



**Written submission from
National Council of
Women Canada**

**Mémoire de
National Council of
Women Canada**

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 Itée, à Chalk River**

Hearing in writing based on written
submissions

Audience par écrit fondée sur des mémoires

June 2020

Juin 2020

From: gracia.janes [REDACTED]
Sent: Monday, June 1, 2020 6:59 PM
To: [Interventions \(CNSC/CCSN\)](#)
Cc: [President National Council of Women of Canada](#)
Subject: National Council of Women of Canada Comments on
Attachments: Global Power small nuclear reactor prototype September 14th 2019.docx; The National Council of Women of Canada Slowpoke application.docx; CNSC Global Power final document EA.docx; nuclear Bill C69 May 31, 2019 final.docx



Ms. Rumina Velshi, President and CEO
Canadian Nuclear Safety Commission
280 Slater Street, Ottawa, Ontario K1P 5S9

June 1st, 2020

cns.interventions.ccsn@canada.ca

Dear Ms Velshi,

Below and attached are the National Council of Women of Canada (NCWC) June 21st comments regarding the “Scope” of the Environmental Assessment of Global First Power’s proposed Micro-Modular nuclear reactor at Chalk River ON (CNSC Global Power Final Document).

Also attached are other NCWC interventions re : May 31st, 2019 Bill C-69 ; August 26th, 2019 Change of License for the Decommissioning of the SLOWPOKE reactor ; and, the September 14th 2019 Global power “*Project Description*” for the Proposed Micro- Modular Nuclear Reactor at CNL Chalk River Site.

Gracia Janes 1st VP National Council of Women of Canada and VP Environment

Ms. Rumina Velshi, President and CEO
Canadian Nuclear Safety Commission
280 Slater Street, Ottawa, Ontario K1P 5S9

June 1st, 2020

cncs.interventions.ccsn@canada.ca

Re: Scope of the Environmental Assessment of Global First Power Micro Modular Reactor at Chalk river , Ontario

Dear President Velshi,

As you are aware, due to our past interventions at CNSC hearings, the National Council of Women of Canada (NCWC) is most concerned about nuclear power's lifecycle threats to public health, safety and the environment. **1.** Therefore we have urged the CNSC many times over close to three decades to use the "*Precautionary Principle*" when considering all nuclear projects, whether large-scale, such as nuclear reactor rebuilds or life extensions, or as in this case, the "*Scope*" of Global First Power's proposed Micro- Modular Nuclear Reactor at Chalk River Environmental Assessment.

To this end in a letter to CNSC of May 31st, 2019 NCWC spoke strongly in support of Small Nuclear modular reactors being kept within the stronger "*Environmental Assessment*", now "*Impact Assessment*" protections of Bill C 69 . **2.**

Later, in a September 14th, 2019 letter to CNSC we raised a wide variety of serious concerns regarding Global Power's "*Project Description*". These included, the dangers posed by small modular nuclear reactors, key missing elements to the description, and many necessary vital additions as :

- *In-depth proof of the proponent's experience in building and managing small nuclear reactors*
- *Examples of successful modular reactors elsewhere*
- *A detailed description of the site, including barriers to safe operation*
- *A crisis management plan e.g. nefarious actions and emergency measures for accidents e.g. emergency crew access in remote areas*
- *Assurance of safe handling and disposal of nuclear waste-out of human contact*
- *Proof that international standards will be met*
- *A peer-review by independent scientists of design, operation, safety, public and worker health and safety, environmental protection and social impacts* **3.**

NCWC considers the Commission Member Document (CMD) to be integral to the development of very strong EA "*Scope*" for this, the first small scale modular nuclear

reactor in Canada. And, while we note staff has recognized some of our concerns in its *“Disposition Table of Public and Indigenous Groups and Organizations’ Comments on the Project Description for the Micro Modular Reactor Project”*, and they have referred to a wide variety of regulatory documents that the proponent must follow, several key responses lack the necessary detail as to how Global Power must interpret and incorporate certain very important factors into the Environmental Assessment.

Like other involved public sector groups NCWC’s ability to fully study the CMD and supporting documentation and explain our views regarding the changes needed to improve the “scope” of the Global Power’s 2021 CNSC EA hearing, has been considerably reduced by the current COVID 19 restrictions. This is exacerbated by the one month delay in the posting of Staff’s CMD and CNSC’s refusal to subsequently extend the deadline for public comment to June 30th as requested by CELA.

To conclude NCWC notes again, that this is the first, of what is already a multitude of expected proposals for small nuclear reactors, and while each of these will have its own Environmental Assessment, the diligence given to the Global Power EA will set a precedent. Therefore it is extremely important for engaged Indigenous groups and organizations such as NCWC, CELA, North Watch and individual Canadians to be heard, through the allotment of additional time to more fully study, critique and respond to CNSC well before the projected Spring 2021 CNSC EA hearing.

Submitted by Gracia Janes 1st vice President NCWC and VP Environment

gracia.janes@bellnet.ca

References/Attachments

1. NCWC August 26th 2019 Presentation CNSC Licensing change for decommissioning of the University of Saskatchewan Slow Poke Reactor
2. NCWC May 31st 2019 Brief on Bill C69 Discussion Paper on Proposed Project List
3. NCWC September 14th, 2019, comments 80182 Global Power *“Project Description”* for Proposed Micro Modular Nuclear Reactor at CNL Chalk River Site



Canadian Nuclear Safety Commission
Aimee Rupert Environmental Assessment Officer
Cnsc.ea.ccsn@canada.ca
September 14th 2019

Re: 80182 Global Power “*Project Description*” for Proposed Micro Modular Nuclear Reactor at CNL Chalk River Site

The National Council of Women of Canada (NCWC) has strong precautionary policy regarding the many dangers of nuclear power to public health and safety and the environment, and we are recently on record with the Canadian Environmental Assessment Agency as supporting full Environmental Impact Assessments for small modular nuclear reactors, under the 2019 Impact Assessment Bill C-69 .1.

Therefore, NCWC is extremely concerned that Global Power’s micro-modular nuclear reactor “*project*”, the first of its kind to get to this stage of CNSC’s application process , and therefore a precedent-setting one, is instead subject of a CNSC “*review*” , and “*assessment*” under the much weaker 2012 Canadian Environmental Assessment Act.

Given CNSC’s guidance to the nuclear industry and promotion of micro nuclear reactors as the next generation of electricity providers across Canada , NCWC doubts the impartiality of this process. 2. Nevertheless, in the public interest NCWC raises the following issues of great concern regarding Global Power’s nuclear micro reactor, as this project :

- is the first reactor of its kind to use extremely dangerous enriched uranium as fuel and this raises concerns about nuclear proliferation 3.
- Is likely to experience the same types of accidents , and failures of similar reactors in the USA and Europe. 4.
- may fail commercially, as these types of reactors have not been economically feasible elsewhere.5.
- is to be located at the Chalk River site in a recognized earthquake zone near the Ottawa River .

- will transform reactor fuel over twenty years of operation into high-level waste, containing highly- radioactive, long-lived fission products . 6.
- accounts for a prototype at only one location i.e. Chalk River , which doesn't reflect other sites such as remote communities with additional barriers e.g. siting transportation , community conditions , safety and security capacity 7.
- fails to provide detailed plans for decommissioning 8.
- is likely to be opposed strongly by First Nation Chiefs 9.

Given these very important cautionary problems with Global Power's project and with small nuclear reactors in general, it is crucial that CNSC develop extremely strong assessment parameters for its "*project description*," and those of subsequent modular nuclear projects. This is to ensure that none are approved unless the environment and public/community and worker health and safety, are stringently protected now and over the very long term .

Therefore NCWC recommends that the Global Power "*project description*" include:

- 'in-depth' proof of the proponent 's experience in building and managing small nuclear reactors .
- a description of the fuel to be used , its risks and proposed safety measures.
- a detailed description of the main components of the reactor and its operation.
- examples of successful modular nuclear reactors elsewhere.
- a record of proven experience for the company's researchers, and operational staff.
- a detailed description of the site, including barriers to safe operation.
- a crisis management plan e.g. nefarious actions and emergency measures for accidents e.g. emergency crew access in remote locations .
- assurance of safe handling and disposal of nuclear waste-out of human contact and in perpetuity i.e. nuclear waste inter-generational stewardship
- proof that international standards will be met.
- a peer-review by independent scientists of design, operation , safety, public and worker health, environmental protection and social impacts .

- a plan for deployment elsewhere in Canada –similarities and differences – and adaptations for these
- a life-cycle cost benefit and loss analysis of the environmental, operational, health, social, and waste management of the project over the short, intermediate and very long term.

NCWC looks forward to a detailed response to our concerns and an opportunity to attend any subsequent hearing on this application.

Gracia Janes, VP Environment National Council of Women of Canada
gracia.janes@bellnet.ca

References :

1. National Council of Women of Canada letter to Canadian Environmental Assessment Agency .May 31st 2019
2. .Concerned Citizens of Refrew County. Globe and Mail article November 6 2018. " *Federal nuclear regulator urges Liberals to exempt smaller nuclear reactors from full panel review* Globeandmail.com/business/article-federal-nuclear-regulator-urges-liberals-to-exempt-smaller-reactors/
3. Information sheet Northwatch&Personal Communication. Gordon Edwards. .August 19th 2019
4. Old Fort William Cottagers Association comments to CNSC.August 27th 2019 ...” *the types of technology that GFP is proposing, have a spotty safety record and are “prone to failures that could potentially lead to serious accidents releasing radioactivity into the environment. All HTGRs have been shut down before their licenses expired according to: Englert, MaBhias, Friederike, Frieß, and M. V. Ramana. 2017. (hBp://dx.doi.org/10.1080/08929882.2017.1275320) Ramana, M.V. 2016 “The Checkered Operational History of High Temperature Gas-Cooled Reactors.” Bulletin of the Atomic Scientists 72 (Issue 3):171-179.*
5. *Information Sheet North Watch & Personal Communication* Gordon Edwards. August 19 2019
6. *ibid.*
7. Old Fort William Cottagers Association comments to CNSC. August 27th 2019 .pages 7-8.
8. *Ibid*
9. *9.North Bay.Expositor News” The Anishinabek Nation Chiefs-in-Assembly have sent a strong message to the nuclear industry and the governments of Canada and Ontario, having unanimously endorsed a resolution stating their clear opposition to the construction, operation, storage or disposal of small modular reactors (SMRs) in the territory of the Anishinabek Nation, including bodies of water.” .*