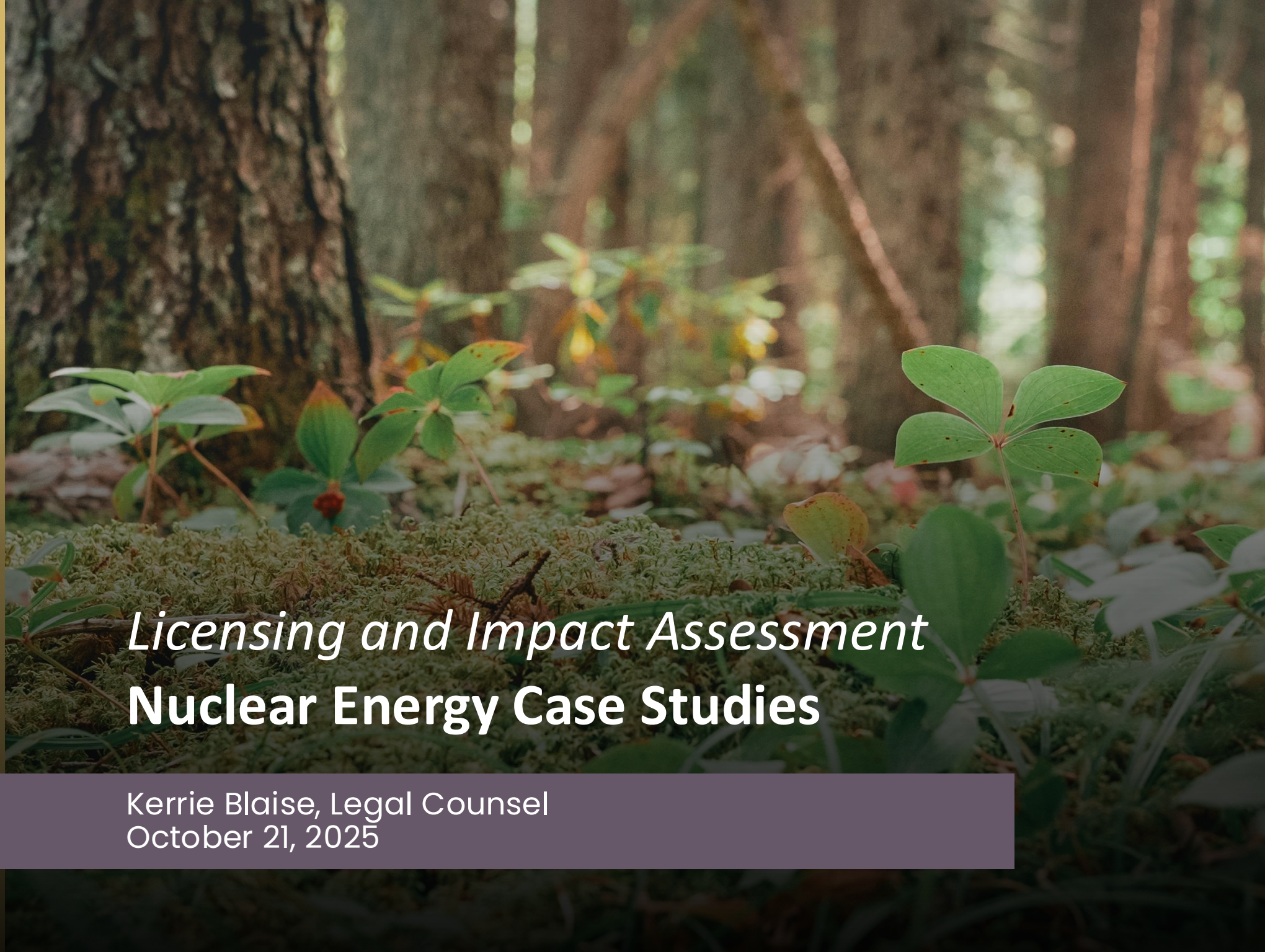


Licensing and Impact Assessment

Nuclear Energy Case Studies

Kerrie Blaise, Legal Counsel
October 21, 2025

Today's Focus

Energy use **rise and falls**

Behind the **headlines**

How **licensing and impact assessment apply** (or do not)

Changes and **way forward**

Nuclear energy's share of global electricity generation in 2024 declined to 9 percent

This is 45 % below the peak of 17.5 % in 1996

Renewable energy generation continues to surpass nuclear power generation

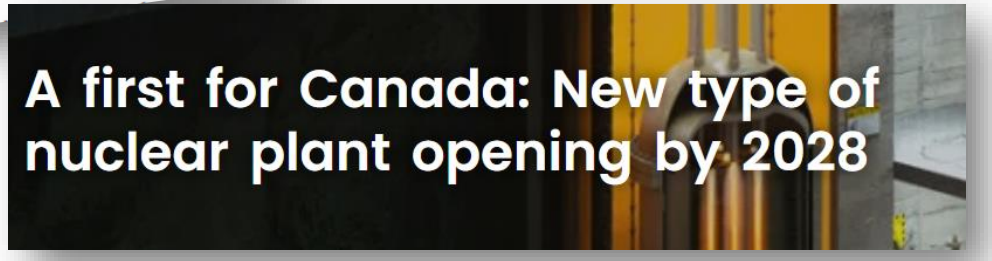
One third of all reactors connected to grid in last 70 years now in decommissioning phase

How it started

Nuclear

OPG Becomes First Utility to Snag Ownership Stake in Nuclear Microreactor Project

velopment of its proven advanced sodium cooled fast reactor
gy source, will offer higher levels of safety than the current generation
waste. The first ARC-100 unit will be operational in the late 2020's
clear Generation Station in New Brunswick. ARC Canada has
y Commissions (CNSC) Vendor Design Review (VDR) Phase 1, which is



OPG President and CEO Ken Hartwick added: "We are excited about the advancement of low-carbon small modular reactors in Canada and see them as an innovative growth opportunity for our company, one that fits well with our existing clean energy portfolio."

How it's going

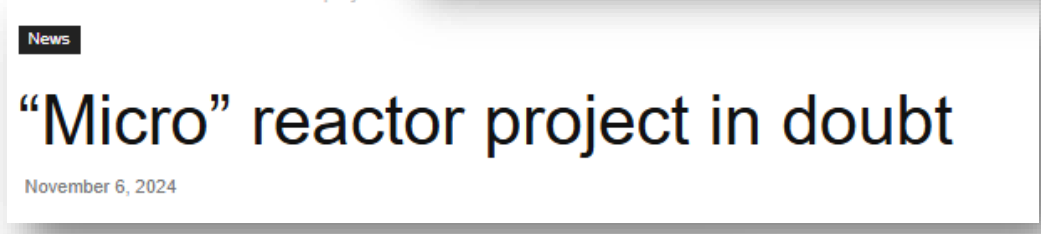
New Brunswick / News / The Issues / Energy & Environment

NB Power CEO now 'unsure' if first SMR will be ready by 'late 2030s'

Technology was originally expected to be ready by the beginning of the decade

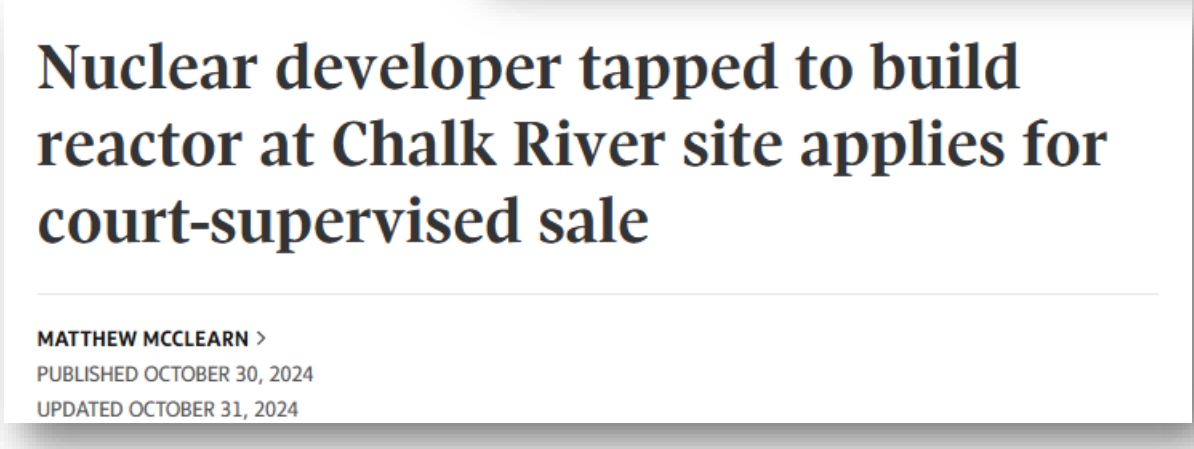
Adam Huras

Published Mar 02, 2025 • Last updated Mar 04, 2025 • 7 minute read


News

"Micro" reactor project in doubt

November 6, 2024


Nuclear developer tapped to build reactor at Chalk River site applies for court-supervised sale

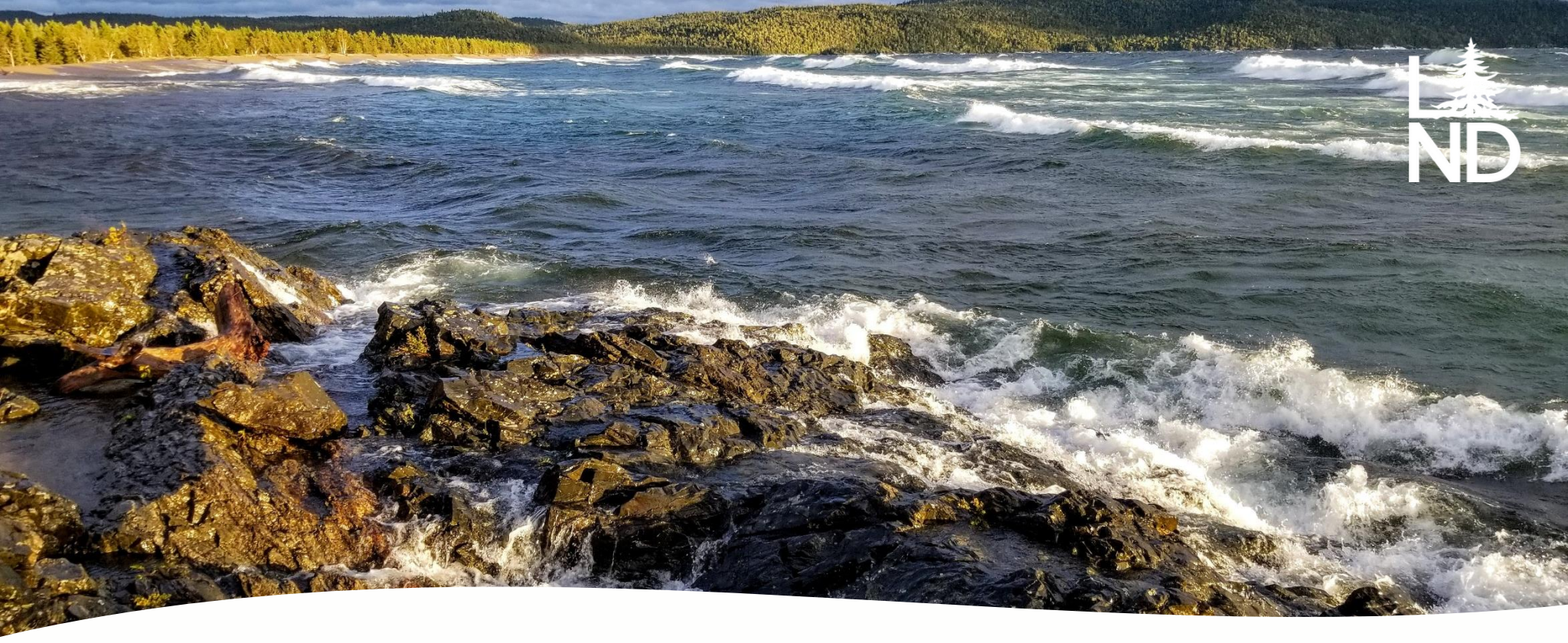
MATTHEW MCCLEARN >

PUBLISHED OCTOBER 30, 2024

UPDATED OCTOBER 31, 2024

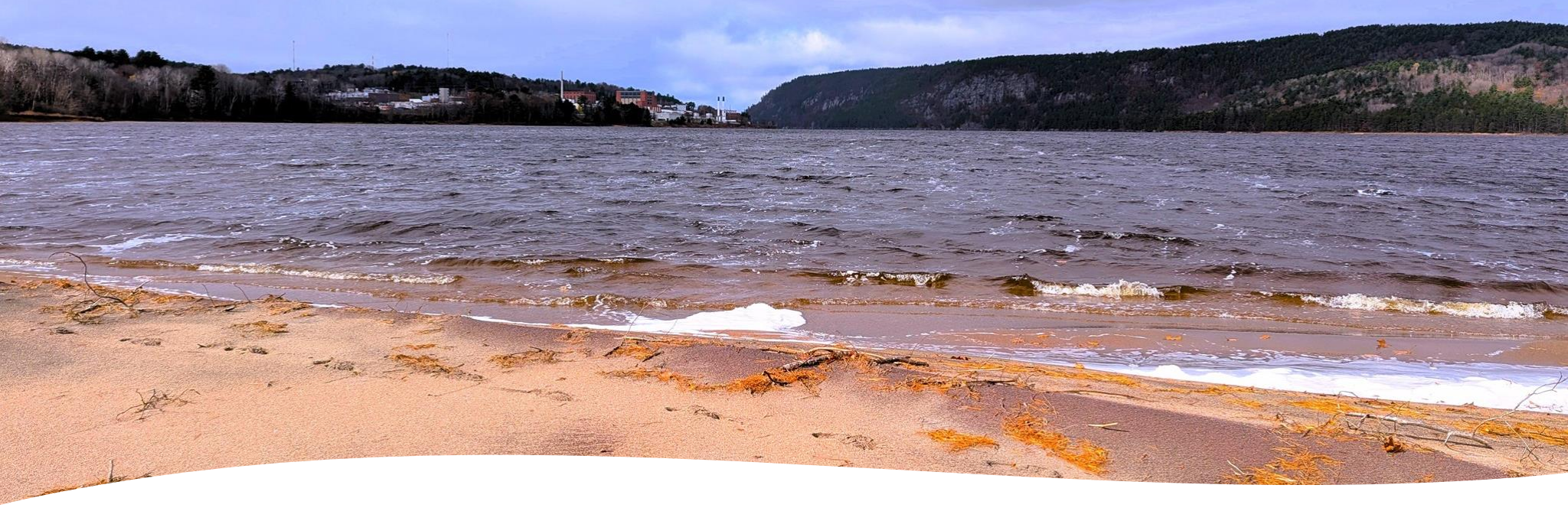
What are SMRs?

- No single accepted definition; generally refers to a more compact nuclear reactor designed producing **1 – 300 MW** of electricity/heat
- The term **‘modular’** refers to proponent’s hope that they can be assembled from factory produced modular – rather than on site
- Industry’s “SMR Roadmap” has been endorsed by the federal government
- Proposed for on-grid power uses, remote communities, mine sites



Impact Assessment

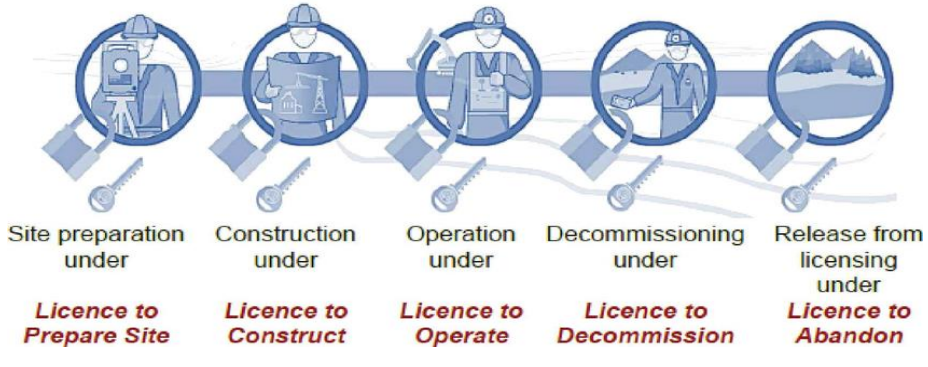
- Reactors under 200MW do not require an impact assessment (or 900MW if on an existing site)
- 'Project List' regulation recently underwent review → proposed to exempt all SMRs and remove large scale nuclear project
- 70+ Indigenous nations, concerned citizens, NGOs, doctors and academics called for full inclusion of nuclear projects
- Awaiting 'Project List' updates from Impact Assessment Agency of Canada



Nuclear Licencing (click to learn more)

- **Nuclear licensing is a regulatory proceeding**, narrowly defined by the stage of activity being licensed (i.e., site preparation, operations, decommissioning)

- Licensing and oversight is conducted by the **Canadian Nuclear Safety Commission**



Comparing IA and Licencing (click to learn more)

1. The statutory purposes of the *IAA* are, "to foster sustainability" and "encourage the assessment of cumulative effects" → no equivalents in Canadian Nuclear Safety Commission's mandate per *Nuclear Safety and Control Act*

2. CNSC's licensing process is specific to the stage of the activity being undertaken,

3. The CNSC assesses a licence application against a narrower range of factors than impact assessment.

Nuclear Waste Burial Project

Canadian Nuclear Laboratories proposed the **Near Surface Disposal Facility (NSDF)** for its nuclear waste → licence and environmental assessment overseen by the CNSC

- Established in the 1940s along the Kichi Sibi
- Built on unceded Algonquin territory without consultation or consent
- Environmental assessment process commenced in 2016 and decision issued in early 2024

7-storey disposal site

one million cubic metres of radioactive waste

37 hectares of old growth forest

9 million peoples' drinking water threatened if Kichi Sibi contaminated

Judicial Review

Kebaowek First Nation challenged the January 9 2024 Canadian Nuclear Safety Commission ("CNSC") licensing decision authorizing CNL to construct a nuclear waste disposal facility at Chalk River.

March 2025 – CNL files appeal of Federal Court decision
Jan 2024 – CNSC issues licence to CNL allowing for construction of NSDF
Feb 2024 – Judicial review filed by Kebaowek First Nation challenging licensing decision by CNSC
February 2025 – Chief Justice Blackhawk of the Federal Court issues decision in favour of Kebaowek First Nation
March 2025 – CNL files appeal of Federal Court decision

Judicial Review

Kebaowek argued that the CNSC failed to acted in a manner that was consistent with UNDRIP, namely **article 29.2 of UNDRIP** that specifies:

States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.

In February 2025, Justice Blackhawk of the Federal Court found:

- the CNCS was required to consider UNDRIP
- the CNSC should have considered UNDRIP in determining the depth of consultation and in the circumstances incorporated free, prior and informed consent in its determination

As a result, the Federal Court ordered:

1. CNL and CNSC resume consultation with Kebaowek with a view to implementing the UNDRIP FPIC standard in a robust manner, by adapting its processes to address Indigenous laws, knowledge, and processes and to develop a process that is aimed at reaching an agreement. **This process is to be completed on or before September 30, 2026.**
2. Following this consultation process, the CNSC is directed to reconsider (i.e issue a new decision) if the duty to consult and accommodate in this case was fulfilled in view of the principles articulated in the UNDRIP and in particular, the FPIC standard.

[92] There is no Canadian jurisprudence that considers how these Articles should be interpreted or how they may aid in the interpretation of Canadian laws. Accordingly, I acknowledge the importance that these reasons will have going forward as one of the first decisions that set out how the UNDRIP, as incorporated into federal law through the *UNDA*, may be utilized as an interpretive aid. I have no doubt there will be further opportunities for all levels of court to consider these issues, and the jurisprudence will develop and evolve over time.

[128] In my opinion, Canada's adoption of the UNDRIP into Canadian law via the *UNDA* must mean more than a status quo application of the section 35 framework. The UNDRIP must be interpreted in the ordinary sense of the words set out. **The words of the UNDRIP and the resulting commentary regarding its development and interpretation must be used to guide our interpretation of the section 35 framework**, and in this application, how the UNDRIP is to be used to interpret the Crown's analysis of the duty to consult and accommodate.

Where do we go from here?

- Strengthen environmental regulation of nuclear projects in Canada (impact assessment and implementation of UNDRIP
- Speak out in **favour** of renewables and **against** nuclear projects which will delay timely climate responses

And remember . . .

Everyone must have an opportunity to meaningfully participate in all aspects of governmental decision-making that may affect their health or environment **(right to participate)**

Everyone must have full and timely access to information that is being used for decision-making purposes **(right to know)**

THANK YOU!

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