Debunking the myths around Small Modular Reactors

Nuclear Law and Public Oversight in Canada

With thanks to:

Beyond Nuclear

Coalition for Responsible Energy Development in New Brunswick



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Disclaimer

This presentation contains legal information about nuclear law and environmental assessment

The contents do not constitute legal advice or other professional advice and must not be relied on as such

If legal advice related to specific circumstances is required, please seek competent legal counsel



About Us

- ► The Canadian Environmental Law Association (CELA) is a specialty community legal clinic providing services to low income individuals and disadvantaged communities across Ontario in environmental law matters.
- ► CELA was established in 1970, funded as an Ontario specialty legal aid clinic by Legal Aid Ontario since 1978.
- Ontario's only clinic providing environmental law legal aid services including representation in trial and appellate courts and before administrative tribunals; summary advice and brief services; public legal education and law reform



Agenda

1. Introduction

What are SMRs? What are Canada's plans?

2. Implications

Sustainability & Impact Assessment Intergenerational Equity & Radioactive Waste Reconciliation & Indigenous Rights

3. Scaling Up

Organize & Respond Outreach & Resources



1. Introduction

What is a Small Modular Reactor (SMR)?

 No one 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





1. Introduction

What is the plan for SMR's in Canada?

- Vision for SMRs authored by industry and promoted by federal government in Canadian Nuclear Association's "A Call to Acton: A Canadian Roadmap for Small Modular Reactors" (Nov 2018)
 - Roadmap describes SMR technology as 'a source of safe, clean, affordable energy,' presenting an opportunity for a 'low-carbon future'
 - ▶ Roadmap champions suitability of SMRs for (1) remote, off-grid communities; (2) replace on-grid fossil fuel based generation and (3) powering resource extraction projects (i.e. Ontario's Ring of Fire)

1. Introduction

SMR Roadmap Recommendations SMR Roadmap includes a "concrete set of recommendations ...to guide future actions needed by governments, industry, and other nuclear stakeholders to capitalize on Canada's SMR opportunity,"

Recommendations include:

- Restricting the application of federal environmental impact assessment legislation
- 2. Incorporating new waste streams into existing long-term radioactive waste management plans





Sustainability & Impact Assessment

- ► Environmental or impact assessments (IA) is about "looking before you leap" requires upfront, public examination of ecological, socio-economic, and cultural impacts of a project *prior* to development
- Impact assessment allows us to:
- (1) Avoid, minimize, and mitigate adverse impacts of projects/development
- (2) Prevent disproportionate impacts on vulnerable communities and ecosystems
- (3) Ensure the public voice is heard and decision-making process is accountable





Sustainability & Impact Assessment

- Canada's <u>federal</u> Impact Assessment Act only applies to projects identified in "Project List" <u>regulation</u>
- ▶ Nuclear reactors less than 200 MW do not trigger IA
 - ★ Terrestrial Energy (Ontario) 192 MW
 - x X-Energy (Ontario) − 80 MW
 - ★ Moltex Energy (New Brunswick) 150 MW
 - ★ NuScale Power (Saskatchewan) 60 MW

Without inclusion of SMRs in *IAA*, proponents can make unilateral determinations about the acceptability of a project, its social and economic impacts, without public input and expert review.



Intergenerational Equity and Radioactive Waste

- Nuclear Waste Management Organization (NWMO) mandated to develop and implement plan for managing Canada's nuclear fuel waste
- ▶ Its planning, comparison of risks and benefits of management approaches, and mandatory public consultations assumed a finite volume of used nuclear fuel, based on projected inventory from existing CANDU fleet
- ► SMR proponents assume NWMO has mandate to accept new waste streams; no public discussion of this matter nor assessment of new waste characterization, composition, etc.



Reconciliation & Indigenous Rights

- Remote, off-grid applications of SMRs championed by nuclear proponents; First Nation communities could become hosts for the majority of remote SMRs
- Reconciliation requires respect for Indigenous values and traditional knowledge, and opportunities for equal, effective, and fair participation
- Duty to consult must be satisfied prior to decisions being made which could affect First Nations' constitutionally protected traditional and treaty rights
 - 2019: Anishinabek Chiefs-in-Assembly unanimously endorsed a Grand Council Resolution <u>opposing</u> the construction and operation of Small Modular Reactors in Ontario
 - 2005: Nishnawbe Aski Nation passed Resolution 05/57 declaring NAN a nuclear waste free zone





3. Scaling Up

Organize & Respond

- Replace promotional, industry rhetoric with accountability for environmental debts (mining, accidents, legacy wastes)
- ► End discrimination and marginalization experienced by Indigenous peoples in Canada by respecting individual and collective rights (Article 29, UNDRIP)
- ▶ Uphold the best interest of the child including future generations who will inherit the legacy of previous generation (Article 3, Convention on the Rights of Child)
- Require legal frameworks which empower the public to access information and have opportunities to participate; strengthen environmental standards to protect human rights
- Embrace opportunities to transition to a more sustainable, healthier, and equitable economy





Outreach & Resources

Email, call, or reach out to your MP, MPP, the Premier and Prime Minister, provincial & federal Ministers with environment, infrastructure and Northern mandates, and the Canadian Nuclear Safety Commission

Participate in the *only* SMR environmental assessment: https://ceaa-acee.gc.ca/050/evaluations/proj/80182

Request an impact assessment for the SMR proposed in your community: https://bit.ly/3dHGTq3

Visit cela.ca and subscribe to our monthly e-bulletin for updates: https://cela.ca/sign-up-stay-informed-cela-bulletin/





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