What We Heard

SMR Engagement Summary Report

March 2025

Capital Power x ONTARIO POWER GENERATION

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1. INTRODUCTION

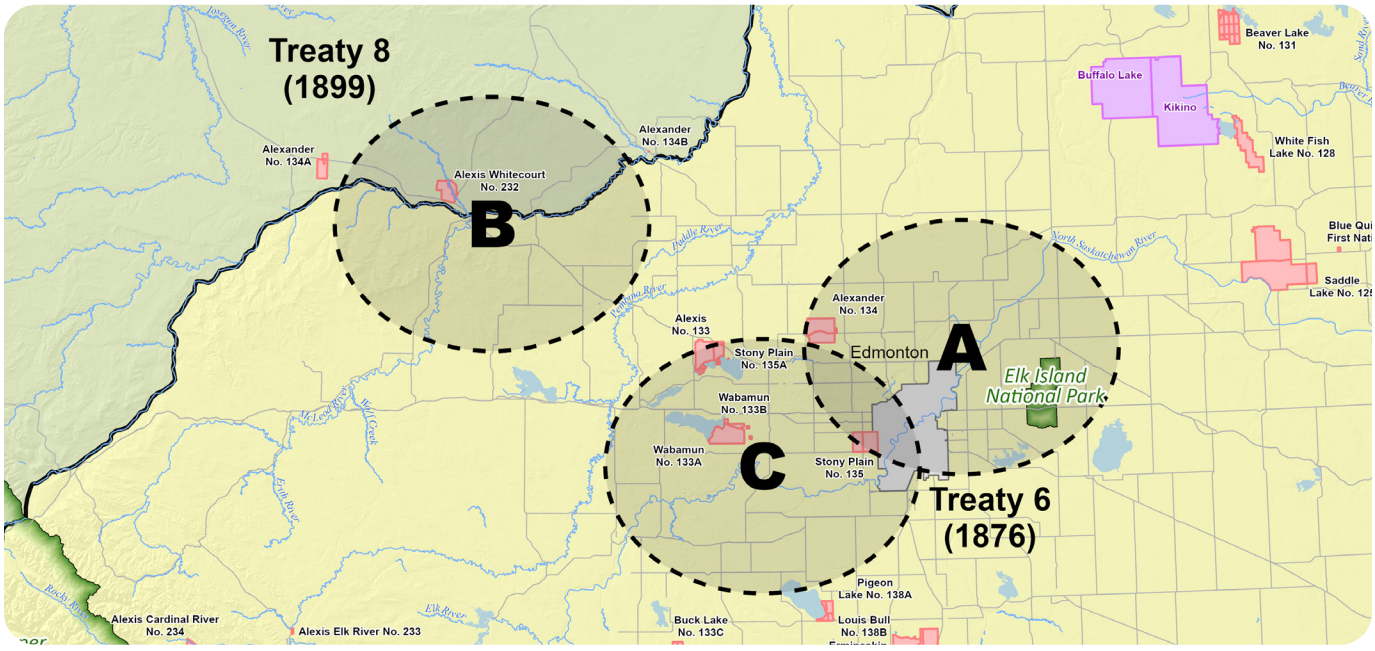
In January 2024, Capital Power and Ontario Power Generation (OPG) entered into a 2-year commitment agreement to examine the feasibility of developing and deploying grid-scale Small Modular Reactor (SMR) nuclear generation in Alberta.

The feasibility assessment (study) examines stakeholder and Indigenous perspectives, Alberta's market and policy dynamics, commercial opportunities and risks, and an initial screening of the best technology and location for a potential SMR project.

Early engagement activities initiated in the summer of 2024 concentrated effort in three potential host regions in north-central Alberta. The purpose of early engagement is to provide factual information about nuclear energy, and initiate open discussions with communities about their perspectives, interests in long-term partnerships, and concerns about and/or support for nuclear power generation.

Feedback from early engagement activities contributes valuable insights into the degree of public support for SMR development in Alberta. Ultimately, what we heard provides an early signal as to whether to proceed further into subsequent phases, selection of a potential host region and site, and how to communicate, collaborate and support participation in future project planning activities.

The preliminary information gathering phase of the study is now complete with final analysis and next steps scoping planned to wrap up in late 2025 / early 2026.



Three broad regions, the Industrial Heartland area (A), Woodlands County (Whitecourt area) (B), and Leduc County (Genesee) (C) are being screened for their suitability to potentially host an SMR project. Considerations include public support, access to existing or future electricity load demand, land and cooling water, availability of existing transmission and transportation infrastructure, and proximity to external hazards and sensitive features.

2. ABOUT US

Capital Power is a growth-oriented power producer with ~10 GW of power generation at 30 facilities across North America. We prioritize safely delivering reliable and affordable power, building lower-carbon power systems and creating balanced solutions for our energy future. We are Powering Change by Changing Power™.

Learn more about (Capital Power)

As one of North America's largest, most diverse electricity generators, **OPG** invests in local economies and employs thousands of people across Ontario and the United States. OPG and its family of companies are advancing the development of new low-carbon technologies, refurbishment projects, and electrification initiatives to power the growing demand of a clean economy.

Learn more about (OPG)

3. WHO WE ENGAGED

The SMR Project Team provided opportunities for local residents, municipal and county stakeholders, and interested Indigenous communities to learn about the study and share perspectives, meet subject matter experts, ask questions, and deliver feedback.

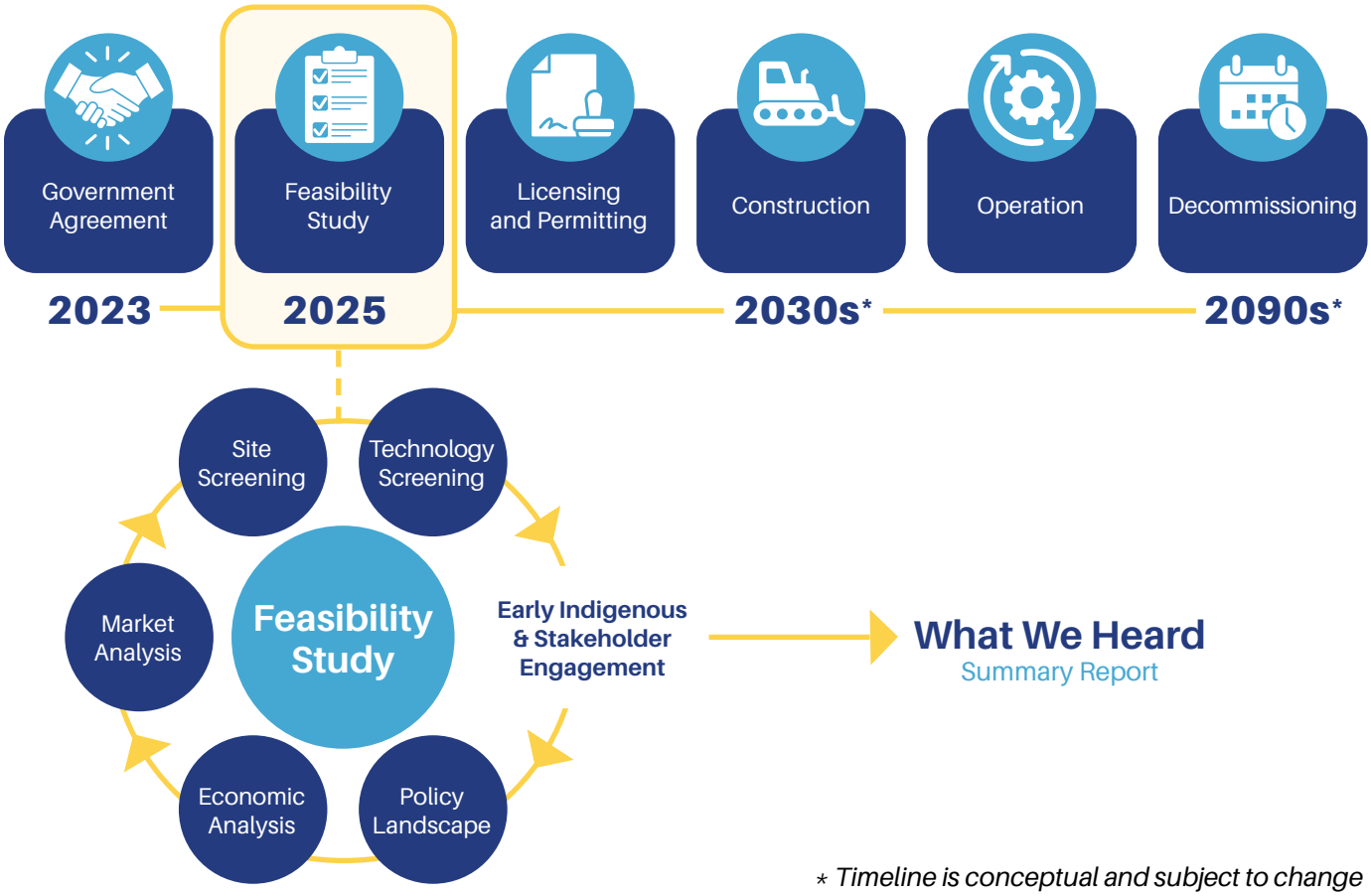
- 26 First Nations
- 13 Metis Settlements and Credibly Asserted Métis Communities and Otipemisiwak Métis Government (Métis Nation of Alberta)
- Municipalities
- Government Departments and Agencies
- Landowners, Stakeholders and Interested Parties

4.
YOUR COMMUNITY. YOUR VOICE.

There is growing interest in SMRs, both in Alberta and in other Canadian jurisdictions, as well as globally. This interest is driven by the need to find a low emitting source of reliable baseload generation to meet growing electricity demand.

The Alberta System Electric Operator (AESO) has projected that the demand for electricity in Alberta will double by 2050 due to industrial development, population growth and electrification .

Capital Power and OPG believe that SMRs could be a solution to Alberta's growing demand for reliable, affordable, and lower carbon energy. In July 2024, the SMR Team initiated early engagement to provide Indigenous communities, stakeholders and the public a variety of accessible opportunities to learn about nuclear energy, and the drivers for and focus areas of the feasibility assessment.



* *Timeline is conceptual and subject to change*

? The feasibility study assists in answering basic questions about public support, interests and opportunities, market and policy dynamics, economic benefits, the best technology and the right location.

Objectives

- Build and maintain collaborative relationships
- Provide factual information and opportunities to learn about nuclear energy
- Gain insights into perspectives, interests, and concerns
- Provide access and opportunity to 'experience' a nuclear facility

Approach to early engagement :

- In-person and virtual meetings
- Hosted tours of OPG's Darlington Nuclear Generating Station in Ontario
- Public open houses
- Events and conferences
- Youth education and outreach

Summary of Activities

The SMR Team invited interested Indigenous communities located within a 300 km radius of each potential host region to meet in-person or virtually with representatives to discuss the study, their perspectives on nuclear energy, and interest in potentially hosting an SMR development in their respective traditional territory, as well as attend a tour of OPG's Darlington Nuclear Generating Station (DNGS) and proposed SMR development site in Ontario.

Additionally, the SMR Team conducted in-person and virtual meetings with local municipalities, councils and government officials, hosted a total of seven public open houses with local stakeholders in each potential host region, presented and exhibited an interactive SMR activation booth at community events and industry conferences, participated in the Generate Youth Summit, and delivered a Nuclear 101 seminar to STEM students at the University of Alberta.

Open houses, Darlington tours and SMR Summit

Engagement at a Glance

- Met with **30** Indigenous communities
- Toured **44** delegates from **15** different Indigenous communities at Darlington Nuclear Generating Station
- Hosted **7** public open houses attended by **465** people
- SMR information booth drew approximately **80** youth attending the Generate Youth Summit
- Nuclear 101 seminar delivered to over **30** STEM university students
- Exhibited the SMR information booth at **9** events spanning all three regions
- Distributed approximately **1,000** information postcards with website QR code

> *As local residents, we are huge proponents of this project. It would be such a win for the success and sustainability of the area, creating jobs, injecting investment, re-commissioning infrastructure, cleaning up the grid, supporting Canadian industries, and providing a vision for the future. We would love to have you here.*

> *People need education. Concerns are already being expressed over the risks and dangers of nuclear waste.*

5. WHAT WE HEARD

There was a general degree of open receptiveness to SMR development in each of the three potential host regions

Early engagement interactions at various meetings, open houses and community/industry events indicate that many members of the public and Indigenous communities from all three potential host regions are curious about nuclear energy and receptive to the possibility of future SMR development. Many expressed openness to maintaining communications and interest in learning more about nuclear power and participating in project planning activities if/when the project progresses forward.

However, there was also a contingent of Indigenous communities (23%) who did not respond to our invitation to engage. There was a small contingent of individuals who expressed having no interest or support for hosting nuclear energy in their community due to major concerns about nuclear waste transport and storage, potential environmental impacts, and affordability of nuclear energy costs born on consumers.

There was a moderate to major degree of concern expressed about potential impacts on water, nuclear waste, and human health

Almost every community expressed concern about the potential impacts on water use and quality, nuclear waste transport and storage, and human health related themes but equally, a desire to learn more about how nuclear technologies operate, passive safety systems, and plans for nuclear waste management.

Feedback from open houses and other events suggest that the opportunity to speak with subject matter experts and meet individuals who live and work near a nuclear facility significantly addressed misconceptions and fear about nuclear technologies. Representatives who toured OPG's DNGS generally came away with a better understanding of nuclear power and how it operates expressing that the experience will assist them in making informed decisions.

Key areas of interest included training and employment, equity partnerships, education and awareness, and ongoing communication

High interest in greater access to advanced and continuing education, upskilling and retraining opportunities were often raised throughout engagement, particularly in regions that favour economic diversification. Another often raised theme was interest in commercial partnerships, joint ventures, and long-term employment and contracting business opportunities for local and Indigenous businesses.

That same interest was often expressed with a shared concern about the fulfillment of any negotiated commitments for sustaining community benefits and fulfillment of reclamation obligations at the end of the operating life of a nuclear generation facility.

Heat map of key issues, interests and concerns

	Issues — Degree of Concern					Opportunities — Degree of Interest				
Mention Frequency	Minor	Moderate	Major	Severe	Extreme	Exceptional	High	Major	Moderate	Minor
Always			C9							
Often		C5 C8					O6 O8	O2 O4		
Sometimes		C4					O5			O1
Rarely	C2 C6	C1 C3 C7						O3 O7		
Never										

Key Issues and Concerns

- **C1** Affordability and cost to consumers
- **C2** Emergency response coordination
- **C3** Environmental impacts
- **C4** Fear of nuclear technologies
- **C5** Radiation safety and human health
- **C6** Traffic and road maintenance
- **C7** Trust and accountability for liability management
- **C8** Water use and quality
- **C9** Water storage, transportation and disposal

Key Interests and Opportunities

- **01** Clean energy
- **02** Commercial partnerships
- **03** Community investments
- **04** Economic diversification
- **05** Enhanced reliability
- **06** Equity and benefits agreements
- **07** Industrial collaboration
- **08** Training and employment

6. NEXT STEPS

Feedback from early engagement activities contributes valuable insights into the degree of public support for SMR development in Alberta. Ultimately, what we heard provides an early signal as to whether to proceed further into subsequent phases, selection of a potential host region and site, and how to communicate, collaborate and support participation in future project planning activities.

Nuclear curious?
Learn more.

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