



**Oral presentation**

**Exposé oral**

**Written submission from  
Margaret R. MacDonald**

**Mémoire de  
Margaret R. MacDonald**

In the Matter of the

À l'égard de la

**New Brunswick Power Corporation,  
Point Lepreau Nuclear Generating Station**

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**Société d'Énergie du Nouveau-Brunswick,  
centrale nucléaire de Point Lepreau**

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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**

Intervention by Margaret R. MacDonald (Fredericton, N.B.), regarding the Proposed Twenty-Five-Year Licensing Period for Point Lepreau Nuclear Generating Station (PLNGS)

(February 14, 2022)

I would like to express my concerns regarding the proposed lengthening of the licensing period for the Point Lepreau Nuclear Generating Station from five years to twenty-five years.

The effects of climate change have been exponentially increasing, particularly since the 1970's, and we have begun to see more rapidly rising sea levels and more severe, unpredictable, and lengthy storms. The integrity of the generating station's structures, including the aging concrete containment silos which are filled with "high-level" radioactive waste, may not be able to withstand the effects of future violent storms. Also, the effectiveness of the station's piping may become overwhelmed by rising sea levels. The licensing situation should be re-evaluated every five years, as the effects of climate change increase.

The Bay of Fundy is an area which supports biodiversity in the form of a delicate marine ecosystem. It also supports agriculture, shipping and fishing, and a healthy tourism industry. As seawater has warmed with the effects of climate change, this has caused acidification of the water, resulting in the dissolving of the shells of mollusks, as well as affecting algae and microscopic phytoplankton, which are the basis for the aquatic food webs. Warming of the seawater also affects the feeding and spawning activities of certain fish species. Since the PLNGS draws in seawater to use as cooling water and releases it back into the Bay of Fundy at a slightly higher temperature, this will further exacerbate the problems affecting marine life. Maintaining a five-year licensing renewal option would ensure that the public can submit their opinion regarding any undue impacts of the generating station with regard to a decline in marine activity and health.

Financially, the Point Lepreau Nuclear Generating Station is not a good long-term risk. In 2021, the N.B. Auditor General reported that \$3.6 billion of NB Power's \$4.9 billion debt was directly attributed to the Point Lepreau Station. Since the responsibility for eventually dismantling the reactors will be paid for by the N.B. Provincial Government and since future generations of New Brunswickers will be paying to store and maintain the safety and security of the radioactive waste forever, perhaps money from NB Power and the N.B. Provincial Government could be better spent on safer and more renewable energy options such as solar or wind. If the license for PLNGS is renewed for only five years at a time, there would be an opportunity for the public to suggest and discuss alternatives. If the license is legally locked-in for the next twenty-five years, there would be no option for public discourse regarding this financial issue.

I fear that if Point Lepreau is granted this licensing period of twenty-five years, we will be setting a precedent for other nuclear generating stations within Canada and other parts of the world, particularly the U.S., to do the same, setting a dangerous precedent for many aging nuclear generating stations.

Although Point Lepreau was refurbished in 2008-2012, it will soon be approaching the end of its life-span. Nuclear generating stations are generally rated as safe for twenty to forty years, before

being decommissioned. Since Point Lepreau was originally intended to operate for twenty-five years (before refurbishment), but has been operating for thirty-nine years, it is an aging station. Refurbishment does not make it a new facility. The risk of having something go terribly and irreversibly wrong with the basic infrastructure of the station increases as time goes on. We have to keep in mind that in another twenty-five years, the Point Lepreau Nuclear Generating Station will be sixty-four years old! Continuing to have its license renewed every five years would allow for public input on the risks involved with keeping the station in operation.

In summary, I would advocate maintaining the present five-year licensing period, so that public input could be received every five years. I would also encourage NB Power to implement a new plan of carrying out an Impact Assessment every five years, and to review their emergency plan in conjunction with each five-year renewal. I know that this is not currently the practice, but I believe that we need to protect the health and welfare of our people and of our beautiful province, particularly in light of the changing climate.