



**Written submission from the  
Concerned Citizens of Renfrew  
County and Area**

**Mémoire de  
Concerned Citizens of Renfrew  
County and Area**

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**

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

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Hearing in writing based on written  
submissions

Audience par écrit fondée sur des mémoires

**June 2020**

**Juin 2020**

**Micro Modular Reactor Project at Chalk River: Comments on the proposed scope of factors to  
be considered in the conduct of an EA (Impact Assessment Agency Reference #80182)  
Concerned Citizens of Renfrew County and Area  
June 1, 2020**

Concerned Citizens of Renfrew County and Area wishes to comment on factors to be considered in the environmental assessment of a “small modular reactor” (SMR) proposed to be built at the Chalk River Laboratories, located in Renfrew County on the Ottawa River. We are a non-governmental, volunteer organization that has been working for the clean-up and prevention of radioactive pollution from the nuclear industry in the Ottawa Valley for over 40 years.

Global First Power - a partnership between Ultra Safe Nuclear Corporation and Ontario Power Generation Inc. (OPG) – is proposing to build a “Micro Modular Reactor” (MMR) at the federally owned Chalk River Laboratories. The MMR project description says OPG would “provide licensing and operations capability for the MMR facility during the construction, operation, and decommissioning phases of the project.” Project funding sources are unclear, but Global First Power said in a May 20<sup>th</sup> “SMR Telephone Town Hall” that the MMR would cost in the range of \$100 to \$200 million dollars.

With regard to the environmental assessment of this project, CMD 20-H102, Submission from CNSC Staff on the Proposed Scope of Factors to be Considered in the Conduct of an Environmental Assessment for a Project Proposed by Global First Power, recommends that “the scope of the factors for this EA include the factors mandated in paragraphs 19(1)(a) to (h) of the CEAA 2012 and no additional factors.”

The *Canadian Environmental Assessment Act, 2012* (CEAA 2012) was bundled into an omnibus budget bill and passed in great haste and secrecy, without an opportunity for careful consideration by Parliamentarians. In contrast, Canada’s House of Commons and Senate had prolonged and sometimes contentious debates in 2019 before passing the *Impact Assessment Act*– which supersedes CEAA 2012. However, the MMR project was launched just prior to the coming into force of the *Impact Assessment Act*. Its project assessment under CEAA 2012 may not benefit from the new Act’s measures pertaining to sustainability and Indigenous rights, to name a few, that are now legal requirements.

In Section 22 (1) of the new Act, the list of “factors to be considered” in a project assessment differs from the equivalent section 19 (1) of the old Act. Parliament added the following factors, all of which are relevant to the MMR project and should be included in the scope of the project assessment:

- the “need for” the project;
- the extent to which the designated project contributes to sustainability;
- alternative means of carrying out the project that include use of “best available technologies”;
- the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada;
- “community knowledge provided with respect to the designated project”; and

- “the extent to which the effects of the designated project hinder or contribute to the Government of Canada’s ability to meet its environmental obligations and its commitments in respect of climate change.”

**The project’s ability to contribute to Canada’s climate change commitments** must include the project’s carbon dioxide and GHG emissions. The CNSC’s *Interim Strategy for Environmental Assessments* (<https://nuclearsafety.gc.ca/eng/resources/fact-sheets/greenhouse-gas-emission-assessments-canadian-nuclear-fuel-cycle.cfm>), proposes “that proponents assess the total GHG production as part of CNSC-led environmental assessments,” using “a lifecycle analysis approach that includes estimation of upstream and downstream GHG emissions,” that “may include the following stages:

- mining and milling
- refining
- fuel fabrication
- nuclear power plant
- waste disposal (low-, intermediate-, and high-level radioactive waste disposal).”

All five stages are relevant to the MMR project. The CNSC should require the proponent to carefully evaluate the emissions from each of these stages, including all the uncertainties involved. In particular, GHG emissions associated with the MMR fuel fabrication stage (involving production of enriched U-235 fuel not currently used in Canadian nuclear power reactors) should be thoroughly assessed.

The MMR project would represent “the first commercial deployment of a private sector funded Small Modular Reactor (SMR) technology in Canada,” intended to “demonstrate the commercial viability of the MMR technology to prospective customers.” This is not intended to be a “one-off” project. It has implications for future deployment of SMRs, and should be assessed with this in mind.

The MMR project description refers to remote communities “with no access to grid power for their heating and electricity needs” as prospective customers for MMR deployment. Many of these remote communities are Indigenous; however, the increased protections provided to Indigenous rights in the new *Impact Assessment Act* are not requirements within CEEA 2012. To quote from the new Act, “**the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada**” must be considered as a factor in the project assessment. We further note that the Chalk River Laboratories were established without consultation or accommodation with Algonquin peoples who never ceded their rights to the 3,700 hectare site. At a minimum, the MMR project will be located on this site for several decades, potentially with impacts lasting thousands of years. The proponent should consider in detail the MMR project’s impact on the exercise of their traditional rights.

Our group made a previous submission on the project description with details on a number of technical issues (waste management, description of physical works related to the project, accident probabilities, nuclear weapons proliferation risks). We requested these be addressed in the EA. We repeat our request that our previous submission be addressed in the consideration of the scope of the EA.

In that submission we noted that the project description does not describe “Financial support that federal authorities are, or may be, providing to the project,” which is a requirement of the *Prescribed Information for the Description of a Designated Project Regulations* under CEAA 2012. We questioned the proponent’s assertion that “Federal authorities are not providing financial support to the Project,” and noted that this side-stepped the issue of support that may be provided to the project in the future.

Atomic Energy of Canada Limited (AECL), the federal crown corporation that owns the Chalk River site, provides the privately-owned Canadian Nuclear Laboratories (CNL) with roughly a billion dollars annually in federal funding. CNL has created a Canadian Nuclear Research Initiative “to make CNL’s technical capabilities and expert knowledge available and accessible to the SMR community in order to equip them with the technical support required to progress towards SMR deployment in Canada,” and is negotiating terms of a cost sharing arrangement with Ultra Safe Nuclear Corporation “to resolve a broad array of technical questions in support of its Micro Modular Reactor (MMR).”

Noting the MMR project objective of demonstrating commercial viability of SMRs, we ask that the following additional factor be included in the scope of the EA: **Financial support from government authorities, including the crown corporations AECL and OPG, for the project.** The assessment should also detail any in-kind support that AECL and OPG have given or expect to be offering in the future.

Finally, we wish to raise an issue regarding the process through which the CNSC’s Commission will make its determination on the scope of the MMR EA. The scope of three previous EAs currently being conducted under CEAA 2012 was approved by a panel composed solely of the CEO and President of the CNSC, who also serves as Commission Chair. *A Commission Decision on the Scope of Environmental Assessments for three proposed projects at existing Canadian Nuclear Laboratories’ facilities* was made at a Commission Hearing on March 8, 2017 with the only Member present being the past CNSC President, Michael Binder. While this is shown on the CNSC website as a “Hearing in writing,” no Notice of Meeting was issued prior to this “public” hearing, and no documentation was available for consideration other than a written submission from CNSC staff (CMD 17-H100).

In the current matter, CMD 20-H102 refers to a “Hearing in writing based solely on written submissions scheduled for June 2020,” with no further details as to the date of the hearing, which Commissioners may be present, whether the public would be allowed to listen to any discussions that might take place, or whether submissions such as the present one will be included as CMDs for the hearing.

Based on the limited information currently available, the decision-making process for the hearing on the scope of the MMR EA could be similar, if not identical, to that followed for the March 8, 2017 hearing.

Given that the current CNSC President and CEO, who is also Chair of the Commission, is a former senior manager responsible for new nuclear reactor projects at OPG - and given that OPG would “provide licensing and operations capability for the MMR facility during the construction, operation, and decommissioning phases of the project” – using a “Hearing in writing” with only the current Commission Chair present creates the appearance of a conflict of interest.

We recommend that the CNSC use an alternative decision-making process for the scoping decision that provides transparency and that does not affect public trust in the independence and credibility of the regulator. In light of the COVID-19 pandemic, we also recommend an extension in the submission deadline for comments, so that all interested parties have ample time to consider this important matter.