

March 1, 2022

Executive Director's Message

SMRs (small modular reactors) are our next big opportunity. But for SIMSA members to realise business from these, a few things need to be considered.

The key issue is that the first reactor in Saskatchewan is actually built; and is built safely, on time, and on budget – otherwise nothing else happens. And then, we need to commit to initially building 2 to 4 reactors so that it makes economic sense for the supply chain to re-tool/get-certified to help build them.

To do this, a few things are required:

- There are proposed designs/providers ranging from science experiments to smaller versions of existing reactors – so it is better to choose something proven so it is far more likely for them to be built on time and on budget
- Ontario has begun a selection/building process – so we should let them de-risk the program and follow them (say 6-12 months behind)
- People are more likely to accept something proven over conceptual – so it is better to choose something proven
- We also want to decarbonise the grid sooner than later - so waiting is not an option.

One reactor developer in particular is lobbying our government to have theirs built here, which is different than Ontario's choice of the GEH design, by claiming:

- We can also have the fuel enriched here
 - So, they don't even have a fuel source currently available? This causes delays.
 - The design requires 19% enriched fuel to operate (others are 3% to 4%) and governments sanctioned Iran for trying to go above 4% enrichment. So, it is unlikely the US Gov't will allow this technology to be exported into Canada.
- It is safer
 - But if it is a new concept, it will add at least 10-years to the development timeline as it requires proof of safe, so right now it is conceptually safer at best
 - It will likely experience time delays and cost over-runs, thus only one gets built not several as is needed
- It can provide heat for oil extraction as a side benefit
 - True, but if it adds 10-years to the timeline with cost overruns, it's not worth it
 - We can build the GEH ones first, then this one later if needed

If Saskatchewan choose the GEH version as an example, we can see:

- Mined here
- Milled here
- Refined in Ontario
- Partially enriched in Ontario
- Enrichment completed in the USA
- Pellets created in Saskatchewan
- And, we could do all of the above here, if the Government commits to an order of 8 – 12 reactors including our own plus sales to others

On a side note, the reason for the 300 MW size is that: (1) this is the average size of a thermal (gas/coal) power plant, and 85% of the world's power comes from these, therefore (2) a country need only replace the powerplant and not the grid /infrastructure to start using them. If we get into GEH's "First Global Power" stream we can see reactors even manufactured here – but we first need to get a few built.

It is important for suppliers to note that the entire nuclear power station is considered a nuclear facility, so suppliers will need to be accredited to do anything on site. This will cost money and time, so it only makes sense for local suppliers if several reactors are committed to.

However, permitting and selection is extremely dependent upon "Localisation" – it lives and dies by this. Therefore, SIMSA can help "check the box" on this for the selected supplier, if they choose to work with us.

In short:

- The key issue is "the first reactor in Saskatchewan is actually built; and is built safely, on time, and on budget"
- We think that existing technology is likely to cause this, not new unproven ideas
- We think it is wiser to follow OPG and let them do the de-risking (so use the GEH design)
- We think Saskatchewan should commit to two or better yet four reactors, not one initially – this will allow a supply chain to scale-up and take the risk to become involved
- If you want 600-degree process heat, build a 4th generation reactor, but build the other ones first
- We further suggest that the reactor provider:
 - Assists in supplier accreditation
 - Informs and discusses with suppliers early of any and all thoughts/options/decisions
 - Uses our free member database

Last week I shared [SIMSA's economic view](#) with members via email – it included the impact of increased resource revenues. A few hours later Alberta released its 2022/23 budget, which substantiated SIMSA's view. Alberta's Minister Toews delivered Alberta's first balanced budget in seven years; in it he projects a small \$500 million surplus in FY 2022-23. This will be a spectacular turnaround from last year's record \$17-billion deficit. His government can largely thank a tremendous rebound in the energy sector—and especially soaring oil and gas prices—for this turn of event.

Finally, as the Globe and Mail noted [here](#), the most effective economic weapon that the West has in its arsenal to retaliate against Vladimir Putin for his unprovoked attack on Ukraine is a boycott of Russia's oil. Oil and gas exports account for nearly 60 per cent of Russian exports, so cutting-off energy shipments would inflict the most damage.

But, from an oil standpoint, it's something that would be very costly for the large portions of the world who are dependent upon Russian supplies. It would also drive global oil prices to record levels, causing further problems. So, they are currently not sanctioning Russian oil and gas – but that might change.

Eric

Advocacy

Recently, the Government of Quebec tabled a Bill that would cause more Quebec Government procurement stay in Quebec. SIMSA is attracted to the Bill's concept that its "... purpose is to use public contracts as an economic lever by giving priority to Quebec-sourced and environmentally responsible procurement." We either want the Bill blocked or for Saskatchewan to adopt a similar position. So, SIMSA asked SaskBuilds to look into the program.

The program is detailed here: https://www.blakes.com/insights/bulletins/2022/the-quebec-government-tables-a-new-bill-promoting-quebec-sourced-procurement-environmental-responsi?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration

They write in the above:

The Quebec Government Tables a New Bill Promoting Quebec-sourced Procurement, Environmental Responsibility and Innovation

On February 3, 2022, the Quebec government (Government) tabled Bill-12, *An Act mainly to promote Québec-sourced and responsible procurement by public bodies, to reinforce the integrity regime of enterprises and to increase the powers of the Autorité des marchés publics* (Bill-12), before the Quebec National Assembly.

By amending the *Act respecting contracting by public bodies* (Act), among other things, Bill-12 aims to promote procurement sourced in Quebec and its regions by public bodies. It also seeks to strengthen the integrity regime of enterprises and increase the powers of the Autorité des marchés publics (AMP).

Described as “innovative” by the Government, Bill-12 is one of the key components of the [new government strategy on public procurement](#), whose purpose is to use public contracts as an economic lever by giving priority to Quebec-sourced and environmentally responsible procurement.

Members’ News

[JNE Welding January 2022 Update](#)

[MacLean Takes Another Mining Vehicle Solution Around The Hard Rock Globe](#)

[SMP 2023 Fleet Vehicles Ordering](#)

[SRC Urban Mining: How recycling lithium-ion batteries can help meet growing demands for critical metals and divert batteries from landfills](#)

Sector News

Global events over the past year have refreshed our memories that we do not work within a Canadian let alone Saskatchewan bubble. World events impact us more than national events.

Upcoming Events

Register for Upcoming Events [HERE](#)

- **Speak with greater influence! - A Speak2Impact workshop – March 2, 2022**
Learn how to influence, impact and inspire from the best speakers in the world; from a person whose clients include: Coca-Cola, Walt Disney, Rolls Royce, Lloyds of London, NATO, Intel, Harrods, Facebook, S&P Global, and Google.
- **Lunch & Learn: The Carbon-Reduction/Energy Efficiency Landscape – March 10, 2022**
As part of SIMSA's initiative to assist our members with their carbon needs, James Bulmer will present on carbon-reduction/energy efficiency for suppliers, using SIMSA's carbon calculator, and the current trends facing the industry.
- **Lunch & Learn: Digitization/Innovation in Mining – March 31, 2022**
As part of SIMSA's initiative to assist the IMII and their mineral company members in fulfilling their innovation needs, James Bulmer will present on the current digitization/innovation trends and opportunities in the industry.
- **Saskatchewan Mining Supply Chain Forum – April 26 & 27, 2022**
We are planning on this event going back to its original format including attendance from outside of Saskatchewan.

SIMSA Contacts

Eric Anderson

EXECUTIVE DIRECTOR

eric.anderson@simsa.ca

Keri Beebe

*ADMINISTRATOR &
EVENTS COORDINATOR*

keri.beebe@simsa.ca

James Bulmer

INDUSTRIAL CONCIERGE

james.bulmer@simsa.ca



www.simsa.ca