

## *(The) Future's Now*

Those of you that have read these pages for a while are quite familiar with our discussions about market failure and our admonitions about the shortcomings and inefficiencies in the uranium market, even though we publish one of the primary price indices. Addressing the annual WNA Symposium last September in London, UxC's President Jeff Combs gave the market a grade of only a "D+," and in our initial cover story of the year we concluded that in many ways the market should get a failing grade. Allow us to address this issue once more, but hopefully for the last time, as there is now hope that the market will operate much more efficiently with an emerging futures market.

In June of 2003, we were alarmed (we said "fascinated" at the time) by the fact that uncovered requirements on the part of U.S. utilities were so large in 2006, just three years away at the time. There seemed to be an impasse or perhaps a disinterest in contracting, which translated into this large uncovered position. Because of the large amount of contracting yet to take place in an environment where production was not expanding, it appeared to us that there was no way the market could clear at anywhere near the then spot price of \$10.90 when 2006 came around.<sup>1</sup> Because of this, we wondered if the market had failed. (see "A Case of Market Failure?" *The Ux Weekly*, June 9, 2003, p. 1-2).

Because of this concern, we tried an

experiment in our mid-year price survey that we conducted in July and August of that year. We asked buyers and sellers what they would bid and offer for 250,000 pounds U<sub>3</sub>O<sub>8</sub> for July 2006 delivery. Although these bids and offers were nonbinding, some survey participants indicated that they were willing to act on them, so we believe that this was a fairly realistic representation of the forward market at that time.

The results of this survey were published in a cover story (see *The Ux Weekly*, September 1, 2003, p. 1-2). The survey showed that most of the respondents believed that the spot uranium price would be in the \$11.00-11.50 range by the end of 2003, and between \$13 and \$16 (or about \$100 below the current price) by 2008. The vast majority of buyers' bids for a 2006 purchase were in the \$11.50-12.00 range, or not much higher than what they believed the end-year 2003 price would be. No sellers' offers were below \$12, so the market would have cleared above this point.

An interesting observation, and one that foreshadowed the coming increase of price, was while the bids and offers overlapped in the \$12 to \$13.50 range, once these were cleared out, the next range of offers was \$13-\$15. Since bids outnumbered offers by a 2:1 margin, there was more demand being sought than supply being offered, and price would likely have to be bid up. Of course, price increased tremendously over the next three years as there was not nearly enough "low-priced" uranium to meet demand.

**Ux U<sub>3</sub>O<sub>8</sub> Price: (4/16/07)**

**\$113.00 (Unch.)**

**Ux LT U<sub>3</sub>O<sub>8</sub> Price: (3/26/07)**

**\$85.00**

In hindsight, a futures market existing in 2003 would have served the market well, as it would have given more advanced notice of the tight future supply situation that existed. Prices would have been bid up sooner, prompting a quicker response in production and exploration. Utilities certainly would not have liked seeing higher prices, but if they had known what the alternative was (which is what actually happened), they would have been more accepting.

Clearly, a well-functioning futures market would not have prevented the floods at McArthur River and Cigar Lake or the rains and water problems at Ranger. But, it would have provided a more immediate price signal to which buyers and sellers alike could have reacted, resulting in a more efficient market operation. Importantly, it would have allowed market participants to hedge against such events.

We were not in a position to establish a futures market then, nor was there likely sufficient interest on the part of nuclear fuel market participants or the investor community at that time. However, subsequently interest in the uranium market and its future (as well as the future of nuclear power) has increased dramatically, as has the interest in futures markets in general (see the lead editorial in *The Wall Street Journal* of April 11, 2007) and the ability to trade derivatives electronically. Thus, developments in our market as well as financial market and futures markets infrastructure in general have made a futures market in uranium more desirable and more feasible.

<sup>1</sup> As an interesting aside, the price of \$10.90 represented a decline of \$0.10 from the previous week's price, the last decline registered for the Ux U<sub>3</sub>O<sub>8</sub> Price.

It is into this environment that NYMEX, with our support, is introducing uranium futures products on electronic trading platforms, using UxC prices to settle these trades (see story below). We are pleased to participate in this endeavor because we believe that this is a crucial step to ensure the future success of the market during a time which is critical for the future of nuclear power.

We should also note that some, thinking that a futures market in uranium is two or three years away, may be surprised by this announcement; however, some futures trades have already taken place in uranium and Tullett Prebon has set up a nuclear fuel derivatives desk (see the *Ux Weekly*, April 2, 2007, p. 3). Thus, the market has already started to evolve in the direction of a uranium futures market, and NYMEX has elected to support this development in a major way.

Certainly, developing nuclear fuel futures markets today can do nothing to change how the markets have developed up to this point. But, it will aid in price transparency and the establishment of a forward price curve. Our cover last week discussed how market participants are facing an uncertain situation when it comes to future uranium prices, since most forward contracts today are being written on a market price basis, or where the price to be paid (or received) is to be based on the market price existing at or near the time

of delivery, and thus is not known today. This makes budgeting and planning difficult, if not impossible.

Importantly, futures markets create the opportunity for hedging to reduce price uncertainty, a feature that is exceedingly valuable in today's market. Establishing futures contracts and a forward price curve should also make it easier for new mines to get financing, thus helping to speed up the needed recovery in production. Thus, futures contracts can be of immediate benefit to market participants, and in the process set the stage where supply is more robust in the future.

To many, it may seem like the uranium market has changed more in the past two weeks than it has in the previous 40 years with price soaring to new heights and the introduction of a futures market, while they are still getting used to the presence of hedge and investment funds. And, although a number of participants have bemoaned the entry of hedge and investment funds into the market, their entry signaled that the uranium market was mature enough to attract those with solely financial interests, i.e., those that will also participate in a futures market. While hedge funds

can and will participate in a uranium futures market, futures trading is regulated by the government and large positions reported, again adding to the transparency of these markets.

In the coming weeks prior to the launch date of May 7, NYMEX in

**UxC Price Survey: September 2003  
Bid and Offer Ranges – July 2006 Delivery**



conjunction with UxC will be holding meetings to discuss the various products and services that will be provided. All in the industry are invited to these meetings, and we will be happy to answer any questions you might have about the functioning of futures markets, from market, technical, and regulatory standpoints.

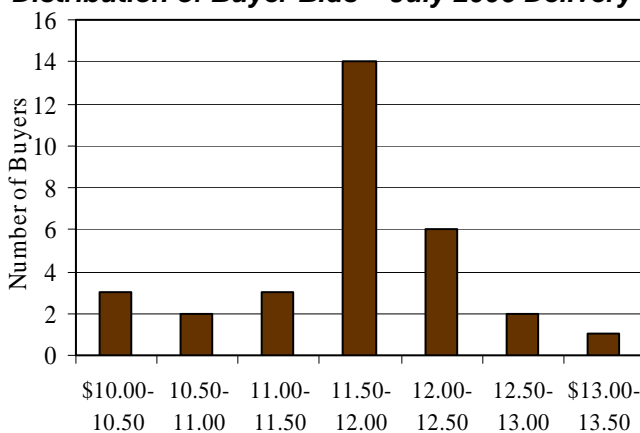
## News Briefs

### **NYMEX and UxC announce introduction of uranium futures contracts**

The New York Mercantile Exchange, Inc., a subsidiary of NYMEX Holdings, Inc. announced Monday that they have signed a ten-year agreement with The Ux Consulting Company, LLC, "to introduce on and off-exchange traded futures products on the CME Globex and NYMEX ClearPort electronic platforms on May 6 for trade date of May 7." These will be financially settled products, and NYMEX and UxC together plan to provide marketing and education for these products.

With respect to the introduction of the uranium futures products, NYMEX Chairman Richard Schaeffer said, "We are excited to introduce uranium futures contracts and to provide the industry with a transparent price discovery mechanism. We expect to create a benchmark contract for this important and underserved global market. NYMEX is gratified to launch innovative

**UxC Price Survey: September 2003  
Distribution of Buyer Bids – July 2006 Delivery**



products, and uranium is uniquely positioned to act as a complement to both our energy and metals product offerings.” UxC President and owner Jeff Combs added, “We are pleased to partner with NYMEX, the global leader in commodities-based futures trading, in the introduction of uranium futures products, and applaud NYMEX for investing the time and resources to make uranium futures a reality.”

NYMEX Holdings is the world’s largest physical commodities-based futures and options exchange, and offers futures and options for a variety of energy products, such as crude oil, petroleum products, natural gas, coal, electricity, and now uranium, as well as metals and a host of other products.

### ***NRC licenses USEC’s American Centrifuge Plant***

The U.S. Nuclear Regulatory Commission (NRC) issued a construction and operating license to USEC Inc. for its American Centrifuge Enrichment Plant on April 13, 2007. Issuance of the 30-year license for the American Centrifuge Plant (ACP), to be constructed in Piquette, Ohio, follows a positive recommendation made by the Atomic Safety and Licensing Board (ASLB), NRC’s adjudicatory body, on the same day. USEC’s license is for a 30-year term and authorizes enrichment up to 10 percent. It is the second major nuclear facility li-

censed by the NRC in recent years. Louisiana Energy Services received its construction and operating license for the National Enrichment Facility in June 2006.

Issuance of the ACP license concludes a 30-month NRC review that included the completion of an Environmental Impact Statement (EIS) with a finding of no significant adverse environmental impacts in April 2006 and a Safety Evaluation Report that was published in September 2006. The ASLB held its safety hearing, which is mandated by law, in March 2007.

USEC plans to build the American Centrifuge Plant using technology originally designed by the U.S. Department of Energy with “design, material and manufacturing improvements.” USEC hopes to begin commercial plant operations in late 2009 and expects to have deployed 11,500 machines by 2012, for an output of about 3.8 million SWU using current centrifuge designs. The NRC license review considered modular expansion of the plant up to a maximum annual capacity of 7 million SWU. Current cost targets for deploying the American Centrifuge plant are \$2.3 billion, as compared with early cost estimates of \$1.0 to \$1.5 billion.

USEC is currently working towards operating its Lead Cascade in the American Centrifuge Demonstration Facility by mid-2007. The Lead Cascade demonstration will include the operation of a small number of full-size centrifuges with uranium hexafluoride (UF<sub>6</sub>) in order to assess certain aspects of cascade configuration and determine the functionality of various support systems. The license for the

## **Industry Calendar**

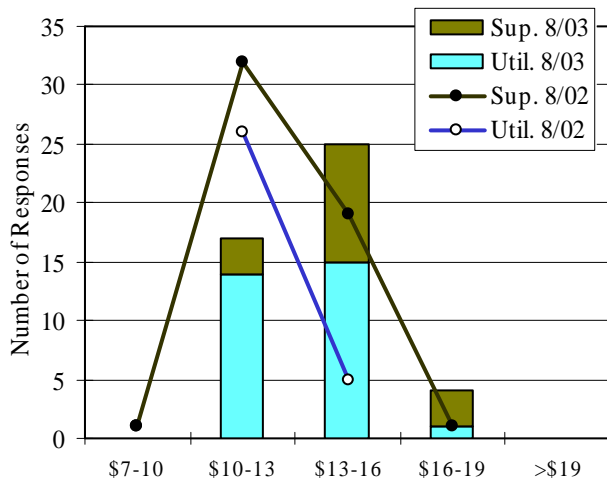
- April 17-20, 2007  
**World Nuclear Fuel Cycle Conf.**  
World Nuclear Association  
<http://www.world-nuclear.org/>  
Nuclear Energy Institute  
<http://member.nei.org/>  
Hilton Budapest  
Budapest, Hungary
- May 13-16, 2007  
**UF6 Seminar 2007**  
Ureco  
<http://www.ureco.com/uf6seminar07/>  
Theatrehotel Almelo, Netherlands
- May 16-19, 2007  
**China Power & Alt Energy 2007**  
China Decision Makers  
<http://www.alt-power.com/>  
Hong Kong Macau Center  
Swissotel, Beijing, China
- May 21-24, 2007  
**Global Uranium Symposium**  
South Texas SME/Texas A&M  
<http://www.u2007.org/>  
Omni Bayfront  
Corpus Christi, Texas, USA
- May 23-25, 2007  
**Nuclear Energy Assembly**  
Nuclear Energy Institute  
<http://member.nei.org/>  
The Fairmont at Turnberry Isle  
Miami, Florida, USA
- June 3-5, 2007  
**WNFM 33<sup>rd</sup> Annual Meeting**  
World Nuclear Fuel Market  
<http://www.wnfm.com/>  
Hotel Grande Bretagne  
Athens, Greece
- June 19-21, 2007  
**UxC Utility Nuclear Fuel Procurement Seminar**  
The UxC Consulting Company, LLC  
<http://www.uxc.com/>  
Embassy Suites Buckhead  
Atlanta, Georgia, USA

Details are available at:  
<http://www.uxc.com/c/data-industry/uxc-calendar.aspx>

American Centrifuge Demonstration Facility was issued in February 2004, and the NRC assumed regulatory oversight of the facility in August 2006, which allows for the introduction of UF<sub>6</sub> gas.

“The American Centrifuge Plant will provide a long-term, reliable, competitive fuel source for the United States and for the world’s growing number of nuclear

**UxC Price Survey: September 2003**  
**Where will spot Uranium price be in 5 years?**



power plants," said USEC's President and Chief Executive Officer John Welch.

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### ***TVA nears Browns Ferry 1 start up; seeks comments on Watts Bar 2 completion***

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According to a company press release, the Tennessee Valley Authority (TVA) has told the U.S. NRC it is ready for a final inspection of the Browns Ferry 1 reactor in preparation for start up. TVA has spent five years and \$1.8 billion in restoring the reactor, which had been in cold standby since 1985. In addition to major restoration works, TVA has also uprated the capacity of the reactor to 1,155 MWe and extended its license by an additional 20 years. Fuel loading of the boiling water reactor (BWR) located in Decatur, Alabama, was completed early this year, and TVA claims it is ready to bring the plant online in May. This will be the first major "new" nuclear generating capacity in the United States since TVA's Watts Bar 1 reactor was completed in 1996.

TVA also announced last week that it is planning to hold an open house this week to hear public comments on its draft environmental review on the possible completion of its Watts Bar 2 reactor located in Spring City, Tennessee. "TVA is considering completing Unit 2 at Watts Bar to meet the growing need for power in the Tennessee Valley, and we are updating previous environmental reviews completed for the Watts Bar plant," said TVA Vice President of Nuclear Generation Development Jack Bailey. "Along with a detailed engineering and feasibility study currently under way, the environmental review will provide information we need on the possible completion of Unit 2."

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### ***French government approves construction of new Flamanville reactor***

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The French government last week published its approval of Electricité de France's (EDF) new Flamanville-3 reactor in its Official Journal according to

*Dow Jones*. The decision is the last step in the approval's process, since the French Nuclear Safety Authority (ASN) gave the go-ahead for the reactor construction in March.

The reactor will be the first of the 1,600 MWe Generation III+ design European Pressurized Reactor (EPR) supplied by AREVA to be built in France. It will be the third unit to be built at the Flamanville site and is expected for completion in 2012. EDF has indicated it expects to spend €3.3 billion over the five-year construction phase. The first EPR to be built is currently under construction in Finland at the Olkiluoto site.

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### ***AREVA and EDF team up to offer reactors to U.K. market***

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According to *Les Echos*, two French nuclear giants, AREVA and Electricité de France (EDF), have agreed to work together to bid on projects to build new reactors in the United Kingdom. After months of negotiations, the two companies say they will team up to present "one application during the 'pre-licensing' phase" to the UK authorities with expected approval within the next three years. According to the report, the UK safety authorities have already stated that only three or four reactor designs will be approved for use in the country, and thus competition is expected to be fierce. AREVA and EDF are planning on applying for UK approval of the EPR design similar to the reactor that will be built at Flamanville.

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### ***Entergy completes purchase of Palisades NPP***

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On April 11, Entergy announced that it has completed the purchase of the Palisades nuclear power plant, which has a single 798 megawatt pressurized water reactor. Completion of the transaction follows an April 6 decision by the U.S. Nuclear Regulatory Commission (NRC) to authorize a transfer of the plant's operating license, which was previously held by Nuclear Management Company (NMC). Entergy paid Consumers En-

ergy \$380 million, a price which includes \$242 for the plant, \$83 million for nuclear fuel, and \$55 million for additional assets. The agreement calls for Entergy to sell the plant's output back to Consumers Energy under a 15-year contract. In January, the NRC approved a 20-year license extension for Palisades, which allows the reactor to operate until 2031.

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### ***Indian government gives environmental clearance for four new heavy water reactors***

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According to *The Hindu*, the Indian government has given environmental clearance for four pressurized heavy water reactors (PHWR) to be built at two sites in the country. Two of the Indian-designed 700 MWe capacity reactors are set to be constructed at Kakrapar in Gujarat, and another two at Rawatbhatta in Rajasthan, according to S.K. Jain, Chairman and Managing Director of Nuclear Power Corporation of India Ltd. (NPCIL). Mr. Jain indicated that the groundwork for both projects would begin later this year, although a completion date for the plants was not reported. A total of eight identical PHWRs are planned for construction around the country in the near term, and Mr. Jain said that the sites for the remaining four would be chosen later.

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### ***Russia and Japan hope to complete cooperation agreement by end of year***

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Sergei Kiriyenko, the head of Russia's Federal Atomic Energy Agency (Rosatom), visited Tokyo, last week and held high-level discussions with Japanese counterparts on nuclear cooperation between the two nations. According to *Bloomberg*, the two sides will hold official nuclear talks later this month with hopes of wrapping up a peaceful cooperation agreement by the end of this year.

According to Kiriyenko, "the nuclear treaty will allow Japanese makers to enter Russia's nuclear plant designing, engineering and construction business."

Both Toshiba and Hitachi have indicated interest in participating in the rapidly growing nuclear construction market in Russia. As for his side, Kiriyenko added that Russia could "provide services such as enrichment of spent nuclear fuel and the conversion of the fuel for use at conventional reactors." Without a completed cooperation agreement, however, the two countries are still restricted from such trade.

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### **Japan and China agree to expand nuclear cooperation**

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The governments of China and Japan issued a joint statement last week in which they announced an agreement to cooperate on nuclear power plant construction as reported by *Reuters*. "Both countries understand that expansion of nuclear power generation in Asia and the world helps to ease energy supply-demand tightness and stop global warming," Japanese Trade Minister Akira Amari and Ma Kai, head of China's energy policy-setting National Development and Reform Commission, said in the statement. "(We) will continue to cooperate in construction of nuclear power and its safe operation."

Through this agreement, it is anticipated that China will allow Japanese companies greater access to its growing nuclear market. *Reuters* reports that China is planning to spend approximately \$50 billion on new nuclear plants through the year 2020.

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### **AREVA and MHI announce progress on joint reactor development project**

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France's AREVA and Japan's Mitsubishi Heavy Industries (MHI) last week announced in a joint press release that they could "confirm the fast deployment of their alliance in the nuclear energy area," which was first announced last October. The heads of the two companies met last week to review progress on combined work done in the "initial conceptual design phase of their new joint advanced reactor," which should be

completed by early summer.

According to the release, the companies' engineers have agreed on the reactors main features, including "an advanced generation 3, pressurized water, 3 loops reactor with a power level of around 1,100 MWe. It will integrate the latest features already adopted by AREVA and MHI in terms of safety (resistance to commercial airplane crashes for instance), environment (reduced spent fuel and waste) and efficiency (possibility of extended fuel cycles and capacity to use MOX fuel for instance)." Indicating an interest to market this reactor to smaller countries that may not already have operating nuclear plants, the companies explained that this reactor is being designed to "address the specific markets where such size of reactor will better fit the grid or the demand pattern."

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### **Doosan Heavy nears deal to build reactors in China**

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According to the *Korea Times*, South Korea's Doosan Heavy Industries said last week that it is beginning negotiations with the State Nuclear Power Technology Company (SNPTC) to supply nuclear plant facilities to China. Doosan will sign a letter of intent with SNPTC that will pave the way for the first South Korean participation in nuclear plant construction in the fast growing Chinese reactor program. A final agreement is expected by the end of this year.

Through this agreement, Doosan will take the place of Japan's Mitsubishi Heavy Industries (MHI), which had previously joined with Westinghouse in a consortium to sell AP1000 reactors to China. However, following Toshiba's purchase of Westinghouse, MHI ended its long-standing partnership with the U.S. nuclear reactor vendor. It appears that this new deal with Doosan means that Westinghouse will continue to be the general design and construction contractor, while Doosan will supply reactor vessel and steam generator

components for two new units being built in China's Shandong Province.

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### **U.S. NRC approves revisions to new plant licensing rule**

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The U.S. Nuclear Regulatory Commission (NRC) last week moved closer to finalizing its revisions to the new plant licensing rule, otherwise known as 10 CFR Part 52. The commissioners unanimously voted to clear the way for a key rule which governs design certifications, early site permits (ESP) and combined construction and operating licenses (COL). Specifically, the NRC approved a staff memorandum that clarified close-out procedures for the inspections, tests, analyses and acceptance criteria (ITAAC) as well as the design certification amendment process. In addition, new licensee requirements for probabilistic risk assessments (PRA) for new reactors are detailed.

The NRC is also expected this week to complete work on a supplemental rulemaking to update regulations on limited work authorizations (LWA) that would allow utilities planning new reactors to begin some site preparatory work prior to receiving a COL. With these actions, the NRC is moving to completing all work on Part 52 revisions by June or July of this year. The first COL applications for new U.S. reactors are expected to be submitted in the fourth quarter of this year.

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### **ERA releases results for the first quarter of 2007**

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Energy Resources of Australia (ERA) has released results for the first quarter of 2007. The company reported production of 1,006 tonnes U<sub>3</sub>O<sub>8</sub>, a 28 percent decline when compared with the first quarter of 2006, and a 39 percent decline when compared with the fourth quarter of 2006. ERA reported a 32 percent decline in its milling rate when compared with the same period last year, and said the decline was mainly due to heavy rainfall that led to the temporary closure of Ranger's processing

plant. However, the amount of ore mined increased by 45 percent when compared with the same quarter in 2006 as methods implemented during the end of last year enabled a higher grade of ore to be accessed in January and February 2007 before the heavy rains began. ERA plans to process high grade ore previously stockpiled during the second quarter of 2007. The company restated its previous announcement that it expects 2007 production to be at a similar level to 2006 and expects a 25 to 35 percent lower production level in 2008 due to high water levels that will continue to restrict access to ore.

During the quarter, ERA spent A\$3.7 million on exploration efforts in the Ranger area. Sixteen holes were drilled during the first quarter in the zone between the existing open pit area at the mine and the access road in order to examine the feasibility of extending the open pit. Significant results from drilling in this zone include 0.257 percent  $U_3O_8$  over an interval of 17 meters, and 0.166 percent  $U_3O_8$  over an interval of 56 meters. In the Ranger 3 Deeps zone, which is east of the access road, nine holes were drilled for a total of 4,691 meters. Significant results from this zone include 0.364 percent  $U_3O_8$  over a 27 meter interval, 0.222 percent  $U_3O_8$  over a 15 meter interval, 0.417 percent  $U_3O_8$  over a 26 meter interval, and 0.346 percent  $U_3O_8$  over a 31 meter interval. Commenting on exploration requirements in this zone, the company stated, "Considerably more drilling will be required to determine whether the mineralization will be economic as it is probable that the ore will have to be accessed by underground methods." ERA plans to resume drilling efforts in the Ranger 18 East zone during the dry season.

### ***Mitsubishi invests in development of CanAlaska project***

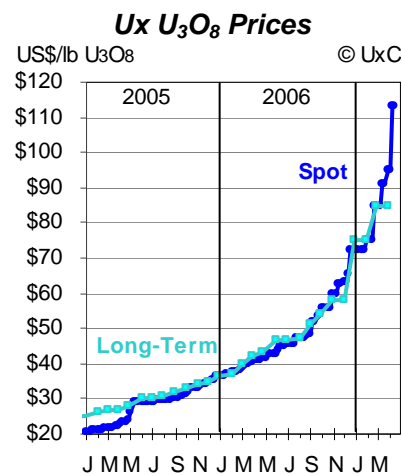
Mitsubishi's Australian mining subsidiary, Mitsubishi Development Pty Ltd. has finalized an agreement with CanAlaska

Uranium Ltd. for joint development of the West McArthur uranium project in Canada's Athabasca Basin. Mitsubishi has the option to acquire a 50 percent stake in the property by investing at least C\$11 million. The agreement is subject to approval by the TSX Venture Board.

### ***AREVA to purchase up to 18 percent in Summit Resources; directors accept increased offer from Paladin***

In an April 11 press release, Australian minerals exploration firm Summit Resources announced that it has agreed to a strategic alliance with AREVA. The deal calls for AREVA to purchase 19.5 million shares in Summit, representing a 9 percent stake in the company, for A\$6.20 per share, which would provide the company with around A\$121.1 million. The agreement calls for AREVA to provide technical assistance to Summit for exploration and development at the Mount Isa project in Queensland. AREVA also has the option to purchase an additional 9 percent in the company at A\$7.20 per share in the period from two months until six months after the initial share purchase takes place. If AREVA makes the second purchase, it will gain the right to market two-thirds of uranium production of Summit's Australian uranium production. Summit, which has approximately 7,000 square kilometers of mineral property located at Mount Isa in the state of Queensland, has estimated its uranium reserves at 75 million pounds  $U_3O_8$ , along with additional reserves of copper, gold, and other metals. The agreement must be approved by Summit's shareholders and Australia's Foreign Investment Review Board.

In related news, Paladin Resources has submitted a revised takeover bid for Summit and extended its offer until April 27. The offer, which Paladin says is final, has been increased from one Paladin share in exchange for 2.04 Summit shares to one share of Paladin for every 1.67 shares in Summit. Pala-



din views the AREVA deal in a positive light and believes that the company's expertise would help in the development of the Mount Isa uranium project. Summit Resources issued a press release on April 16 recommending that shareholders accept the increased offer. The press release states, "After much deliberation, your directors have unanimously resolved to recommend that all Summit shareholders should now accept Paladin's increased offer of 1 new Paladin share for each 1.67 Summit shares." Summit also acknowledged that it is unclear whether the Labor Party will change its uranium policy during the upcoming conference to enable uranium to be mined in Queensland.

### ***Energy Metals announces Moore Ranch drilling results***

On April 12, Energy Metals Corporation released phase 1 drilling results along with information on the permitting progress for its Moore Ranch uranium property located in Campbell County in the U.S. state of Wyoming. The company reports that the first phase of its drilling program at sections 33 and 34 of the property included 177 holes with average thickness for ore-grade intervals of 13.7 feet and an average grade of 0.078 percent  $U_3O_8$ . Significant results include 0.266 percent  $U_3O_8$  with a 15.5 foot thickness, 0.1 percent  $U_3O_8$  with a 24 foot thickness, 0.164 percent  $U_3O_8$  with a 20.5 foot thickness, and 0.128 percent  $U_3O_8$  with a 26.5 foot thickness.

Regarding the permitting process at

the property, Energy Metals said that 20 wells were drilled to sample baseline groundwater and said soil and vegetation mapping were nearly complete. The company provided an update on the status with radiological surveys, wildlife surveys, wetland surveys, and climatology work. Energy Metals expects to finish baseline studies for the licensing process for the U.S. Nuclear Regulatory Commission and the state of Wyoming in August 2007 and submit a final application in October. "Our field team is making substantial progress in the development and permitting process for Moore Ranch. The baseline studies are firmly on track and we believe that timely submittal of the final application later this year will allow us to achieve our production goals in the Powder River Basin, Wyoming," said Energy Metals CEO Paul Matysek.

### **Drill results released for AREVA/Denison JV property in Canada's Athabasca Basin**

In an April 11 press release, Denison Mines released results from a 16,930 meter drilling program at uranium properties located in the McClean Lake mill area of the Athabasca Basin. The exploration program, which took place at the Mae zone, the McClean Property, and the Wooly zone, was conducted by Denison's joint venture partner, AREVA Resources, the majority-owner and operator of the project. Significant results from the Mae zone include an intersection of 26.7 percent  $U_3O_8$  over 14.6 meters, 15.3 percent  $U_3O_8$  over 12.5 meters, 15.9 percent  $U_3O_8$  over 13.8 meters, and 12.7 percent  $U_3O_8$  over 14.5 meters. AREVA Resources plans to conduct a resource estimate for the Mae zone over the next few months. Significant results were not reported for the McClean Property or the Wooly zone, but Denison and AREVA plan to conduct additional exploration. "Denison believes that the Wooly property has the best exploration potential of all major properties in the Athabasca Basin," said the company's press release.

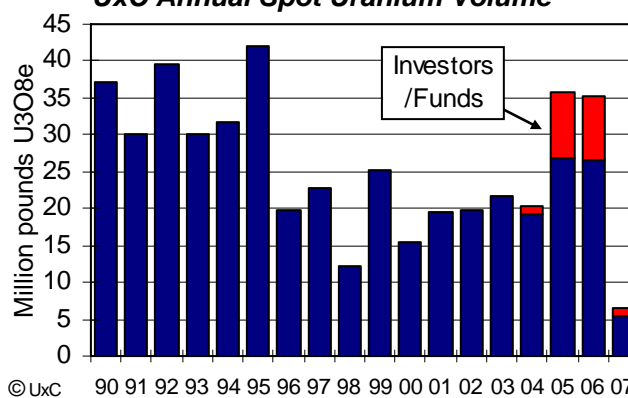
### **RPT Uranium decides to extend drilling program after intersecting high-grade uranium**

In an April 12 press release, RPT Uranium Ltd. said that it plans to extend its winter drilling program to 6,750 meters for the Split Rapids area of Black Sturgeon Uranium Property, which is located in Ontario, Canada. The company decided to extend its drilling program after intersecting high grade results, which include 4.68 percent  $U_3O_8$  over 0.72 meters in drill hole BSE07-03. "With these high uranium grades intersected near surface, a relatively small deposit can contain a lot of pounds of uranium. We therefore need to drill at a close spacing to fully test the target area," said RTP President Dr. Hikmet Akin.

### **Russia and Mongolia reach agreement for joint uranium exploration and development**

According to an April 14 article from RIA Novosti, Russia and Mongolia have reached an agreement for joint exploration and production of uranium. "Rosatom (Russia's Federal Atomic Energy Agency) and Mongolia's industry and trade ministry signed a protocol on development of cooperation in the field of geological prospecting, production and processing of uranium ores," said Rosatom head Sergei Kiriyyenko.

**UxC Annual Spot Uranium Volume**



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### **Ux Price Indicator Definitions**

The Ux Prices indicate, subject to the terms listed, the most competitive offers available for the respective product or service of which The Ux Consulting Company, LLC (UxC) is aware. The Ux  $U_3O_8$  Price (Spot) includes conditions for delivery timeframe ( $\leq 6$  months), quantity (100-300,000 pounds), and origin considerations, and is published weekly. The Ux LT  $U_3O_8$  Price (Long-Term) includes conditions for escalation (from current quarter), delivery timeframe ( $\geq 24$  months), and quantity flexibility (up to  $\pm 10\%$ ) considerations. The Ux Conversion Prices consider offers for delivery up to twelve months forward (Spot) and base-escalated long-term offers (LT) for multi-annual deliveries with delivery in North America (NA) or Europe (EU). The Ux NA  $UF_6$  Price includes conditions for delivery timeframe (6 months), quantity (50-150,000 kgU), and delivery considerations. \*The Ux NA and EU  $UF_6$  Values represent the sum of the component conversion and  $U_3O_8$  (multiplied by 2.61285) spot prices as discussed above and, therefore, do not necessarily represent the most competitive  $UF_6$  spot offers available. The Ux SWU Price (Spot) considers spot offers for deliveries up to twelve months forward for other than Russian-origin SWU. The Ux LT SWU Price (Long-Term) reflects base-escalated long-term offers for multi-annual deliveries. \*\*The Ux Spot and Term EUP Values represent calculated prices per kgU of enriched uranium product based on a product assay of 4.50%, and a tails assay of 0.30%, using spot and term Ux NA and appropriate spot and term price indicators and are provided for comparison purposes only. All prices, except for the weekly Ux  $U_3O_8$  Price, are published the last Monday of each month. (Units:  $U_3O_8 = US\$$  per pound, Conversion/ $UF_6$ :  $US\$$  per kgU, SWU:  $US\$$  per SWU, EUP:  $US\$$  per kgU) The Ux Prices represent neither an offer to sell nor a bid to buy the products or services listed. \*\*The Euro price equivalents are based on exchange rate estimates at the time of publication and are for comparison purposes only.

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# The Market

## Uranium

Spot activity over the past week has slowed somewhat, with many participants now digesting the latest spot price increase. A number of buyers are still actively pursuing near-term delivery for both U<sub>3</sub>O<sub>8</sub> and UF<sub>6</sub>, with one non-U.S. utility buyer expected to announce the results of its spot procurement over the next week involving U<sub>3</sub>O<sub>8</sub>, conversion, and enrichment. Sellers are also looking towards the future and how the spot market will move over the coming months. In the meantime, there has not been much in the way of new offers with fixed pricing for spot delivery. Therefore, the Ux U<sub>3</sub>O<sub>8</sub> Price remains unchanged for the week at \$113.00 per pound.

Two weeks ago (*Ux Weekly*, April 2), we reported the announcement by Tullett Prebon that it was launching a nuclear fuel derivatives desk. As discussed in the cover and a news brief this week, NYMEX has announced that it will be launching futures trading on its electronic platforms. It should be pointed out that there already were indications of futures trades taking place for delivery within the next year at prices notably

higher than the current spot price, giving rise to a forward price curve.

In the term market, a U.S. utility is awaiting offers for about 1.7 million pounds U<sub>3</sub>O<sub>8</sub> equivalent as either U<sub>3</sub>O<sub>8</sub>, UF<sub>6</sub>, or enriched uranium product (EUP). Offers are due April 30<sup>th</sup>. Another U.S. utility has offers due April 30<sup>th</sup> for just over 2.4 million pounds U<sub>3</sub>O<sub>8</sub> as U<sub>3</sub>O<sub>8</sub> or UF<sub>6</sub> with delivery in 2010-2013. A U.S. utility continues to evaluate offers for 3.5 million pounds U<sub>3</sub>O<sub>8</sub>e with delivery in 2012-2016. A non-U.S. utility is evaluating offers for two million pounds U<sub>3</sub>O<sub>8</sub> with delivery in 2008-2017. Another non-U.S. utility is evaluating offers for ten million pounds U<sub>3</sub>O<sub>8</sub> with delivery in 2009-2018. A third non-U.S. utility is evaluating offers for close to four million pounds U<sub>3</sub>O<sub>8</sub> with delivery in 2011-2017.

## Conversion & Enrichment

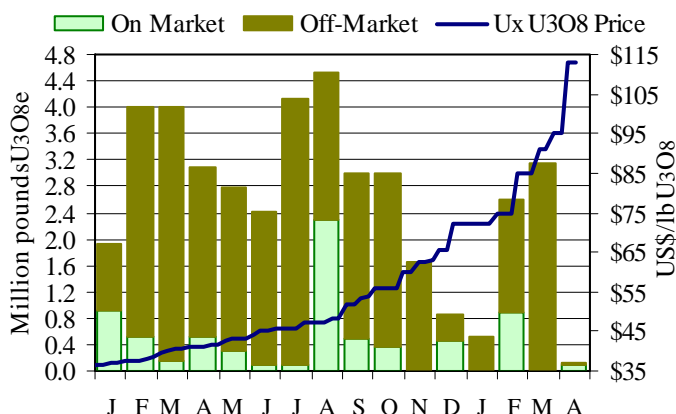
There is little to report in either the conversion or enrichment markets over the past week as no new demand or transactions are reported. In the term market, a U.S. utility has offers due April 30<sup>th</sup> for about 650,000 kgU as UF<sub>6</sub> with delivery potentially starting in 2008 and about 400,000 SWU as either enrichment services or contained in enriched ura-

Ux Price Indicators (€Equiv**)			
<b>Weekly (4/16/07)</b>		1 US\$ = .73816€	
<b>Ux U<sub>3</sub>O<sub>8</sub> Price</b>	<b>\$113.00</b>	<b>€83.41</b>	
<b>Mth-end (3/26/07)</b>		1 US\$ = .75020€	
<b>U<sub>3</sub>O<sub>8</sub></b>	Spot	<b>\$95.00</b>	€71.27
	Long-Term	<b>\$85.00</b>	€63.77
<b>Conversion</b>	NA Spot	<b>\$11.50</b>	€8.63
	NA Term	<b>\$12.25</b>	€9.19
	EU Spot	<b>\$11.15</b>	€8.36
	EU Term	<b>\$13.00</b>	€9.75
<b>U<sub>3</sub>O<sub>8</sub> Spot</b>	NA Price	<b>\$260.00</b>	€195.05
	NA Value*	<b>\$259.72</b>	€194.83
	EU Value*	<b>\$259.37</b>	€194.57
<b>SWU</b>	Spot	<b>\$138.00</b>	€103.53
	Long-Term	<b>\$137.00</b>	€102.78
<b>EUP</b>	NA Spot**	<b>\$3,514</b>	€2,636
	NA Term**	<b>\$3,248</b>	€2,437

niun product (EUP) covering four re-loads starting in 2009. A number of other utilities remain evaluating offers for term delivery. Several other utilities continue to evaluate offers for term enrichment delivery. A U.S. utility is out for about 2.4 million SWU with delivery starting in 2011. Another U.S. utility is seeking almost two million SWU with delivery starting in 2010. A non-U.S. utility is looking for 600,000 SWU with delivery starting in 2009. Another non-U.S. utility is seeking about 2.4 million SWU with delivery starting in 2011.

UxC Market Statistics					
Monthly (Apr)	Spot		Term		
	Volume	# Deals	Volume	# Deals	
U <sub>3</sub> O <sub>8</sub> e (million lbs)	W	2	0	0	
Conv. (thousand kgU)	0	0	0	0	
SWU (thousand SWU)	W	1	0	0	
2007 Y-T-D		Spot		Term	
	Volume	# Deals	Volume	# Deals	
U <sub>3</sub> O <sub>8</sub> e (million lbs)	6.4	25	38.3	15	
Conv. (thousand kgU)	1,073	12	W	2	
SWU (thousand SWU)	>130	3	5,256	7	
Key: N/A – Not available. W – Withheld due to client confidentiality.					
UxC Leading Price Indicators					
Three-month forward looking price indicators, with publication delayed one month. Readings as of Mar 2007.					
<b>Uranium</b> (Range: -17 to +17)	<b>+13</b> [unchanged]				
<b>Conversion</b> (Range: -16 to +16)	<b>+1</b> [unchanged]				
<b>Enrichment</b> (Range: -18 to +18)	<b>+10</b> [unchanged]				
<b>NuclearFuel Price Range</b>	<b>\$110.00-\$125.00</b>				
A forward two-week outlook.	As of 4/9/07 (US\$/lb)				

## Ux U<sub>3</sub>O<sub>8</sub> Price vs. Spot Volume by Method



## Washington DC

A teacher asked one of her pupils, "What's the nation's capital?" The reply was, "Washington D.C."

On being asked what the 'D.C.' stood for, the pupil added, "Dot com!"