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The Leading Source For Timely Market Information

# Will Kazakhstan be the New Saskatchewan?

In September 2002, Kazatomprom made a claim that Kazakh output would expand to 39 million pounds  $U_3O_8$  per year by 2030. By early 2003, it said that it planned to produce about 21 million pounds by 2010. At the time, this seemed like an incredible amount, considering that Kazakhstan then was producing on the order of 7 million pounds and the uranium price was hovering around \$10-\$11. Recently, Kazatomprom has reiterated the goal of achieving production of 39 million pounds, but this time has pegged this output to 2010.

While the earlier goals of 39 million pounds by 2030 and 21 million pounds by 2010 seemed terribly ambitious, they no longer appear to be so, although attaining production of 39 million pounds by 2010 is daunting, to say the least. However, in a way, one has to take this expansion potential more seriously now, given recent developments both in Kazakhstan and the market itself (price is now three times higher), and the overrid-

ing need for new production.

Before, Kazatomprom appeared to be just making a blanket statement about the production it expected to see: now it is identifying projects that would support this production. Just last week, it announced four new projects that would potentially add over 15 million pounds  $U_3O_8$  of annual production by 2012 (see  $Ux\ Weekly$ , October 10, 2005, p. 3)

The chart below shows Kazakh actual production from 1996 through 2004 and projected production from existing and planned centers – including the recently announced centers – from 2005 through 2013. This chart shows Kazakh production more than doubling over the 2007-2010 timeframe, a crucial period for production. As another point of reference, the planned expansion of Kazakh production between now and 2010 (as shown in the chart) is equivalent to the 24 million pounds of supply coming from Russian HEU feed.

Of course, the key question is whether

Kazakhstan can achieve these lofty goals. On the plus side, it is attracting a considerable amount of foreign investment and foreign interest. The world's three biggest suppliers – Cameco, AREVA, and RWE NUKEM, are now all involved in projects in Kazakhstan, as are the Russians. China has reportedly signed a large long-term contract. And,

Ux U<sub>3</sub>O<sub>8</sub> Price: (10/17/05) \$33.00 (Unch.)

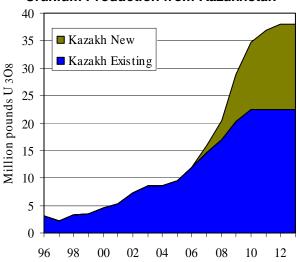
Ux LT U<sub>3</sub>O<sub>8</sub> Price: (9/26/05) \$33.00

the activity has only intensified over the past year. Recently, the Japanese trading house Itochu announced that it would buy about 8 million pounds  $U_3O_8$  from Kazatomprom over a ten-year period. Another recent development has been the announcement and the pending IPO concerning UrAsia (Ux Weekly, September 26, 2005, p. 5).

Still, even with all of this interest, a considerable amount of exploration, development drilling, and construction will have to take place in order for production to expand. The questions then become whether the Kazakh infrastructure and transportation system (which relies on transits through Russia) will be able to support this level of growth, and whether adequate financing will be available. Beyond this are considerations of the stability of the government and its international relations (including its nonproliferation regime). But, perhaps most crucial to the success of this expansion is the receptivity of individual utilities to this supply source. Thus, a number of challenges will have to be overcome before these goals can be obtained.

The New Saskatchewan? The comparison with Saskatchewan in the title is in no way meant to imply any similarity in geology, mining methods, and infrastructure between Saskatchewan and Kazakhstan. Indeed, the geology, mining methods, and infrastructure in Kazakhstan are much different than those in Saskatchewan. Rather, the analogy is one where a relatively unknown supply region, as was the case for Saskatchewan in the 1970s, emerges to become a

#### Uranium Production from Kazakhstan



major source of supply in a relatively short period of time. In this regard, there was little production in Saskatchewan in the 1970s, but in due course it became the number one source of supply in the world. As far as Kazakhstan is concerned, fifteen years ago it was barely on the radar as a supply source to the West and hence the market in general. Now, production is approaching 10 million lbs U<sub>3</sub>O<sub>8</sub> per year, making it the third largest uranium producing country in the world, up from 13<sup>th</sup> just eight years ago.

The chart below compares the growth of production in Saskatchewan with the recent and potential production from Kazakhstan. While this comparison isn't perfect, it does highlight the dramatic ascension of Saskatchewan and an even more abrupt upturn in Kazakhstan if all of these plans come to fruition. In the case of Saskatchewan, most of the growth was due to bringing megaprojects (Key Lake and then McArthur River) on line during what was primarily a down market cycle, while in the case of Kazakhstan it is the introduction of a greater number of smaller projects during a bull market.

Certainly, production in Saskatchewan will continue to grow, and it will not likely give up its number one spot for a while, if ever. Also, it is the case that production in Australia can expand considerably, depending to a large extent on what happens at Olympic Dam and how the federal and state policies toward ura-

nium production in Australia evolve. But at present, no country is poised to grow its production as quickly as Kazakhstan.

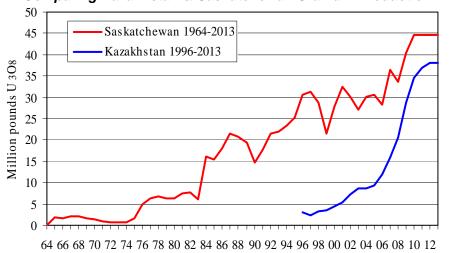
Production in Kazakhstan will continue to increase, providing an important source of supply to the world uranium market. However, the jury's still out as to whether the dramatic rate of increase sought is achievable or not. In any case, it is clear that whatever happens in Kazakhstan will have profound implications for uranium supply and the market itself. In fact, in the current supply-starved market, it may be the most important single factor today.

## News Briefs

### CIT asks for and receives suggestions on Enrichment Trade Case

On Wednesday, October 12, most parties to the enrichment trade case filed their statements advising the U.S. Court of International Trade (CIT) on suggested ways in which to proceed, given the recent reaffirmation of its March 2005 decision by the U.S. Court of Appeals for the Federal Circuit (CAFC). These filings were as a result of a September 28 Order in which the CIT had requested that parties to the case suggest a direction for the underlying antidumping and countervailing duty orders that is consistent with the CAFC decision. In that March 2005 CAFC decision of an interlocutory appeal of the CIT's

#### Comparing Kazakhstan & Saskatchewan Uranium Production



### Industry

#### Calendar

- October 16-19, 2005
   NEI International Uranium Fuel Seminar
   Nuclear Energy Institute <a href="http://member.nei.org/">http://member.nei.org/</a>
   Eldorado Hotel
   Santa Fe, New Mexico, USA
- November 7-8, 2005
   Carnegie Non-Proliferation Conf
   Carnegie Endowment
   <a href="http://www.carnegieendowment.org/">http://www.carnegieendowment.org/</a>

   Reagan International Trade Center
   Washington, D.C., USA
- January 24, 2006
   NEI Fuel Supply Forum
   Nuclear Energy Institute
   <a href="http://member.nei.org/">http://member.nei.org/</a>
   The Willard Inter-Continental
   Washington, D.C., USA
- April 4-6, 2006
   World Nuclear Fuel Cycle Conf.
   World Nuclear Association
   http://www.world-nuclear.org/
   Nuclear Energy Institute
   http://member.nei.org/
   Sheraton Hong Kong Hotel &
   Tower, Kowloon, Hong Kong

Details are available at: <a href="http://client.uxc-subscriber.com/data-industry/uxc-calendar.aspx">http://client.uxc-subscriber.com/data-industry/uxc-calendar.aspx</a>

so-called "general issues," which was reaffirmed in September 2005, the CAFC ruled that the provision of SWU constitutes a service that is not covered by the antidumping law. The March 2005 CAFC decision also addressed certain aspects of the French countervailing duty orders. While the general issues were on appeal at the CAFC, the CIT had placed a stay on the remaining case-specific appeals.

Regarding the antidumping and countervailing cases on French low-enriched uranium, Eurodif, COGEMA and COGEMA Inc. and the Ad Hoc Utilities Group (AHUG) filed together, while USEC took a separate position. The U.S. Government requested a sevenday extension and did not make a filing last week. In its joint statement, Eurodif/COGEMA/COGEMA Inc. and AHUG requested that the CIT remand the cases back to the U.S. Department of Commerce (DOC) and that DOC issue

its remand within thirty days of a CIT Order. USEC did not object to the remand back to DOC, but did not agree that DOC should eliminate all SWU transactions from the case without further discussion and analysis of certain issues. (USEC and the U.S. Government still have until December 8, 2005 to decide whether to appeal the CAFC decision to the Supreme Court, which USEC says is still under consideration.)

In the Urenco antidumping case appeals, Urenco, USEC and AHUG filed a joint statement suggesting that a remand back to DOC is not necessary and the CIT should proceed with its remaining appeals. In the Urenco countervailing duty case appeals, Urenco, USEC and AHUG also filed a joint statement noting that a remand to DOC is not necessary at this time because the issues related to this appeal were not addressed by the CAFC cases.

Once the CIT receives all recommendations, it is not under a deadline to act – it is up to the judges. However, until a remand is issued by DOC, all on-going administrative reviews will continue to be conducted. In addition, duty deposits will continue to be collected pending the final outcome of all appeals.

## All three reactors offline at APS' Palo Verde

On October 11, Arizona Public Service Co. took two reactors at the Palo Verde nuclear power plant offline because it was unable to prove to the Nuclear Regulatory Commission that emergency reactor cooling systems would be able to function properly. A third unit at the plant is undergoing refueling, and that unit has the same cooling system issue. The utility is not yet sure when the reactors will be able to resume operation, and NRC approval will be required before the units can restart. The combined capacity of Palo Verde's three 1,270 megawatt pressurized water reactors is 3,810 megawatts, making it the largest nuclear power plant in the U.S.

# Entergy informs NRC that it will seek license renewal for Vermont Yankee

Entergy has announced that it has informed the Nuclear Regulatory Commission that it plans to apply for a 20-year license renewal for its Vermont Yankee nuclear power plant. Vermont Yankee's current license is set to expire in 2012, and a license renewal would enable the plant to operate until 2032. Vermont Yankee's sole boiling water reactor currently has a capacity of 535 megawatts, but if Entergy can get NRC approval, it plans to boost the reactor's capacity by 20 percent to around 640 megawatts.

# Survey finds most residents living near U.S. nuclear plants would support new reactors

In a press release, the Nuclear Energy Institute has reported the results of a survey of opinions of 1,152 U.S. residents living within 10 miles of functioning nuclear power plants conducted by Bisconti Research Inc. and Quest Global Research Group. Eighteen residents at each of the nation's 64 nuclear power plants were interviewed by telephone for the survey. The survey excluded employees of utilities operating nuclear plants and their immediate families. Eighty-three percent of the respondents support nuclear power, and 76 percent would support the construction of a new reactor at the nearest nuclear power plant.

When asked if licenses should be renewed for nuclear plants that continue to meet federal safety standards, 90 percent of the respondents replied yes. When asked if they were confident that the utility operating the closest nuclear plant to them was able to safely operate the facility, 88 percent said yes. Eighty-five percent of the respondents assigned a high safety rating to their nearest nuclear power plant, while six percent assigned a medium safety rating, and eight percent assigned a low safety rating. Eighty-one percent of the re-

spondents agreed that utilities should begin preparations now in case new reactors are needed in the next decade. "The survey confirms what some utilities have seen in their own public opinion surveys and interactions in the community—that is, that most nuclear power plant neighbors support their local plant," said Bisconti Research's president, Ann Bisconti. "NIMBY (not in my backyard) does not apply at existing plant sites because close neighbors have a positive view of nuclear energy, are familiar with the plant, and believe that the plant benefits the community."

# Ontario will reportedly approve restart for two long-idled Bruce Power reactors

Citing anonymous sources, The Canadian Press has reported that the province of Ontario will grant final approval next week for a deal with Bruce Power that will lead to the restart of units 1 and 2 at the Bruce A nuclear power plant. In March, Bruce Power and the provincial government came to a tentative agreement regarding the restart but the government was not able to grant final approval for the agreement at that time because the two sides needed to determine how much the utility company would be paid for electricity from the reactors. Restarting units 1 and 2 at Bruce A would be more complicated than the previous six restarts at the Bruce nuclear complex, and it would likely be several years before the two 750 megawatt reactors would be ready to return to operation. The cost of refurbishing the units would probably be well in excess of C\$2 billion (~US\$1.69 billion).

## IEA wants Spain to rethink nuclear phase-out

The International Energy Agency (IEA) has asked Spain's government to reconsider its plan for a nuclear phase-out. The IEA fears that the eventual elimination of nuclear power in the nation would have negative consequences both environmentally and economically. "Spain's

demand for energy has grown rapidly and this growth shows no signs of abating. Spain's indigenous energy resources are limited, while weak crossborder gas and electricity interconnections and low electricity trade compared to total demand lead to a situation similar to that of an island... From a security of supply perspective, it is important that the government develops an analysis of the consequences of a nuclear phaseout," said an IEA press release issued on October 10. Spain's nuclear phaseout policy, which was put in place when a socialist government came to power last year, bans the construction of new reactors and limits lifespans of existing reactors to 40 years each, which will result in all of the nation's nuclear reactors closing by 2024 if the policy is not changed.

## China could build a new nuclear plant on island province

China National Nuclear Corp. is discussing the possibility of building a new nuclear power plant on the southern island province of Hainan with the province's government. Preliminary negotiations have already been completed and further talks on the issue are set for next year. An official with China National Nuclear Corp. has stated that there are ten potential nuclear plant sites being evaluated on the island. The plant's size would be determined by electricity demand. A plan by the province's government to develop its petrochemical and steel industries could lead to yearly increases in electricity demand of over 15 percent. Approval from China's National Development and Reform Commission would be needed before construction of the plant could begin. If the facility is built, its first reactors could begin operation sometime between 2011 and 2015.

### India wants Russia to build four more reactors at Koodankulam nuclear plant

In December, India's prime minister is scheduled to visit Russia, and coopera-

tion in nuclear energy is one of the issues to be discussed, according to the Daily Times Monitor. The Indian government has indicated that it wants Russia to help build four additional reactors at the Koodankulam nuclear power plant. Russia is already building two 1,000 megawatt reactors at Koodankulam. India wants Russia to directly build two more 1,000 megawatt reactors at Koodankulam and then India wants to use Russian technology to build another two 1,000 megawatt units. Russia supports the U.S. effort to lift nuclear sanctions on India. Approval from the Nuclear Suppliers Group would be needed before Russia would be willing to supply more nuclear reactors to India or resume supply of nuclear fuel.

# High oil prices forcing delay in construction of Taiwanese nuclear plant

Taipower has stated that construction of the twin-reactor Lungmen nuclear power plant in Taiwan is facing a three-year delay due to rising oil costs and a poorly performing domestic economy. A spokesman for Taipower stated that an internal assessment report has predicted that Lungmen will not open until 2009. Opening of the plant's first reactor was previously scheduled for July 2006, and the second reactor was supposed to open by July 2007. The plant was 62 percent complete at the end of September, but was supposed to have been 86 percent complete by that time. "The construction has been seriously affected by rising import costs of crude and raw materials and a local economic slowdown which has discouraged investment in the project," said the spokesman in a quote to Agence France-Presse. The Lungmen plant's two reactors will each have a capacity of 1,350 megawatts when complete.

### Prime Minister says further study needed before Thailand decides on nuclear power

According to a report from *Thais-News.com*, Thailand's prime minister,

Thaksin Shinawatra, wants the nation to continue studying the possibility of using nuclear power. A spokesman for Shinawatra stated that extensive studies would need to be conducted before Thailand decides whether to make use of nuclear power in order to reduce its dependence on oil.

### Venezuela expresses interest in Argentine nuclear technology

Argentine officials have stated that Venezuela has expressed interest in acquiring technology from the nation to help in the development of a nuclear power program. However, Venezuela's Minister of Energy, Rafael Ramirez has denied reports that it is seeking to buy a medium-sized nuclear reactor from Argentina. Instead, Ramirez stated that the two nations are negotiating a potential agreement for nuclear energy cooperation, and that it is now too early for those negotiations to include the sale of a nuclear reactor. "It's about technical exchange and studies; there is no concrete agreement for obtaining anything related to generating atomic energy," stated Ramirez in a quote to Venezuelan state television.

### U.S. Gov't approves due diligence on Silex technology by U.S. companies

Silex Systems Ltd has received official notification from the Australian Department of Foreign Affairs and Trade that the U.S. Government has given its authorization for a number of U.S. companies to proceed with classified due diligence studies of the SILEX uranium enrichment technology. The Silex technology is the only third-generation laser-based uranium enrichment process under development. The authorization was confirmed in a letter from the U.S. Secretary of State, Dr. Condoleezza Rice to the Minister for Foreign Affairs, Mr. Alexander Downer.

The approval follows a delay of over six months caused by an internal proc-

ess within the U.S. government related to consideration of classified due diligence activities in view of current nonproliferation policy.

Before due diligence can commence, the U.S. companies need to finalize arrangements with the U.S. Nuclear Regulatory Commission. However, these steps are procedural by nature and not related to any policy issues. Silex is hopeful that due diligence will commence in early November and be completed before Christmas. The company hopes to be in a position to announce the outcome of due diligence sometime in the first guarter of 2006.

In the event that due diligence activities are successful and a U.S. company wants to pursue commercial deployment of the SILEX technology in the U.S., the parties involved will liaise with the U.S. government regarding any policy-related conditions that need to be implemented in future development programs. Silex chief executive Michael Goldsworth said his company remains confident of its prospects in securing a new project partner for future commercial deployment of its technology.

## Cogema's mining of Koongarra in doubt

The Sydney Morning Herald reported October 10 that the Howard government has in effect ruled out Cogema's plan to mine uranium at Koongarra, which lies within the Kakadu National Park. Cogema faces a "very high hurdle" to expand uranium mining in an ecologically sensitive area in the World Heritage-listed Park, 250 kilometers southeast of Darwin, said Greg Hunt, the parliamentary secretary to the Minister for Environment and Heritage.

Mr. Hunt said that he strongly supports the use of uranium worldwide to reduce greenhouse gases, but acknowledged that Cogema would have to overcome World Heritage concerns before being allowed to mine its 14,540 t U<sub>3</sub>O<sub>8</sub> deposit at Koongarra near the spectacular Nourlangie Rock. Mr. Hunt describes

Nourlangie's landscape as "one of the park's great visual outlooks", and "perhaps the highest citadel of rock art and history" in Kakadu. Legally, he could not pre-empt any decision about Koongarra, but he said his job is to protect Kakadu's heritage. Cogema has been canvassing the support of Koongarra's traditional owners since a five-year moratorium imposed by traditional owners against the mine expired last April.

However, Mr. Hunt has said he would support Energy Resources of Australia's push to bring online Jabiluka as long as an agreement is reached with the traditional landowners of the area. The Mirrar people, the traditional owners of Jabiluka, recently told a parliamentary inquiry into uranium resources that they are worried about any further uranium mining on their land.

# Southern Cross commences drilling program at Honey-

Southern Cross Resources Inc. announced October 12 that it has com-

menced a drilling program at the Honeymoon project in South Australia to provide the data required to complete a commercial development plan. The program will focus on well field design to optimize recovery rates. Work is scheduled to be completed by the end of the first quarter of 2006.

The Honeymoon in-situ leach deposit contains an indicated reserve of 7.3 million pounds  $U_3O_8$  at an average grade of 0.12%. Since the announced merger with Aflease, Southern Cross CEO Mark Wheatley said the company is contemplating beginning production at Honeymoon as soon as late 2007. Recent plans called for the mine to produce 880,000 pounds  $U_3O_8$  per year over a period of six to eight years.

#### UEX reports best hole from Shea Creek

Cogema Resources Inc. has reported to UEX Corporation final results from the 2005 Spring/Summer drilling program at the Shea Creek project (Anne and Colette deposits), which is located in the

#### **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 U3O8 Price (Spot) includes conditions for delivery timeframe (6 months), quantity (100-300,000 pounds), and origin considerations, and is published weekly. The Ux LT U3O8 Price (Long-Term) includes conditions for escalation (from current quarter), delivery timeframe ( $\leq$  24 months), and quantity flexibility (up to  $\pm$ 10%) considerations. The **Ux Con**version 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 UF6 Price includes conditions for delivery timeframe (6 months), quantity (50-150,000 kgU), and delivery considerations. \*The Ux NA and EU UF<sub>6</sub> Values represent the sum of the component conversion and U<sub>3</sub>O<sub>8</sub> (multiplied by 2.61285) spot prices as discussed above and, therefore, do not necessarily represent the most competitive UF<sub>6</sub> spot offers available. The Ux SWU Price (Spot) considers spot offers for deliveries up to twelve months forward for other than Russian-origin SWU, while the Ux RU SWU Price pertains to the spot delivery of Russian-origin SWU. The Ux LT SWU Price (Long-Term) reflects base-escalated long-term offers for multi-annual deliveries. All prices, except for the weekly Ux U<sub>3</sub>O<sub>8</sub> Price, are published the last Monday of each month. (Units: U<sub>3</sub>O<sub>8</sub> = US\$ per pound, Conversion/UF<sub>6</sub>: US\$ per kgU, SWU: US\$ per SWU) 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.



The NuclearFuel and RWE NUKEM prices belong to their respective companies and are published with permission. Definitions of these prices are available from their original source.

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western Athabasca Basin in northern Saskatchewan. Hole SHE-114-11 is the first hole at Shea Creek to intersect significant intervals of both high-grade elevated sandstone-hosted mineralization and high-grade, deep basement-hosted uranium mineralization.

High-grade, elevated sandstone hosted uranium mineralization was intersected in SHE-114-11 between 678.5 and 692.2 meters, 22.0 meters above the unconformity, grading 5.83% U<sub>3</sub>O<sub>8</sub> over 13.7 meters, including 8.89% U<sub>3</sub>O<sub>8</sub> over 8.3 meters, which includes 17.05% U<sub>3</sub>O<sub>8</sub> over 3.5 meters. Meanwhile, highgrade, deep basement-hosted uranium mineralization was intersected between 816.1 and 853.8 meters at a depth of 101.9 meters below the unconformity, grading 5.40% U<sub>3</sub>O<sub>8</sub> over 37.7 meters, including 7.03% U<sub>3</sub>O<sub>8</sub> over 26.6 meters, which includes an interval of 10.02% U<sub>3</sub>O<sub>8</sub> over 14.5 meters, which also includes 25.46% U<sub>3</sub>O<sub>8</sub> over 4.0 meters.

Drilling has concluded for the season and the summer drilling camp is presently being demobilized. Drilling from pilot holes SHE-114 and SHE-115 is scheduled to commence in early 2006.

## Energy Metals gains NI 43-101 compliance for Aurora project

Energy Metals Corporation (EMC) reported Oct. 12 that it received a National Instrument (NI) 43-101 compliant technical report, prepared by Dr. Greg Myers, on the Aurora project located just inside Oregon some three miles from the Nevada border. Dr. Myers calculated an indicated resource of 17.69 million tons at an average grade of 0.0518% U<sub>3</sub>O<sub>8</sub>e, or 18.3 million pounds U<sub>3</sub>O<sub>8</sub>, using a 0.03% U<sub>3</sub>O<sub>8</sub>e cut-off.

## IUC/JNR complete Moore Lake drilling program

International Uranium Corporation (IUC) and JNR Resources Inc. have announced that the 2005 summer diamond drilling program on the Moore Lake uranium project, located in the Athabasca Basin of northern Saskatchewan,

has been completed.

The companies said that the results from the first 16 holes of the program were very encouraging, as they successfully extended the strike length and width of the main high-grade mineralized lens at the Maverick Zone and demonstrated that the mineralizing system continues to the north and northeast within the Nutana and Maverick Northeast grids. Samples of the remaining drill holes have been received by the SRC Laboratory and results will be reported as they become available.

The two companies also announced that a 3,600-kilometer airborne EM and magnetic survey is underway on the Lazy Edward Bay, South Dufferin and Kelic Lake projects.

# Standard Uranium aims to become South Texas ISL producer

Standard Uranium Inc. (URN) announced October 11 that it signed a binding letter of intent (LOI) with privately held Everest Exploration Inc. (EEI) and Everest Resources Company (ERC) outlining the terms for a 99%-1% URN-EEI joint venture that will position the company to become a South Texas in-situ leach (ISL) uranium producer.

Through 99% ownership in the joint venture, Standard plans to use the existing Hobson mill, located near Hobson, Texas, to produce a saleable U<sub>3</sub>O<sub>8</sub> product from ISL solution mining of the Palangana property located in Duval County, Texas. The joint venture will control the Hobson plant, Hobson satellite production facilities, Palangana leases and an extensive Texas uranium exploration database.

Under terms of the LOI, Standard will make a cash payment to EEI of US\$4.5 million for the permitted Hobson processing plant, the associated satellite facilities, and the Texas database. EEI will maintain a 1% participating interest in the joint venture and will be the nominal operator of the production facilities.

EEI will receive a net production royalty of US\$0.75 per pound on the first 8 million pounds  $U_3O_8$  produced from the Hobson plant.

Current plans are to increase the Hobson plant's annual production capacity from 750,000 to 1 million pounds U<sub>3</sub>O<sub>8</sub>. The 6,200 acre Palangana property is located about 4 miles north of Benevides, Texas in Duval County. An EEI internal evaluation (1980) yielded an estimated historic ISL resource of 4.84 million pounds U<sub>3</sub>O<sub>8</sub> at an average grade of 0.182% U<sub>3</sub>O<sub>8</sub>. Upon closing of the transaction, the joint venture plans to begin resource definition drilling on the property. Production area permitting will begin once a sufficient reserve has been delineated by the planned exploration and delineation drill program. Upgrading and modernization of the Hobson production plant and satellite facilities will be ongoing.

## NNSA breaks ground on MOX facility

The National Nuclear Security Administration's (NNSA) plutonium disposition program took a leap forward on October 14 with the beginning of site preparation for its Mixed Oxide (MOX) Fuel Fabrication Facility at the Savannah River Site (SRS). NNSA Administrator Linton F. Brooks and U.S. Senator Lindsey Graham led a group of U.S. and Russian dignitaries in turning the first shovels of earth at the MOX facility site at SRS, located in F-Area.

"Starting site preparation in advance of construction for the MOX facility will bring us one step closer to disposing of large quantities of weapon-grade plutonium in the United States and Russia," said Brooks. NNSA's plutonium disposition program aims to eliminate a total of 68 metric tons of surplus weapon-grade plutonium both in the United States and in Russia, and is based on a 2000 non-proliferation agreement between the two countries. Both countries will dispose of their plutonium by converting it to MOX fuel for use in existing nuclear reactors.

### The Market

#### Uranium

While no new demand or transactions are reported over the last week, an additional deal, awarded earlier in the month, has been booked, bringing this year's spot volume to 23.5 million pounds under 70 deals. A few buyers remain active in the market seeking near-term delivery; however, overall activity has leveled off over the past month. While activity has been more limited over the past three and a half months (see chart below), the spot price has responded to upward pressures (part of which came during a slight increase in activity during September) and offers have increased 12% over the last nine-week period. A number of market participants, both on the buy and sell sides, have been surprised at this latest round of increases.

The spot market is not to the point where supply is exceptionally limited and no disruptions or supply shortages are expected over the next year. So what is driving the spot price? Part of the upward pressure on the spot market has been the ever increasing activity on the

term market (discussed below). Another aspect of the recent movement is perception. However, as the spot price is at least temporarily equal to the reported term price, some participants think that the spot price could now level off, although trending upward by the end of the year. Current offers remain available at last week's price and therefore the Ux U<sub>3</sub>O<sub>8</sub> Price is unchanged for the week at \$33.00 per pound.

Looking at the term activity, a number of buyers are currently either awaiting or evaluating offers totaling over 18 million pounds U<sub>3</sub>O<sub>8</sub>e. Over the past week, a few more deals have been verified as awarded earlier this year, bringing the annual term volume to just over 95 million pounds U<sub>3</sub>O<sub>8</sub>e under 34 awards. Based on current and expected activity, term volume is now projected to exceed 200 million pounds, and, depending on award timing, could approach even higher levels. Looking into next year, term volume is expected to continue at high levels (exceeding 100 million pounds). Although half of this year's potential volume, it will likely exceed the previous record high volume set in 1996, the last price peak in over a decade.

Ux Price Indictors (€Equiv**)							
Weekly (10/17/05) 1 US\$ = .82821€							
Ux	U₃O <sub>8</sub> Price	\$33.00	€27.33				
Mth-end (9/26/05) 1 US\$ = .82829€							
U <sub>3</sub> O <sub>8</sub>	Spot	\$31.25	€25.88				
	Long-Term	\$33.00	€27.33				
Conversion	NA Spot	\$11.50	€9.53				
	NA Term	\$12.00	€9.94				
	EU Spot	\$11.50	€9.53				
	EU Term	\$12.75	€10.56				
UF <sub>6</sub> Spot	NA Price	<b>\$92.50</b>	€76.62				
	NA Value*	\$93.15	€77.15				
	EU Value*	\$93.15	€77.15				
SWU	Spot	\$114.00	€94.43				
	Long-Term	\$112.00	€92.77				
	RU Spot	\$91.00	€75.37				

#### **Conversion**

Even though term conversion volumes have not been as impressive as those seen in uranium, conversion numbers did take a jump over the past week as deals were added to the database. Total term volume is now reported at almost 37 million kgU under 25 contract awards. Combined with current and expected activity for the year, term volume could exceed 50 million kgU this year, posting the second highest year on record after 2003's record 82 million kgU following several market disruptions.

UxC Market Statistics							
Monthly (Oct)	Spot		Term				
Worthing (Oct)	Volume	# Deals	Volume	# Deals			
U <sub>3</sub> O <sub>8</sub> e (million lbs)	0.7	3	0	0			
Conv. (thousand kgU)	0	0	0	0			
<b>SWU</b> (thousand SWU)	0	0	0	0			
2005 Y-T-D	Spot		Term				
2003 1-1-0	Volume	# Deals	Volume	# Deals			
U <sub>3</sub> O <sub>8</sub> e (million lbs)	23.5	70	95.3	34			
Conv. (thousand kgU)	6,854	40	37,759	25			
<b>SWU</b> (thousand SWU)	440	7	29,720	19			

 $\label{eq:Key: N/A-Not available. W-Withheld due to client confidentiality.}$ 

#### **UxC Leading Price Indicators**

Three-month forward looking price indicators, with publication delayed one month. Readings as of Sep. 1, 2005.

Uranium (Range: -17 to +17)	+7 [unchanged]
Conversion (Range: -16 to +16)	+3 [unchanged]
Enrichment (Range: -18 to +18)	+6 [unchanged]

<b>NuclearFuel</b> P	\$32.40-\$34.00	
<b>RWE NUKEM</b>	Spot Uranium (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$30.25-\$31.00
Price Ranges	Spot Conversion (US\$/kgU)	\$11.25-\$11.50
As of 9/30/05	Spot SWU (US\$/SWU)	\$91.00-\$108.00

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



While I was employed by a private corporation and assigned to the space-shuttle program, my job included ordering supplies. One of the engineers asked me to get a new dictionary for him. The request form said, "State reason this item is needed," so I asked him why he wanted one.

I expected his answer would be "My old copy is lost" or "The cover is falling off." Instead he replied, "My edition defines spaceship as an 'imaginary aircraft." He got his new dictionary.