URGENT ACTION REQUEST -

BY MIDNIGHT DECEMBER 11 (MONDAY)

Please send a letter or written submission to the Canadian Nuclear Safety Commission (CNSC) at <u>cnsc.interventions.ccsn@canada.ca</u>, commenting on the 2018 relicensing of Chalk River Laboratories (CRL) for 10 years (until 2028). It is important to have many citizens' voices on the record. Please send a blind copy of your letter or submission to <u>ccnr@web.ca</u>.

The deadline for written submissions is very soon – Monday, December 11, at midnight.

Please indicate your desire to make an oral presentation during the public hearings, to be held in Pembroke Ontario on January 24 and 25. A week or two before the hearings you can decide to come to Pembroke and make an oral intervention in person, or you can ask to make a telephone intervention, or you can withdraw your request to make an oral intervention altogether. But by indicating NOW your desire to intervene orally, you will keep all options open. We can probably arrange billeting if you decide to come to Pembroke.

Gordon Edwards

IMPORTANT BACKGROUND INFORMATION

The proposed Chalk River licence does not go to Atomic Energy of Canada Limited (AECL, the crown corporation that was in charge of Chalk River from 1952 until 2014), but to a private consortium of profit-making multinational corporations — two US companies, two UK companies, and the scandal-ridden SNC-Lavalin. [SNC-Lavalin faces fraud and corruption charges that will be heard in 2018.] This consortium operates the Chalk River labs (that still belong to AECL), and manages the radioactive and other toxic wastes (that still belong to AECL also).

In recent years AECL itself has had its staff slashed from 3400 to 40 (!!) employees. AECL had been unable to recruit a permanent president & CEO, despite years of effort, and they have not had a full roster of seven on their Board of Directors until very recently (measured in weeks). AECL is a hollowed-out shell of the corporation it used to be.

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

The main value of AECL is to funnel taxpayer's money to the consortium, just under a billion dollars in EACH of the last two fiscal years.

The consortium is not only motivated, but instructed by the time-constrained contract under which it operates, to do things quickly and at minimum cost. Legally, AECL is in charge and CNL (owned by the consortium) works for them, but in reality it seems like a very slender tail trying to wag a very hefty dog. CNL = Canadian Nuclear Laboratories started out as a wholly-owned subsidiary of AECL but ownership was transferred to the consortium on November 3, 2014.

The current Chalk River licence was issued to AECL for a five year period in 2011. That licence was extended in 2016 for another two years. Next licence, to CNL, will be in 2018. Chalk River has never been issued a 10-year licence before.

See <u>http://ccnr.org/crl_sacrifice.pdf</u> re. the 2011 licence and <u>http://ccnr.org/CCRC_CRL_2016.pdf</u> re. the 2016 licence extension.

Dr. Ole Hendrickson has done a careful comparison between the existing licence and the proposed licence, and he feels that there are many alarming changes that indicate less regulatory oversight, fewer requirements for reporting or for asking permission to do specified things, language that omits many of the words that imply enforcement — in short, Ole feels that the new proposed licence indicates a major step towards deregulation of the Chalk River labs, leaving the consortium free to do many of the things it wants to do without undue regulatory interference. (Ask me for a copy of his analysis and I will provide it to you.)

What the consortium wants to do is quite alarming -- but their detailed plans do not enter into the licence itself. CNSC will no doubt rule that any DIRECT discussion of these plans is "out of order" in considering the Chalk River licence. However, if the terms of the licence are quite permissive and non-intrusive from a regulatory perspective, then the protection of the public and the environment may be seriously compromised as these future plans are carried out. So, indirectly, some discussion of those plans can be "inserted" into your intervention.

(1) CNL wants to build a huge 5 to 7 story mound of radioactive and other toxic wastes (including things like asbestos, heavy metals, DDT and many toxic chemicals associated with reprocessing and isotope production) less than a kilometre from the Ottawa River. Originally it was going to include everything except irradiated nuclear fuel (the high-level radioactive waste). CNL planned to include all low-level and intermediate-level waste in the mound, including materials that would require shielding to protect the workers and including very long-lived materials that would remain dangerous for hundreds of thousands of years. Because of the outcry from the public — mostly from the Quebec side of the border — including a number of town council resolutions against the project and a good critique from the Government of Quebec — CNL has said that it will NOT put intermediate level waste in the mound, but will leave it where it is on site. However the proposed radioactive and toxic mound is still unacceptable as a permanent facility, so close to the Ottawa River, ultimately to be abandoned. And leaving the intermediate level waste in existing pits and trenches that already have underground plumes migrating toward the River is unacceptable also.

See http://ccnr.org#crl .

(2) CNL also plans to demolish about a hundred buildings at Chalk River, many of them contaminated. It also plans to bring radioactive and toxic waste to Chalk River from the Whiteshell Nuclear Research Establishment in Pinawa, Manitoba, and from four federally-owned nuclear reactors: the NPD (Nuclear Power Demonstration plant) on the Ottawa River, the WR-1 reactor at Whiteshell on the Winnipeg River, the Douglas Point reactor at Kincardine on Lake Huron, and the Gentilly-1 reactor on the St-Lawrence River. High level waste and intermediate level waste will also be brought to Chalk River from these locations, but will not be put in the mound. Meanwhile, however, the NPD reactor and the WR-1 reactor will be decommissioned by simply being "entombed" on-site, right beside their respective rivers, by dumping all the intensely radioactive debris into the sub-basement of the reactor building and filling the entire below-surface radioactive structure with special (as yet to be developed) grout.

(3) CNL plans to revitalize the Chalk River site, as instructed in the contract, by building new state-of-the-art nuclear facilities. In particular, CNL is inviting designers and manufacturers of Small Modular Reactors (SMRs) to consider building their prototypes at Chalk River so that they can subsequently market them worldwide. CNL reports it has already received expressions of interest from many of the 90 or so potential vendors of SMRs, who see themselves as the vanguard of a "nuclear renaissance" that was never able to materialize with the bulkier reactors of today. In fact the original talk of a massive nuclear renaissance has fizzled badly in North America and Western Europe.

Paragraph from the 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. CNL has an existing and broad site licence; we have operated several nuclear reactors on our sites safely over the last 60 years, with key supporting infrastructure and services – security, radiation protection, environmental protection, and many others – already in place."

THINGS WORTH SAYING IN YOUR INTERVENTION?? (Just some off-the-cuff ideas — feel free to improvise.)

1) A 10-year licence is unwise as there are very big changes being planned at the Chalk River site. The consortium has been operating at Chalk River for only three years and should be kept on a short lease to ensure that the public and the regulator have ample opportunity to nip problems in the bud as CNL embarks on an entirely novel set of activities. A 2 or 3 year licence at most should be granted.

2) CNSC is the sole agency charged with protecting the health and safety of Canadians and the environment; as such it should not be relaxing licensing requirements but making them more stringent. All existing reporting requirements should be maintained and strictly enforced, and explicit permission should be required for each and every new facility on site, with regulatory approval and public notification required at every stage of development.

3) To enable future generations to deal with radioactive and toxic materials at the Chalk River site, as well as those being brought it from elsewhere, new licence requirements should be added to require that all waste materials be properly segregated, labelled, and packaged with a complete inventory of the contents of each package. Mixing diverse toxic materials together will make it extremely difficult for future generations to properly characterize the waste; and, in the case of failure of containment, to take appropriate corrective action.

4) The crown corporation AECL, as the owner of the site and the waste, and as the agency that has contracted CNL to operate the site and manage the waste, has had some serious ongoing problems with its management structure; the regulator and the public need to be able to monitor AECL's ability to maintain control over the consortium. A shorter licence period is in order to allow for timely review of such.

5) The licence should reflect growing public concern over the long-term management of radioactive and other toxic waste products, including a set of requirements designed to keep dangerous waste materials as far away as possible from the Ottawa River, and to ensure that such wastes are packaged and routinely monitored so that leaks are readily detected and repairs can be expeditiously made for centuries to come.