

The Provincial Council of Women of Ontario (PCWO)

Established 1923

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Comments on Canadian Nuclear Laboratories (CNL) Application for a 10-year Relicensing of Chalk River Laboratories (CRL) from 2018 to 2028

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Introduction

The Provincial Council of Women of Ontario (PCWO) is a member-funded non-governmental, non-partisan, non-sectarian organization, that has been working for close to 95 years to advance the status of women, and improve and enhance the lives of their families and of their communities in Ontario. PCWO is federated with the National Council of Women of Canada and the International Council of Women.

A healthy and safe environment for all Ontario citizens and their families has always been of the utmost importance to our members. Consequently, we have been monitoring the proposed solutions and processes for the safe operation of nuclear facilities and the disposal of all types of nuclear waste for many years.

As PCWO is concerned greatly about the dangers and risks to our healthy Ontario (and Quebec) environment it is opposed to the Canadian Nuclear Laboratories (CNL) application for a 10-year licence of the Chalk River Laboratories. Therefore we recommend strongly that, if approved, no more than a 2 year licence be granted, and extremely strong regulatory CNSC oversight conditions be set within any licence for the following reasons:

- Atomic Energy of Canada, a Crown Corporation which until recently had considerable expertise amongst its many hundreds of scientists and other employees who managed Chalk River for 62 years, were often limited to between 2 year single - project extensions, and at the most 5 year licences.

Even within these time frames, AECL's adherence to the licence conditions were at times critiqued and modified by CNSC due to deficiencies in such things as reliability. 1.

- In its licence application, CNL, a consortium of private companies, in co-partnership with Atomic Energy of Canada, states that its *"CNL dedicated employees are its primary asset. The commitment, dedication and technical excellence of CNL's employees having established a proud heritage over many decades"* 2. Yet now, CNL is just a shell of the former operator Atomic Energy of Canada (AECL), its private-sector management having let go thousands of AECL employees and retained a bare minimum of about 40.3.
- CNL's responsibilities over the next several years are enormous, including such tasks as decontaminating and decommissioning infrastructure, remediating sites and safely storing and disposing of radioactive waste in a manner that protects the public, workers and the environment 4.
- Despite this daunting responsibility, CNL is rushing ahead with its mandated tasks, most recently evidenced by a promise to government that it was *"pursuing the fastest, most cost effective way (s) of executing the DWM (Decommissioning and Waste Management) mission including disposal of all waste"* 5.
- According to the latest review of CNL by the Attorney General of Canada, it has a complete *"lack of formal plans for assessing risks"* 6. This is of grave concern to PCWO, many other scientists, and the general public.

**This flaw was underlined recently by the media report of an internal Ontario Power Generation memo, that workers were pulled from Ontario nuclear plants due to 'concerning trend of safety incidents,' 7.

- CNSC staff has recommended changes, including the deletion of half of the current licence conditions, that will mean less regulatory oversight, fewer requirements for reporting; and weaker regulatory language 8.
- All of the above concerns are exacerbated by the dangers posed by the physical properties of the Chalk River site itself, which lies on a known geological fault area, with a history of regular earthquakes, close to the Ottawa River, upstream from major Ontario and Quebec urban centres. 9

Conclusion

To conclude, in the interests of public and worker health and safety, and environmental protection, PCWO asks the following most important question underlying all of the issues we and many other scientists, public interest groups, health and safety professionals and concerned Canadians have raised.

Why would the Canadian Nuclear Safety Commission grant a primarily private sector consortium, with no proven track record at this site, and with such enormous responsibilities as it carries out multiple potentially dangerous tasks, a licence that is between 2 and 5 times longer that AECL has received in the past, and with much weaker standards, rather than a 2-year licence with even stronger licence requirements?

References

1. CNSC Records of Proceedings, including Reasons for Decisions in the Matter of AECL application for renewal of the Operating Licence for the New Processing Facility at Chalk River Laboratories November 24th 2005

CNSC Supplementary Information CMD 06-H9.B stated "*When CMD 06-H9 was written, CNSC staff was considering the implications of deficiencies found during a February 2006 audit of the NRU Upgrades and was formulating regulatory requests or actions to address the deficiencies to the extent that would provide assurance that the upgrades possess the physical, functional, and performance characteristics to meet their design objectives [...] CNSC's staff review of the NRU Upgrades concluded that, although they possess the physical, functional and performance characteristics to meet their design objectives, there is a lack of assurance that they will perform their functions with high reliability.*" CNSC also said that, in order to bring the upgrades to high reliability, eight directives and two action notices were issued to the upgrade project, and two directives, three action notices and two recommendations were issued to CRL site processes.

2. http://www.cnl.ca/site/media/Parent/Exec_Summary_Long_Term_Strategy_2017Apr18.pdf Canadian Nuclear Laboratories 2016-2026 10-Year Integrated Plan page 9. Paragraph 2.
3. Personal communication Dr. Gordon Edwards 8/12/17
4. Canadian Nuclear Laboratories 2016-2026 10-Year Integrated Plan <http://www.cnl.ca/en/home/news-and-publications/stories/2017/20170425.aspx> CNL web site. <http://www.cnl.ca/en/home/news-and-publications/stories/2017/170223.aspx> "Canadian Nuclear Laboratories stands

ready to assist vendors every step of the way; from supporting research and development activities to prototype deployment at one of our sites. A prototype SMR at CNL would be co-located with the world-class research facilities and scientists needed to solve key technology challenges with capabilities for fuel manufacturing, and examination, and novel waste solutions to efficiently move a project to deployment. “

5. Canadian Environmental Law Association. June 20th, 20217. Petition to Auditor General. Canada’s Nuclear Legacy Liabilities: Clean-up Costs for the Chalk River Liabilities. Page 6. *“CNL shall seek the fastest, most cost- effective way(s) of executing the DWM (Decommissioning and Waste Management) Mission including disposal of all waste.”*

6. <https://ipolitics.ca/2017/11/21/nuclear-agency-hurt-pcos-failure-find-appointments-auditor>

“The OAG spotted other gaps in AECL’s governance during the critical transition years, including a lack of formal plans for assessing risks, bungled salary levels and a failure to hold public meetings. The board has not implemented a systematic way of watching and reporting risks among its many nuclear assets, the report says. AECL is overseeing the decommissioning of several large reactors and the rejuvenation of the Chalk River facilities in Eastern Ontario.”

7. Workers pulled from Ontario nuclear plants due to ‘concerning trend of safety incidents,’ internal email

<https://globalnews.ca/news/3896056/darlington-pickering-nuclear-safety-concerns/>

8.. Study by Ole Erickson for Concerned Citizens of Renfrew County 2017 :

“CNSC staff now propose to delete the vast majority of these Compliance Verification Criteria and replace them with references to CSA standards and internal CNL documents. Neither the CSA standards nor the internal CNL documents are publicly accessible. CSA standards are voluntary, and are not intended to replace government regulations. This in our view represents a massive deregulation of activities at Chalk River”

9. CNL Project Description SECTION 5.3 GEOLOGICAL AND HYDROLOGICAL ENVIRONMENT 5.3.1.4.2.2. Map Figure 5.3.1.5 Descriptive

*“ Two main fracture or faulting zones are present in the CRL property; the Mattawa Fault , which lies below the Ottawa river and consists of the northeast boundary of the property, and; the Maskinonge Lake lineament in the southwest area of the property. Within the Perch Lake basin a moderate probable fracture zone extends from approximately east to west through the upper portion of the basin “ ..“two main fracture or faulting zones are present in the CRL property. * These are known to be active and have been for thousands and thousands of years”.–J. Robert Janes BSc, M.Eng, author ‘Geology and the New Global Tectonics’ ..co-author with Jack Mollard of ‘Air Photo Interpretation of the Canadian Landscape.’*