

First Quarter Spot U₃O₈ Review

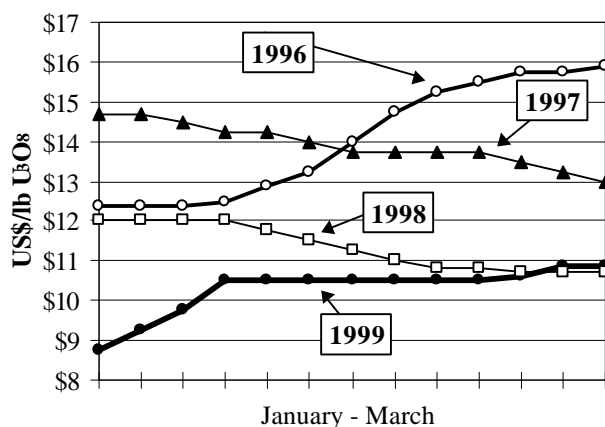
Compared with 1997 and 1998, the first quarter of 1999 started off with a bang. Increase was the name of the game as demand, volume and spot prices all rose during the quarter. With over 8 million pounds U₃O₈ equivalent transacted in the spot market through last month, this year's volume already represents 80% of the total volume transacted during all of 1998. Add to this the current active requests representing a potential of 2 million pounds to be transacted over the next month or two, and one can see that demand is definitely much higher than the last two years.

As shown in the price graph below, the price trend during the start of 1999 is more similar to that seen in 1996 than the last two years. Since the beginning of the year, price has risen \$2.10, a 24% increase. This increase contrasts to the 11% and 12% drops seen in 1998 and 1997, respectively. Although prices in 1996 started at a considerably higher level, this year's rise compares well

against the 29% increase of 1996 based on a volume of over 6 million pounds.

First Quarter Recap—The first quarter saw 25 transactions involving 8 million pounds U₃O₈ equivalent. As shown in the table on page 3, the majority of the material was purchased as U₃O₈ with 25% as UF₆ and a small amount of EUP. The average delivery leadtime, which has been increasing over the last six months, is now up over eight months. The leadtime trend is now breaking into two distinct groups, those that are looking for delivery in three to six months, and those looking to take delivery between ten to twelve months away.

Comparison of 1st Quarter Spot Prices



Non-U.S. buyers (utilities, producers and traders/others) accounted for just over half the quarter's volume, which is fairly consistent with the last several years. U.S. and non-U.S. utilities each took about 42% of the volume, with the remaining material purchased by producers. On the other hand, non-U.S. sellers made up over 85% of the volume as little of the material came from U.S. utility or U.S. producer inventories. As a group, traders/others sold 96% of the total volume.

CIS-origin material made up a considerable percentage of the volume during the quarter, attributable primarily to a single Asian utility buyer. Due to what appears as ample supply of CIS material from traders, the initial rise in CIS spot prices was short lived with prices falling back to \$8.50 per pound level. Although spot prices have been near their lowest levels in years, discretionary buying has not played a major role during the quarter. Whereas discretionary purchases accounted for 35% of the volume in the fourth quarter of 1998, when prices were falling to the \$8.75 level, discretionary purchases accounted for less than 4% of the total volume as prices rose quickly at the beginning of the first quarter.

Second Quarter Outlook—We have already seen over one million pounds U₃O₈ transacted thus far in April, and expect that soon another couple of million pounds will be added to the two million currently active. Although the second quarter volume may not match that seen in the first, demand remains strong as we are in the middle of what is traditionally the strongest buying season of the year. However, demand could slack off toward the end of the quarter due to the normal slowing of buying activity that accompanies the onset of summer.

A trend that started last year shows producers, who normally sell more material on the spot market than they buy, are now purchasing greater quantities than they are selling. This reversal of roles not only increases demand on the market, but also reduces the amount of supply normally available to fill demand. With the recent announced closures, cutbacks, and delays and expected producer purchases, it looks like producers will once again account for a small portion of total spot market supply. Because of the production cutbacks, the market fundamentals are strong, suggesting continued support for price.

**Volume 13
Issue 15**

Internet:
www.uxc.com

As published by
The Ux Consulting
Company, LLC

**Weekly
Ux Prices**

U₃O₈
\$10.85
(Unch.)

CIS U₃O₈
\$8.50
(Unch.)

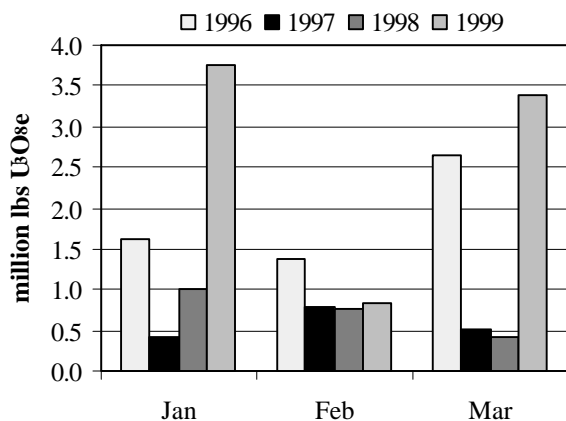
NEWS BRIEFS

Northern States Power lawsuit blocked—The U.S. Court of Federal Claims dismissed a filing by Northern States Power (NSP) last week against the U.S. Department of Energy (DOE), through which NSP sought \$1 billion in monetary damages for DOE's failure to begin accepting spent fuel from nuclear utilities by the January 31, 1998 deadline. In the April 6 decision, Judge John Wiese said NSP "must pursue its claims through the administrative remedies established in the standard contract" with DOE at the agency level, and not by suing the federal government.

Meanwhile, NSP contends that DOE remains legally obligated to remove the spent fuel and store it in a temporary national storage site until a permanent repository at Yucca Mountain, Nevada is complete. Although no decision has been announced, NSP attorney Michael Connelly said the company might likely appeal the decision. NSP has 60 days to file an appeal to the Federal Circuit Court or 10 days to file an appeal for reconsideration. The recent ruling could establish a precedent with three other U.S. utilities seeking approximately \$3 billion in damages from DOE. Litigation brought by Florida Power & Light, Duke Power, and American Electric Power can now proceed since a decision has been reached in the NSP case.

Boston Edison and Entergy inch closer to finalizing Pilgrim sale—On April 7, the Federal Energy Regulatory Commission (FERC) issued an order authorizing the sale of Boston Edison's Pilgrim station to Entergy Nuclear. In November, Boston Edison agreed to sell Pilgrim to Entergy for \$80 million in cash, plus the transfer of a \$466 million decommissioning trust fund from Boston Edison to Entergy. Earlier, FERC had deferred its decision on the sale, indicating that Boston Edison needed to iron out agreements with

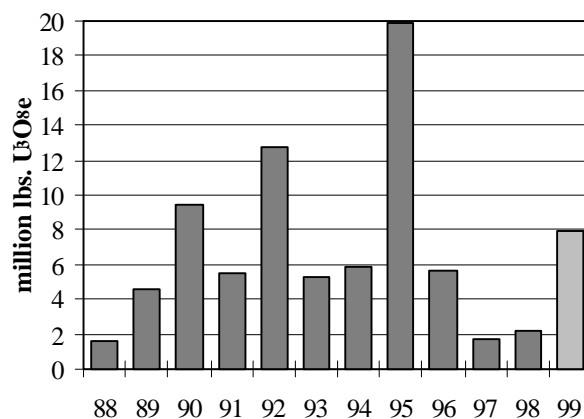
Comparison of 1st Quarter Monthly Spot Volumes



— Industry Calendar —

- **April 11-14**—NEI's Fuel Cycle '99 is being held in Austin, Texas.
- **May 16-19**—WNFM's 26th Annual Meeting will be held in Beaver Creek, Colorado.
- **May 19-21**—The Uranium Institute midterm meeting will be held in Beaver Creek, Colorado.
- **September 8-10**—The Uranium Institute 24th Annual Symposium will be held in London, England.
- **October 3-6**—NEI's International Uranium Fuel Seminar 99 will be held in Bolton Landing, NY.

Comparison of 1st Quarter Volumes, 1988-1999



14 local municipal utilities, representing only three percent of Pilgrim's generation, over the handling of decommissioning costs for the facility. The municipal utilities balked at paying their share of the remaining decommissioning fees up front, preferring to continue paying the fees over the life of the unit. Boston Edison applied for emergency relief from FERC's deferral on April 1. On April 7, FERC issued the order authorizing the sale.

Before the sale can be completed, two final approvals are still necessary. One is a NRC order transferring the operating license from Boston Edison to Entergy. Currently this NRC order is in the final agency review stages. The other approval relates to the fact that the IRS must issue a tax ruling on the transfer of the decommissioning fund. This order is expected to support a timely closure of the transaction.

Both Boston Edison and Entergy would like to conclude the deal as soon as possible. "We would like to close the deal before May 8 when Pilgrim goes down for a scheduled refueling outage, however, realistically we're looking at sometime in the second quarter," said

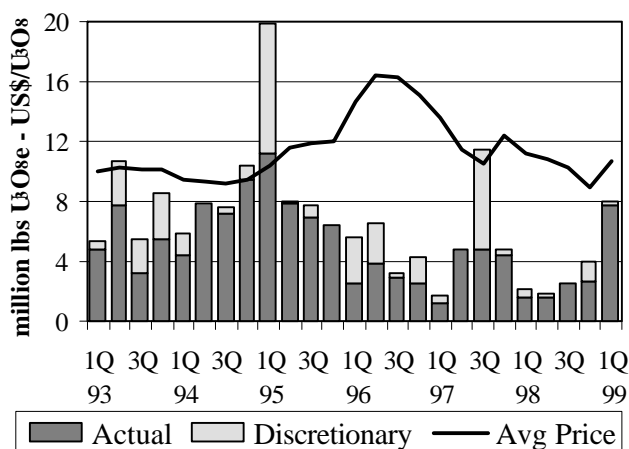
NEWS BRIEFS cont...

Boston Edison's spokesman Dave Tarantino. In addition, Entergy wants to consummate the deal as quickly as possible since it loses about \$1.9 million every month until the deal is complete.

NU's Millstone 2 restart dependant on two April 14th hearings—A Connecticut state judge will hear legal arguments on April 14 on whether to allow Northeast Utilities (NU) to restart its idled 880-MWe Millstone 2 nuclear unit. Fish Unlimited, a non-profit fishermen's group based in Long Island, N.Y., sued NU for an injunction blocking the restart of Millstone 2. The group alleges restarting the plant would kill fish and their larvae in Long Island Sound. In the lawsuit, the group demands that NU build a cooling tower and install a filter system that would return fish caught in the cooling tower back to the Long Island Sound. Additionally, the group wants to delay the plant's restart until after June 15 when the winter flounder spawning season is over. On April 2, Judge Norris O'Neill of the Connecticut Superior Court ruled against NU's request to dismiss the group's motion for an immediate injunction and set a hearing date for April 5. The judge then pushed that date back to April 14 at NU's request.

April 14 is also the day that NU is scheduled to meet with the Nuclear Regulatory Commission (NRC) in a hearing to receive permission to restart the reactor. Millstone 2 has been idle since February 1996 for exten-

Quarterly Spot Volume vs. Ux Average Price



sive safety upgrades mandated by the NRC. NU hopes that it can restart the reactor by the end of this month.

Hitachi, Toshiba & GE in talks to merge nuclear units—According to a front page article in Saturday's *Asahi Shimbun*, Japan's Hitachi Ltd. and Toshiba Corporation and General Electric Co. of the U.S. are progressing in their negotiations to merge some of their nuclear power operations. The three companies are considering integrating their design units of nuclear power reactors and other equipment, as well as maintenance and overseas marketing operations. The companies already have a jointly owned nuclear fuel-manufacturing unit in Yokosuka, Kanagawa Prefecture.

Spot Market Statistics (million lbs U ₃ O ₈ equivalent)																
	1996					1997					1998					1999
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q
Total Volume	5.6	6.5	3.2	4.3	19.6	1.7	4.8	11.4	4.8	22.7	2.2	1.9	2.5	4.0	10.6	8.0
# Transactions	27	20	16	15	78	8	16	31	18	73	10	10	15	11	46	25
Avg. Leadtime (mths)	3.9	4.1	5.4	5.6	4.6	4.3	7.0	4.2	4.5	4.9	4.1	5.7	4.4	6.7	5.2	8.2
Form																
U ₃ O ₈ Total	5.1	4.8	2.2	3.0	15.1	0.9	3.4	5.8	3.5	13.6	0.9	1.6	2.0	1.9	6.4	5.2
UF ₆ Total	0.5	1.7	0.8	1.3	4.3	0.3	1.4	5.5	1.3	8.5	0.6	0.1	0.4	2.1	3.2	2.0
EUP Total	0	0	0.2	0	0.2	0.5	0	0.1	0	0.6	0.7	0.2	0.1	0	1.0	0.8
Buyers																
U.S.	2.9	2.8	2.2	1.6	9.5	0.1	3.3	5.6	1.4	10.4	0.9	1.3	1.8	2.6	6.6	3.6
Non-U.S.	2.7	3.7	1.0	2.7	10.1	1.6	1.5	5.8	3.4	12.3	1.3	0.6	0.7	1.4	4.0	4.4
Sellers																
U.S.	3.0	2.9	2.8	1.8	10.5	0.4	2.5	5.0	3.1	11.0	1.2	1.1	0.7	1.9	4.9	1.1
Non-U.S.	2.6	3.6	0.4	2.5	9.1	1.3	2.3	6.4	1.7	11.7	1.0	0.8	1.8	2.1	5.7	6.9
Origin																
Non-CIS	5.1	3.8	2.4	2.3	13.6	0.7	3.3	7.8	3.6	15.4	1.6	0.8	1.8	3.2	7.4	4.9
CIS	0.5	2.7	0.8	2.0	6.0	1.0	1.5	3.6	1.2	7.3	0.6	1.1	0.7	0.8	3.2	3.1
Need																
Actual	2.5	3.9	2.9	2.6	12.2	1.1	4.8	4.8	4.3	15.0	1.6	1.7	2.5	2.6	8.4	7.7
Discretionary	3.1	2.6	0.3	1.7	7.4	0.6	0	6.6	0.5	7.7	0.6	0.2	0	1.4	2.2	0.3

NEWS BRIEFS cont...

Talks are under way to merge this company with the nuclear fuel operations of Hitachi and Toshiba. Additionally, GE's nuclear fuel plant in North Carolina would be spun off as a separate company, with Hitachi and Toshiba taking equity stakes in the plant.

Together the three companies account for roughly 45% of Japan's nuclear fuel market. Japan's Fair Trade Commission would be expected to approve the merger, since the Ministry of International Trade and Industry (MITI) has already suggested that the commission should consider increasing competition on a global scale rather than focusing solely on the domestic market.

Ontario Hydro reports '98 financial results—

In 1998, Ontario Hydro reported a net income of C\$1.831 billion, compared with a net loss of C\$6.326 billion in 1997. However, the results are not comparable for three reasons. First off, Ontario Hydro's Board of Directors approved a number of charges and write-offs against 1997 operations totaling C\$6.58 billion, while there were no write-offs in 1998. Second, 1998 costs of C\$1.49 billion were charged against a provision for future costs established at the end of 1997, and therefore not included in 1998 net income. These costs related primarily to Ontario Hydro's nuclear recovery program and could not be covered through existing electricity rates. Third, the 1998 net income includes a C\$887 million favorable adjustment to recognize a change resulting from the Energy Competition Act of 1998.

Ontario Hydro's net operating income for 1998 (exclusive of the favorable adjustment) was C\$944 million, an improvement of just over C\$300 million from the 1998 business plan (released in February 1998), which included a net income target of C\$640 million. Revenues for 1998 were C\$8.98 billion, an increase of C\$54 million over 1997. Ontario Hydro's CFO Barry Nicol said, "We are pleased to have achieved better financial performance than we expected at the beginning of 1998." He added that the company benefited from a strong exports market for power due to El Nino in the U.S., cost-control measures within Ontario Hydro, and lower-than-expected financing costs.

Framatome expects higher net profit in '99—

French nuclear engineering group Framatome said last Thursday that it expects to earn a 1999 net attributable profit of 150 million euros (\$162 million), up 63 percent from 92 million euros (\$99 million) last year. Framatome finance director Gilbert Lehmann, also indicated operating profit would rise significantly from 247 million euros (\$229 million) to 430 million euros (\$398 million). Company growth will mainly come from the integration over the full year of U.S. firm Berg, which

Framatome purchased last October.

Trittin rejects resuming German spent fuel shipments to foreign reprocessing facilities—

German Environment Minister Juergen Trittin rejected a call by Hans-Dieter Harig, chief of German utility giant Veba's PreussenElektra, to resume spent fuel exports to France and Great Britain for reprocessing this year. Trittin also accused Harig of implying the government was using the "safety issue" as a blocking tactic. In a prepared statement Trittin said, "I reject the attempt to portray necessary safety checks as being put there as an obstacle. You cannot buy safety on the cheap." Two weeks ago, Trittin agreed in principle that limited spent fuel exports would take place at some point, but without indicating when. He now states that exports can only go ahead when all doubts over safety have been removed. Currently, the German government continues in delicate negotiations with the nuclear industry to determine how quickly to withdraw from nuclear power.

Ux Price Definitions

The Ux Prices indicate, subject to the terms listed, the most competitive spot offers available for the respective product or service, of which The Uranium Exchange Company (Ux) is aware. The Ux U₃O₈ price includes conditions for quantity, delivery timeframe, origin and location considerations while the Ux CIS U₃O₈ price is the most competitive price for deliveries up to six months forward without regard to specific quantity or location. Both U₃O₈ prices are published weekly. The Ux Conversion price considers spot offers for delivery up to twelve months forward. The Ux UF₆ value represents the sum of the conversion and U₃O₈ components as discussed above and, therefore, does not necessarily represent the most competitive UF₆ offers available. The Ux SWU price considers spot offers for deliveries up to twelve months forward. The Conversion, UF₆ and SWU prices are published the last Monday of each month.

The Ux Prices represent neither an offer to sell nor a bid to buy the products or services listed.

The Ux Weekly is published every Monday by The Ux Consulting Company, LLC (UxC). The information contained in The Ux Weekly is obtained from sources the company believes to be reliable. Accuracy cannot be guaranteed; therefore, UxC makes no warranties, express or implied, nor assumes any liabilities for the accuracy or completeness of the information contained in The Ux Weekly.

The Ux Consulting Company, LLC
10927 Crabapple Road, Suite 201
Roswell, GA 30075-5825

Phone: **(770) 642-7745**

Fax: **(770) 643-2954**

Internet: **<http://www.uxc.com>**

© 1999 The Ux Consulting Company, LLC

THE MARKET

Uranium—New demand emerged in the restricted market this week, as a U.S. utility solicited offers for 250,000 pounds U_3O_8 and over 150,000 SWU which could be purchased as EUP. Offers are due on April 28. This and other upcoming demand, along with reasonably high volume so far in April, should maintain some upward pressure on restricted prices. On the other hand, there has been evidence of a surprisingly large number of sellers at these levels, especially in the form of UF_6 . A U.S. utility is thought to have selected a supplier for 100 MTU of UF_6 for delivery at the end of the year at a price at or slightly below the current market prices for U_3O_8 and conversion; that buyer is believed to have received a significant number of offers. Another purchased a very small quantity of UF_6 at market prices, and a third purchased a quantity of Ukraine UF_6 in Europe at a price between the restricted and unrestricted levels, with the discount based on the origin. A European utility continues to evaluate offers for a large quantity of UF_6 .

The Ux U_3O_8 Price is unchanged at \$10.85 per pound. The CIS U_3O_8 Price is also unchanged at \$8.50 per pound. Activity is fairly quiet in the CIS market, although two non-U.S. utilities currently in the market may purchase part of their needs as CIS origin.

The long-term market remains relatively inactive. A non-U.S. utility has requested offers for approximately

1.5 million pounds U_3O_8 beginning in 2002, some of which may be CIS origin. Several U.S. utilities are expected to enter the long-term market later this month.

Conversion—No active buyers are in the market, but several utilities are expected to enter in the next 2 months. Conversion prices remain under pressure, and the large number of UF_6 sellers may be forced to become more aggressive in making “off-market” conversion proposals in order to be able to offer U_3O_8 as demand for that commodity emerges.

Enrichment—There is more activity to report in the SWU/EUP market, as a U.S. utility again entered the market for about 20,000 SWU or EUP for delivery in early 2000. Another U.S. utility completed its purchase of about 24,000 SWU for year-end delivery, and yet another is expected in the market within the next month or so. A U.S. utility continues to evaluate long-term offers for 25% of its annual requirements in the 2001-2006 period. Spot SWU supply remains available to fill the smaller requests, while the upcoming 150,000-SWU purchase will undoubtedly foster aggressive competition among the primary sellers for this business.

Ux Spot Prices

Weekly (4/12/99)

U_3O_8 \$10.85

Quantities: 3-500,000

Delivery: 6 months

Origin/Location:

Open/U.S. convertor

Non-CIS/All others

Matched/Any location

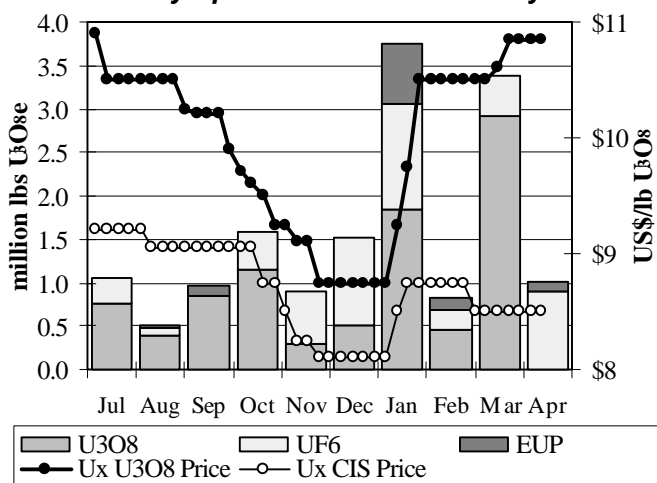
CIS U_3O_8 \$8.50

Industry Spot Prices

	NuclearFuel		NUKEM		TRADE	Ux	Avg.
	Low	High	Low	High	TECH		
Weekly (4/12/99)							
U ₃ O ₈ (\$/lb)	(4/5)				(4/9)		
Restricted	10.70	11.30	—	—	10.85	10.85	10.90
Non-restr.	8.40	8.80	—	—	8.50	8.50	8.53
Month-end (3/31/99)							
U ₃ O ₈ (\$/lb)	(3/22)					(3/29)	
Restricted	10.40	11.00	10.40	10.85	10.85	10.85	10.76
Non-restr.	8.30	8.70	8.45	9.00	8.50	8.50	8.56
Conversion (\$/kgU)	—	—	3.50	4.50	3.85	3.75	3.87
UF ₆ (\$/kgU)							
Restricted	—	—	—	—	32.10	32.10	32.10
Non-restr.	—	—	—	—	26.05	25.96	26.01
SWU (\$)							
Restricted	—	—	—	86.00	85.00	85.00	85.33
Non-restr.	—	—	83.00	—	84.00	84.00	83.67

Note: Definitions of these prices vary among companies. They are listed strictly for comparison purposes and are in U.S. dollars. Nukem's SWU price shows limits on its price range.

Ux Weekly Spot Prices vs. Volume by Form



Scratch Golfer!

Two women were put together as partners in the club tournament and met on the putting green for the first time. After introductions, the first golfer asked, “What’s your handicap?”

“Oh, I’m a scratch golfer,” the other replied. “Really!” exclaimed the first woman, suitably impressed that she was paired up with her.

“Yes, I write down all my good scores and scratch out the bad ones!”