



April 27, 2021

Ms. Rachel Thompson
Senior Policy Advisor
Strategic Network & Agency Policy Division
Ministry of Energy, Northern Development & Mines
77 Grenville Street, 6th Floor
Toronto, Ontario
M7A 2C1

RE: EBR Registry Number 019-3007 - Reviewing Ontario's Long-Term Energy Planning Framework

Dear Ms. Thompson,

On behalf of BWXT Canada Ltd. (BWXT) I am pleased to submit our comments on the ongoing review of the province's long-term energy planning framework to the Ministry of Energy, Northern Development & Mines (ENDM).

BWXT is a longstanding and trusted global supplier of nuclear engineering, components, fuel, services and medicine and today operates 10 locations across Canada with approximately 1500 skilled employees. As one of Ontario's largest nuclear supply chain companies, BWXT has substantial interest in the province's long-term energy planning process.

We understand and appreciate that the ENDM's long-term energy plan includes goals and objectives in respect to: the **cost-effectiveness** and **reliability** of energy supply, capacity, transmission and distribution; the resiliency to the effects of **climate change**; prioritization of measures related to the conservation of energy; the use of clean energy sources and innovative and emerging technologies; air emissions from energy sources as they relate to greenhouse gases and **consultation with Indigenous Peoples** and their participation in the energy sector.

BWXT can confidently state that nuclear energy, which currently supplies over half of Ontario's electricity supply, adequately supports these stated goals and objectives. BWXT strongly supports a long-term energy framework that continues to uphold these objectives which are strongly supported today by a healthy, well-established and predominantly Ontario-based nuclear industry.

As it pertains to **cost-effectiveness**, nuclear remains the second most affordable energy in Ontario next to hydroelectric, providing more than half of the province's power below the average cost to produce residential power. In regards to **reliability**, nuclear energy provides a steady flow of power, supporting both baseload and peak demand which is unachievable with wind and solar. Our province, country and planet requires emissions-free nuclear power to meet our **climate change** goals. Such progress cannot be achieved with fossil fuel resources which release emissions into the environment. BWXT is encouraged by the ENDM's focus of **collaboration and consultation with Indigenous Peoples** as it

relates to their participation in the energy sector. The nuclear industry provides a wealth of opportunities for partnership with Indigenous communities as can be seen by the many evolving programs and networks supported by the nuclear industry.

The nuclear energy sector also has a profound and measurable impact on the Ontario economy through the provision of tens of thousands of high-skilled and well-paying jobs. Strengthened by the ongoing and necessary refurbishments of the province's nuclear fleet, Ontario's nuclear workforce stands to support and mentor an enduring and innovative nuclear industry for generations to come. Ontario's nuclear supply chain is also poised to support long-term economic growth through export opportunities afforded by an expected 500 international nuclear reactors by 2030.

As a global supplier of nuclear medicine, BWXT is proud of the nuclear industry's contribution to patient health. Today, BWXT is leading a project that will produce the world's most sought-after nuclear medicine, Tc-99m, (used to diagnose serious diseases like heart disease and cancer) for the first time ever in a nuclear power reactor – right here in Ontario.

Of particular concern to BWXT and its stakeholders is the projected capacity needs ranging from approximately 2,000-3,000 MW that begin to appear between 2024-2026 largely due to the retirement of Ontario Power Generation's Pickering Nuclear Generating Station and how this demand will be addressed. As Ontario will need to continue to remain focused on its climate change goals, BWXT feels strongly that this capacity gap should not be addressed by greenhouse gas emitting sources like natural gas, but rather by non-emitting sources, such as small modular reactors (SMRs). BWXT is encouraged by the Memorandum of Understanding signed in 2019 by the Governments of Ontario, Saskatchewan and New Brunswick in relation to SMRs, and stands ready to support its developers in the provision of engineering, component manufacturing and services well into the future. BWXT is confident that SMRs are the solution to continued clean, long-term, reliable, baseload power for Ontarians.

As BWXT continues to supply critical components and services to support Ontario's ongoing nuclear refurbishment projects, its strong future relies upon a long-term energy planning framework that supports the adoption and licensing of new innovations, like SMRs. It is for this reason, that BWXT strongly supports Ontario Power Generation's application to the CNSC for a ten-year Nuclear Power Reactor Site Preparation License. Further BWXT believes that Ontario would benefit from improved regulatory flexibility to support nearer-term SMR development in an effort to maintain ENDM's goals and objectives for Ontarians long-term.

I appreciate this opportunity to share BWXT's perspective on Ontario's Long-Term Energy Planning Framework with ENDM and welcome any further discussions that may be of assistance in its development.

Sincerely,

A handwritten signature in blue ink that reads "John MacCharlie". The signature is written in a cursive, flowing style.

President
BWXT Canada Ltd.