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Written submission from Nancy Covington

Mémoire de Nancy Covington

In the Matter of the

À l'égard de la

New Brunswick Power Corporation, Point Lepreau Nuclear Generating Station Société d'Énergie du Nouveau-Brunswick, centrale nucléaire de Point Lepreau

Application for the renewal of NB Power's licence for the Point Lepreau Nuclear Generating Station

Demande de renouvellement du permis d'Énergie NB pour la centrale nucléaire de Point Lepreau

Commission Public Hearing Part 2

Audience publique de la Commission Partie 2

May 11 and 12, 2022

11 et 12 mai 2022



From: Nancy Covington
Sent: Nancy Covington
March 28, 2022 1:24 PM

**To:** cnsc.interventions.ccsn@canada.ca

**Subject:** Re: Point Lepreau asking for 25 year lease.

Dear intervention committee,

Thank you for allowing input into the New Brunswick Power's ask for a 20 to 25 year lease for its Point Lepreau site.

I live in NS, so am familiar with the Bay of Fundy, its ferocious tides, raising sea level in general and the fact that our storms are increasing in frequency and intensity. Point Lepreau's nuclear site is at risk of all of these problems. Hence I think that at minimum every five years, that the structures of the plant, which include containment structures for recently used spent fuel as well as the operational plant itself must be examined carefully by outside personnel.

Hence, please give only a five year lease to this plant, even if they have been model caretakers of their plant in the past.

Sincerely, Nancy Covington MD

"The only sure way to eliminate the threat posed by nuclear weapons is to eliminate the Weapons themselves." UN Secretary General Antonio Guterres. September 26, 2019

From: Nancy Covington
Sent: March 28, 2022 9:04 PM

**To:** cnsc.interventions.ccsn@canada.ca

**Subject:** Point Lepreau and its wish for a long license period up to 25 years.

## Dear intervention committee.

Thank you for the opportunity to contribute to this discussion.

I am very concerned about the fact that Moltex company wishes to extract plutonium on Point Lepreau site and 20 -25 years is way too long to license such an activity which is fraught with currently unresolved concerns. These concerns are not just "fear mongering" as John Gorman of Canadian Nuclear Association has written in its Hill Times ad of Dec 6th, 2021.

## Concerning facts:

- 1. The fact that no viable underground storage for radioactive wastes has yet been developed anywhere in the world.
- 2. The fact nuclear power is the ultimate in a consumer or "throw away" society and indeed the long-lived radioisotopes which must be kept out of the biosphere, will be radioactive for longer than human kind has been labelled as homo sapiens. (Homo sapiens is about 300,000 years old, wheras some of the radioactive isotopes in spent nuclear waste will last in radioactive form for one million years.)
- 3. 'Recycling' is industry's term for reprocessing CANDU waste. This process uses extremely toxic chemicals to remove the 1% plutonium and leaves an unusual harder-to-deal-with waste than the CANDU waste. The process does not 'use up' the waste nor does it 'recycle' the waste. The process removes the 1% plutonium and leaves the rest. Also, opening the fuel containers of the CANDU waste to extract the plutonium may release radioactivity unintentionally.
- 4. There are nuclear weapons proliferation issues with plutonium that could involve diversion, terrorism, and unregulated use in general.
- 5. However it is the recent Russian military takeovers of Chernobyl and Zaporizhzhia nuclear power plants in Ukraine which have revealed additional startling and extremely dangerous issues with nuclear power.

It was pure luck that the explosive, which struck the Zaporizhzhia nuclear power plant causing a fire in a training facility, missed the structure housing the containment pools for spent (waste) fuel. These containment pools typically contain much more radioactive material than the fuel in the operational side of the power plant. A continuous supply of water is needed to keep the spent fuel in these pools from heating up, thus preventing an explosion and widespread dispersal of its highly radioactive contents. During this critical period of waste management, plumbing, pumps and electrical supply must remain intact at all times. If the integrity of the cooling pools had been breached at Zaporizhzhia, the resulting nuclear disaster could have been similar to Chernobyl's disaster of 1986. It would have affected wide swaths of Europe, Russia and Asia, creating another exclusion zone in the heart of Ukraine's wheat belt and potentially scattering radioactive elements worldwide.

At Chernobyl, the military takeover caused a main electrical cable rupture and reliance had to be made on auxiliary diesel fuel for cooling of the spent fuel. Routine monitoring data from both these plants was switched off and is no longer being sent to the International Atomic Energy Agency (IAEA), a critical element in international regulation of nuclear power. The Ukrainian regulator is no longer in control and the IAEA is clearly not in the picture.

The IAEA and its Canadian counterpart the Canadian Nuclear Safety Commission (CNSC) were formed to promote the peaceful use of nuclear power. These organizations were not designed to deal with nuclear disasters, caused by damaging weather events, acts of war, or even nuclear waste issues. The IAEA has not been able to respond to the extremely dangerous situation in Ukraine, nor has the United Nations.

6. I have described what could happen if an international conflict happened and fortunately, we are probably much safer in NB from this sort of threat. However, if Moltex builds SMRs for remote scattered locations, these small modular units are essentially horrendous weapons already on site and are vulnerable to both sabotage and to extreme climate related events. In fact, SMRs may be more vulnerable than large power plants as security staff may be fewer in number and the concrete walls may be thinner.

Point Lepreau itself is on environmentally sensitive land in a rich marine environment. Let us not risk this precious gift of nature with more nuclear power plants. Instead of relicensing, the time has come to decommission the current plants as safely as feasible. However, if decommissioning is not in the cards at this time, the very least that can be done is give a five year license and review the situation very regularly.

Respectfully submitted, Nancy Covington MD