*Remand Instructions*”). In accordance with the CIT’s instructions, the Department issued its final results of redetermination eliminating from the analysis of and calculations for the program “Purchases at Prices that Constitute More Than Adequate Remuneration” all SWU transactions. See the March 2, 2006, Final Results of Redetermination on Remand pursuant to Remand Instructions (“*LEU Remand Redetermination*”). As a result, there is no benefit or program rate for the program “Purchases at Prices that Constitute More Than Adequate Remuneration.” We, therefore, calculated a revised *ad valorem* subsidy rate for Eurodif for the period January 1, 1999, through December 31, 1999, based on the “Exoneration/Reimbursement of Corporate Income Taxes” program, which is the only other program determined to confer countervailable subsidies during the period of investigation. The revised net subsidy rate for Eurodif is 0.87 percent *ad valorem*, which is *de minimis*.

On May 18, 2006, the CIT sustained the Department’s redetermination in all respects and, thus, affirmed the Department’s revised analysis and calculations. On June 8, 2006, consistent with the decision of the Federal Circuit in *Timken vs. United States*, 893 F.2d 337 (Fed. Cir. 1990), the Department notified the public that the *Eurodif I* and

¹ COGEMA and COGEMA Inc. are now known as AREVA NC and AREVA NC, Inc.

Eurodif II decisions were not in harmony with the Department's final CVD determination for LEU from France. See *Low Enriched Uranium from France: Notice of Court Decision and Suspension of Liquidation*, 71 FR 33280 (June 8, 2006) ("*LEU Timken Notice*"). The *LEU Timken Notice* continued the suspension of liquidation, and further informed that if the CIT's decision was not appealed, or if appealed, and upheld, the Department would publish an amended final CVD determination. On July 17, 2006, USEC² filed a notice of appeal challenging the CIT's affirmation of the Department's remand determination. On February 9, 2007, the Federal Circuit affirmed the CIT's decision without a written opinion, pursuant to Rule 36 of the Court's rules. The deadline for filing a petition for certiorari with the Supreme Court has elapsed.

Amended Final Determination, Revocation of Order, and Rescission of Review

Because there is now a final and conclusive decision in the court proceeding, we are amending the *LEU Final Determination* to reflect the results of the LEU Remand Redetermination, which is a revised countervailable subsidy rate of 0.87 percent *ad valorem* for Eurodif during the period of investigation, which is *de minimis*. Further, because Eurodif is the only known producer/exporter of the subject merchandise, we are revoking the CVD order for all entries effective May 14, 2001, the date on which the Department published the notice of preliminary affirmative CVD determination. See *Notice of Preliminary Affirmative Countervailing Duty Determination and Alignment with Final Antidumping Duty Determination: Low Enriched Uranium from France*, 66 FR 24325 (May 14, 2001).

Accordingly, the Department will instruct U.S. Customs and Border Protection ("CBP") to terminate the suspension of liquidation, pursuant to section 705(c)(2)(A)(B) of the Tariff Act of 1930, as amended ("the Act"). Injunctions enjoining liquidation of entries subject to the CVD order remain in place for (1) entries on or after May 14, 2001, and on or before September 11, 2001, and on or after February 13, 2002, and on or before December 31, 2002,³ and (2) entries on or after January 1, 2003, and on or before December 31, 2003.⁴ Injunctions enjoining

liquidations of entries subject to the companion antidumping order remain in place for (1) entries on or after July 13, 2001, and on or before January 8, 2002, and on or after February 13, 2002, and (2) entries on or after February 1, 2003, and on or before January 31, 2004.⁵ We will instruct CBP to liquidate all entries without regard to countervailing duties when the injunctions are lifted.

In accordance with 19 CFR 351.213(d)(4), the Department is rescinding the ongoing administrative review covering the period January 1, 2006, through December 31, 2006. The Department will also not initiate the administrative review covering the period January 1, 2005, through December 31, 2005, for which a deferral was published in the **Federal Register** on March 28, 2007. See *Initiation of Antidumping and Countervailing Duty Administrative Reviews*, 72 FR 14516 (March 28, 2007).

This determination is published pursuant to sections 705(d), 751(a)(3)(C), and 777(i) of the Act.

Dated: May 21, 2007.

David M. Spooner,
Assistant Secretary for Import
Administration.

[FR Doc. E7-10136 Filed 5-24-07; 8:45 am]

BILLING CODE 3510-DS-S

² United States Enrichment Corporation and USEC Inc. ("USEC") are the petitioners.

³ Court number 04-00392.

⁴ Court number 05-00456.

⁵ Court numbers 02-00219 and 05-00564.

**INTERNATIONAL TRADE
COMMISSION**

[Investigation Nos. 701-TA-409 and 731-TA-909 (Review)]

Low Enriched Uranium From France

AGENCY: United States International Trade Commission.

ACTION: Scheduling of full five-year reviews concerning the antidumping and countervailing duty orders on low enriched uranium from France.

SUMMARY: The Commission hereby gives notice of the scheduling of full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) (the Act) to determine whether revocation of the antidumping and countervailing duty orders on low enriched uranium from France would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of these reviews 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).

EFFECTIVE DATE: April 9, 2007.

FOR FURTHER INFORMATION CONTACT: Nathanael Comly (202-205-3174), 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 202-205-1810. 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 April 9, 2007, the Commission determined that responses to its notice of institution of the subject five-year reviews were such that full reviews pursuant to section 751(c)(5) of the Act should proceed (72 FR 27151, May 14, 2007). A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's Web site.

Participation in the reviews 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 these reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of the reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the reviews. A party granted access to BPI following publication of the Commission's notice of institution of the reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report in the reviews will be placed in the nonpublic record on September 21, 2007, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with the reviews beginning at 9:30 a.m. on

October 11, 2007, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before October 1, 2007. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on October 4, 2007, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions.—Each party to the reviews may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is October 2, 2007. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is October 22, 2007; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before October 22, 2007. On November 16, 2007, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before November 20, 2007, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also 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 where 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).

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews 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.

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.

By order of the Commission.

Issued: May 25, 2007.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E7-10410 Filed 5-30-07; 8:45 am]

BILLING CODE 7020-02-P

**INTERNATIONAL TRADE
COMMISSION****[Investigation No. 701-TA-409 (Final)]****Low Enriched Uranium From France****AGENCY:** United States International Trade Commission.**ACTION:** Termination of five-year review.**SUMMARY:** On May 25, 2007, the Department of Commerce published notice in the **Federal Register** of an amended final negative determination pursuant to final court decision, rescission of administrative review, and revocation of the countervailing duty order in connection with the subject investigation (72 FR 29301).

Accordingly, pursuant to section 207.40(a) of the Commission's Rules of Practice and Procedure (19 CFR 207.40(a)), the five-year review concerning the countervailing duty order on imports of low enriched uranium from France (investigation No. 701-TA-409 (Review)) is terminated.

DATES: *Effective Date:* May 25, 2007.**FOR FURTHER INFORMATION CONTACT:**Nathanael Comly (202-205-3174), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained 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 this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.**Authority:** This investigation is being terminated under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 201.10 of the Commission's rules (19 CFR 201.10).

Issued: May 31, 2007.

By order of the Commission.

Marilyn R. Abbott,*Secretary to the Commission.*

[FR Doc. E7-10950 Filed 6-6-07; 8:45 am]

BILLING CODE 7020-02-P

EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY

in

Low Enriched Uranium from France

Inv. Nos. 701-TA-409 and 731-TA-909 (Review)

On April 9, 2007, the Commission determined that it should conduct full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(5).¹

The Commission received responses to its notice of institution from: (i) USEC, Inc and its wholly-owned subsidiary, the United States Enrichment Corporation (the sole domestic producer of low enriched uranium or “LEU”); (ii) Eurodif S.A. (the sole producer and exporter of LEU in France); and (iii) the Ad Hoc Utilities Group (“AHUG”) (a coalition of U.S. nuclear utilities that are industrial users of LEU).

The Commission determined that the responses described above (except that of AHUG, which, as a coalition of industrial users, is not an “interested party” within the meaning of 19 U.S.C. §1677(9), and with respect to which an adequacy determination is not contemplated) were individually adequate. The Commission also determined that both the domestic interested party group response and the respondent interested party group response were adequate.

Although the Commission found Eurodif’s response to be adequate, it is concerned that Eurodif did not provide data on the amount of LEU it enriched and exported pursuant to separative work unit (“SWU”) transactions.² In the full reviews the Commission expects Eurodif to provide data that is requested by the Commission regardless of its legal position on the appropriate scope of the orders or on whether enrichment constitutes production of LEU.

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

¹ Commissioner Okun did not participate in this determination.

² Given this lack of data, Commissioner Williamson found Eurodif’s response to be inadequate, and therefore found that the respondent interested party group response was inadequate. Commissioner Williamson found, however, that other circumstances warranted conducting full reviews.

APPENDIX B
CALENDAR OF THE PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Low Enriched Uranium from France
Inv. Nos.: 731-TA-909 (Review)
Date and Time: October 11, 2007 - 9:30 a.m.

Sessions were held in connection with this investigation in the Main Hearing Room, 500 E Street (room 101), SW, Washington, DC.

OPENING REMARKS:

In Support of Continuation of Order (**Richard O. Cunningham**,
Steptoe & Johnson LLP)

In Opposition to Continuation of Order (**Stuart M. Rosen**,
Weil, Gotshal & Manges LLP)

In Support of Continuation of Antidumping Duty Order:

Steptoe & Johnson LLP
Washington, DC
on behalf of

USEC, Inc. and its wholly owned subsidiary,
United States Enrichment Corporation
(collectively "USEC")

Philip G. Sewell, Senior Vice President, American
Centrifuge and Russian HEU, USEC

Robert Van Namen, Senior Vice President,
Uranium Enrichment, USEC

**In Support of Continuation of
Antidumping Duty Order:**

Michael C. Whitehurst, Director, Marketing, USEC

John Dorrian, Assistant Controller, USEC

Philip Potter, Counsel to United Steel Workers,
Law Offices of Philip Potter

Daniel W. Klett, Principal, Capital Trade, Inc.

Richard O. Cunningham)
Thomas J. Trendl) – OF COUNSEL
Eric C. Emerson)

**In Opposition to Continuation of
Antidumping Duty Order:**

Weil, Gotshal & Manges LLP
Washington, DC
on behalf of

Eurodif S.A.
AREVA
AREVA Inc.
AREVA NC Inc.

José-Luis Carbonell, Senior Vice President, AREVA S.A.

Stuart M. Rosen)
) – OF COUNSEL
John M. Ryan)

**In Opposition to Continuation of
Antidumping Duty Order (continued):**

Pillsbury Winthrop Shaw Pittman LLP
Washington, DC
on behalf of

Ad Hoc Utilities Group (“AHUG”)

Kenneth Church, Nuclear Fuel Supply Manager,
Duke Energy Corporation

Nancy A. Fischer)
Joshua D. Fitzhugh) – OF COUNSEL
Christine J. Sohar)

REBUTTAL/CLOSING REMARKS:

In Support of Continuation of Order (**Richard O. Cunningham, Eric C. Emerson,**
and Thomas J. Trendl, Steptoe & Johnson LLP)

In Opposition to Continuation of Order (**Stuart M. Rosen**, Weil, Gotshal & Manges LLP,
and Nancy A. Fischer, Pillsbury Winthrop Shaw Pittman LLP)

APPENDIX C
SUMMARY DATA

Table C-1

LEU: Summary data concerning the U.S. market, 2002-06, January-June 2006, and January-June 2007

(Quantity=1,000 SWUs, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per SWU; period changes=percent, except where noted)

Item	Reported data						Period changes						
	2002	2003	2004	2005	2006	January-June		2002-06	2002-03	2003-04	2004-05	2005-06	Jan.-June
						2006	2007						2006-07
U.S. consumption quantity:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
France	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
France	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. imports from:													
France:													
Quantity	1,431	4,004	2,109	2,223	982	462	24	-31.4	179.8	-47.3	5.4	-55.8	-94.7
Value	250,357	555,019	346,789	456,198	274,491	118,444	14,337	9.6	121.7	-37.5	31.5	-39.8	-87.9
Unit value	\$174.97	\$138.62	\$164.42	\$205.21	\$279.65	\$256.25	\$589.37	59.8	-20.8	18.6	24.8	36.3	130.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia:													
Quantity	3,830	4,706	4,107	3,778	3,843	1,699	1,370	0.3	22.9	-12.7	-8.0	1.7	-19.4
Value	762,181	911,943	825,843	827,334	841,074	354,515	308,342	10.4	19.6	-9.4	0.2	1.7	-13.0
Unit value	\$199.02	\$193.80	\$201.09	\$218.97	\$218.88	\$208.69	\$225.15	10.0	-2.6	3.8	8.9	0.0	7.9
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources:													
Quantity	3,485	5,618	5,508	3,680	6,063	3,107	2,430	74.0	61.2	-2.0	-33.2	64.8	-21.8
Value	596,838	871,972	796,923	843,462	1,662,581	742,804	1,013,570	178.6	46.1	-8.6	5.8	97.1	36.5
Unit value	\$171.28	\$155.21	\$144.69	\$229.23	\$274.22	\$239.10	\$417.18	60.1	-9.4	-6.8	58.4	19.6	74.5
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject):													
Quantity	7,314	10,324	9,615	7,458	9,906	4,805	3,799	35.4	41.1	-6.9	-22.4	32.8	-20.9
Value	1,359,019	1,783,915	1,622,766	1,670,797	2,503,655	1,097,318	1,321,912	84.2	31.3	-9.0	3.0	49.8	20.5
Unit value	\$185.80	\$172.80	\$168.78	\$224.03	\$252.75	\$228.35	\$347.96	36.0	-7.0	-2.3	32.7	12.8	52.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
All sources:													
Quantity	8,745	14,328	11,724	9,681	10,887	5,268	3,823	24.5	63.8	-18.2	-17.4	12.5	-27.4
Value	1,609,376	2,338,934	1,969,555	2,126,995	2,778,147	1,215,762	1,336,249	72.6	45.3	-15.8	8.0	30.6	9.9
Unit value	\$184.03	\$163.25	\$167.99	\$219.71	\$255.18	\$230.80	\$349.49	38.7	-11.3	2.9	30.8	16.1	51.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':													
Average capacity quantity	8,000	8,000	8,000	8,000	8,000	4,000	4,000	0.0	0.0	0.0	0.0	0.0	0.0
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (SWUs per hour)	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.

(2) Undefined

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-2
LEU: Summary financial data concerning the U.S. producer, 2002-06, January-June 2006, and January-June 2007

* * * * *

Table C-3
LEU: Summary data concerning EUP transactions, 2002-06, January-June 2006, and January-June 2007

* * * * *

APPENDIX D

**RESPONSE OF THE U.S. PRODUCER AND PURCHASERS CONCERNING
THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDER AND THE
LIKELY EFFECTS OF REVOCATION**

**U.S. PRODUCER'S COMMENTS REGARDING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDER
AND THE LIKELY EFFECTS OF REVOCATION**

The Commission requested the U.S. producer to describe any anticipated changes to the character of their operations or organization relating to the production of LEU in the future if the antidumping duty order covering imports of LEU from France were revoked. (Question II-4.) The following are quotations from the response of the U.S. producer.

USEC

The Commission requested the U.S. producer to describe the significance of the existing antidumping duty order covering imports of LEU from France in terms of its effect on the firm's production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values. (Question II-27.) The following are quotations from the response of the U.S. producer.

USEC

The Commission requested the U.S. producer describe any anticipated changes in their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values relating to the production of LEU in the future if the existing antidumping duty order was revoked. (Question II-28.) The following are quotations from the response of the U.S. producer.

USEC

U.S. PURCHASERS' COMMENTS REGARDING THE LIKELY EFFECTS OF REVOCATION

The Commission requested U.S. purchasers describe any potential effects on (1) the activities of their firm and (2) the U.S. market as a whole if the antidumping duty order covering imports of LEU from France was revoked. (Question V-5). The following are quotations from the responses of purchasers.

(1) *Activities of your firm*: “Respondent would consider continuing to contract for enrichment services from France as a means of diversity of supply sources.”

(2) *Entire U.S. market*: “It is ***’s understanding that France needs most of its enrichment services for its own needs. Therefore, termination of the antidumping and/or countervailing duty orders would have minimal impact on the enrichment services market.”

(1) *Activities of your firm*: “We would anticipate no substantive changes to our current practices.”

(2) *Entire U.S. market*: “We would anticipate no substantive changes to the market as a whole.”

(1) *Activities of your firm*: “A termination of the AD/CVD orders on LEU from France would increase ***’s ability to better diversify supply sources to address supply risks. This supply diversification would not increase the likelihood of price suppression in the enrichment services market since increases in U.S. demand are expected, which will serve to offset the unencumbered supply. Also, no negative impact to U.S. suppliers of enrichment services is anticipated since demand is projected to be sufficiently high so as to require the purchase of available U.S. supply.”

(2) *Entire U.S. market*: “A termination of the AD/CVD orders on LEU from France would create a more stable U.S. electricity supply system benefitting the U.S. consumer. With continued and further increases expected in U.S. enrichment services demand, there is room for many more suppliers of enrichment services to meet this demand. USEC’s enrichment services supply is expected to be more competitive in the future as the ACP program unfolds, which will substantially improve USEC’s cost efficiency compared to the current high GDP production cost. USEC, LES, and any resultant French enrichment services will all be required to satisfy the demand for enrichment services in the United States well into the future.”

(1) *Activities of your firm*: “Termination of the antidumping/countervailing duties could increase imports of LEU from France, which would increase competition in the United States.”

(2) *Entire U.S. market*: “We have no opinion on this subject.”

(1) *Activities of your firm*: “If the antidumping and/or countervailing duty orders from France were terminated, it would have no effect due to our long-term contract with an enrichment services supplier.”

(2) *Entire U.S. market*: “We can make no concrete estimate on the effect of terminating the antidumping and/or countervailing duty orders from France. We do not have knowledge of the U.S. market’s sensitivity to the imports of LEU from France.”

(1) *Activities of your firm*: “No changes; our current contract goes to ***.”

(2) *Entire U.S. market*: “Improved availability of LEU. USEC would no longer have a monopoly on the U.S. spot market. Improved long-term market.”

(1) *Activities of your firm*: “We would have more options open for supply, which should translate to better prices and conditions.”

(2) *Entire U.S. market*: “More competitive with the rest of the world.”

(1) *Activities of your firm*: “*** procurement activities would most likely be unchanged as a result of the termination of the antidumping and/or countervailing duty orders on LEU from France. We would expect that Areva NC would be likely to supply SWU to this country, however, since supply is in high demand, we would not expect any newcomers to the U.S. domestic SWU market to significantly affect SWU prices.”

(2) *Entire U.S. market*: “It is the opinion of *** that termination of the antidumping and/or countervailing duty orders on LEU from France would have little effect on the U.S. SWU market. As with uranium, it is not clear that significant French SWU capacity would be available to the U.S. market. Again, given France’s market economy stance, sale of SWU lower than what the future market will bear is highly unlikely.”

(1) *Activities of your firm*: “The antidumping and/or countervailing duties on imports have been determined to be not applicable to imports from France by the courts since enrichment services imported to the United States from France have been determined to be a service and not a product subject to the duties. The issue of termination is, therefore, moot. Despite this ruling, tariffs continue to be imposed on imports and AREVA NC has elected to withdraw from the U.S. market rather than continue posting tariffs. If tariffs were lifted and AREVA NC returned to the market, it may have little effect on the market since AREVA NC has committed its economical capacity to overseas companies. The pricing that AREVA NC would have to charge to product enrichment services may not be competitive in today’s market.”

(2) *Entire U.S. market*: “The answer to this question as addressed above.”

(1) *Activities of your firm*: “Beyond not having to respond to another questionnaire on this subject matter, we expect the effects would be minimal. *** will seek to diversify its supplier base beyond what is available today. To the extent that we can reduce the cost of enrichment services, we will move in that direction also.”

(2) *Entire U.S. market*: “We think that the additional enrichment services capacity being built or announced to be built in the United States will eliminate USEC’s future use of the U.S. trade law to control competition. Other nuclear generators will also diversify their supplier base beyond what’s available today.”

(1) *Activities of your firm:* “*** is of the opinion that the removal of the antidumping and/or countervailing duties from the LEU from France will not have any significant impact on the market and the practices of ***. It will allow for another valuable enricher source to be fully available in the U.S. market.”

(2) *Entire U.S. market:* “*** believes that the U.S. market as a whole needs as many enrichers as can possibly be available for use. The U.S. market is the world’s largest market for nuclear materials and yet is restricted by duties on French SWU and Russian LEU. This severely limits the supply to the U.S. utilities. Elimination of duties on French SWU will be needed to support the new construction in this country and keep the cost of nuclear fuel within reason while the uranium producers get their act together and expand production.”

(1) *Activities of your firm:* “We would be on the phone immediately to solicit a long-term contract to ensure enrichment supply for our plants. Currently, USEC feels it has a monopoly and does not entertain negotiating a competitive contract because of that.”

(2) *Entire U.S. market:* “The market prices would reflect the realities of producing the product rather than artificial price supports that enable bad business decisions. If it costs a certain amount to produce a SWU and the producer needs a margin of profit to stay in business, that will be the market price. Protecting marginal performers through import controls only continues marginal performance.”

(1) *Activities of your firm:* “No effect.”

(2) *Entire U.S. market:* “Potential decrease in U.S. market and service prices.”

(1) *Activities of your firm:* “Little change; would still desire to maintain a diverse supply of enrichment services to provide a greater security of supply.”

(2) *Entire U.S. market:* “The market prices would reflect the realities of producing the product rather than artificial price supports that enable bad business decisions. If it costs a certain amount to produce a SWU, and the producer needs a margin of profit to stay in business, that will be the market price. Protecting marginal performers through import controls only continues marginal performance.”

(1) *Activities of your firm:* “*** would evaluate LEU from France on supply risk and price. The delivery history would be central to the evaluation, along with the pricing terms. *** would fairly balance the additional supply risk of transatlantic deliveries with other factors before making a decision.”

(2) *Entire U.S. market:* “The market as a whole would not be hugely affected. The potential influx of material should remain relatively low given the current supply limits. Short-term effects may affect USEC’s ability to get financing for their centrifuge system.”

(1) *Activities of your firm:* “We do not expect any major impact to *** or the U.S. market from the termination of AD or CVD order on LEU from France. As mentioned in Part III of the questionnaire, *** tries to purchase enrichment services from a diversified portfolio of competitive, reliable suppliers. We diversify our supply to reduce the impact of potential supply interruptions from any one supplier. We currently have long-term contracts with ***. We do not expect this approach to the market to change. We monitor the condition of each of the suppliers and may adjust our portfolio over time to account for changes in supplier competitiveness and reliability.”

(2) *Entire U.S. market:* “As mentioned above, we do not expect any major effect on the U.S. market from the termination of the AD or CVD order on LEU from France. As noted previously, the market has evolved to a production-cost driven market, which is characterized by a tight supply/demand balance. Areva is constructing and planning to construct a new enrichment plant in France and the United States. We believe SWU prices will remain strong because Areva (and other suppliers who are increasing capacity) must recover investment in these new facilities. The U.S. dollar is weak relative to the euro, so this keeps pressure on the SWU price (denominated in U.S. dollars) to remain high. We estimate most, if not all, U.S. utilities have a similar procurement policy to ***’s in that they diversify their SWU supply among competitive, reliable suppliers to minimize the risk of supply interruption. We do not expect this to change in the future. Suppliers also diversify their customers to minimize risk. This diversification is not only among individual customers but geographic regions. Therefore, we expect suppliers will continue to spread their allocations of supply among the major markets (e.g., Europe, Asia, and the United States) to avoid concentration in any one region. We believe most U.S. utilities, like ***, would prefer to have a significant portion of their SWU supply with competitive, reliable U.S.-based production to minimize risk (e.g., transport, import, currency, and political risk).”

(1) *Activities of your firm:* “As *** has long-term enrichment services contracts, the termination of the antidumping and/or countervailing duty orders on LEU from France will have no effect.”

(2) *Entire U.S. market:* “*** has no direct knowledge of the effects, if any, of the termination of the antidumping and/or countervailing duty orders on LEU from France. ***’s knowledge of such effects is derived from information contained in various industry publications purchased by ***.”

(1) *Activities of your firm:* “No change through *** as all *** under contract. After ***, would expect slightly lower prices due to improved competition.”

(2) *Entire U.S. market:* “Lowering of prices for SWU due to improved competition.”

(1) *Activities of your firm:* “No change. *** is 100 percent covered.”

(2) *Entire U.S. market:* “No change. Price is production driven.”

(1) *Activities of your firm:* “Termination of the antidumping and/or countervailing duty orders on LEU from France will allow *** to procure LEU at more competitive prices.”

(2) *Entire U.S. market:* “Termination of the antidumping and/or countervailing duty orders on LEU from France will allow *** to procure LEU at more competitive prices.”

(1) *Activities of your firm:* “Would present additional opportunities for SWU supply and allow for further diversification. The market needs all of the supplies possible, along with competition to foster a healthy market. French SWUs are currently limited.”

(2) *Entire U.S. market:* “No significant impact on the market, particularly prices. The market needs all of the supplies possible, along with the competition to foster a healthy market. Obtain more French origin SWU, although supplies expected to be limited. More competition. If no termination of the trade case, probability increases that Areva will build a new facility in the United States.”

(1) *Activities of your firm*: “Termination of the antidumping and/or countervailing duty orders on LEU from France would not be expected to impact the activities of ***.”

(2) *Entire U.S. market*: “Termination would be likely to increase the competitiveness of enrichment services in the United States sourced from France.”

(1) *Activities of your firm*: “Increased availability of LEU. No significant impact on price expected.”

(2) *Entire U.S. market*: “Increased availability of LEU. No significant impact on price expected.”

(1) *Activities of your firm*: “Other things being equal, the termination would allow more enrichment services to be contracted for at lower prices, thus easing the pressure on the overall costs of nuclear fuel and thereby the final cost of electricity generated by ***. This firm would have another source of supply that would ameliorate supply vulnerabilities and susceptibilities to price dictation by concentrated suppliers (if/when they exert oligopoly market power). This is of overwhelming importance to *** with regards to the mix of fuels we must optimize to maintain our own financial viability and competitiveness as a business and to maintain our presence in *** highly competitive and *** electricity markets.”

(2) *Entire U.S. market*: “Other things being equal, the termination would allow more enrichment services to be contracted for at lower prices, thus easing the pressure on the overall costs of nuclear fuel and thereby the final cost of electricity generated by existing nuclear power plants. Nuclear utilities would have another source of supply that would ameliorate supply vulnerabilities and susceptibilities to price dictation by concentrated suppliers (if/when they exert oligopoly market power). This is of overwhelming importance to the domestic market in the United States because of the importance of USEC.”

(1) *Activities of your firm*: “The termination of the antidumping and/or countervailing duty orders on LEU from France would have little to no impact on the activities of ***.”

(2) *Entire U.S. market*: “*** is an electric utility and does not perform case studies for the future U.S. or world markets.”

(1) *Activities of your firm*: “No change.”

(2) *Entire U.S. market*: “Unknown.”

(1) *Activities of your firm*: “The activities of *** would not change. It would continue to consider all viable sources of enrichment services.”

(2) *Entire U.S. market*: “If the antidumping and/or countervailing duty orders on LEU from France were terminated, this would introduce more fair competition for the sale of enrichment services to customers in the United States. The U.S. market would therefore not be driven by a single supplier or primarily by a supplier maintaining the majority of market share due to the fact that alternate enrichment service capacity is not available without penalty.”

APPENDIX E
ADDITIONAL PURCHASER DATA

Table E-1

LEU: Subset of annual deliveries and expected deliveries of LEU from Areva/Cogema, by origin of LEU as specified on shipping documents, 2002-12

* * * * *

Table E-2

LEU: Subset of electric utility purchases of LEU via enrichment contracts, as delivered by Areva/Cogema, by country of origin as specified on shipping documents, 2002-06 and January-June 2006 and 2007

* * * * *

