

SaskPower & MN-S SMR Engagements Summary Report

May 2023



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Purpose

Current and Future State of Energy Production in Saskatchewan

To avoid the worst impacts of climate change, Canada has committed to achieving net-zero emissions by 2050. Net-zero can be achieved in several ways, whether through eliminating emissions of Green House Gases (GHGs) or offsetting emissions (such as through carbon capture technology or the planting of trees). It is necessary that the government of Canada and the governments of the provinces and territories begin planning for net-zero emissions now, as the implementation of technology and infrastructure to eliminate and offset GHGs is a process that will take many years.

In Saskatchewan, the power system is fuelled primarily by natural gas (40%) and conventional coal (24%), both of which produce GHGs in the production of power. To achieve Canada's targets, a transition away from conventional coal and the closure of Saskatchewan conventional coal power facilities is expected to occur by 2030. To ensure that power production can meet demand beyond 2030, SaskPower has begun the exploration phase of a project to bring nuclear power from Small Modular Reactors (SMRs) to the Saskatchewan power grid. Additionally, SaskPower is aiming to have renewables make up 50% of the electricity system (currently, renewables make up about 32-36% of the power system) through solar, wind, and other renewable energy technologies.



FIGURE 1: OUR CURRENT POWER SYSTEM - FROM SASKPOWER'S SMR PRESENTATION MAY 2023

As the federal pricing of carbon emissions rises from \$65 per tonne to \$170 per tonne by 2030, the consequence of not acting early to reduce the carbon intensity of Saskatchewan's grid will be that Saskatchewan residents will pay more for power. Saskatchewan citizens, and particularly Métis Nation–Saskatchewan (MN–S) citizens living in northern communities, are already feeling the rising cost of power, and so early action is necessary to decarbonize Saskatchewan's electrical grid.



Why SMRs?

SMRs have been identified as an option for SaskPower to explore on the pathway to transitioning to low-carbon-emitting options for power production. Some of the following justifications for the exploration of SMRs over other power production technologies were presented by SaskPower:

- Compared to full-scale nuclear power production facilities, SMRs are the appropriate size for Saskatchewan's grid (comparable in size to current coal power production facilities).
- SaskPower's current supply plan outlines a significant amount of wind and solar generation
 to be added to the Saskatchewan power grid by 2030. However, these technologies
 are limited by their intermittency and are unable to fully replace the amount of baseload
 (continuous) generation that SaskPower will no longer have access to as a result of the
 Federally mandated phasing out of coal-fired power generation by 2030.
- SMRs can be built side by side as demand increases, increasing power generation, building in redundancies in the event of outages, and utilizing existing infrastructure and grid connections.



FIGURE 2: SMR'S IN SASKATCHEWAN FROM SASKPOWER'S SMR PRESENTATION MAY 2023

Where Are We in the Process?

Beginning in 2022, SaskPower embarked on the siting process, studying two potential regions for a future SMR that meets capacity, safety, and infrastructure requirements, while being mindful of environmentally sensitive lands, habitats, and archaeological and heritage resources. MN–S worked with SaskPower early in 2022 to provide a virtual interest-based engagement session as an introduction to the site selection process and to provide SaskPower with feedback on the project and considerations for MN–S involvement in the ongoing evaluation process.



FIGURE 3: SITE SELECTION CRITERIA FROM SASKPOWER'S SMR PRESENTATION MAY 2023

Now, in 2023, SaskPower has identified two potential regions for further evaluation: the Elbow, SK region and the Estevan, SK region. To meet the demand heard in the 2022 virtual session, SaskPower has continued its engagement with Saskatchewan Métis citizens. SaskPower partnered with MN–S in late 2022 to begin planning another series of interest-based engagement events to update Métis citizens on progress to date, introduce the two proposed regions for further evaluation, and to hear what people have to say about the process so far.



Overview

Following Up on Previous Engagements

MN–S, in partnership with SaskPower, hosted two virtual engagement sessions in February 2022 to receive and share information with MN–S citizens. Saskatchewan Métis citizens from across all of Saskatchewan were represented in the sessions.

Four themes of concern/interest were heard in the February 2022 virtual engagements: **engagement, economic development, environment, and health.**

The following recommendations were proposed in the engagement report from the February 2022 sessions:

- Proceed with engagement broadly across MN–S regions, as well as with focused participants, such as resource managers, and continue to engage with MN–S.
- Continue to discuss alignment of SaskPower's perspectives on opportunities for Métis people with MN–S interests and concerns.
- Design and plan for engagement that will address Constitutional Section 35 rights of Métis in Saskatchewan.
- Seek and implement the unique Métis traditional knowledge required for the success of this and other projects.
- Establish a technical working group in which MN-S participates.
- Hold early discussions regarding potential for MN-S service providers.
- As soon as feasible, return further engagement to an in-person model.



What Has Changed?

Since the last rounds of engagement, a few factors have changed:

- 1. Restrictions to in-person gatherings have been lifted, and the request for returning to an in-person engagement model can now be met.
- 2. The site evaluation process has led to the selection of two regions for further evaluation for a future SMR: Elbow, SK and Estevan, SK regions.

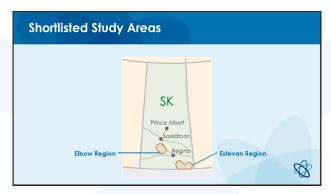


FIGURE 4: SHORTLISTED STUDY AREAS FROM SASKPOWER'S SMR PRESENTATION MAY 2023

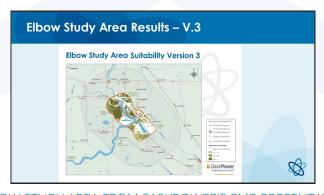


FIGURE 5: ELBOW STUDY AREA FROM SASKPOWER'S SMR PRESENTATION MAY 2023



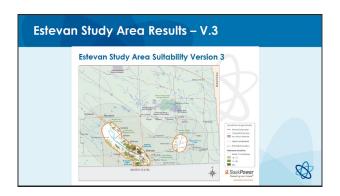


FIGURE 6: ESTEVAN STUDY AREA FROM SASKPOWER'S SMR PRESENTATION MAY 2023

3. SaskPower is currently consulting with rights-bearing Indigenous communities in the two identified regions. While these consultations are underway, broader engagement with Saskatchewan's Indigenous communities continues and will be ongoing.

Engagement Format

In 2022, SaskPower's engagement with MN–S citizens included two MN–S-led virtual engagement sessions. While in-person engagement options are preferred in many scenarios, COVID-19 gathering restrictions meant that virtual engagements were a safer option.

Now, in 2023, the option to engage in-person or virtually meant that MN–S was able to arrange both a virtual and in-person option for engagement with MN–S citizens. Regina, SK was selected as the location for the in-person engagement, due to its central location and accessible proximity to the two sites selected for further evaluation (approximately 200 km from both Estevan, SK and Elbow, SK). This selection was made to provide citizens living closest to the two locations, and who are most likely to be impacted by the project, the opportunity to easily participate in the engagement. However, citizens from across the province were invited to participate.

The virtual engagement presented an opportunity for anyone to participate in the engagement, with no limitation on the number of participants and easy accessibility to the information presented, without the need to travel.

Both engagements featured remarks from MN–S and SaskPower Executive, Elder Calvin Racette, and presentations from SaskPower, NWMO, and CNSC.





FIGURE 7: IN-PERSON SMR ENGAGEMENT IN REGINA, SK - MAY 2023



FIGURE 8: IN-PERSON SMR ENGAGEMENT IN REGINA, SK - MAY 2023



FIGURE 9: IN-PERSON SMR ENGAGEMENT IN REGINA, SK - MAY 2023



Participants

Métis Nation-Saskatchewan

"Métis' means a person who self-identifies as Métis, is distinct from other Aboriginal peoples, is of historic Métis Nation Ancestry and who is accepted by the Métis Nation."

• "National Definition of Métis Citizenship," Métis National Council General Assembly, 2002

Métis are unique and distinct rights-bearing Indigenous people, whose rights are recognized and affirmed in Section 35 of the Canadian Constitution. The Métis are recognized in the 1982 Canadian Constitution "Section 35 (1) the existing Treaty and Aboriginal Rights of the Aboriginal peoples of Canada are hereby recognized and affirmed;" (2) In this Act, "Aboriginal peoples of Canada" includes First Nations, Inuit and Métis peoples. The Métis are recognized within Canada's current distinctions-based approach to relationships with Indigenous peoples.

Métis Nation–Saskatchewan (MN–S) represents the political, socioeconomic, cultural, and educational interests of the province's Métis citizens through a representative system based on 12 Regions and approximately 82 active Locals. MN–S' expectations for engagement and consultation are based in recognition of its Section 35 rights and as an Indigenous Nation that is distinct from other Indigenous groups in Saskatchewan.

SaskPower

SaskPower is Saskatchewan's grid operator (transmission and distribution) and primary supplier of electricity, generating and distributing power for residential, business, and commercial customers. SaskPower, as the proponent of a project that may impact Indigenous rights, is responsible for engagement as well as consultations under "duty-to-consult" with Métis. Métis duty-to-consult rights result from Section 35 of the Canadian Constitution and are defended and supported by the MN–S.

NWMO

The Nuclear Waste Management Organization (NWMO) was established in 2002 by the nuclear energy corporations (Ontario Power Generation Inc., Hydro-Québec, and New Brunswick Power Corporation) under the Nuclear Fuel Waste Act. The NWMO's mandate is to create a nuclear waste technical method (a way to dispose of the waste) as well as a management system. The Adaptive Phased Management plan developed by the NWMO was adopted by Natural Resources Canada in 2007. The NWMO has been conducting engagement with communities across the country, including Pinehouse and English River First Nation, on the creation of a final repository for the county's waste. The site selection has since been narrowed down to two communities in Ontario, with final selection expected in 2023. The NWMO has developed an Indigenous Knowledge Policy to help guide them in their work, and engagement is informed by the Council of Elders and Youth, an advisory body to NWMO management.



CNSC

The Canadian Nuclear Safety Commission (CNSC) is an independent, quasi-judicial administrative tribunal and court of record. Staff of the CNSC work to enforce federal and CNSC standards within the Canadian nuclear industry, including uranium mines and nuclear energy facilities. Part of their role is to ensure that meaningful consultation and engagement with the public and Indigenous Nations and communities has occurred. Their staff make recommendations to the seven independent members that make up the Commission. The Commission then reviews these recommendations and prepares reports of recommendations to the federal Minister of Natural Resources regarding approvals and other governmental actions.

The CNSC licensees and nuclear proponents are responsible for safety and play a key role in building trust with the Indigenous Nations and communities and are responsible for establishing their long-term relationships based on cooperation, information-sharing, and robust communication amongst Indigenous Nations and communities. The CNSC has multiple tools and approaches for ensuring meaningful consultation with potentially impacted Indigenous Nations and communities on new nuclear projects.



Outcome

What We Heard

Similar to previous engagements on SMRs, several themes were identified during the in-person and virtual engagements. It is noted that the in-person engagement had more opportunity for discussion

and feedback than the virtual engagement due to the ability to form small working groups and take

more time for conversation.

Themes from the virtual engagement

- 1. Questions about what options have been considered for nuclear energy in Saskatchewan, as well as other options for energy production/purchase:
 - a. Is imported energy an option to keep costs low and achieve carbon targets?
 - b. Is hydro being considered (and if so, where?), and since nuclear is not renewable by definition, are solar and wind power generation technologies being considered as well?
 - c. Why is a small modular reactor being considered over a full-sized nuclear plant, which would allow for the excess energy to be sold?
- 2. Questions about the security of SMRs and nuclear power
 - a. Security from external threats such as war or terrorism
 - b. Earthquakes and other seismic activity
 - c. Have SMRs been put in place in other areas or is the proposed SMR in Saskatchewan the first of its kind?
- 3. Questions about educational readiness and opportunities for training and employment
 - a. What can communities do to prepare for employment opportunities (construction and operation)?
 - b. Will there be opportunity for agreements between MN–S and SaskPower for training opportunities in the nuclear industry?

Themes from the in-person engagement:

- 1. Environment & Safety
 - a. How will waste be stored and managed? Can waste be used in the future? Would like to know more about transport and storage of nuclear waste material.
 - b. What impacts will the use of Saskatchewan water bodies for facility cooling have on the safety of water for drinking, fishing, recreation, and the health of the water ecosystems? How will contamination, leaks, and transportation of nuclear material be reported and communicated to Saskatchewan citizens?



- c. What work is being done on the exploration of 100% renewable energy production (such as solar and wind)?
- d. Will the reduction of CO2 emissions through exploration of SMRs in Saskatchewan benefit the health and environment of Métis people?
- e. What are the legacy effects of SMRs on future generations? Do we have enough data to know?

2. Education & Employment

- a. Fears over a shortage of STEM professionals who can support SMRs in Saskatchewan and a need for education to adapt now to meet future demands. Education on SMRs and alternative energy production methods should be taught in schools to help youth understand the technology and be prepared should they want to pursue a career in the field.
- b. Language and culture considerations should be made to ensure education on SMRs and nuclear power is accessible to all. Language and explanation of concepts should be taken into careful consideration to accommodate all education, experience, and skill backgrounds.
- c. What level of involvement will Métis people have in working in and around SMR facilities? (Environmental monitoring, operations, construction, etc.)
- d. Would like to see the public skepticism of SMRs overcome through education and public outreach so we can move forward on working together and making progress.
- e. Indigenous knowledge should be considered equal to western science as a way of knowing.
- f. Métis people are looking for equity, ownership, and involvement at a high level when it comes to the future of energy in Saskatchewan. Would like to see Métis people be true partners in the process and have a seat at the table, which will help to get buy-in on the safety and need for nuclear power in Saskatchewan.
- g. What opportunities will come from the construction of SMRs in Saskatchewan and how can Métis people be ready for them? Are there value-add or parallel industries that Métis citizens can explore involvement in?

3. Engagements & Relationships

- a. Métis leaders are prepared to have more conversations in their communities about SMRs and nuclear power (including about mining operations).
- b. Skepticism about how serious these words, opinions, perspectives, and asks are being taken and what actions are being taken as a result of engagements.
- c. These early engagements give time for meaningful relationships to be built and for action to be taken in involving Métis in the process.
- d. Would like to see involvement of youth and Elders and targeted efforts to include their perspectives.



4. The Engagement Process

- a. SaskPower is considering SMRs in the 2030s, but what other types of considerations for nuclear or renewable power production are being considered beyond the 2030s? Will there be more engagement on other topics related to SaskPower projects?
- b. Looking for more details on the timeframe: what is the current state of the grid in Saskatchewan? (Are we selling energy? Are we using it all? Will modernization of the grid feed the north and south areas better?)
- c. Want to see a continuation of the conversation throughout the entire planning process and to take engagements to the next level, making decisions, having more access to resources and opportunities, and to see real steps towards involving Métis in the process. Clearly describing the next steps in the engagement process (such as future engagement opportunities) and allocating resources to encourage Métis involvement in engagement and education opportunities.

Many of the questions and concerns raised by participants were answered by SaskPower, NWMO, and CNSC staff; however, there is room for additional outreach and education as well as engagement to give Métis citizens the opportunity to ask questions and raise concerns early on in the exploration process.



Next Steps

SaskPower has identified that ongoing Indigenous, stakeholder, and public engagement is an objective across the full project lifecycle. Future engagements are anticipated as project milestones are achieved and as new information, decisions, and project directions are established, including more targeted engagement upon site selection for citizens in the site area, as well as those impacted by activities occurring near the site or as part of Saskatchewan's transition away from natural gas and coal (such as transportation routes, removal of decommissioned facilities, etc.). The next step in the process following site evaluation of the Elbow, SK and Estevan, SK sites is site selection, expected to be completed by the end of 2024. The pre-planning phase (which informs the decisions on impact assessment and license to prepare the site) is expected to be completed by end of 2023, at which time the planning phase will begin.

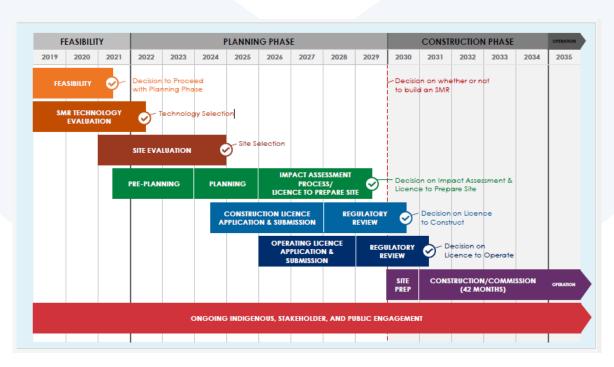


FIGURE: PROJECT GANTT CHART FROM SASKPOWER'S SMR PRESENTATION MAY 2023

Future Considerations

Recommendations

- Continue engaging with Métis citizens, providing engagement platforms that allow participation across all MN–S regions.
- Work with MN–S to identify opportunities for readiness (education, employment, Métis-owned businesses).
- Continue outreach and education on SMRs and the state/future of Saskatchewan energy production and consumption patterns.
- Take concrete steps towards the formation of a working group to solidify Métis voices, concerns, and input throughout (and beyond) the project lifecycle.
- Actively engage with Métis youth and Elders through the process.

Other Considerations

Although not directly related to the topics discussed in the SMR engagements, MN–S citizens identified other areas of concern, which may be relevant to this project as it continues:

- Vegetation management practices
- Power bills in northern communities

Approximate Number of Participants and Communities Represented

Virtual	In-Person
~40 People	~70 People
Meadow Lake	Biggar
Saskatoon	Melfort
La Ronge	La Ronge
Prince Albert	Cumberland House
Melfort	Star City
Biggar	Air Ronge
Marshall	Yorkton
Christopher Lake	Île-à-la-Crosse
Weldon	St. Georges Hill
Glaslyn	Buffalo Narrows
Tisdale	La Loche
La Loche	Archerwill
Candle Lake	Allan
Livelong	Beauval
Regina	Cando
Domremy	Dillon
Spiritwood	Duck Lake
Estevan	Glaslyn
North Battleford	Indian Head
Battleford	Invermay
Warman	Kindersley
	Leoville
	Moose Jaw
	Pinehouse Lake
	Preeceville
	Prince Albert
	Rosthern
	Saskatoon