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Written submission from PCL Industrial Constructors Inc.

In the Matter of

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

Hearing in writing based on written submissions

June 2020

Mémoire de PCL Industrial Constructors Inc.

À l'égard de

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

Audience par écrit fondée sur des mémoires

Juin 2020

Canada

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PCL's Intervention for the Proposed Scope to be Considered in Conducting and Environmental Assessment for a Project Proposed by Global First Power

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PCL is Canada's largest constructor that carries out work across Canada, the United States, the Caribbean and Australia. We have diverse operations in civil infrastructure, heavy industrial and the buildings markets that are supported by 31 major centers. Together, we have an annual construction volume of more than $8 billion, making PCL one of the largest contracting companies in North America. We are a Canadian company that is 100% employee owned, with 4600 employees that manage approximately 20,000 trades people. We have offices in almost all our provinces, with our corporate head office in Edmonton, Alberta along with the largest modular facility in Canada, if not North America. PCL is committed to building up our nuclear energy footprint and operations in Canada, and we are supportive of the proposed project for a new micro modular reactor at Chalk River.

Nuclear energy is a safe, clean, reliable and affordable source of energy. Canada has a great uranium resource combined with one of the most well-developed nuclear supply chains, demonstrated by the recent MOU signed by the provinces of New Brunswick, Saskatchewan and Ontario to collaborate on SMR development. Alberta has also indicated a desire to participate which is an incredible milestone in our Canadian nuclear industry. Saskatchewan has the potential to become an international nuclear fuel manufacturer and supplier for TRISO fuel which many of the SMR designs will utilize. If we continue to act with priority, there is an opportunity to capture the economic benefits that will arise for Canadians from coast to coast and the potential to make Canada a global leader in nuclear energy. We hope that the CNSC and Canadians can see how developing this industry will touch every province and territory across our great nation.

PCL understands that GFP's MMR projects is subject to an EA under the Canadian Environmental Assessment Act 2012 (CEAA 2012) with the CNSC as the sole responsible authority. As such, the EA is required to take into account the factors outlined in CEAA 2012 subsection 19 (1). After reviewing these factors, PCL agrees with CNSC staff's assessment that the scope of factors for the EA include the factors mandated in paragraphs 19 (1) (a) to (h) of CEAA 2012 and that no additional factors be included.

The purpose of the MMR at Chalk River project is to demonstrate a viable alternative to using fossil fuels to provide safe, reliable energy for heavy industry or remote installations, while also reducing Canada's carbon footprint and achieving climate change goals. A successful MMR project could prove that nuclear energy – specifically, small modular reactors - is a viable alternate energy solution for Canada and worldwide.

PCL has reviewed GFP's Project Description and CMD 20-H102 and would like to offer the following comments for the Commission's consideration:

- The proposed site at CNL has been part of the development of the nuclear program for decades by safely operating a reactor and research facilities. The land is well characterized and understood from a technical and cultural perspective. Therefore, there is a low probability that there will be impacts on any physical or cultural heritage aspects that have not already been well studied and documented. As well, the CRL site has been well studied through previous EAs and potential areas of cultural heritage are well known.

- The construction for the MMR will take place off site based on its modular design. This increases the safety and quality of the plant as only the assembly of major components takes place on site. A minimal excavation in the specific project area will be required, however this construction technique minimizes the on-site construction period with less construction traffic, therefore reducing the environmental impact and local traffic congestion.

- The proposed MMR design does not require a source of cooling water (no intake or discharge of water) meaning there will be no or very little impact on the Ottawa River or surrounding natural water bodies.

- The design of the MMR is one of the safest designs with an EPZ at the reactor building walls. As such, the safety of the environment, plant personnel and surrounding communities will benefit from the energy that will be derived from this safe plant design.

- This MMR is intended to be part of a fleet across Canada, as such, the CNSC should consider how the initial EA process can be modified, if possible, such that future projects can take credit for some of the decisions being made in this EA. The objective is to streamline the process so GFP is not required to answer the same questions repeatedly, where the answer has not changed due to the technology stability. In addition, it will demonstrate progressive thinking from the CNSC as a regulator, further illustrating that we can protect our environment whilst moving ahead in an efficient manner.

Let me close by reiterating PCL's commitment to the goals of clean energy, environmental protection, resource development, and economic growth. Goals we believe GFP will demonstrate and achieve through this project. We at PCL also believe that this project at Canadian Nuclear Laboratories supports achieving all of these goals.

In conclusion, PCL believes that the proposed EA scope for GFP's MMR project should be accepted as recommended.

Sincerely,

Louie Shoukas
Chief Nuclear Officer
PCL Industrial Constructors Inc.