



Oral presentation

Exposé oral

**Written submission from the
Canadian Nuclear Association**

**Mémoire de l'
Association nucléaire canadienne**

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

March 25, 2022

Canadian Nuclear Safety Commission
c/o Louise Levert, Secretariat
280 Slater St. PO Box 1046
Ottawa, Ontario K1P 5S9

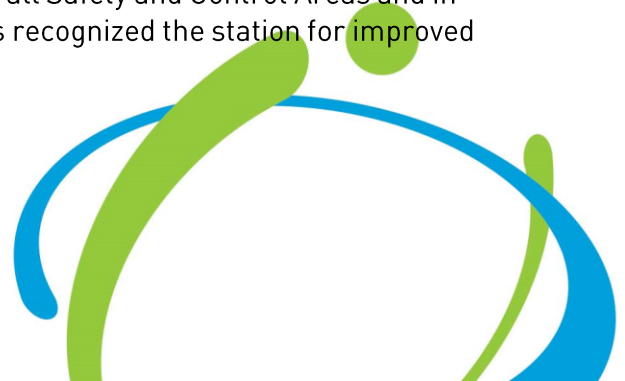
Subject: Canadian Nuclear Association Intervention in support of New Brunswick Power's application to renew its licence for the Point Lepreau Nuclear Generating Station.

The Canadian Nuclear Association (CNA) has approximately 100 members, representing over 70,000 Canadians employed directly or indirectly in exploring and mining uranium, generating electricity, advancing nuclear medicine, and promoting Canada's worldwide leadership in science and technology innovation. As such, our members are strong supporters of the continued operation of the Pt. Lepreau Nuclear Generating Station (PLNGS).

Nuclear energy is a safe, reliable, and non-emitting source of energy that not only helps Canada and indeed the world meet its electricity needs but is also a critical element in the world's fight against climate change. It is widely acknowledged that nuclear energy must play a greater role if the world is to meet its climate change goals. That is especially true in New Brunswick where the PLNGS is the largest source of non-emitting electricity producing over 30% of New Brunswick's electricity.

The CNA notes that New Brunswick Power's request for a 25-year licence is longer than previous CNSC licences but that under Section 26 of the Nuclear Safety Control Act, the Commission has flexibility regarding the establishment of licence periods. The CNA also notes that longer licences are in keeping with international precedence and benchmarking and that many countries give much longer licences, such as the US (40 years) and the UK and France (lifetime). These licences of course come with additional conditions, most notably Periodic Safety Reviews (PSR) and continuous monitoring of operational performance. NB Power has completed a PSR for the first validity period (2022-2032) and is committed to complete additional PSRs prior to the end of each validity period. These PSRs combined with the CNSC's continuous monitoring will ensure continued safe, reliable operations throughout the requested term of the licence.

The CNA believes that the best indicator of future performance is past performance and the performance of PLNGS over the last licence period gives us great confidence in NB Power's ability to maintain the highest levels of safe, reliable performance. The CNSC's most recent assessment of PLNGS gave the facility a satisfactory rating in all Safety and Control Areas and in the fall of 2019, the World Association of Nuclear Operators recognized the station for improved performance.



PLNGS is committed to maintaining these high standards and employs a number of techniques to ensure that. Regular self-assessments are done, as is regular benchmarking against other facilities. PLNGS also engages an Independent Nuclear Oversight Group to provide senior management with an independent perspective on nuclear safety, operational performance, station reliability and emergency response effectiveness. The Nuclear Oversight Group has conducted over 94 internal independent evaluations since 2016. In addition, external oversight is provided through the Nuclear Safety Review Board and the Corporate Nuclear Oversight Team.

PLNGS has comprehensive programs in place to ensure that Systems, Structures and Components (SSCs) are fit for service and processes such as long-term asset management, equipment reliability and system health monitoring are in place and are regularly reviewed. NB Power has committed to continuing to invest in the station to ensure PLNGS continues to meet or exceed industry standards.

To that end, PLNGS has identified a number of significant future activities and improvements over the proposed licence period including:

- Heat Transport Pump Motor replacement
- HP Turbine Rotor replacement
- Unit Transformer replacement
- Moderator D2O replacement
- Switch Gear upgrade

PLNGS employs Excellence Plans to achieve both compliance and world-class performance in specifically targeted areas and these plans are reviewed and updated annually.

The plans and programs mentioned above give the CNA great confidence in PLNGS's ability to maintain the highest standards but like all nuclear facilities, protecting workers, the public and the environment remains the top priority and that priority is anchored in a strong safety culture. NB Power is compliant with CNSC REGDOC 2.1.2 Safety Culture and conducted a comprehensive nuclear safety culture self-assessment in 2016. In addition, external evaluations are made by the Nuclear Safety Review Board and the Corporate Nuclear Oversight Team.

PLNGS employs a comprehensive Radiation Protection Program to ensure radiation doses and contamination levels are monitored, controlled and maintained as low as reasonably achievable. CNA notes that during the most recent licence period maximum individual effective dose tracked downwards and the estimated dose to the public was extremely low. NB Power is committed to continual improvement in radiation protection programs and practices and employs self-assessments, internal and external audits to ensure the program maintains world-class standards.



Conventional Health and Safety is also a top priority at PLNGS. Point Lepreau has a goal of zero industrial safety events and recently surpassed two million person-hours worked without a Loss Time Accident.

As per the NB Power's shared commitment with International Brotherhood of Electrical Workers Local 37, they are committed to the following: "No work is of such urgency or importance to justify not taking the necessary steps and time to ensure the safety of every member of the workforce and the public". This commitment demonstrates the workforce desire to always keep each other safe.

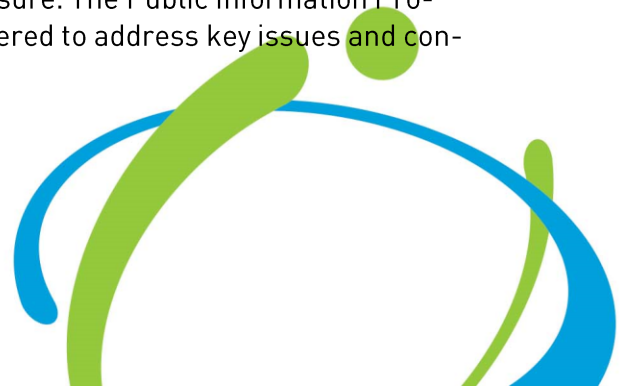
Like all members of the Canadian nuclear industry, environmental protection is a top priority for NB Power. PLNGS has been certified ISO 14001 compliant and had a successful maintenance audit in 2020. PLNGS has identified significant environmental aspects and developed objectives and targets for continual improvement under the environmental management system. As outlined in the CMD, the environmental management system provides a comprehensive program designed to minimize and monitor all impacts on the environment. All releases during the current licence period were below regulatory limits.

In 2020, PLNGS conducted an update of its Environmental Risk Assessment (ERA). This study was an update of the previous ERA (2016). The CNA was pleased to see that the results of the ERA were consistent with that of previous risk assessments. It is also worth noting that the updated ERA included a thermal plume assessment of cooling water discharges. Recommendations from the ERA update will be used to strengthen the environmental management system and PLNGS will continue to update the ERA every five years.

NB Power has recognized the importance of building and maintaining a positive relationship with the First Nations of New Brunswick. In addition to regular engagement with community members and organizations, NB Power and representatives of First Nation communities meet regularly and share information of mutual interest. NB Power has formal capacity funding agreements in place with both the Wolastoqey Nation in NB, the Mi'gmawe'l Tplu'taqnn Incorporated and Peskotomuhkati Nation at Skutik represented by Passamaquoddy Recognition Group Inc.

The funding provides the ability to host and attend engagement opportunities and these initiatives have been extended to Station specific issues such as SMRs.

NB Power recognizes the importance of public communication and the PLNGS follows the requirements of REGDOC 3.2.1 Public Information and Disclosure. The Public Information Program ensures that timely and accurate information is delivered to address key issues and concerns in a systematic and transparent way.



A wide variety of public communication methods are used depending on the particular audience and what method they prefer including public information meetings, a well-established and active Community Relations Liaison Committee.

In summary, the CNA believes that NB Power has demonstrated a sustained commitment to safe, reliable operations as well as to continuous improvement. We believe that the operational record of PLNGS, the well-established operational and oversight programs, the commitment to regular PSRs and the continuous oversight of CNSC staff should give the Commission assurance that it can grant NB Power's request for a 25-year licence.

Please contact Steve Coupland couplands@cna.ca directly should you have questions or require any additional information.

Sincerely



John Gorman
President and CEO
Canadian Nuclear Association

