

August 1, 2022

Executive Director's Message

To increase the value of a SIMSA membership, while simultaneously reducing costs, SIMSA is pursuing MOUs which will see us partner with other agencies. These agencies specialise in an area that SIMSA should participate in, but we cannot due to time/staff constraints. And given they already do a great job in their respective space; we'll use them as our arm/department in those areas.

Now that the dust has settled, we can announce that there are 4-bronze sponsorships open for the 2022 (8th Annual) Saskatchewan Suppliers' Energy Forum (formerly known as the Saskatchewan Oil and Gas Supply Chain Forum) to be held on September 28th, 2022 in the Delta Hotel in Regina. This event will be in-person. The tradeshow is now sold out, but there are still event tickets available [HERE](#).

There will be a small vendor tradeshow (approximately 38 booths), presentations by energy company procurement persons, networking sessions, and another great speed-networking session. Confirmed presenters already include Crescent Point Energy, Federated Co-operative Ltd., TC Energy and more to be announced! There will also be an SMR portion to the event with the Organization of Canadian Nuclear Industries presenting on opportunities in the sector and required accreditations. GE Hitachi and X-energy will also have procurement persons in attendance.

On July 26th, SIMSA announced that we have [signed an MOU with X-energy](#). This MOU is similar to our recently announced MOUs with the [Organisation of Canadian Nuclear Industries \(OCNI\)](#) as well as [GEH SMR \(GE Hitachi\)](#), which will see our member database become a central fixture within the development of SMRs in Saskatchewan and other regions.

The X-energy MOU will see the two parties explore opportunities to build supply chain capacity in Saskatchewan, helping the province capitalize on the potential benefits of the Xe-100 Generation IV nuclear reactor technology.

It is important to note that while the X-energy Xe-100 was not selected by SaskPower for their first SMR(s), this does not mean that other installations are not possible. The Xe-100 is a High Temperature Gas-Cooled Reactor developed on decades of research, development, and operating experience. The Generation IV technology is scalable to meet demand, with one unit generating up to 80 megawatts of electricity from 200 megawatts of thermal power. Efficiently combining high-temperature 565 Celsius steam and power production, the Xe-100 can directly support heavy industry including oil sands operations, mining applications, and other industrial processes.

Further, X-energy and Ontario Power Generation (OPG) announced a collaboration to pursue clean energy opportunities that will reduce heavy industry carbon emissions. Under the agreement, X-energy and OPG will pursue opportunities to deploy Xe-100 advanced reactors in Ontario at industrial sites and identify further opportunities throughout Canada. And, in 2021, the U.S. Department of Energy selected the Xe-100 for the Advanced Reactor Demonstration Program, appropriating nearly US\$1.2 billion to support the delivery of a four-reactor Xe-100 plant in the United States as early as 2028.

“We’re proud of our relationship with SIMSA and this important collaboration,” said Katherine Moshonas Cole, President, X-energy Canada. “Saskatchewan’s industrial and mining supply chain has immense capability, which can be utilized and expanded to support the forthcoming SMR industry. From the start, X-energy has been committed to early engagement with local industry to ensure their inclusion in our projects. We look forward to continuing our work with Saskatchewan’s supply chain as we bring our net zero technology to Canada.”

Finally, as we stated in previous months, to effectively tell our story, and to have them follow our requests, the Federal and Provincial governments need to be told how many voters and dollars we represent. We have not completed a thorough survey of this since 2019 and our membership has grown by 50% since then. As such, we are now completing a member survey to secure this data - only the primary contact from each member company has been emailed the survey. The data received will only be disclosed as a total, not individually. The results should be in the September 1st SIMSA newsletter.

Eric

Members’ News

[SIMSA Hosts “It’s Time to Rise” Fundraising Event for now Saskatchewan Polytechnic Campus](#)

[Cross Country Opens Doors to Regina Branch](#)

[Team Power Solutions Employee Mentors Youth at EYES Camp](#)

[Team Power Solutions Loads Completed E-House Out for Shipment](#)

Sector News

[Cameco's 2nd quarter results](#) includes a detailed worldview of the nuclear market. The following are direct excerpts from the "Second quarter market update" section – pages 7 – 10.

The uranium spot price closed the second quarter at about \$50 (US) per pound U3O8 following significant appreciation in the first quarter of 2022. Unrest in Kazakhstan in early-January had an impact on the market. Security of supply concerns were amplified with the Russian invasion of Ukraine in late-February.

This geopolitical uncertainty has led many governments and utilities to re-examine supply chains and procurement strategies that are reliant on nuclear fuel supplies coming out of Russia. Currently, the global nuclear industry relies on Russia for approximately 14% of its supply of uranium concentrates, 27% of conversion supply and 39% of enrichment capacity. The geopolitical situation driven by Russia's invasion of Ukraine has created transportation risk in the region. Sanctions on Russia, government restrictions, and the restrictions on and cancellations of some cargo insurance coverage create uncertainty about the ability to ship material from Central Asia.

As a result of the geopolitical uncertainty, we have seen pressure on prices in all segments of the nuclear fuel cycle. The uranium spot price is up over 18% and the long-term price is up 20% since the beginning of the year. The conversion spot price is up 103% and the long-term price is up 46%, while enrichment spot prices are up 55% this year.

Despite the recent increase in uranium prices, years of underinvestment in new production capacity has shifted risk from producers to utilities. In addition to the decisions many producers, including the lowest-cost producers, have made to preserve long-term value by leaving uranium in the ground, there have been a number of unplanned supply disruptions related to the impact of the COVID-19 pandemic and associated supply chain challenges on uranium mining and processing activities. In addition, not only are there the transportation risks as a result of geopolitical uncertainty, the risk of transport disruptions for Class 7 nuclear material continues due to global supply chain challenges. Uranium is a highly trade-dependent commodity. Adding to security of supply concerns is the role of commercial and state-owned entities in the uranium market, and trade policies that highlight the disconnect between where uranium is produced and where it is consumed. Nearly 80% of primary production is in the hands of state-owned enterprises, over 70% comes from countries that consume little-to-no uranium and nearly 90% of consumption occurs in countries that have little-to-no primary production. As a result, government-driven trade policies and, more recently, actions taken in response to Russia's invasion of Ukraine, can be particularly disruptive for the uranium market.

According to the International Atomic Energy Agency (IAEA), there are currently 439 reactors operating globally and 54 reactors under construction. With a number of reactor construction projects recently approved, and many more planned, the demand for uranium continues to improve. There is growing recognition of the role nuclear must play in providing safe, affordable, carbon-free baseload electricity that achieves a low-carbon economy while being a reliable energy source to help countries diversify away from Russian energy. Further evidence of the important role for nuclear in the clean energy transition is the ongoing energy crisis due to natural gas shortages, soaring prices and a lack of diversified supply or reliance on state owned supply. These factors are highlighting that energy policy needs to balance three main objectives: providing a clean emissions profile; providing a reliable and secure baseload profile; and providing an affordable levelized cost profile. Momentum is also building for non-traditional commercial uses of nuclear power such as the development of small modular reactors (SMRs) and advanced reactors, with numerous companies and countries pursuing projects. Longer term, these projects have the potential to open up new fuel cycle opportunities and demand for uranium. In the medium-term, reactor life extensions are adding demand and in the near-term unplanned demand has come from junior uranium companies and financial funds purchasing in the spot market. Policy decisions to support the continued operation of existing reactors also increasing near-term demand.

Upcoming Events

Register for Upcoming Events [HERE](#)

- **Lunch & Learn: NRC IRAP – September 8, 2022**
An overview on NRC IRAP and how they can help small and medium-sized businesses grow through innovation.
- **Saskatchewan Suppliers Energy Forum – September 28, 2022**
The 8th Annual Saskatchewan Suppliers Energy Forum will be held at the Delta Hotel in Regina, SK. Crescent Point Energy, Federated Co-op, and TC Energy are already confirmed as attendees, more are expected. SMRs will also be included in the event.
- **Future Mines Event – November 23, 2023**
Save the date!
- **Saskatchewan Mining Supply Chain Forum – April 18 & 19, 2023**
Save the date!

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