

The

**U  
X**

**W  
E  
E  
K  
L  
Y**

# Indications of a Strengthening Uranium Market

One question that market participants may have on their minds is whether the recent increase in the restricted spot uranium price is an aberration or the beginning of a more sustained recovery. To obtain a better appreciation of this situation, it is useful to examine the underlying trends in the market. Over the years Ux has devised a system, The Ux Indicators, to monitor and quantify these underlying trends in the uranium, conversion and enrichment markets, and relate these changes to upcoming price trends.

Ux has three indicator systems for uranium: a short-term indicator which is done on a weekly basis providing an outlook for prices over the next four weeks; a near-term indicator system which is done on a monthly basis providing an outlook for prices over the next three to six months; and, a long-term indicator system which is done on a quarterly basis but provides an indication of prices out two years. The Near-Term Indicator System is the one discussed here.

There are a number of factors that influence the uranium market, including supply, demand, financial issues, government policies and market psychology. The Ux Near-Term Uranium Indicator system is designed to measure changes over a broad spectrum of these factors which are divided into four main indicator groups: Supply Indicators, Demand Indicators, Market Indicators and Financial Indicators. There are 17 individual indicators in all which are assigned values at the beginning of each month based on observations on market developments. Each indicator is assigned a positive, neutral or negative reading, and the values are summed to derive a net indicator value.

As of September 1, there were net positive readings in all of these indicator groups except Financial Indicators, which were net neutral. Especially strong was the Demand Indicators group, in which two of the individual indicators were positive and the other registered a neutral reading but showed an improving trend. Such high demand readings have been borne out by purchases this month, where spot volume likely will exceed 3 million pounds  $U_3O_8$ e, not including the material being auctioned by DOE.

In the May 12 cover story on the Ux Indicators, done at a time when the spot price was under severe downward pressure, it was noted that a large improvement in the net value of the indicators,

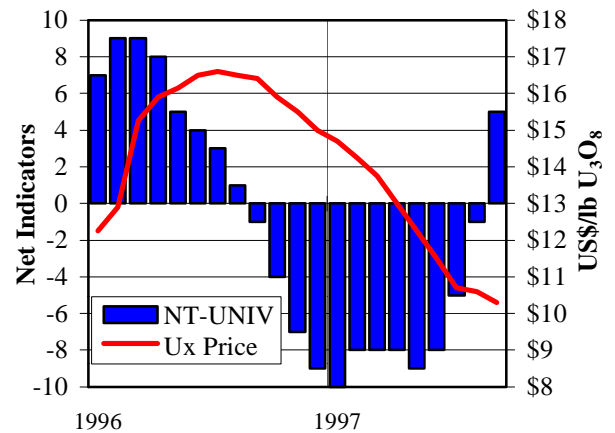
even if it were still negative, would signal a potential turnaround in price. As shown in the chart below, the indicators began improving from a negative nine (-9) at the end of May, and as of September 1 stood at positive five (+5), a 14-point increase over four consecutive months. As the chart shows, the indicators registered a strong improvement even though spot price was declining, signaling that underlying forces of the market were changing.

From the standpoint of the Ux indicators, the turnaround in price is therefore not surprising at all. This change was preceded by a pronounced improvement in the indicators, with this improvement reflecting the fact that the most aggressive sellers had sold their material, spot demand had dramatically improved, and market psychology had shifted, among other things.

As for the speed and duration of the recovery, the chart shows that the price decline, which lasted 14 months and was fairly steady, was preceded by 4 months of a steadily-declining NIV, with the total period during which the indicators declined lasting 10 months. Thus, a steady and protracted decline in price matched the steady and protracted decline in the indicators.

On the other hand, the recent price recovery was preceded by four months of increasing indicators, in which the last three months the increase was dramatic. Based on this comparison of the change in the indicators to the change in prices, this suggests that the price recovery may be more rapid and perhaps not as long as the descent. Further readings of the indicators should provide some additional insight on this latter point.

**Ux Near-Term Uranium Net Indicator Values vs. Ux Month-end  $U_3O_8$  Price**



**Ux  $U_3O_8$**   
**\$10.85**  
**(+0.35)**

**CIS  $U_3O_8$**   
**\$9.00**  
**(Unch.)**

# NEWS BRIEFS

**DOE to make awards for sales of U<sub>3</sub>O<sub>8</sub> and conversion this week**—The Department of Energy (DOE) is expected to award contracts this week for sales of natural uranium and conversion. Lockheed Martin Energy Systems had acted on DOE's behalf to issue invitations to bid on up to one million pounds U<sub>3</sub>O<sub>8</sub> equivalent in the form of UF<sub>6</sub> and up to 382,723 kgU as conversion services in the form of natural UF<sub>6</sub>. Bids were due September 22.

DOE is pleased with the response to its bid invitation and received nearly 30 bids to buy some or all of the U<sub>3</sub>O<sub>8</sub> and all of the conversion. Indications from the prices offered on the uranium component reflect bidders' beliefs that the market price has bottomed and that prices are on the rise, based on the number of offers DOE received with prices over \$11.

Meanwhile, DOE is continuing to work on securing approval of a Secretarial determination that will allow it to make additional sales of natural uranium and conversion inventories under long-term contracts under which deliveries will take place over the 1998-2003 period.

## IUC enters fourth deal for U recovery—

International Uranium Corp. (IUC) said last week that it has arranged for a new source of ore to be fed through its White Mesa mill via a processing agreement signed with Recovery Dynamics in Tennessee. Recovery will supply IUC with about 16,000 tons of ore containing uranium, tantalum and niobium. IUC expects to recover about 80,000 pounds of uranium from the ore and will deliver the material to its existing contract holders.

The contract with Recovery is the fourth of its kind that IUC has entered into since it took over the former Energy Fuels business earlier this year. In June IUC signed a contract with the U.S. Department of Energy to process about 400 tons of material that is expected to yield between 60,000 and 70,000 lbs of uranium. The two other recovery transactions are with ConvergDyn.

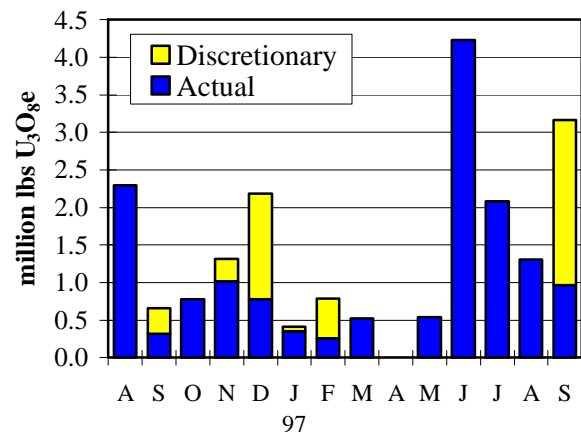
While all four transactions are expected to yield about 650,000 lbs, IUC will probably recover between 500,000 and 600,000 lbs for calendar year 1997 with the rest to be recovered during the first few months of 1998. In the meantime, development and restoration work is in high gear at the Sunday Mine Complex, a group of five mines located in Colorado where, according to IUC President Earl Hoellen, he hopes to begin mining ore in another 30 to 60 days. Milling of that ore will occur next year.

Hoellen said he believes there are a number of opportunities for IUC to enter into similar recovery arrangements with other companies and that such arrangements are be-

**— Industry Calendar —**

- **September 28-Oct. 1**—NEI's International Uranium Fuel Seminar '97 in Monterey, California.
- **January 28, 1998**—NEI's Nuclear Fuel Supply Forum will be held in Washington, D.C.
- **March 29-April 1, 1998**—NEI's FUEL CYCLE '98 will be held in Savannah, Georgia.
- **May 17-19, 1998**—The World Nuclear Fuel Market (WNFM) will be held in Paris, France.
- **June 7-11, 1998**—American Nuclear Society's 1998 Annual Meeting in Nashville, Tennessee.
- **September 9-11, 1998**—Uranium Institute 23<sup>rd</sup> Annual Symposium, London.

**Uranium Spot Volume by Need**



ing pursued. The cost of recovering uranium this way is well below today's market prices, he said. Over \$8 million is expected in pre-tax earnings based on revenues from IUC's existing uranium contracts and current uranium market prices plus those from a contract to sell tantalum and niobium concentrates that will be recovered as well. The company's second quarter report shows working capital of over \$26 million.

The *Financial Post* listed IUC as one of the most heavily traded stocks on the Toronto Stock Exchange as of September 24 (the day before the announcement was made) On 6,211 shares traded, the price rose C\$0.03 to close at C\$1.32.

**Anaconda continues U<sub>3</sub>O<sub>8</sub> acquisition program**—Anaconda Uranium Corp. announced last week that it is buying the La Jara Mesa uranium property from Homestake Mining. The purchase price was set at US\$1.24 million plus 750,000 shares in Anaconda, which will be paid over five years. When the agreement was

## NEWS BRIEFS cont...

signed, Anaconda paid \$50,000 and forwarded 50,000 shares. In addition, Homestake is to receive a 1.5% gross product value royalty.

John Cook, president of Anaconda, said that he has now shifted the company's emphasis from the pure acquisition mode it has been in since being formed this past April to looking into the engineering details of the four properties the company now has in its portfolio. This does not mean that the search for additional properties has ended, he said. In fact, he is currently looking at a uranium property in western Europe that would be attractive given the lack of production in that area of the world. But with four properties in hand, the time has come to begin evaluating the data each project has come with and to determine which of the four would be developed first.

To generally characterize what makes a property attractive to Anaconda, Cook said he looks for those that can be economically produced with uranium spot prices in the \$13-\$18 per pound range and that have around 10 million pounds of in ground resources. It does not make sense to enter into pure exploration, he said, given the large number of uranium properties where drilling and feasibility studies were carried out in the 1970s. All four of the properties that Anaconda has share the characteristic of having drilled resources and a lot of environmental data available. With the addition of La Jara Mesa, Anaconda now has about 70 million lbs of total resources.

La Jara Mesa, which is located near Grants, New Mexico, has resources of 8 million lbs at a grade of 0.25 percent defined for feasibility studies. Total resources are estimated at 15 million lbs.

When Anaconda went public this past spring, it already had the Copper Mountain project in Wyoming, which is owned privately, in hand. The acquisitions began in early July with the purchase of the Maureen and Newcastle Range deposits in Australia from unnamed parties for A\$325,000 and a A\$0.20 per kilogram uranium production royalty. Studies done at Maureen outlined 6.5 million lbs of resources at a grade of 0.123% while Newcastle's defined resources are over 2 million lbs. Fewer details are available on Newcastle, Cook said.

Later that month, the company purchased Ben Lomond from Cogema for A\$3 million plus payment of a 1% gross product value royalty up to A\$2 million. Studies show resources of 14.9 million lbs with an average ore grade of 0.228%. Mineable reserves of 10.5 million lbs with an average grade of 0.24% were defined to support production of about 1.3 million lbs per year. All four properties would involve underground or open pit mining followed by

heap or vat leaching.

Cook said he envisions going into production with uranium available to the market in two to three years. There have been some preliminary discussions with people about selling the material, but these are more from an informational point of view, he said.

At the end of trading the day the agreement was announced, September 24, the Toronto company's shares, which trade on the Vancouver Stock Exchange, closed at C\$0.50. At the close of trading today (Monday the 29<sup>th</sup>), the share price remains unchanged.

### World Wide arranges financing for Dornod—

While uncertainty continues over whether or not World Wide Minerals can retain its contract with the Kazaks to manage the Tselinny uranium operations, the company has

#### 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 U<sub>3</sub>O<sub>8</sub> price includes conditions for quantity, delivery timeframe, origin and location considerations while the Ux CIS U<sub>3</sub>O<sub>8</sub> price is the most competitive price for deliveries up to six months forward without regard to specific quantity or location. Both U<sub>3</sub>O<sub>8</sub> prices are published weekly. The Ux Conversion price considers spot offers for delivery up to twelve months forward. The Ux UF<sub>6</sub> price represents the sum of the conversion and U<sub>3</sub>O<sub>8</sub> components as discussed above and, therefore, does not necessarily represent the most competitive UF<sub>6</sub> offers available. The Ux SWU price considers spot offers for deliveries up to twelve months forward. The Conversion, UF<sub>6</sub> and SWU prices are published once a month on 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>

© 1997 The Ux Consulting Company, LLC

## NEWS BRIEFS cont...

arranged US\$60 million in financing from Deutsche Morgan Grenfell that will be used to help bring uranium production on line in Mongolia. Part of the problem with the Tselinny contract had been the Kazak government's allegations that World Wide had not lived up to certain terms of its agreement, such as investing money. World Wide said it was taking steps to arrange financing, which took longer than the company anticipated.

In a press release dated September 24, World Wide said the financing would go to its subsidiary, World Wide Uranium Holdings Inc., and will be secured by uranium inventories and long-term contracts. While the company said the financing is not tied to any specific uranium production source, it also said at least some of the proceeds will be used to develop the Dornod uranium mines in Mongolia. None of the money will be used in Kazakhstan.

World Wide will hold a conference call this Tuesday at noon eastern standard time in which company officials will discuss the financing and its development plans. The phone number for North America is 1 (800) 997-6755. For international calls the number is (416) 620-6801.

**Agreement on China nuclear accord remains in doubt**—Negotiations between the U.S. and China continued last week but disagreements remain on terms that must be met before President Clinton will approve implementation of a nuclear agreement with the country. The first China-U.S. summit scheduled in 10 years will be held in Washington in late October with an agenda that will focus on nuclear nonproliferation and human rights.

**Utility sees lower earnings due to outage**—Illinova reported last week that its 1997 annual earnings will be lower because of an extended outage at its Clinton nuclear plant. The utility filed a petition with the Illinois

<b>Ux U<sub>3</sub>O<sub>8</sub> 9/29/97 Price Conditions</b>	
<b>Price:</b>	<b>\$10.85 (\$10.50)</b>
<b>Quantities:</b>	<b>1-300,000 lbs (2-400,000)</b>
<b>Delivery:</b>	<b>3 months (3)</b>
<b>Origin/Location:</b>	Open origin/U.S. convertor Non-CIS/All other locations Matched/Any location

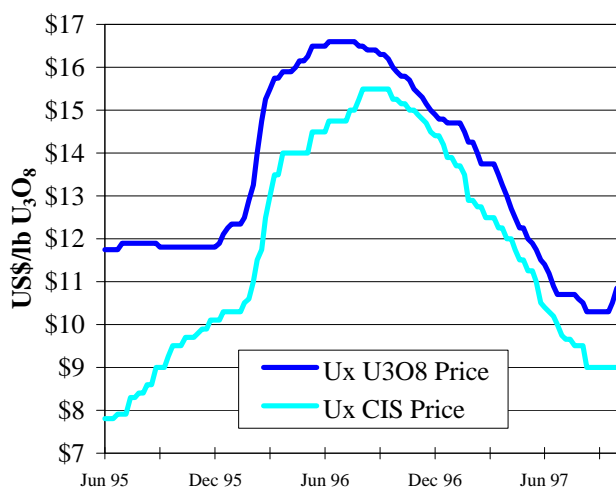
Commerce Commission saying it would not collect about \$20 million for replacement power costs relating to the shutdown. Analysts had expected the utility's earnings at a mean of \$2.58/share, but the utility now expects it to be no higher than \$2.15 to \$2.20.

**WPL merges with two Iowa utilities**—Wisconsin state regulators last week conditionally approved a merger between Wisconsin Power and Light, IES Industries and Interstate Power Company. The new company will be called Interstate Energy Corp. and will have combined assets of \$4.6 billion and co-own 26 power plants, including two nuclear units. Among the conditions for approval are a four-year rate freeze and a measure that will allow Wisconsin's utility commission to continue having jurisdiction over state consumers.

**UxC updates Web Site**—Based on comments and suggestions from Internet visitors, UxC has revamped its web site, <http://www.uxc.com>, with a new layout and additional content. The layout changes include frames-driven navigation (a non-frames version is available) that simplifies viewing and the creation of *content groups* to organize the growing number of pages. In addition, new navigation buttons are found at the bottom of each of the content pages. These buttons allow you to move sequentially between all of the content pages in the current group, or directly to the Ux Home or Site Map pages. For those without frames-capable browsers, you can use the Ux Site Map to easily view all of the content pages.

The new *content groups* include Statistical Review, Products & Services, *U-PRICE* Forecasting Model, Corporate Information, Industry News, Industry Links and Fun Stuff. The Statistical Review group contains charts and tables on current market information that are updated based on the frequency listed on each page. The Products & Services, *U-PRICE* Forecasting Model and Corporation Information groups contain information and background on Ux and UxC. The last set of content groups, Industry News, Industry Links and Fun Stuff, presents useful and interesting links to other sites in a single convenient location.

**Ux U<sub>3</sub>O<sub>8</sub> and CIS Prices**





# THE MARKET

**Uranium**—One producer that came out last week for 500,000 lbs was joined by two U.S. utilities that are seeking up to 500,000 lbs between them. Other utilities, sensing that the market is recovering, have shown an interest in purchasing, although they may do so in a less formal way.

Whereas buyers are entering the market, sellers, which are now mainly traders, show signs of retreating. Some have declined to respond to the latest buyer requests while others are making staggered offers, offering smaller lots of material at successively higher prices. This indicates that sellers clearly sense an upward momentum in price, based in part on last week's upturn and perhaps based on information that is beginning to circulate concerning the results of DOE's auction (as discussed in the story on page 2). As a result of recent activity in the market, the Ux U<sub>3</sub>O<sub>8</sub> price has increased to \$10.85, while the CIS price is unchanged at \$9.00.

As to where the market goes from here, the real question is how demand will react now that DOE has completed its auction and the price is increasing. Will the bidders which did not win DOE's auction—there were apparently many of these—elect to buy now believing that price can only go higher, or wait out the market to see if they can get better deals? A number of companies apparently bid prices above the then current market price, indicating that they were serious buyers.

The other part of this question is how will suppliers react in this new market environment. There is some hint of this behavior now, given that some are reluctant to offer very large quantities into an escalating market while others are reluctant to sell at all. Higher prices will undoubtedly bring new supplies into the market, but the question is how high do these prices have to be.

An interesting issue, and one that has a bearing on how quickly price recovers, is the extent to which traders, which have recently been the primary source of spot supply, become buyers.

**Conversion**—Even though conversion demand has picked up somewhat, even more supplies are appearing on the market. Consequently, the spot price has continued to weaken, and now stands at \$5.50.

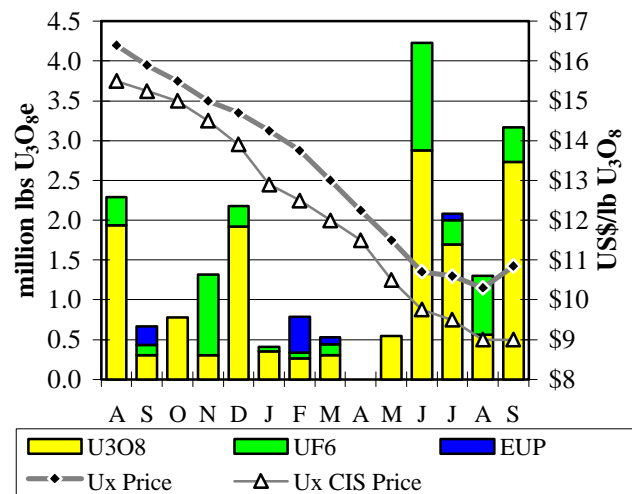
**Enrichment**—The enrichment market has been relatively quiet recently, and therefore spot prices for the restricted and unrestricted markets have remained unchanged at \$90 and \$88, respectively.

Ux Spot Prices	
Month-end (9/29/97)	
U <sub>3</sub> O <sub>8</sub>	\$10.85
CIS U <sub>3</sub> O <sub>8</sub>	\$9.00
Conversion	\$5.50
UF <sub>6</sub>	\$33.85
CIS UF <sub>6</sub>	\$29.01
SWU	\$90.00
CIS SWU	\$88.00

Industry Spot Prices							
	NuclearFuel		NUKEM		TRADE	Ux	Avg.
	Low	High	Low	High	TECH		
<b>Weekly (9/29/97)</b>							
U <sub>3</sub> O <sub>8</sub> (\$/lb)	(9/22)				(9/19)		
Restricted	10.25	10.70	—	—	10.30	10.85	10.54
Non-restr.	8.90	9.40	—	—	9.20	9.00	9.12
<b>Month-end (8/31/97)</b>							
U <sub>3</sub> O <sub>8</sub> (\$/lb)	(8/25)					(8/25)	
Restricted	10.10	10.40	10.20	10.40	10.20	10.30	10.26
Non-restr.	8.90	9.40	9.15	9.60	9.20	9.00	9.18
<b>Conversion</b> (\$/kgU)	—	—	5.40	6.00	5.60	5.55	5.62
<b>UF<sub>6</sub></b> (\$/kgU)							
Restricted	—	—	—	—	32.25	32.46	32.36
Non-restr.	—	—	—	—	29.65	29.06	29.35
<b>SWU</b> (\$)							
Restricted	—	—	—	91.50	90.00	90.00	90.50
Non-restr.	—	—	90.00	—	88.00	88.00	88.67

*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 Month-end U<sub>3</sub>O<sub>8</sub> Price vs. Volume by Form**



## “Idiots”

Two long time golfers were standing at the 3<sup>rd</sup> tee overlooking the river.

One golfer looked to the other and said, “Look at those idiots fishin’ in the rain.”