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Uranium Marketing Annual Report

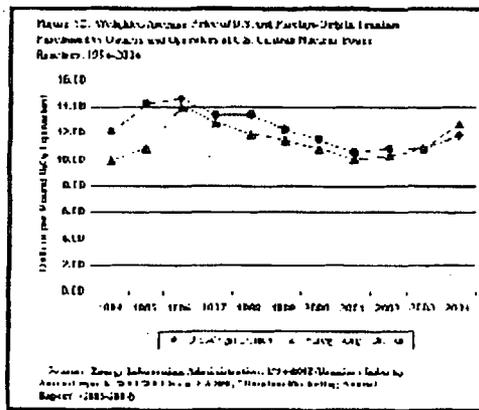
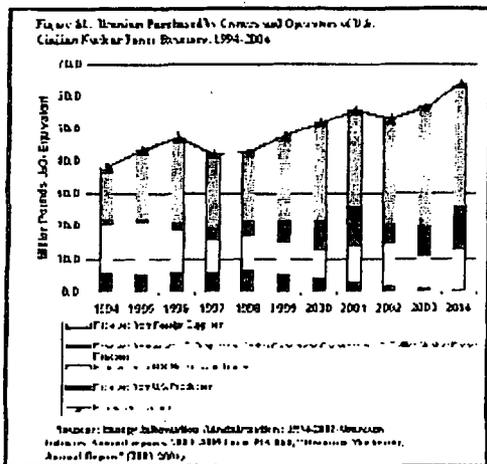
Data for: 2004
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 Next Release: April 28, 2006

Uranium Purchases and Prices

Owners and operators of U.S. civilian nuclear power reactors purchased from U.S. and foreign suppliers a total of 64 million pounds U₃O₈e (equivalent) of deliveries during 2004. The weighted-average price paid was \$12.61 per pound U₃O₈e, an increase of 17 percent compared with the 2003 price. Approximately 19 percent of all uranium purchased was U.S.-origin at an average price of \$11.87 per pound. Foreign-origin uranium accounted for 52 million pounds (81 percent) of the deliveries at an average price of \$12.76 per pound. Owners and operators of U.S. civilian nuclear power reactors purchased uranium with 2004 deliveries from 18 suppliers.¹ During 2004, 15 percent of the purchased uranium involved spot contracts, and the remaining 85 percent involved long-term contracts. The average price for spot contracts was \$14.77 per pound, but for long-term contracts it was \$12.24 per pound.

1994-2004 Data:

Uranium Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



2003-2004 Data:

- Suppliers and Origins:
- Material and Contract Types:
- Average Pricing Mechanisms and Octile/Quartile Price Distributions:

- Table 1 and Figures 1 and 2
- Table 2 and Figures 3 and 4
- Table 3 and Figure 5
- Table 4 and Figure 6
- Table 7
- Table 5 and Figure 7
- Tables 6a and 6b

New and Future Uranium

The quantity of uranium delivered in 2004, under 38 purchase contracts signed in 2004, was 12.5 million pounds U₃O₈e, and the average price was \$13.72 per pound. As of the end of 2004, cumulative unfilled uranium requirements for U.S. civilian nuclear reactors for 2005 through 2014 were reported to be 365 million pounds U₃O₈e. The quantity of maximum deliveries of uranium for the same period under existing purchase contracts totaled 181 million pounds. These contracted deliveries and unfilled requirements combined represent the maximum anticipated market requirements of uranium. The total 10-year maximum requirements, as of year-end of 2004, were 546 million pounds U₃O₈e.

2004-2014 Data:

2004 Contracted Purchases and Future Deliveries of Uranium by Owners and Operators of U.S. Civilian Nuclear Power Reactors, as of 12/31/2004

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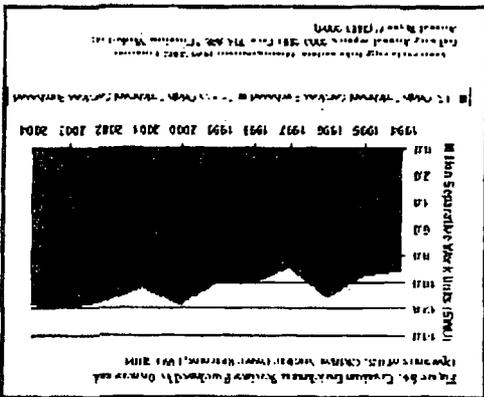
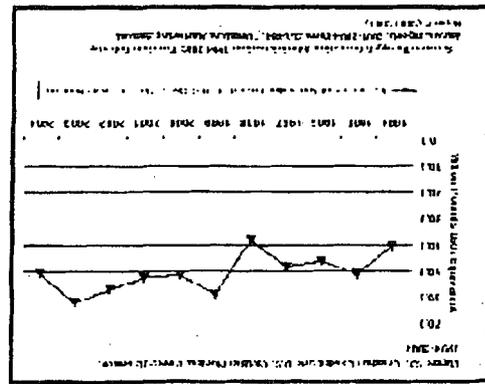
as of the end of 2004.

U.S. suppliers (U.S. brokers, converters, enrichers, fabricators, producers, and traders), and owners and operators of U.S. civilian nuclear power reactors purchase uranium each year from foreign suppliers. Foreign purchases totaled 66 million pounds U₃O₈ in 2004, and the average price was \$12.25 per pound which was 16 percent more than in 2003. Also, U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors sold uranium to foreign suppliers. Foreign sales totaled 13 million pounds U₃O₈ in 2004, and the average price was \$12.63 per pound (22 percent more than the 2003 price). Year-end commercial uranium inventories represent ownership of uranium in different stages of the nuclear fuel cycle (in-process for conversion, enrichment, or fabrication) at domestic or foreign nuclear fuel facilities. Commercial uranium inventories owned at the end of the year by owners and operators of U.S. civilian nuclear reactors in 2004 was 56 million pounds U₃O₈, an increase of 24 percent from year-end 2003. Overall, U.S. commercial inventories totaled 94.3 million pounds as of the end of 2004.

Uranium Foreign Purchases/Sales and Inventories

Uranium Feed for Enrichment: Table 13 and Figure 12 Table 14 and Figure 13 Table 15 and Figure 14
 Purchased Enrichment Services (SWU): Table 16 and Figure 15 Table 17
 Loaded Uranium: Table 18 and Figure 16

2002-2004 Data:



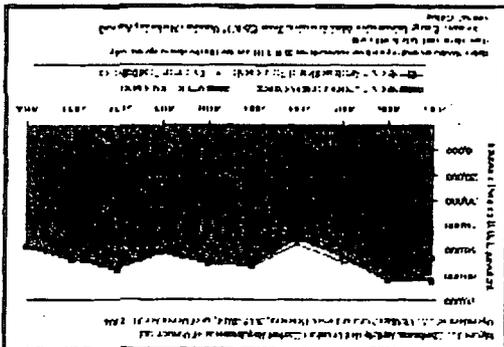
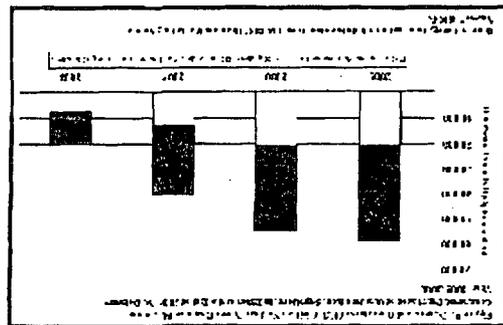
Uranium Feed Deliveries, Enrichment Services, and Uranium Loaded by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004

1994-2004 Data:

In 2004, owners and operators of U.S. civilian nuclear power reactors delivered 53 million pounds U₃O₈ of natural uranium feed for enrichment. And 12 million separative work units (SWU) were purchased under enrichment services contracts from 7 sellers in 2004.² The U.S.-origin SWU share was 12 percent an foreign-origin SWU the remaining 88 percent. Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors during 2004 contained 51 million pounds U₃O₈.

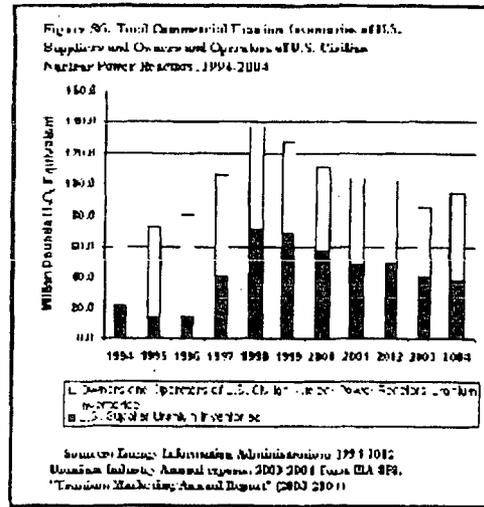
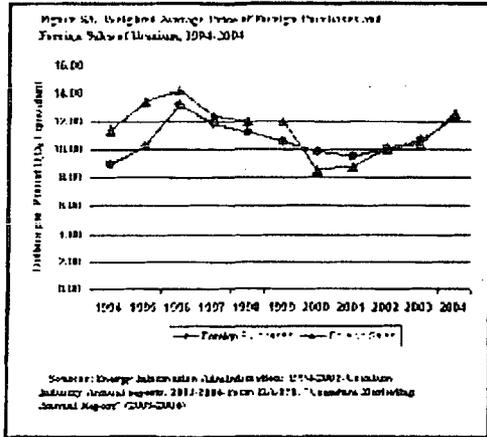
Uranium Feed, SWU, and Loaded

Purchase Contracts Signed in 2004: Table 9 and Figure 8
 Future Deliveries and Unfilled Requirements: Table 10 and Figure 9 Table 11 and Figure 10 Table 12 and Figure 11



1994-2004 Data:

Foreign Purchases, Foreign Sales, and Uranium Inventories by U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



2002-2004 Data:

Foreign Purchases and Sales:
Commercial Inventories:

Table 19 and Figure 17

Table 20 and Figure 18

Table 21 and Figure 19

Table 22 and Figures 20 and 21

Uranium Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004

Deliveries (million pounds U ₃ O ₈ equivalent)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Purchased Uranium	38.3	43.4	47.3	42.0	42.7	47.9	51.8	55.4	52.7	56.6	64.1
Weighted-Average Price (U.S. dollars per pound U ₃ O ₈ equivalent)	10.40	11.25	14.12	12.88	12.14	11.63	11.04	10.15	10.36	10.81	12.61
Received from U.S. Producers	5.4	5.3	5.8	5.7	6.5	5.2	3.6	2.3	1.5	0.6	0.0
Weighted-Average Price	13.72	14.84	14.20	13.60	13.61	13.93	14.81	13.26	13.03	14.17	--
Received from U.S. Brokers and Traders	15.3	16.2	13.3	9.9	10.5	10.4	9.1	11.7	13.4	10.5	13.2
Weighted-Average Price	9.34	9.83	13.36	12.31	11.95	11.54	11.28	10.44	10.21	11.05	12.08
Received from other U.S. Suppliers and other Owners and Operators of U.S. Civilian Nuclear Power Reactors^a	1.1	0.6	1.9	3.0	4.5	5.6	8.8	11.4	5.7	8.3	12.2
Weighted-Average Price	8.04	12.52	14.98	W	W	W	10.45	9.98	W	10.16	11.30
Received from Foreign Suppliers	16.5	21.4	26.4	23.4	21.3	26.8	30.4	30.0	32.2	37.2	38.7
Weighted-Average Price	10.43	11.40	14.45	12.91	11.97	11.47	10.65	9.86	10.37	10.82	13.15
U.S.-Origin Uranium	7.7	5.2	8.3	8.1	7.2	11.4	13.3	13.2	6.2	10.2	12.3
Weighted-Average Price	12.08	14.20	14.62	13.36	13.37	12.24	11.52	10.50	10.89	10.81	11.87
Foreign-Origin Uranium	30.6	38.2	39.0	33.9	35.6	36.5	38.6	42.2	46.5	46.4	51.8
Weighted-Average Price	9.97	10.84	14.02	12.78	11.90	11.47	10.88	10.05	10.29	10.81	12.76
Spot Contracts^b	8.5	13.6	9.1	5.5	7.8	8.0	10.4	14.4	8.6	8.2	9.2
Weighted-Average Price	9.01	10.30	14.22	11.61	10.56	9.52	8.54	7.92	9.29	10.10	14.77
Short, Medium, and Long-Term Contracts^c	29.8	29.8	38.3	36.5	34.9	40.0	39.1	40.0	41.4	46.7	53.3
Weighted-Average Price	NA	NA	NA	NA	NA	NA	11.70	10.96	10.58	10.94	12.24

^a Includes purchases between owners and operators of U.S. civilian nuclear power reactors along with purchases from other U.S. suppliers which are U.S. converters, enrichers, and fabricators.

^b Spot contract: A one-time delivery (usually) of the entire contract to occur within one year of contract execution (signed date).

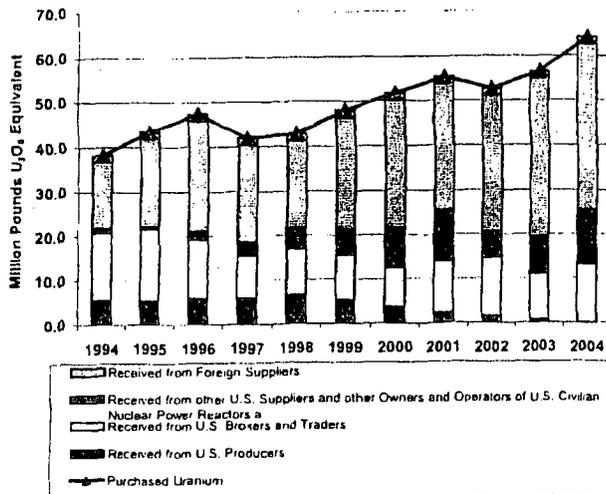
^c Short, Medium, and Long-Term Contracts: One or more deliveries to occur after a year following contract execution (signed date).

-- = Not applicable. W = Data withheld to avoid disclosure. NA = Not available.

Note: Totals may not equal sum of components because of independent rounding.

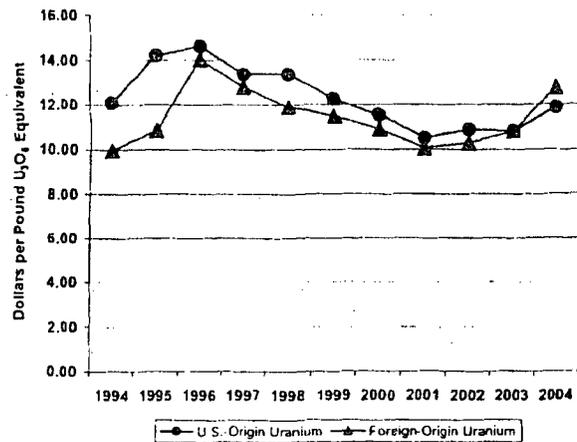
Sources: Energy Information Administration: 1994-2002-Uranium Industry Annual reports, 2003-2004-Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S1. Uranium Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



Sources: Energy Information Administration: 1994-2002-Uranium Industry Annual reports, 2003-2004-Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S2. Weighted-Average Price of U.S. and Foreign-Origin Uranium Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



Sources: Energy Information Administration: 1994-2002-Uranium Industry Annual reports, 2003-2004-Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Table 1. Owners and Operators of U.S. Civilian Nuclear Power Reactors Contracted Uranium by Supplier, Transaction Type, and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

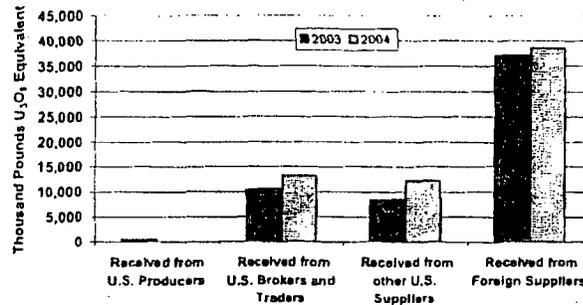
Deliveries	2003	2004
Received from U.S. Producers		
Purchases of U.S.-Origin and Foreign-Origin Uranium	587	0
Weighted-Average Price	14.17	-
Received from U.S. Brokers and Traders		
Purchases of U.S.-Origin and Foreign-Origin Uranium	10,450	13,209
Weighted-Average Price	11.05	12.08
Received from other Owners and Operators of U.S. Civilian Nuclear Power Reactors		
Purchases	0	0
Weighted-Average Price	-	-
Received from other U.S. Suppliers		
Purchases of U.S.-Origin and Foreign-Origin Uranium	8,311	12,233
Weighted-Average Price	10.16	11.30
Received from Foreign Suppliers		
Purchases of U.S.-Origin and Foreign-Origin Uranium	37,163	38,661
Weighted-Average Price	10.82	13.15
Total Received by Owners and Operators of U.S. Civilian Nuclear Power Reactors		
Purchases of U.S.-Origin and Foreign-Origin Uranium	56,552	64,102
Weighted-Average Price	10.81	12.61

-- = Not applicable.

Notes: "Other U.S. Suppliers" are U.S. converters, enrichers, and fabricators. Totals may not equal sum of components because of independent rounding.

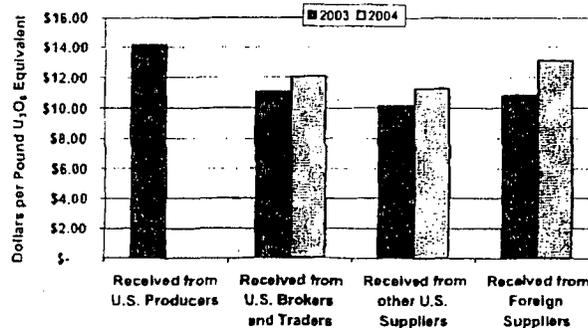
Source: Energy Information Administration; Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 1. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Supplier and Delivery Year, 2003-2004



Source: Energy Information Administration; Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 2. Weighted-Average Price of Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Supplier and Delivery Year, 2003-2004



Source: Energy Information Administration; Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

(Data released in April 2005; Next release: April 2006)

Uranium Sellers to Owners and Operators of U.S. Civilian Nuclear Power Reactors, 2004	
Cameco	Nufcor International
China Nuclear Energy Industry Corp. (CNEIC)	Rio Tinto Mineral Services Limited
CJS National Atomic Company Kazatomprom	Rossing Uranium Limited
COGEMA, Inc.	RWE NUKEM, Inc.
ConverDyn	Techsnabexport (TENEX)
Energy Resources of Australia	The Uranium Exchange Company
Heathgate Resources Pty. Ltd.	UG U.S.A., Inc.
Itochu Corporation	USEC, Inc.
Nuclear Fuels Corporation of South Africa	WMC (Olympic Dam Corporation) Pty Ltd.
Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).	

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 URL: <http://www.eia.doe.gov/cneaf/nuclear/umar/uransellers.html>

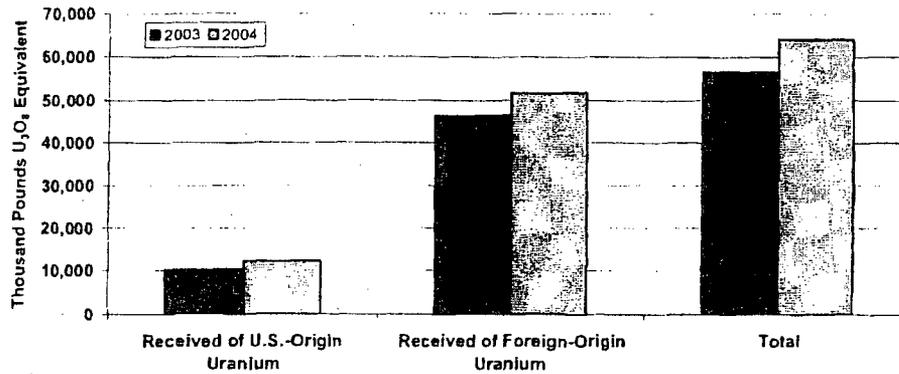
Table 2. Owners and Operators of U.S. Civilian Nuclear Power Reactors Contracted Uranium by Origin, Transaction Type, and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Deliveries	2003	2004
Received of U.S.-Origin Uranium		
Purchases	10,200	12,342
Weighted-Average Price	10.81	11.87
Received of Foreign-Origin Uranium		
Purchases	46,352	51,760
Weighted-Average Price	10.81	12.76
Total		
Purchases	56,552	64,102
Weighted-Average Price	10.81	12.61

Note: Totals may not equal sum of components because of independent rounding.

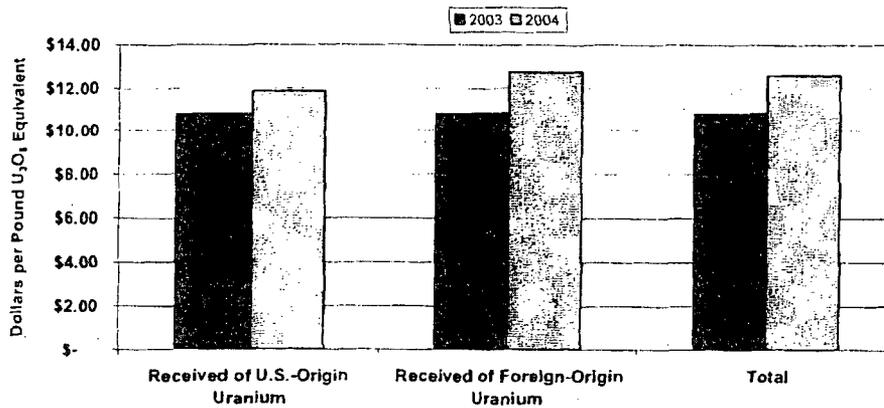
Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 3. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Origin and Delivery Year, 2003-2004



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 4. Weighted-Average Price of Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Origin and Delivery Year, 2003-2004



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 3. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Origin Country and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Origin Country	Deliveries in 2003		Deliveries in 2004	
	Purchases	Weighted-Average Price	Purchases	Weighted-Average Price
Australia	9,326	10.87	11,660	13.38
Canada	17,050	11.34	16,468	13.45
China	W	W	W	W
Czech Republic	W	W	W	W
Kazakhstan	4,232	9.69	4,211	10.18
Kyrgyzstan	W	W	0	--
Namibia	1,034	11.11	2,780	14.67
Niger	0	--	W	W
Portugal	W	W	0	--
Russia	7,689	10.18	10,329	12.10
South Africa	1,438	9.97	2,091	11.60
Ukraine	W	W	W	W
United Kingdom	W	W	W	W
Uzbekistan	3,725	11.14	2,303	12.35
Total Foreign	46,352	10.81	51,760	12.76
United States	10,200	10.81	12,342	11.87
Total Purchases	56,552	10.81	64,102	12.61

W = Data withheld to avoid disclosure.

-- = Not applicable.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 5. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Selected Country Origin and Delivery Year, 2003-2004

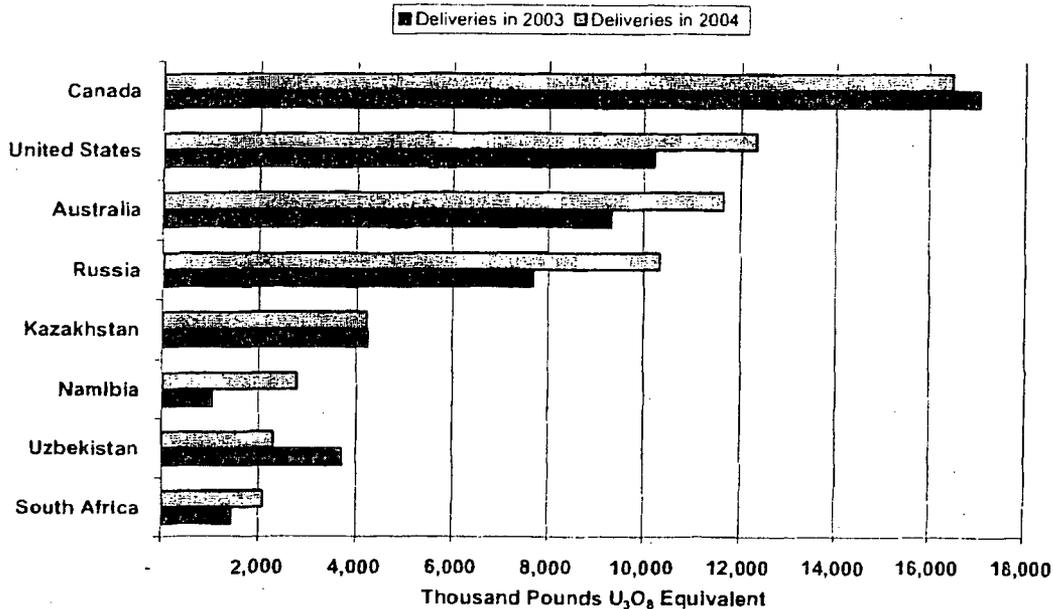


Table 4. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Origin and Material Type, 2004 Deliveries

(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Deliveries	U ₃ O ₈	Natural UF ₆	Enriched Uranium	Total
Received of U.S.-Origin Uranium				
Purchases	1,757	6,440	4,146	12,342
Weighted-Average Price	13.04	11.50	12.00	11.87
Received of Foreign-Origin Uranium				
Purchases	29,302	18,286	4,173	51,760
Weighted-Average Price	13.24	12.37	11.13	12.76
Total				
Purchases	31,058	24,725	8,319	64,102
Weighted-Average Price	13.23	12.14	11.45	12.61

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

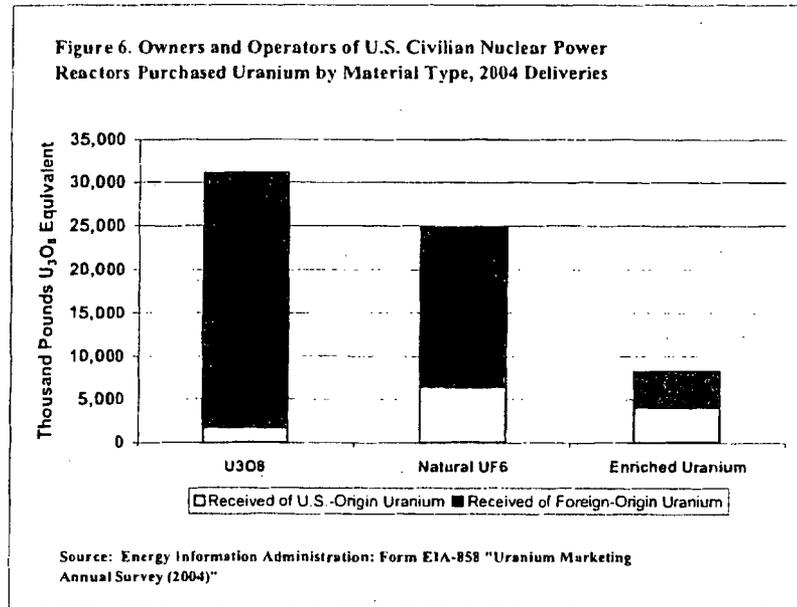


Table 5. Average Price and Quantity for Purchased Uranium by Owners and Operators of U.S. Civilian Nuclear Power Reactors by Pricing Mechanisms and Delivery Year, 2003-2004
(Dollars per Pound U₃O₈ Equivalent; Thousand Pounds U₃O₈ Equivalent)

Pricing Mechanisms	Domestic Purchases ^a		Foreign Purchases ^b		Total Purchases	
	2003	2004	2003	2004	2003	2004
Contract-Specified (Fixed and Base-Escalated) Pricing						
Weighted-Average Price	11.53	12.03	10.50	12.24	11.00	12.13
Quantity with Reported Price	13,139	20,454	13,616	17,238	26,755	37,691
Spot-Market Pricing						
Weighted-Average Price	W	W	W	W	10.54	13.77
Quantity with Reported Price	W	W	W	W	20,098	14,923
Other Pricing						
Weighted-Average Price	W	W	W	W	10.84	12.72
Quantity with Reported Price	W	W	W	W	8,029	9,808
All Pricing Mechanisms						
Weighted-Average Price	10.84	11.91	10.79	13.13	10.81	12.61
Quantity with Reported Price	20,527	26,484	34,355	35,938	54,882	62,423
Total Quantity	21,661	28,164	34,891	35,938	56,552	64,102

^aUranium of both U.S. and foreign origin.

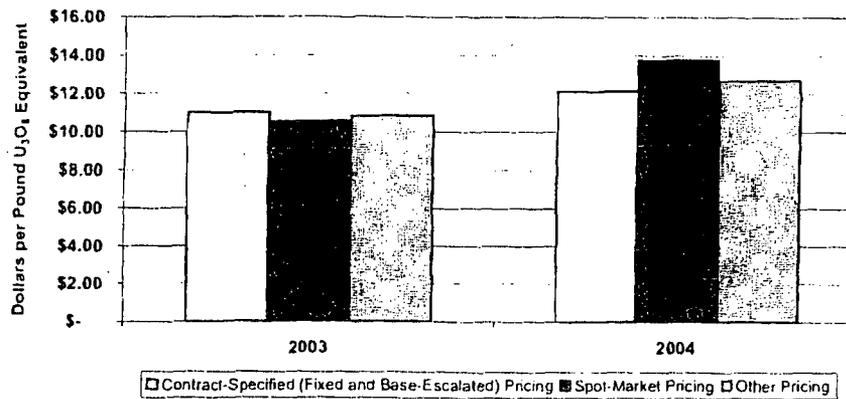
^bUranium of foreign origin only.

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration; Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 7. Average Price for Purchased Uranium by Owners and Operators of U.S. Civilian Nuclear Power Reactors by Pricing Mechanisms and Delivery Year, 2003-2004



Source: Energy Information Administration; Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 6a. Octile Price Distributions of Uranium Purchases by Owners and Operators of U.S. Civilian Nuclear Power Reactors by Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Distribution	Deliveries in 2003		Deliveries in 2004	
	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price
Octile ^a:				
First	6,860	8.50	7,803	9.40
Second	6,860	9.59	7,803	10.12
Third	6,860	9.94	7,803	10.82
Fourth	6,860	10.21	7,803	11.53
Fifth	6,860	10.37	7,803	12.65
Sixth	6,860	10.91	7,803	13.42
Seventh	6,860	11.78	7,803	14.93
Eighth	6,860	15.19	7,803	18.03
Total	54,882	10.81	62,423	12.61

^aOctile distribution divides total pounds of uranium delivered (with a price) into eight distributions by price (sorted from lowest to highest) and provides the quantity-weighted average price for each distribution.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 6b. Quartile Price Distribution of Uranium Purchases by Owners and Operators of U.S. Civilian Nuclear Power Reactors by Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Distribution	Deliveries in 2003		Deliveries in 2004	
	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price
Quartile ^a:				
First	10,853	9.32	24,774	11.30
Second	12,370	10.25	14,147	12.29
Third	22,948	10.89	13,200	13.44
Fourth	8,711	13.25	10,302	15.14
Total	54,882	10.81	62,423	12.61

^aQuartile distribution divides total pounds of uranium delivered (with a price) into four distributions by each Owners and Operators of U.S. Civilian Nuclear Power Reactors aggregate weighted-average price and provides the quantity and average price for each distribution.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 7. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchased Uranium by Contract Type and Material Type, 2004 Deliveries

(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Material Type	Spot Contracts		Long-Term Contracts		Total	
	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price
U ₃ O ₈	4,515	14.63	26,543	12.99	31,058	13.23
Natural UF ₆	W	W	W	W	24,725	12.14
Enriched Uranium	W	W	W	W	6,639	11.45
Total	9,171	14.77	53,252	12.24	62,423	12.61

W=Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Table 8. Contracts Signed in 2004 by Owners and Operators of U.S. Civilian Nuclear Power Reactors by Contract Type with 2004 Deliveries

(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Purchase Contract Type (Signed in 2004)	Quantity of Deliveries Received in 2004	Weighted-Average Price	Number of Purchase Contracts
Spot	8,042	15.34	32
Long-Term	4,431	10.80	6
Total	12,472	13.72	38

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Table 9. Owners and Operators of U.S. Civilian Nuclear Power Reactors Contracted Purchases of Uranium, Signed in 2004, by Delivery Year, 2005-2014

(Thousand Pounds U₃O₈ Equivalent)

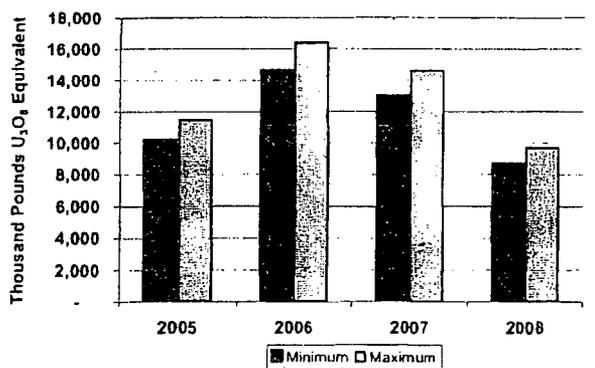
Year of Delivery	Minimum	Maximum
2005	10,215	11,490
2006	14,620	16,417
2007	13,028	14,675
2008	8,692	9,723
2009	W	W
2010	W	W
2011	W	W
2012	0	0
2013	0	0
2014	0	0
Total	52,038	58,207

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Figure 8. Owners and Operators of U.S. Civilian Nuclear Power Reactors Contracted Purchases of Uranium, Signed in 2004, by Delivery Year, 2005-2008



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Table 10. Owners and Operators of U.S. Civilian Nuclear Power Reactors Contracted Purchases of Uranium from Suppliers, in Effect at the End of 2004, by Delivery Year, 2005-2014
(Thousand Pounds U₃O₈ Equivalent)

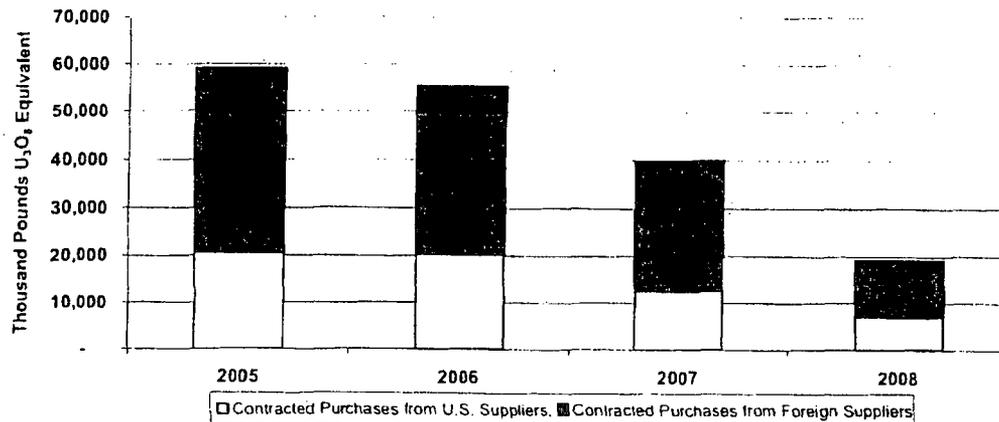
Year of Delivery	Contracted Purchases from U.S. Suppliers		Contracted Purchases from Foreign Suppliers		Contracted Purchases from All Suppliers	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
2005	18,866	20,867	31,108	38,096	49,973	58,963
2006	17,642	20,486	28,318	34,756	45,960	55,242
2007	10,033	12,783	21,429	27,142	31,462	39,924
2008	5,230	7,250	8,835	11,674	14,065	18,923
2009	W	W	W	W	W	W
2010	W	W	W	W	W	W
2011	W	W	W	W	W	W
2012	0	0	0	0	0	0
2013	0	0	0	0	0	0
2014	0	0	0	0	0	0
Total	53,271	63,399	94,210	117,143	147,481	180,542

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Figure 9. Owners and Operators of U.S. Civilian Nuclear Power Reactors Maximum Contracted Purchases of Uranium from Suppliers, in Effect at the End of 2004, by Delivery Year, 2005-2008



Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Table 11. Unfilled Uranium Requirements of Owners and Operators of U.S. Civilian Nuclear Power Reactors, 2005-2014
(Thousand Pounds U₃O₈ Equivalent)

Year	As of December 31, 2003		As of December 31, 2004	
	Annual	Cumulative	Annual	Cumulative
2004	1,403	1,403	NR	--
2005	7,849	7,849	3,302	3,302
2006	22,932	30,781	6,641	9,942
2007	32,433	63,214	12,823	22,765
2008	W	W	26,303	49,068
2009	W	W	W	W
2010	W	W	W	W
2011	W	W	W	W
2012	60,968	345,842	57,941	262,669
2013	54,771	400,613	53,822	316,491
2014	NR	--	48,969	365,460

W=Data withheld to avoid disclosure.

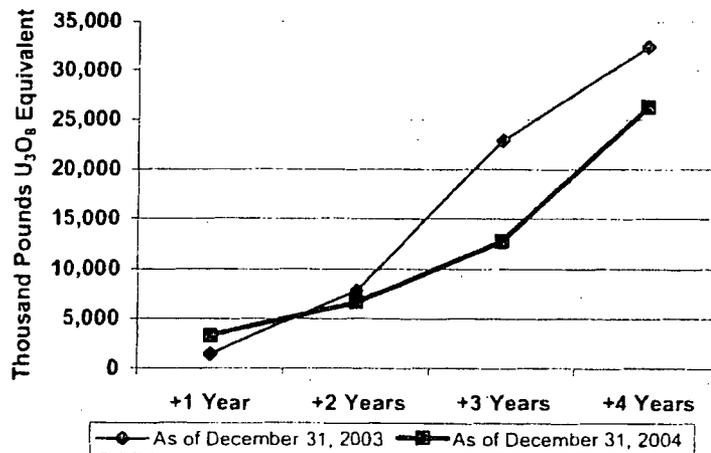
NR=Not Reported.

-- = Not applicable.

Note: Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 10. Owners and Operators of U.S. Civilian Nuclear Power Reactors Annual Unfilled Uranium Requirements Comparison, as of 12/31/2003 and 12/31/2004



Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 12. Maximum Anticipated Uranium Market Requirements of Owners and Operators of U.S. Civilian Nuclear Power Reactors, 2005-2014, as of December 31, 2004
(Thousand Pounds U₃O₈ Equivalent)

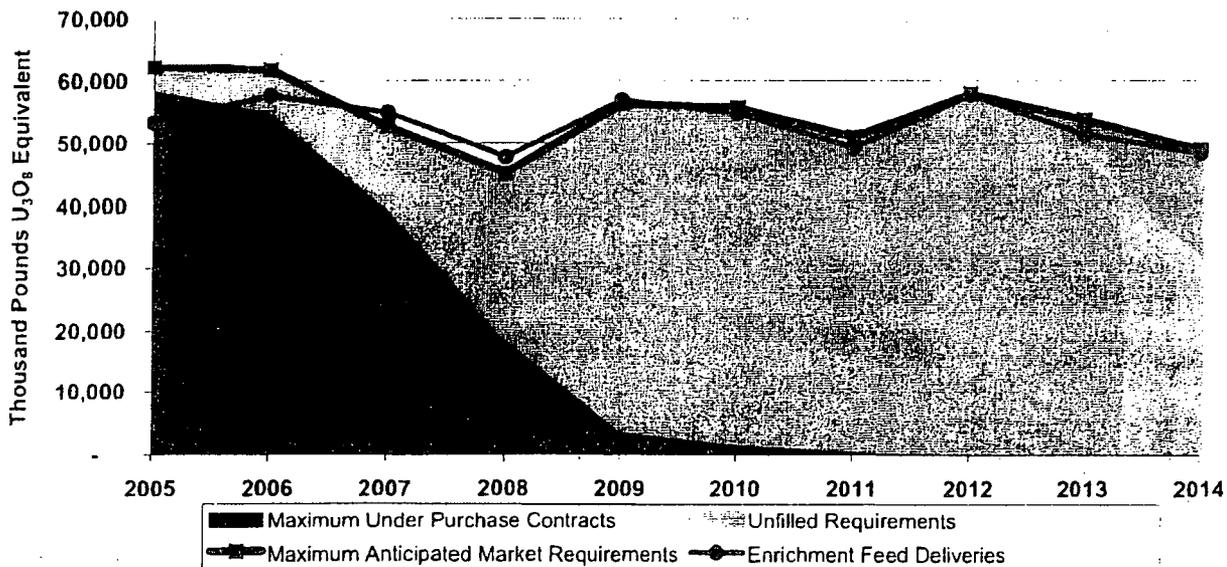
Year	Maximum Under Purchase Contracts	Unfilled Requirements	Maximum Anticipated Market Requirements	Enrichment Feed Deliveries
2005	58,963	3,302	62,264	53,425
2006	55,242	6,641	61,882	57,674
2007	39,924	12,823	52,747	54,999
2008	18,923	26,303	45,227	47,776
2009	W	W	56,326	56,924
2010	W	W	55,704	54,852
2011	W	W	51,119	49,346
2012	0	57,941	57,941	57,783
2013	0	53,822	53,822	51,437
2014	0	48,969	48,969	48,528
Total	180,542	365,460	546,002	532,744

W=Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Figure 11. Maximum Anticipated Uranium Market Requirements of Owners and Operators of U.S. Civilian Nuclear Power Reactors, 2005-2014, as of December 31, 2004



Note: Maximum under purchase contracts for 2009-2011 are for illustration purposes only since the actual data is withheld.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2004).

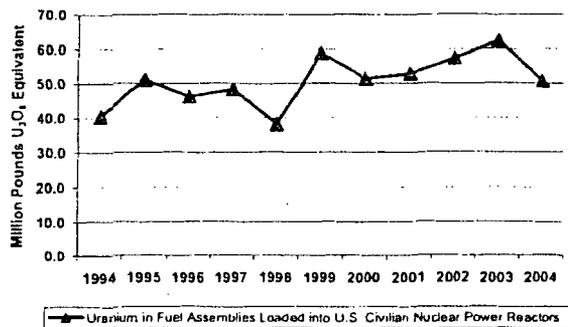
Uranium Feed Deliveries, Enrichment Services, and Uranium Loaded by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004

Million Pounds U ₃ O ₈ Equivalent											
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Feed Deliveries by Owners and Operators of U.S. Civilian Nuclear Power Reactors	37.6	44.3	49.1	40.3	40.6	43.9	47.8	47.3	54.7	49.3	53.4
Uranium in Fuel Assemblies Loaded into U.S. Civilian Nuclear Power Reactors	40.4	51.1	46.2	48.2	38.2	58.8	51.5	52.7	57.2	62.3	50.8
Million Separative Work Units (SWU)											
U.S.-Origin Enrichment Services Purchased	7.5	6.7	8.0	6.0	5.7	4.6	5.2	1.3	1.7	1.7	1.4
Foreign-Origin Enrichment Services Purchased	1.7	2.8	3.2	2.9	4.4	5.4	6.6	9.1	9.8	10.3	10.4
Total Purchased Enrichment Services	9.2	9.5	11.2	8.9	10.1	10.0	11.8	10.4	11.5	12.0	11.8

Note: Totals may not equal sum of components because of independent rounding.

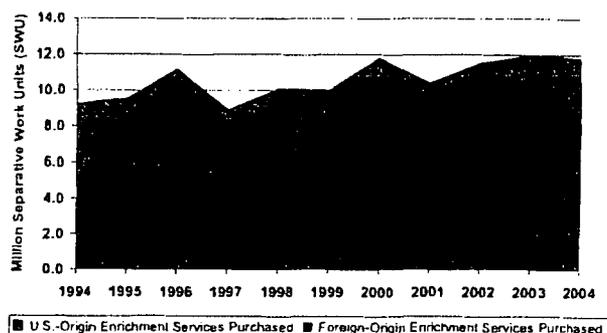
Sources: Energy Information Administration 1994-2002: Uranium Industry Annual, Tables 22, 23, 25, and 27. 2003-2004: Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S3. Uranium Loaded into U.S. Civilian Nuclear Power Reactors, 1994-2004



Sources: Energy Information Administration: 1994-2002: Uranium Industry Annual reports, 2003-2004: Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S4. Uranium Enrichment Services Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



Sources: Energy Information Administration: 1994-2002: Uranium Industry Annual reports, 2003-2004: Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Table 13. Owners and Operators of U.S. Civilian Nuclear Power Reactors Deliveries of Uranium Feed by Enrichment Country and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent)

Enrichment Country	Feed Deliveries in 2003			Feed Deliveries in 2004		
	U.S.-Origin	Foreign-Origin	Total	U.S.-Origin	Foreign-Origin	Total
China	W	W	W	W	W	W
France	W	W	8,268	W	W	11,656
Germany	143	2,230	2,373	W	W	3,150
Netherlands	0	2,039	2,039	0	1,081	1,081
Russia	957	3,237	4,194	0	W	W
United Kingdom	0	5,181	5,181	W	W	8,836
Europe ^a (France, Germany, Netherlands, or United Kingdom) and other	0	W	W	0	W	W
Foreign Total	1,806	23,333	25,139	2,178	27,883	30,061
United States	7,363	16,764	24,127	5,482	17,887	23,370
Total	9,169	40,097	49,266	7,660	45,770	53,431

^a Specific country in Europe was not reported.

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

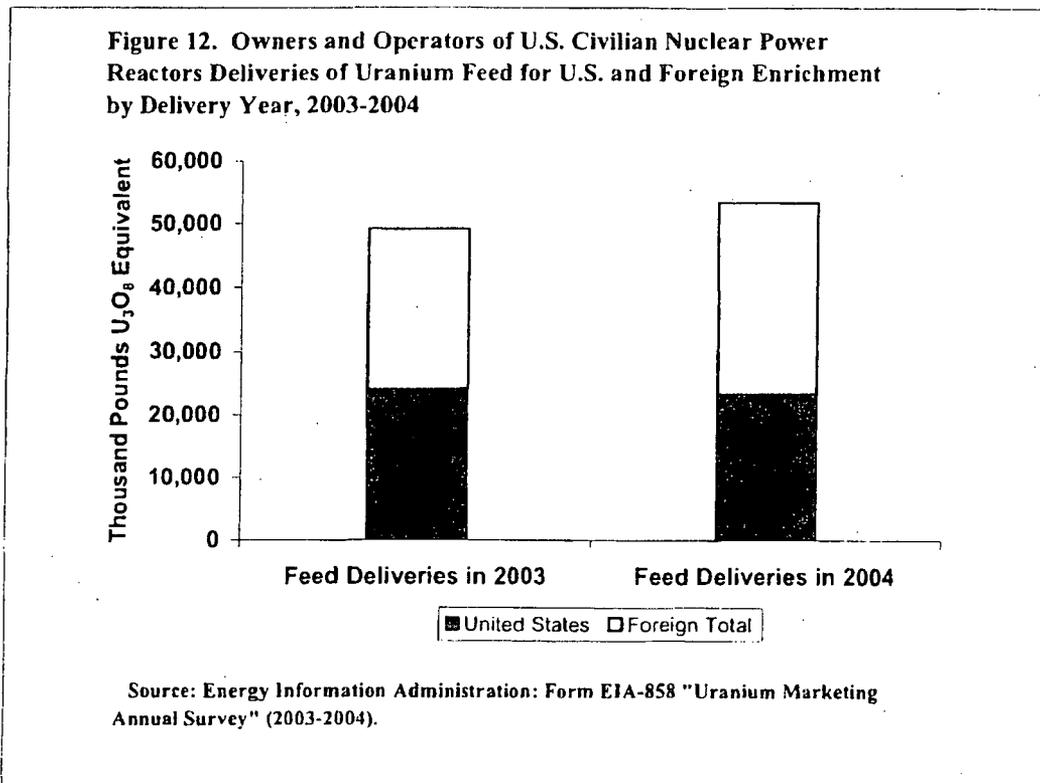


Table 14. Owners and Operators of U.S. Civilian Nuclear Power Reactors Deliveries of Uranium Feed for Enrichment by Origin Country and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent)

Origin Country of Feed	Deliveries in 2003			Deliveries in 2004		
	U.S. Enrichment	Foreign Enrichment	Total	U.S. Enrichment	Foreign Enrichment	Total
Australia	2,797	4,546	7,343	3,741	8,980	12,721
Canada	4,857	9,263	14,120	3,431	8,751	12,182
China	0	0	0	0	W	W
Czech Republic	0	W	W	0	W	W
Kazakhstan	W	W	3,117	W	W	3,958
Namibia	W	W	1,410	W	W	1,206
Niger	0	0	0	0	W	W
Portugal	0	W	W	0	0	0
Russia	4,342	1,630	5,972	7,579	2,187	9,766
South Africa	1,839	308	2,147	1,809	621	2,431
Spain	0	0	0	0	W	W
Ukraine	0	W	W	0	W	W
United Kingdom	W	W	W	0	0	0
Uzbekistan	W	W	4,746	W	W	1,868
unknown	0	W	W	0	0	0
Foreign Total	16,764	23,333	40,097	17,887	27,883	45,770
United States	7,363	1,806	9,169	5,482	2,178	7,660
Total	24,127	25,139	49,266	23,370	30,061	53,431

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

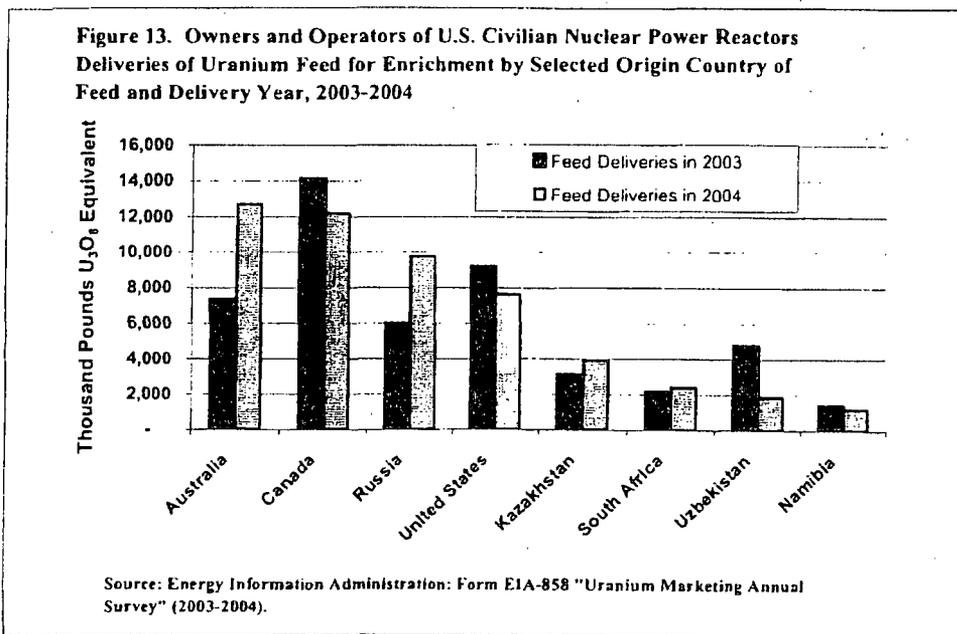


Table 15. Shipments of Uranium Feed by Owners and Operators of U.S. Civilian Nuclear Power Reactors to Domestic and Foreign Enrichment Suppliers, 2005-2014
(Thousand Pounds U₃O₈ Equivalent)

Year of Shipment	Amount to be Shipped		Change from 2003 to 2004	
	As of December 31, 2003	As of December 31, 2004	Annual	Cumulative
2005	52,065	53,425	1,360	1,360
2006	61,584	57,674	-3,910	-2,549
2007	54,198	54,999	802	-1,748
2008	49,848	47,776	-2,072	-3,820
2009	62,372	56,924	-5,448	-9,268
2010	54,894	54,852	-42	-9,310
2011	52,727	49,346	-3,381	-12,691
2012	57,762	57,783	21	-12,670
2013	51,508	51,437	-71	-12,741
2014	NR	48,528	--	--

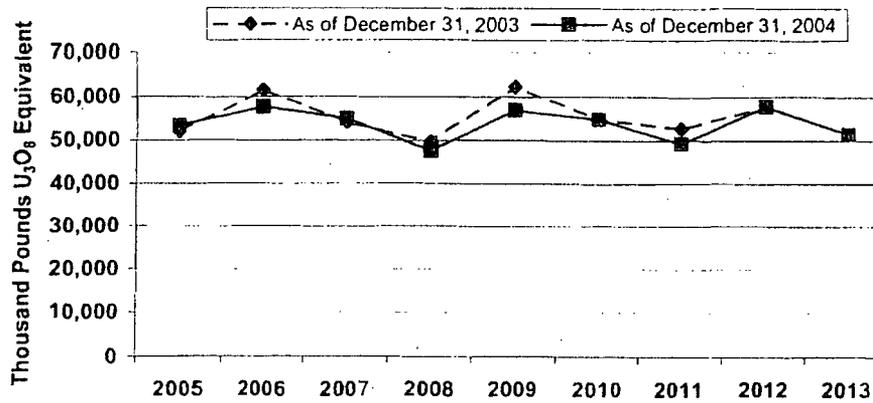
NR = Not reported.

-- = Not applicable.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 14. Shipments of Uranium Feed by Owners and Operators of U.S. Civilian Nuclear Power Reactors to Domestic and Foreign Enrichment Suppliers, 2005-2013



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 16. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchases of Enrichment Services by Origin Country and Delivery Year, 2003-2004

(Thousand Separative Work Units (SWU))

Deliveries	2003	2004
Country of Enrichment Service (SWU-origin):		
China	W	W
France	2,685	2,325
Germany	660	851
Netherlands	542	402
Russia	4,224	4,563
United Kingdom	1,586	1,379
Europe ^a (France, Germany, Netherlands, or United Kingdom) and other	W	W
Foreign Total	10,328	10,411
United States	1,665	1,374
Total	11,993	11,785

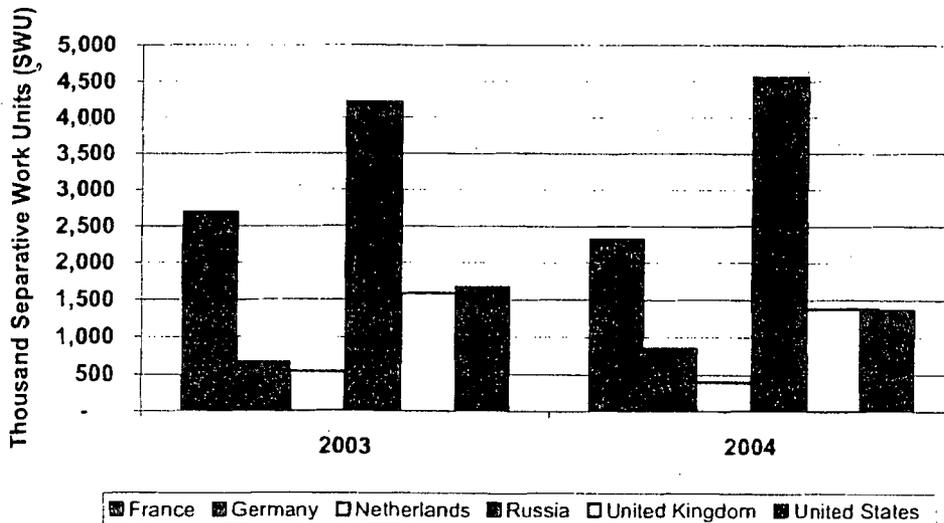
^a Specific country in Europe was not reported.

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 15. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchases of Enrichment Services by Origin Country and Delivery Year, 2003-2004



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).



(Data released in April 2005; Next release: April 2006)

Enrichment Service Sellers to Owners and Operators of U.S. Civilian Nuclear Power Reactors, 2004
China Nuclear Energy Industry Corp. (CNEIC)
COGEMA, Inc.
Itochu Corporation
Nufcor International
UG U.S.A., Inc.
Urenco, Inc.
USEC, Inc.
Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

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URL: <http://www.eia.doe.gov/cneaf/nuclear/umar/swusellers.html>

Table 17. Owners and Operators of U.S. Civilian Nuclear Power Reactors Purchases of Enrichment Services by Contract Type in Delivery Year, 2004

(Thousand Separative Work Units (SWU))

Enrichment Service Contract Type	U.S. Enrichment	Foreign Enrichment	Total
Spot	W	W	740
Long-Term	W	W	11,045
Total	1,374	10,411	11,785

W=Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2004).

Table 18. Uranium in Fuel Assemblies Loaded into U.S. Civilian Nuclear Power Reactors by Year, 2002-2004

(Thousand Pounds U₃O₈ Equivalent)

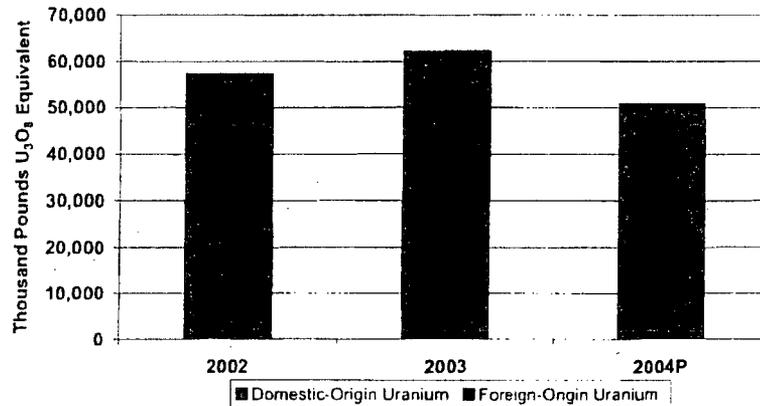
Origin of Uranium	2002	2003	2004 ^P
Domestic-Origin Uranium	10,663	12,941	8,381
Foreign-Origin Uranium	46,569	49,328	42,372
Total	57,232	62,269	50,752

P = Preliminary data. Final 2003 fuel assembly data reported in the 2004 survey.

Notes: Includes only unirradiated uranium in new fuel assemblies loaded into reactors during the year. Does not include uranium removed from reactors that subsequently will be reloaded. Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 16. Uranium in Fuel Assemblies Loaded into U.S. Civilian Nuclear Power Reactors by Year, 2002-2004



P = Preliminary data. Final 2003 fuel assembly data reported in the 2004 survey.

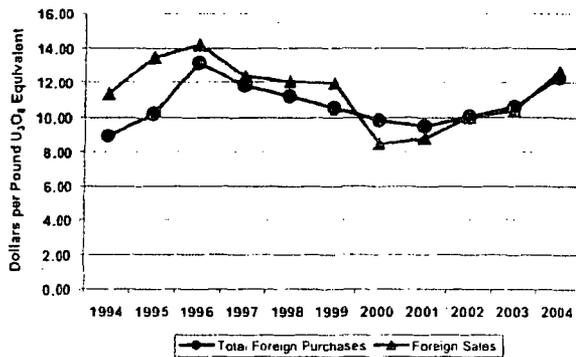
Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Foreign Purchases, Foreign Sales, and Uranium Inventories by U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power											
Deliveries (million pounds U ₃ O ₈ equivalent)											
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Foreign Purchases by U.S. Suppliers	21.1	20.2	21.7	20.4	22.6	21.0	17.4	18.7	22.7	18.7	30.2
Weighted-Average Price (U.S. dollars per pound U ₃ O ₈ equivalent)	7.78	8.96	11.78	10.61	10.50	9.42	8.45	8.98	9.65	10.19	11.21
Foreign Purchases by Owners and Operators of U.S. Civilian Nuclear Power Reactors	15.5	21.1	23.7	22.5	21.1	26.6	27.5	28.0	30.0	34.9	35.9
Weighted-Average Price	10.53	11.39	14.41	12.89	11.96	11.45	10.68	9.87	10.37	10.79	13.13
Total Foreign Purchases	36.6	41.3	45.4	43.0	43.7	47.6	44.9	46.7	52.7	53.0	66.1
Weighted-Average Price	8.95	10.20	13.15	11.81	11.19	10.55	9.84	9.51	10.05	10.59	12.25
U.S. Broker and Trader Purchases from Foreign Suppliers	22.3	18.3	17.8	15.7	21.7	19.2	15.8	18.3	18.6	15.8	26.4
Weighted-Average Price	7.87	9.02	11.78	10.71	10.77	9.60	8.61	8.87	9.59	10.19	11.15
Foreign Sales	17.7	9.8	11.5	17.0	15.1	8.5	13.6	11.7	15.4	13.2	13.2
Weighted-Average Price	11.34	13.48	14.20	12.39	12.05	11.97	8.48	8.79	10.04	10.39	12.63
Year-End Inventories (million pounds U ₃ O ₈ equivalent)											
U.S. Supplier Uranium Inventories	21.5	13.7	13.9	40.4	70.7	68.8	56.5	48.1	48.7	39.9	38.0
Owners and Operators of U.S. Civilian Nuclear Power Reactors Uranium Inventories	65.4	58.7	66.1	65.9	65.8	58.3	54.8	55.6	53.5	45.6	56.4
Total Commercial Uranium Inventories	86.9	72.5	80.0	106.2	136.5	127.1	111.3	103.8	102.1	85.5	94.3

Note: Totals may not equal sum of components because of independent rounding.

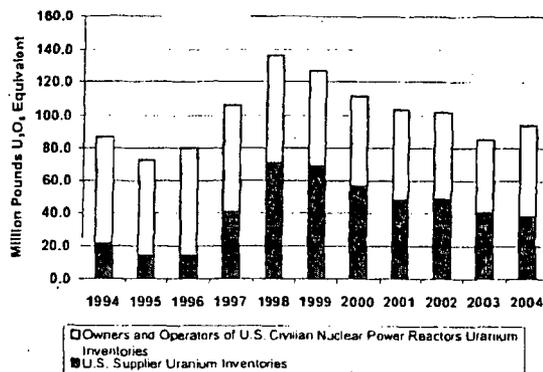
Sources: Energy Information Administration: 1994-2002, *Uranium Industry Annual*, Tables 28, 29, 30 and 31. 2003-2004, Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S5. Weighted-Average Price of Foreign Purchases and Foreign Sales of Uranium, 1994-2004



Sources: Energy Information Administration: 1994-2002, *Uranium Industry Annual* reports. 2003-2004, Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

Figure S6. Total Commercial Uranium Inventories of U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors, 1994-2004



Sources: Energy Information Administration: 1994-2002, *Uranium Industry Annual* reports. 2003-2004, Form EIA-858, "Uranium Marketing Annual Report" (2003-2004)

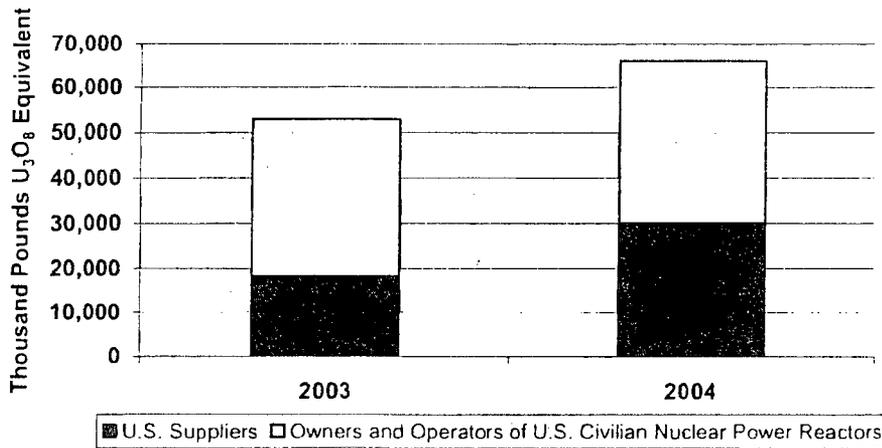
Table 19. Foreign Purchases of Uranium by U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors by Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Deliveries	2003	2004
U.S. Suppliers		
Foreign Purchases	18,153	30,163
Weighted-Average Price	10.19	11.21
Owners and Operators of U.S. Civilian Nuclear Power Reactors		
Foreign Purchases	34,891	35,938
Weighted-Average Price	10.79	13.13
Total		
Foreign Purchases	53,044	66,101
Weighted-Average Price	10.59	12.25

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 17. Foreign Purchases of Uranium by U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors by Delivery Year, 2003-2004



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 20. U.S. Broker and Trader Purchases of Uranium by Origin, Supplier, and Delivery Year, 2003-2004

(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

Deliveries	2003	2004
Received U.S.-Origin Uranium:		
Purchases	W	W
Weighted-Average Price	W	W
Received Foreign-Origin Uranium:		
Purchases	W	W
Weighted-Average Price	W	W
Total Received by U.S. Brokers and Traders:		
Purchases	18,004	28,235
Weighted-Average Price	10.24	11.62
Received from Foreign Suppliers:		
Purchases	15,766	26,434
Weighted-Average Price	10.19	11.15

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

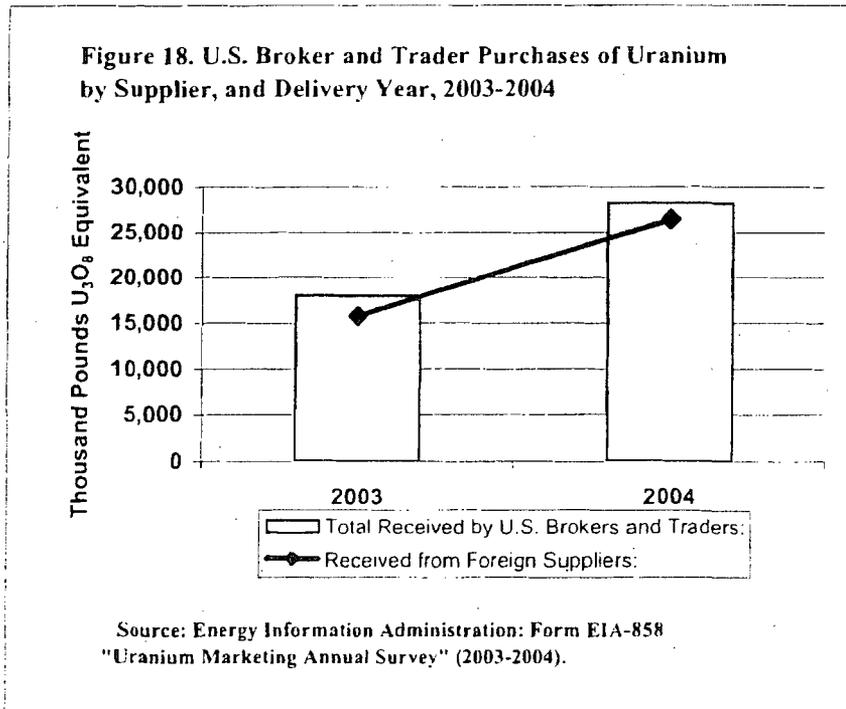


Table 21. Foreign Sales of Uranium from U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors by Origin and Delivery Year, 2003-2004
(Thousand Pounds U₃O₈ Equivalent; Dollars per Pound U₃O₈ Equivalent)

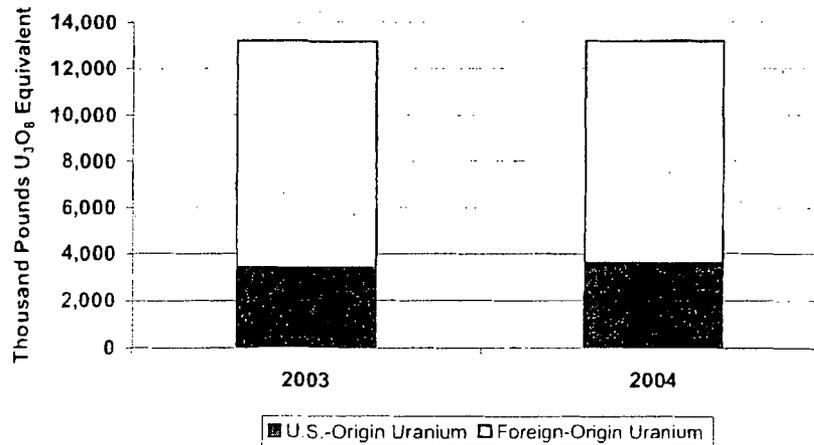
Deliveries to Foreign Suppliers and Utilities	2003	2004
U.S.-Origin Uranium		
Foreign Sales	3,369	3,589
Weighted-Average Price	10.42	14.60
Foreign-Origin Uranium		
Foreign Sales	9,817	9,622
Weighted-Average Price	10.37	11.89
Total Sent:		
Foreign Sales	13,187	13,211
Weighted-Average Price	10.39	12.63
From U.S. Producers, Owners and Operators of U.S. Civilian Nuclear Power Reactors, and other U.S. Suppliers:		
Foreign Sales	W	W
Weighted-Average Price	W	W
From U.S. Brokers and Traders:		
Foreign Sales	W	W
Weighted-Average Price	W	W

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Figure 19. Foreign Sales of Uranium from U.S. Suppliers and Owners and Operators of U.S. Civilian Nuclear Power Reactors by Origin and Delivery Year, 2003-2004



Source: Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

Table 22. Inventories of Natural and Enriched Uranium as of End of Year, 2002-2004
(Thousand Pounds U₃O₈ Equivalent)

Type of Uranium Inventory	Inventories at the End of the Year		
	2002	2003	2004 ^P
Owners and Operators of U.S. Civilian Nuclear Power Reactors Inventories			
Natural Uranium	31,029	22,674	27,304
Enriched Uranium ^a	22,432	22,965	29,667
U.S. Supplier Inventories			
Natural Uranium	W	W	W
Enriched Uranium ^a	W	W	W
Total Commercial Inventories	102,114	85,489	94,332

^aEnriched UF₆ and fabricated fuel not inserted into a reactor.

^P=Preliminary data. Final 2003 inventory data reported in the 2004 survey.

W = Data withheld to avoid disclosure.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2003-2004).

