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Written submission from the Canadian Nuclear Workers Council

Mémoire du Conseil canadien des Travailleurs du Nucléaire

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

CANADIAN NUCLEAR WORKERS' COUNCIL

Canadian Nuclear Workers' Council

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June 01, 2020

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Members of the Canadian Nuclear Safety Commission

RE: CNSC Hearing on the Scope of an Environmental Assessment for Global First Power's proposed Micro Modular Reactor at Chalk River Ref. 2020-H-102 Rev.1

The Canadian Nuclear Workers' Council (CNWC) would like to make a submission in regards to the CNSC decision on the scope of factors to be considered in the conduct of an Environmental Assessment for a Micro Modular Reactor (MMR) by Global First Power (GFP) at Canadian Nuclear Laboratories - Chalk River. This project commenced under the Canadian Environmental Assessment Act, 2012 (CEAA 2012) and continues to be completed under this legislation. Under the CEAA 2012 the project requires an environmental assessment (EA) and the Commission, being the agency responsible for conducting the EA, determines the scope of the factors to be taken into account for that EA. The CNWC supports this approach for the MMR project. Please consider this as our written submission for the June 30, 2020 Commission Hearing.

Who We Are

The Canadian Nuclear Workers' Council has been the collective voice of Unionized Workers across Canada's Nuclear Industry for 27 years. This includes uranium mining, nuclear fuel processing, electricity generation, nuclear power plant construction and refurbishment, medical isotope production, nuclear research and development. A number of our Member Unions represent Workers at Chalk River.

The goals of the CNWC are to ensure the perspectives of Canada's Nuclear Workers are heard by decision makers, strengthen the collective role of Nuclear Workers via their Unions as partners in Canada's Nuclear Industries, and enhance public knowledge about the many benefits of Canada's Nuclear Industries.

The CNWC and all of our Member Unions believe Worker Safety, Public Safety and the Protection of our Environment are all intricately linked. You cannot adequately address one without the others. Nothing is more important to us than protecting our environment, health and safety.

The CNWC is a regular intervenor at CNSC hearings and regularly comments on the evolution of CNSC Regulatory Documents.

The Project

We have read CMD: 20-H102 and are in full support of CNSC Staff's report.

Global First Power's (GFP) Micro Modular Reactor (MMR) project River is a proposal for the site preparation, construction, operation and decommissioning of a new single Small Modular Reactor (SMR) on the Canadian Nuclear Laboratories - Chalk River site. The MMR Project will use a High Temperature Gas Reactor to provide process heat to an adjacent plant via molten salt. The process heat would then be converted into approximately 15 Megawatt (thermal) of steam that could be converted to electrical power and/or heat for the CRL site, or supply electrical power to the local power grid. The anticipated life span of the MMR is 20 years.

This project will use Ultra Safe Nuclear Corporation's (USNC) Micro Modular Reactor (MMR) technology. The reactor design does not require a source of cooling water meaning there will be little impact on the Ottawa River.

The design of the reactor in combination with the fully ceramic microencapsulated fuel result in a significantly reduced probability of a malfunction that could have off-site impacts.

The MMR will operate on a single load of fuel for the 20-year operating lifetime. Therefore no fuelling operations are required and the total volume of used fuel is known and can be planned for well ahead of decommissioning.

Only excavation activities and the assembly of the major components will take place on site. Construction of the MMR components will take place off site. This will result in a shorter on-site construction period and less vehicle traffic.

The Chalk River site has been the home of many nuclear projects and activities for 75 years. This includes many nuclear advances, internationally renowned research and development and Canada's first reactor demonstrations. The community and the workforce are knowledgeable and comfortable with nuclear science and technology. The site is already licensed and it is well known which will help inform the MMR Environmental Impact Statement (EIS).

The purpose of the MMR project at Chalk River is to demonstrate a viable alternative to the use of fossil fuels to produce energy. The MMR project will benefit from the experience and expertise of GFP's industry partners and the many organizations collaborating to bring the benefits of Small Modular Reactors (SMR) to Canada. Canada's SMR Roadmap outlines the significant contribution SMRs can bring to Canada. SMRs can provide safe, clean, reliable energy while displacing the use of fossil fuels and helping to combat climate change. SMRs can also provide tremendous socioeconomic benefits both locally and nationally. The MMR project will help advance the successful development of other SMR projects across Canada.

Closing Remarks

Canada's Nuclear Industry is founded on technologies that were pioneered and developed in Canada. Our Nuclear Industry will continue to support research and development, evolve and provide opportunities for future generations. Currently this is a vital segment of Canada's economy. Nuclear already provides clean, reliable, affordable baseload generation in Ontario and New Brunswick helping to lead the fight against climate change. It produces nuclear isotopes vital for our healthcare. The Industry is highly unionized and supports high quality employment for tens of thousands of Canadians. Workplace health and safety standards in Canada's Nuclear Industry are second to none. Employers in the Industry learn from each other's operating experience. The MMR project and SMR development in Canada will help ensure that proud history is continued. The project is safe and the location is proven.

We are in full support of CNSC Staff's report (CMD: 20-H102), their overall conclusions and their recommendation that the scope of factors to be considered include the factors mandated in paragraphs 19(1) (a) to (h) of CEAA 2012 and that no other factors need to be considered in this EA.

Bob Walker

National Director

Canadian Nuclear Workers' Council