The CEDAR Project
St. Thomas University
51 Dineen Drive
Fredericton, New Brunswick
Canada E3B 5G3
https://cedar-project.org
info@cedar-project.org

November 16, 2026

Standing Committee on Natural Resources
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON K1A 0A6
Canada

By e-mail: RNNR@parl.gc.ca

Re: Brief for RNNR Study on Canada's Nuclear Future

Dear RNNR Committee members,

The CEDAR project at St. Thomas University is studying energy transitions in Canada. As part of this project, and through other work, we have analyzed different aspects of nuclear energy development and are pleased to submit our brief for your study on Canada's Nuclear Future. Our brief is focused on subject matter (b): the development and deployment of small modular reactors and other emerging nuclear technologies.

We draw in part on a report CEDAR published in March 2026: "Eight Years on the Roadmap: Assessing Small Modular Nuclear Reactors (SMRs) in Canada." The report is available on the CEDAR website, in English: https://cedar-project.org/roadmap/
and French: https://cedar-project.org/evaluation-prm/

In 2018, the official roadmap for SMRs expected that one or more SMR demonstration projects would be operating by 2026. The first to apply to the Canadian Nuclear Safety Commission for a license was the Micro Modular Reactor project, slated for the federal nuclear site at Chalk River Laboratories. However, in 2024 the company leading that SMR project filed for bankruptcy protection in the United States. Its numerous unpaid debts included more than $600,000 to the Canadian Nuclear Safety Commission and lesser amounts to many Canadian businesses.

Two SMR projects were planned for NB Power's Point Lepreau nuclear site in New Brunswick. The two start-up company proponents, originally from the U.S. and the U.K., worked with NB Power to develop their SMR designs. To support these efforts, the federal government announced more than $97-million in funding for the SMR designs and related activities in the province and the provincial government added another $31-million. Despite this substantial investment of

public resources, there was no matching investment from the private sector. Last year New Brunswick's energy minister said the province would no longer support these SMR designs because of the financial risk of first-of-a-kind reactors.

Only one SMR is under construction in Canada, at Ontario Power Generation's Darlington nuclear site. This U.S. design, the BWRX-300, has now received almost $5 billion in federal and provincial subsidies and loans and yet, like the New Brunswick projects, has failed to attract private sector interest.

The Darlington SMR project includes four reactors and accompanying infrastructure at a projected total cost of at least $20.9-billion—for just 1,200 MW of electrical power capacity. It could cost far more—the vast majority of nuclear power projects have historically overrun initial cost estimates.

In fact OPG recently announced a delay and cost overruns for its Darlington SMR project. On November 10, the *Globe & Mail* reported that the first SMR would not meet its forecast in-service date of October 2030, and the unit's original cost estimate of $7.7 billion would be exceeded.

It is not only the high cost of SMRs keeping private investors away; the technology has yet to find a customer base. A study in Alberta by the oil company Cenovus into the potential of SMRs for oil sands extraction ended early, with the report concluding that "from a business perspective … SMRs are not economic or commercially feasible at present or in the near future. The capital costs are high, the timelines are long and uncertain, and technology and supply chains lack maturity."

At this point, eight years after the SMR roadmap began, it seems to have reached a dead end. Despite billions in public seed money for SMR activities in Canada, banks and other sources of private capital and potential customers have demonstrated little interest in them. The record of SMRs in other countries is also bleak, which raises further questions about Canada's investments.

Therefore, we recommend that the Natural Resources Committee formally request that the Auditor General conduct an audit of federal spending on SMR activities, including how proposals for SMR-related grants, contributions and contracts were evaluated and due diligence carried out.

On behalf of the CEDAR team, we wish you all the best with your study's deliberations. We look forward to reading the study report.

Sincerely,



Susan O'Donnell, PhD
Adjunct Research Professor
Lead Investigator, CEDAR Project
St. Thomas University