Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

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# Oral presentation

# Written submission from Ann McAllister

# Exposé oral

# Mémoire d' Ann McAllister

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**

Canada

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9

Ann McAllister
Rothesay, NB

March 28, 2022

Re: Intervention by Ann McAllister for the NB Power Licence Renewal Application (Hearing Ref.2022-H-02)

To whom it may concern:

I, Ann McAllister, request to intervene in the hearing in the above-referenced matter.

Please consider this comment submitted to the Canadian Nuclear Safety Commission regarding the licence renewal of the NB Power Point Lepreau Nuclear Generating Station.

I am an older person whose experience and judgement cannot be contributed ever again if the next hearing is in 2047 or even in 2042.

Specifically, my concerns are related to the following: the implications of limiting public input with a 20- to 25-year licensing period, best management practices for uncertain times, and risks of nuclear weapons proliferation.

**Limiting public input**

NB Power's application to renew the licence of the Point Lepreau Nuclear Generating Station (PLNGS) for 25 years would, in all likelihood, prevent any public input during the remaining life of the station.

With so many risks to the safety, reliability and financial soundness of the PLNGS, granting NB Power a lengthy relicensing period of 25 years, or even 20 years as recommended by the CNSC on January 26, 2022, would be contrary to the public interest. Circumstances such as the climate crisis and rapid technological advancement require that the public have frequent opportunities to take part in making decisions that will affect those coming after us. NB Power is a public utility, owned by us. We must not be silenced for a generation.

Public input is particularly crucial regarding the health of the Bay of Fundy, one of North America's natural wonders. A 2017 study[1] shows that entrainment from the cooling water intake is killing fish and invertebrates with estimated annual losses of around 58 megatons of commercially-important species such as Atlantic herring, winter flounder, northern shrimp and rock crab. Total annual equivalent yield losses to local commercial, Indigenous and

recreational fisheries were estimated at $146,000[2]. While the study concluded that losses to the fisheries were actually very low (with the exception of northern shrimp)[3], in my opinion they could be cumulative over the long term as one of many pressures driving down fish stocks. It is vitally important that populations continue to be monitored and trends tracked. The potential that a 25-year license period may result in less frequent assessments is a serious concern.

Another major impact of the Lepreau nuclear plant is its emission of radioactive tritium, a carcinogen, into air and water. Tritium in the form of radioactive water and water vapour can be hazardous "if inhaled, ingested or absorbed through the skin". Canada's current "safe" limits for tritium in drinking water are many times higher than in other countries. In 2018, Dr. Ian Fairlee, a UK expert on radioactivity in the environment, argued that these levels should be lowered and that if they were, some levels around Lepreau would be near the maximum limit. In its environmental report, NB Power states that "the local population would be exposed to radiation as a result of the water vapour in the air, wells, diving for sea urchins, harvesting clams and dulse and eating local seafood". Given this ever-present hazard, the public must have the ability to provide input at least every 5 years.

As for financial impacts, the PLNGS is a boondoggle. Around $3.6 billion of NB Power's $4.9 billion debt (2020) is the result of construction and refurbishment costs for the PLNGS, saddling every child and adult in New Brunswick with a debt of more than $4,500. To stop further debt increases, New Brunswickers may decide to close the station down before 2042 or 2047.

**In conclusion, the CNSC must not renew the operating license for the Point Lepreau Nuclear Generating Station for the requested 25 years or even 20 years. Rather, the CNSC should consider continuing the 5-year relicensing term, and prepare for decommissioning.**

**Best management practices for uncertain times**

As we experience the climate crisis and rapid technological advancement, the nuclear industry faces large increases in costs and long delays in refurbishing and replacing nuclear plants. At the same time, the costs of renewable sources and energy efficiency continue to fall.

The generating station at Point Lepreau has a history of reliability problems:

Electricity has been generated at only 90% of projected goals in the first seven-and-a-half years since the PLNGS's disastrous refurbishment, resulting in an earnings shortfall of $200 million and additional capital expenditures of $500 million.

The most recent unplanned outage was in January and February 2021 during peak heating season at an approximate cost to NB Power of $1 million a day.

Reliability issues and operating costs are likely to increase as the reactor ages. These must be shared regularly with the public in relicensing hearings so that New Brunswickers can have a say in decisions about ongoing operations, in the best interests of the public. Such decisions will include considering whether to continue putting money into Point Lepreau or invest in alternative and renewable sources of energy.

**In conclusion, to ensure decision-making that is open, transparent, accountable to the public and responsive to evolving circumstnaces, the CNSC must not renew the plant's operating license for 25, or even 20, years. Instead, the CNSC should continue to consider re-licensing periods of 5 years to guarantee regular public participation in decisions that proactively and positively address changing social, economic and environmental patterns.**

**Nuclear weapons proliferation**

The civil and military nuclear industries are connected. As long as both civil and nuclear industries continue to exist, the world will be living with the risks of nuclear weapons proliferation.

The president of France, Emmanuel Macron, described this interdependence in a speech on December 8, 2020: *"The nuclear industry lives from its complementarities and it must be thought of in terms of its complementarities. One cannot exist without the other. Without civil nuclear power, there is no military nuclear power, and without military nuclear power, there is no civil nuclear power. Organizations like the French Atomic Energy and Alternative Energies Commission are living proof of this."*

Along with the federal government, NB Power is supporting the development of a proposed reprocessing facility to extract plutonium from the waste (irradiated) fuel produced by the nuclear reactor at Point Lepreau. Extracting plutonium triggers serious concerns about nuclear weapons proliferation. See the article in the Bulletin of Atomic Scientists about New Brunswick's plutonium plans.

**In conclusion, the CNSC must ban the extraction of plutonium from the waste fuel produced by the Point Lepreau nuclear reactor.**

Thank you for this opportunity to participate in the re-licensing hearing for the Point Lepreau Nuclear Generating Station.

Yours truly,

Ann McAllister
Rothesay, NB

## References

[1] Ecometrix Incorporated. *Self-assessment of I and E Losses at Point Lepreau Generating Station, Report #16-2302*, prepared for New Brunswick Power (Fredericton, NB, 2017). Available from New Brunswick Power, P.O. Box 2000, Fredericton, NB E3B 4X1

[2] Ibid. *Table 6.5. Summary of the Equivalent Yield Model Results for PLGS.* p 6.8

[3] Ibid, p.ii