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Written submission from New Brunswick Power

Mémoire de Énergie du Nouveau-Brunswick

In the Matter of

À l'égard de

Decision on the scope of an environmental assessment of the proposed Micro Modular Reactor Project at the Canadian Nuclear Laboratories Ltd., in Chalk River

Décision sur la portée de l'évaluation environnementale pour le projet de microréacteur modulaire aux Laboratoires Nucléaires Canadiens ltée, à Chalk River

Hearing in writing based on written submissions

Audience par écrit fondée sur des mémoires

June 2020

Juin 2020

Canada

Énergie NB Power

Point Lepreau Nuclear Generating Station
PO Box 600, Lepreau, NB
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TU 06374

May 15, 2020

Marc Leblanc, Commission Secretary
Secretariat
Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
Ottawa, Ontario
K1P 5S9

Dear Mr. Leblanc,

Subject: Support for MMR at Chalk River

The purpose of this letter is to express support as an intervenor for Global First Power in their proposal for site preparation of a single small modular reactor, using Micro Modular Reactor (MMR) technology.

The proposed project is located at the Chalk River Laboratories site, Renfrew County, Ontario. The proposed project includes a nuclear plant, which would contain a MMR High Temperature Gas-cooled Reactor to provide process heat to an adjacent plant, via molten salt. The MMR would produce approximately 15 Megawatt (thermal) of process heat to generate electrical power and/or heat, over an operating life-span of 20 years.

As stated in the Global First Power project description, this project could serve as a model for the future and be an energy solution that provides clean, reliable energy to support Canada's heavy industry and mining applications, for far north and remote communities, and for potential applications to export markets. This solution would contribute to a reliable energy source that supports Canada's environment and climate change goals while building Canadian prosperity.

NB Power supports Global First Power's project as it will demonstrate:

- Safe and reliable production of energy using proven nuclear reactor fundamentals and features,
- Simple and scalable design for remote communities and for mining companies,
- Cost-effective option to solve energy challenges in heavy industries,
- Design that can eliminate the dependency on diesel fuel for energy production in remote areas,
- Support for reducing Canada's carbon footprint,
- Supply of baseload power - 24/7, 365 days a year - which can complement renewable generation, such as wind and solar,
- Designed to operate for 20 years without refueling,
- Job creation and the sustainment of Canada's nuclear supply chain. The development and deployment of new SMR technologies presents an opportunity to maintain and grow Canada's existing nuclear supply chain and to expand that supply chain in potential new markets including Saskatchewan and Northern Canada.

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Canada has an opportunity to lead in the development of new nuclear power technology worldwide. The Canadian SMR Roadmap illuminates a pathway for SMR development, demonstration and commercial deployment in Canada. It positions SMR development as a key tool in achieving Canada's climate change and emission reduction objectives while supporting the transition from fossil fuels for power generation, resource extraction and remote off-grid communities. In addition, it encourages the building of a Canadian supply chain versus buying technology from abroad.

New Brunswick Power is interested in this development and will be closely following it, as we continue to work with other provinces and the Federal government to implement the recommendations from the SMR Roadmap.

If you require additional information, please contact Claire Harris at 506-333-8795 or charris@nbpower.com.

Sincerely,

Brett Plummer
Vice President Nuclear and Chief Nuclear Officer

BP/CH

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