

December 1, 2023

Executive Director's Message

There have been a few comments to our Board about event costs and SIMSA's reserve funds policies. So, to be transparent, here is how things are and why.

There have been no SIMSA membership fee increases since we began over 10 years ago – yet the published inflation/CPI increase over that time was 28.55%, with 2024 expected to be an additional 3% or more. Membership fees arguably should have seen at least a 30% increase to cover inflation and then more for expanded services, but have not.

We are offering considerably more value to membership since we began, such as:

- 1) Free access to Nuclear Specialists and Industrial Concierge
- 2) Database use by BHP, FCL, and others
- 3) Roundtable events
- 4) Newsletter and email news updates
- 5) International events
- 6) Nuclear power events

We had almost no rent for first 9 years, but now do.

Our Mining Forum tradeshow sold-out in 2-weeks plus sponsorship sold-out in 24-hours – so the supply/demand/value seems to be balanced. The Forum is operated jointly between SIMSA, The Saskatchewan Mining Association and the Ministry of Trade and Export Development, with all decision – including pricing – being a group decision. The booth prices in 2024 are \$1,100 which is low when compared to:

- 1) Saskatchewan Oil Show will be \$2,000 in 2024
- 2) MEMO was \$3,000 in 2023
- 3) Global Energy Show will be \$6,339 in 2024

At the Mining and Energy Forums, as well as Roundtable events, the hundreds of mining and energy company employees enter for free and our members pay for those persons' costs within their ticket fee. By doing this, there are more selling opportunities at our events.

On another front, SIMSA revenues are 27% from events, 33% from membership fees, and 40% from Government funding. Having Government funding as our largest source of revenues limits how proactive we can be with Government lobbying work, as it limits how strong of statements we can make. It also limits our planning beyond the typical 2-year funding terms and is a somewhat precarious situation to be in.

To become independent of Government funding and still offer the same member benefits, we would need to increase both member fees and event-ticket costs by 60%

Best practice for non-profit groups and aligning with regulations, is having cash reserves are in the amount of “1-year’s minimal operations costs.” We have been working towards this amount and will have accrued it by the end of 2024. Any amount beyond this must be set-aside for a specific project or used towards the benefit of SIMSA members.

The 16th Annual Saskatchewan Mining Supply Chain Forum will take place on April 17 and 18, 2024 at Prairieland Park in Saskatoon, SK. There will be 25% more time for the tradeshow this year! But even with this, the tradeshow sold-out on November 21st at 2:00 pm. This is 2-months earlier than last year and aligns with selling-out sponsorship within 24-hours. The mining companies expect to use 12 booths this year, which 50% more than last year – which is great! They have all spoken-up early this year that they want in.

We have created a waiting list for tradeshow booths, as there may be cancellations.

The high-level 2024 MSCF Draft Agenda is:

- Tuesday, April 16
Tradeshow set up (no set up permitted on April 17)
- Wednesday, April 17
Speakers will be 8:00 - 12:00 (subject to change)
Tradeshow open 10:00 – 6:00
- Thursday, April 18
Speakers will be 8:00 - 12:00 (subject to change)
Tradeshow open 10:00 - 4:00

Finally, as part of our ongoing and year-end house keeping, we will be sending a 1 or 2 question survey on membership information. Expect this item in the next week or so.

Member's News

[Magna IV Saskatoon Branch Powers Up with Expansive Move, Fueling Growth and Client Experience](#)

[Buffalo River Enterprises Acquires Majority Stake in Mining Industry Leader, Mainstay](#)

[Saskatchewan Celebrates Manufacturing Week](#)

[MacLean BEV Update, a made in Canada solution](#)

[Prairie Machine featured on ThinkSask Saskatchewan Spotlight](#)

[Haztech Introduces Convenient Mobile Lab Services in Regina, Saskatoon and Moose Jaw](#)

[PAMI's Research & Development Hub Still Open For Business – A Post Pandemic Triumph](#)

[Mike's Hydraulics "Hydraulitecs" featured on ThinkSask Saskatchewan Spotlight](#)

[Government of Saskatchewan funds Saskatchewan Research Council for Microreactor Research](#)

[RAYHAWK Launches Animation Showcasing Autonomous Railcar Loading Technology](#)

[Xtended Hydraulics & Machine sees 'huge' opportunity ahead](#)

Advocacy

Tom Kishchuk's preliminary work as SIMSA's Nuclear Specialist, has identified what nuclear pieces can/should be manufactured in Saskatchewan and now we need to know what "the playing field" is before encouraging our members to enter the sector.

So, we have asked the developers the key questions:

1. Do the trade agreements apply to reactor builds?
2. Is there labour force development funding?
3. Are there local spending targets?

We have meeting with Federal Government persons to uncover what the new Green Bond Program items means for SIMSA members. They wrote on page 100 of the new budget document [HERE](#), the following:

To align Canada’s Green Bond Framework with Canada’s *2030 Emissions Reduction Plan*, updated taxonomies, international best practices and evolving investor preferences, the Government of Canada is releasing an updated Framework that includes certain nuclear energy expenditures. Specifically:

- investments in new reactors;
- refurbishment of existing facilities;
- research and development; and,
- some investments in Canada’s nuclear supply chain

SIMSA hosted two roundtable events in November – one with [BHP](#) and another with [Federated Co-operative Ltd.](#) Both of these members-only-events saw billions-of-dollars of opportunities discussed with ample time for networking with key persons in the information and decision processes.

As with other SIMSA roundtable events, there were presentations by key persons in the areas of procurement, project teams, and executives, as well as ample networking time. BHP and FCL employees were seated one per table around the room and SIMSA members were allowed to sit were they wanted for the day-long event. Half of the time was set aside for free flow networking.



BHP event with SIMSA – November 7, 2023



FCL event – November 27, 2023

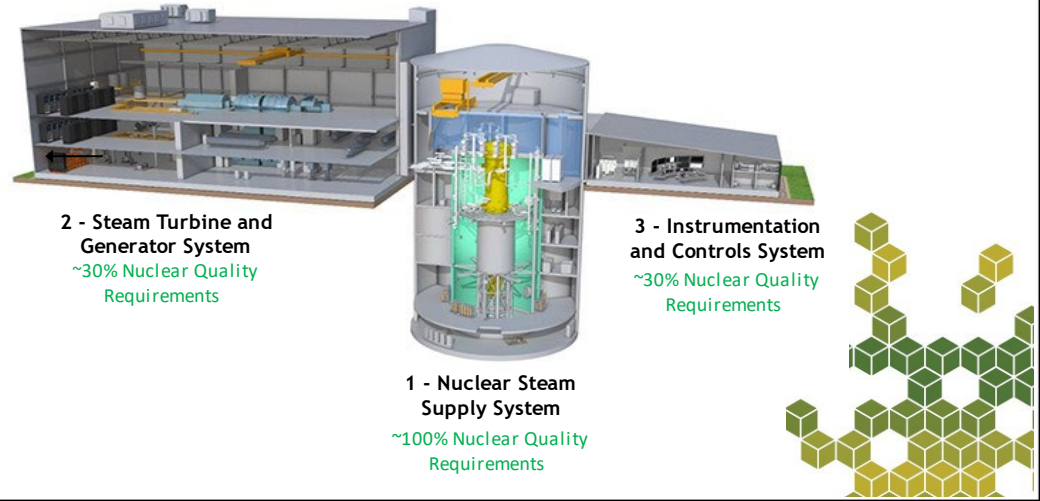
Nuclear

Nuclear Quality Certifications

A focus of Small Modular Reactor (SMR) designs has been the simplification of the plant designs to drive reductions in the overnight capital costs, and to shorten the cycle times for manufacturing and construction. The earliest nuclear power plants, constructed in the 1950's, were also small, typically in the 60 MWe size range. Over time nuclear power plant capacities grew to over 1,600 MWe in order to achieve economies of scale. As the size of the nuclear power plants grew, so did the amount of the plant systems and components that were specified to be manufactured and constructed in accordance with nuclear quality standards. Unfortunately, this “quality scope creep” has resulted in higher than needed manufacturing and construction costs for recent large nuclear builds.

There are various projects underway to look for ways to reverse this “quality scope creep”. A highly respected organization in the US, the Electric Power Research Institute (EPRI), is currently exploring the technical basis of reducing the number of plant components that require expensive nuclear quality standards. The purpose of this project is to “right-size” the quality standards that are applied in order to build nuclear power plants that are more in line with construction costs for natural gas fired power plants.

Nuclear Power Plant - Nuclear Quality Requirements



For the GE Hitachi BWRX-300, vendor design reviews are ongoing with the Canadian Nuclear Safety Commission (CNSC) to determine specifically which standards (CSA and other) will be applied to what portions of the power plant. A rough estimate of the division of nuclear quality standard vs non-nuclear quality standard is shown in the graphic above. Ultimately, it is the Canadian regulator (CNSC) that will decide on the nuclear quality requirements for every system and component in the power plant.

Standards that will be used to specify requirements for Quality Assurance programs for supplier's participating in the Canadian nuclear power industry are listed below. Standards at the top of the list are generally less comprehensive in requirements than the standards closer to the bottom of the list.

ISO 9001 – Quality Management System Requirements

CSA N299.4 – Quality Assurance Program Requirements for the Supply of Items and Services for Nuclear Power Plants, Category 4

ASME Boiler and Pressure Vessel Code – Section III – Division 1 - Rules for Construction of Nuclear Facility Components and Supports (that are intended to produce and control the output of thermal energy from nuclear fuel)

ASME Boiler and Pressure Vessel Code – Section III – Division 2 - Rules for Construction of Nuclear Facility Concrete Containments (that are designed to withstand internal pressure, temperature and other loads)

ASME Boiler and Pressure Vessel Code – NQA-1 – Quality Assurance Requirements for Nuclear Facility Applications

CSA N299.3 – Quality Assurance Program Requirements for the Supply of Items and Services for Nuclear Power Plants, Category 3

CSA N299.2 – Quality Assurance Program Requirements for the Supply of Items and Services for Nuclear Power Plants, Category 2

CSA N299.1 – Quality Assurance Program Requirements for the Supply of Items and Services for Nuclear Power Plants, Category 1

Industrial Concierge Update

Well, we've hit December and it seems SIMSA is busier than ever. We've had a lot on the go lately, namely our Advanced Manufacturing Nuclear Technical Advisory committee, to which we've had our second meeting on November 23rd, where some great discussions were had around the expectations and opportunities in Nuclear.

On that note, we have a sold out workshop on December 6th, where attendees will learn about the aforementioned needs and opportunities in the Nuclear space. If you are interested in attending, we have some room online for those who weren't able to secure a ticket.

As we progress through the study that was the impetus for the formation of the TAC (to be released early 2024), we should see the DEMOday 2024 innovation needs shortly, as well as a Hackathon with students from the University of Saskatchewan in January.

Moving on to other opportunities for members to leverage SIMSA for your business needs (free with membership), there are a few services I'd like to mention as part of SIMSA's regular offerings:

1. SIMSA Connections – Have an innovative idea? Reach out to me or SIMSA and I'll put you in contact with relevant stakeholders in the industry so you can pitch your innovative product/service. On that, as I mentioned last newsletter, I will be putting out a newsletter to people to showcase innovative products and services to mining stakeholders directly.
2. ESG Support – As the mining industry undergoes external investor pressures, the markets are increasingly looking to resource companies and their supply chains (you) to ensure a company's social license is not at risk. If you are struggling to wrap your head around how to prepare for the requirements, please reach out and SIMSA can assist you in understanding and creating an ESG program to meet the needs of industry.
3. Advocacy – Did you miss an RFP from a resource company and haven't had any luck in pursuing the lead yourself? Escalate to SIMSA and we can assist in connecting you with the right people to address the problem.

4. Opening new markets – such as Nuclear or Kazakhstan. If you are interested in supplying to these markets, it's a good idea to get involved today to determine if the products/services you sell require certification, as well as connect with the industry and build future supply relationships.

Happy holidays!

James

Sector News

I think this nuclear power thing might catch-on. Since our last SIMSA Newsletter:

1. Uranium prices hit a 15-year high at over \$80/lb – see [HERE](#).
2. Cameco closed the deal to acquire 49% of Westinghouse – see [HERE](#).
3. Nuclear power items are now in the Green Bond pool - see [HERE](#).
4. SaskPower announced a deal with OPG and its subsidiary Laurentis – see [HERE](#).
5. NexGen rang the opening bell at the New York Stock Exchange – see [HERE](#).
6. Uranium sector is scrambling to fill supply gaps – see [HERE](#).
7. Saskatchewan to Promote Nuclear Advantages in France – see [HERE](#).
8. SRC and Westinghouse announced a funding deal with the province – see [HERE](#).

The 8th item above detailed several key items, which will see the first-ever eVinci™ microreactor in Canada – be in Saskatchewan. Westinghouse and SRC signed an MOU last year to jointly develop a project to locate an eVinci microreactor in Saskatchewan to further explore industrial, research and energy use applications.



From left to right: Jon Ball President eVinci Technologies, Eddie Saab President Westinghouse Electric Canada, Mike Crabtree CEO SRC, Scott Moe Premier of Saskatchewan, Tim Gitzel President and CEO Cameco, Jeremy Harrison Minister of Trade and Export Development (SK). Photo from the SRC funding announcement event.

At [the announcement event](#), Premier Scott Moe of Saskatchewan said \$80 million in government funding will support licensing and other work for the project, which is scheduled to be completed in 2029, subject to licensing and regulatory processes. The location of the eVinci microreactor will be determined as the project progresses.

“This project has the opportunity to be transformative for our economy, industry and communities,” said Premier Moe. “Microreactors provide a custom solution for Saskatchewan’s unique energy needs.”

“Our vision is to see the first eVinci microreactor in an industrial application and lay the groundwork for many more projects in the future,” President and CEO of SRC Mike Crabtree said. “What we learn through this project will prepare SRC to assist communities and industries in future projects.”

“Westinghouse is proud to be working with the team at SRC on this vital project, and for the support from Premier Moe and the government of Saskatchewan,” said Patrick Fragman, President and CEO, Westinghouse. “The eVinci battery technology is the perfect fit for Saskatchewan since it is fully transportable. It also provides carbon-free electricity and heat, uses no water and can be completely removed from site after operating continuously for eight years or more.”

The eVinci microreactor has very few moving parts, working essentially as a battery, providing the versatility for power systems ranging from several kilowatts to 5 megawatts of electricity, delivered 24

hours a day, 7 days a week for eight-plus years without refueling. It can also produce high temperature heat suitable for industrial applications including alternative fuel production such as hydrogen, and has the flexibility to balance renewable output. The technology is 100 percent factory built and assembled before it is shipped in a container to any location.

Upcoming Events

Register for Upcoming Events [HERE](#)

- **Workshop - Advanced manufacturing for Nuclear – December 6, 2023**
SOLD OUT! SIMSA will be hosting a workshop on advanced manufacturing techniques and how they can be leveraged for small modular reactors.
- **How to Use Your SIMSA Membership – December 19, 2023**
Learn how to utilize the benefits of your SIMSA membership.
- **DEMOday 2024 Launch Event – January 18, 2024**
Meet with representatives from BHP, Cameco, Mosaic and Nutrien to learn about the industry's problems and needs.
- **Saskatchewan Mining Supply Chain Forum (MSCF) – April 17 & 18, 2024**
The 16th Annual Saskatchewan Mining Supply Chain Forum will take place on April 17 and 18, 2024 at Prairieland Park in Saskatoon. Tradeshow and sponsorship now sold out!
- **SIMSA AGM – May 15, 2024**
Save the Date! The SIMSA AGM will be on May 15, 2024 at Prairieland Park in Saskatoon.
- **Saskatchewan Suppliers Energy Forum (SSEF) – October 2, 2024**
Save the Date! The 10th Annual Saskatchewan Suppliers Energy Forum will be on October 2, 2024 at the Delta Hotel in Regina.

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