



Supplementary Information

Presentation from New Brunswick Power Corporation

In the Matter of the

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

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

**Commission Public Hearing
Part 2**

May 10 to 12, 2022

Renseignements supplémentaires

Présentation de la Société d'Énergie du Nouveau-Brunswick

À l'égard de

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

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

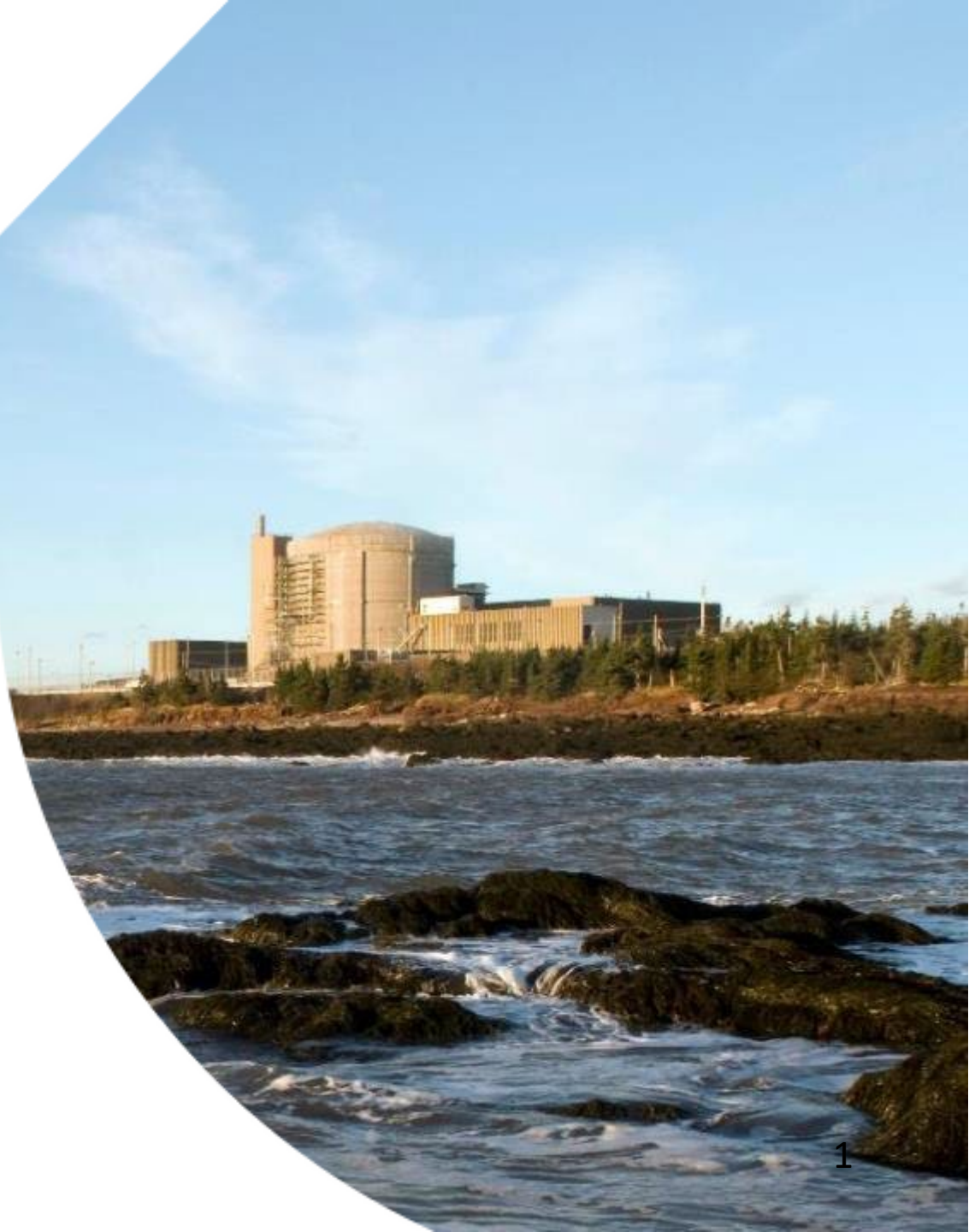
**Audience publique de la Commission
Partie 2**

10 au 12 mai 2022

Point Lepreau Nuclear Generating Station

Renewal of the PLNGS
Power Reactor Operating Licence
CMD 22-H2.1B

CNSC Commission Public Hearing – Part 2
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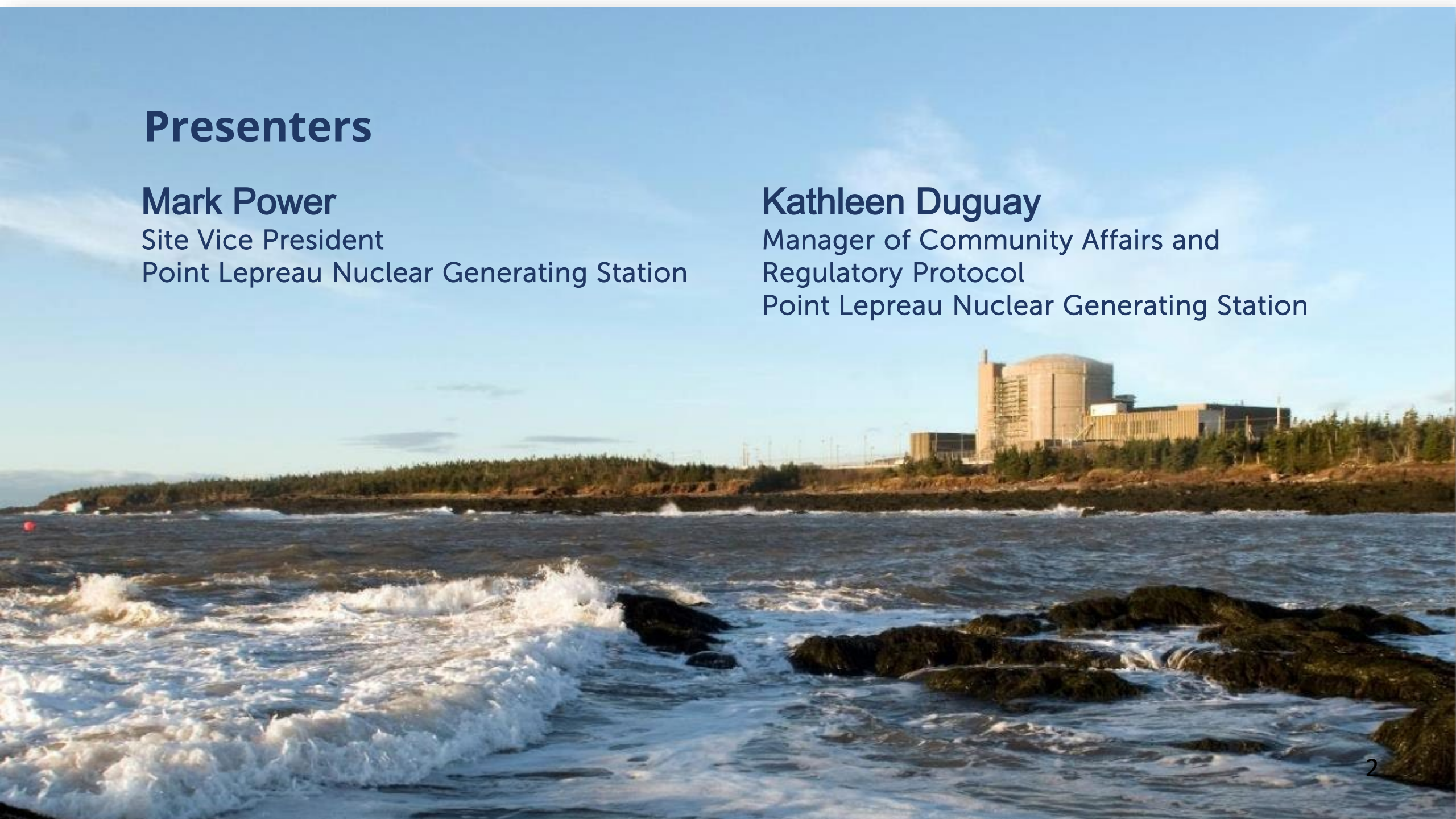
Presenters

Mark Power

Site Vice President
Point Lepreau Nuclear Generating Station

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Regulatory Protocol
Point Lepreau Nuclear Generating Station



Presentation Outline

- Rationale for a 25-year Operating Licence
- What We Heard in Part 1 Hearing
- First Nations, Community and Public Engagement
- Closing Remarks

25-Year Licence

- A 25-year licence to 2047 will:
 - Cover the remainder of the current anticipated operating life of the Station
 - Reflect the advancements in the regulatory framework of the Canadian nuclear industry, including key aspects such as the Periodic Safety Review and the rigorous annual Regulatory Oversight Report
 - Reflect consistency with international regulatory best practices with respect to longer term and/or “life cycle” licencing
 - Not impede regular, informative and continuous engagement with the public, through formal and informal venues
 - Reflect the consistently advancing and reliable safety performance of the Canadian Nuclear Industry
 - Reflect the safety-focused preventive and sustainable nature of modern codes, standards, and regulatory documents included in current licences
 - Demonstrate commitment to meeting Canadian carbon reduction targets and climate change responsibilities, and support New Brunswick’s safe and reliable power generation under the long-range provincial power integrated resource plan
 - Be founded on NB Power’s commitment to ensuring safety is always the top priority
 - Be founded on NB Power’s continued commitment to openness and transparency

What We Heard in Part 1 Hearing

- During the Part 1 Hearing, the Commission identified topic areas for further discussion during the Part 2 Hearing. NB Power will be providing additional information on the following topics.
 - Climate Change
 - Safety Culture
 - Periodic Safety Review
 - Asset Management
 - System Health Monitoring
 - Seismic
 - Waste Management
 - Safeguards
 - Potassium Iodide (KI) distribution

Climate Change

NB Power will ensure climate change impacts over the 25-year licence duration are supported and assessed through:

- Continued production of low carbon energy, supporting Canada's efforts to mitigate potential climate change impacts.
- Planning for the future by assessing long range potential climate change impacts through proactive programmatic approaches in key areas:
 - Safety analysis
 - Hazard assessments
 - Environmental risk assessments
- Continually affirming operational practices and strategic plans incorporate industry best practices for long-range sustainability under the Climate Change Adaptation Committee.

Safety Culture

PLNGS positive safety culture is an industry strength, and is regularly validated by:

- Safety culture assessments
 - Conducted every 5 years
 - Completed in 2021
 - Included over 800 participants
 - Identified a continued positive trajectory
 - Identified a key strength in staff and contractors' recognition of nuclear as being special and unique, and maintaining a high focus on nuclear safety



Periodic Safety Review

PLNGS ensures it meets and maintains compliance with current codes and standards.

- In accordance with Regulatory Document 2.3.3 *Periodic Safety Reviews*, NB Power completed a multi-year Periodic Safety Review (PSR) and submitted the Integrated Implementation Plan (IPP) on June 30, 2021.
- The review confirmed there were no significant safety or operational concerns.
- The improvements identified were mostly process focused (87%).
 - 85% of all actions were completed by December 31, 2021
 - The remaining 15% of actions are in progress and will be completed by December 31, 2030
 - One third (1/3) of these comprise field work, inspections, or upgrades
- An update to the PSR/IIP will be completed every 10 years in alignment with REGDOC 2.3.3 *Periodic Safety Reviews*.

Asset Management

PLNGS has a robust Long-Term Asset Management Program and Aging Management Program which ensures the continued long-term reliable operation of the Station.

- These programs assess the long-term needs of key Station equipment and ensure sustainable reliability.
- Components upgraded:
 - calandria tubes, pressure tubes, feeders and end fittings
 - main fire pumps
 - low pressure turbines
 - high pressure turbine– in progress (Outage 2022)
 - fueling machine
 - primary heat transport pump motors



System Health Monitoring

PLNGS continuously conducts thorough system health monitoring to support the safe, reliable long-term operation of the Station. This is a rigorous program which ensures condition and performance-based surveillance is continually conducted on key Station systems, structures, and components.

- In accordance with the applicable CSA and regulatory documents, this process is applied to aspects such as:
 - Ensuring safety systems are available and poised
 - Ensuring safety support systems are available and ready
 - Ensuring fuel bundle integrity is consistently maintained, including management of foreign material ingress
 - Ensuring steam generator (boilers) reliability, which is integral to both the primary and secondary side of operations
 - Ensuring strict chemistry controls are upheld
 - Ensuring inspection programs are adequate to confirm the long-term integrity of key equipment

Seismic

PLNGS is committed to ensuring it meets all seismic regulatory requirements.

- An integral aspect of ensuring long-term sustainable safe operations is understanding potential seismic implications, focusing on rigorous safety analysis, continual monitoring, and prevention.
- PLNGS maintains an effective process for ensuring seismic requirements and meets the program requirements of CSA N289.1.
- Compliant with CSA N289.1, ongoing enhancements are in progress to fully establish the “program” requirements within our “process” based management system.

Waste Management Program

NB Power is committed to industry best practices for the safe and reliable processing of active and inactive waste, and storage of these materials. Over the anticipated 25-year licence, this commitment will be ensured by:

- Physical on-site storage requirements adequate to support the Station needs for over 25 years.
- Continued implementation of waste minimization at the source through our *Likely Clean Program*.
- Continued efforts on volume reduction of legacy low-level waste, reducing waste volumes by approximately 90%.
- Aligning to NRCan and NWMO objectives and strategies for long-term waste management.

Safeguards

NB Power is committed to meeting and exceeding International obligations for Safeguards, and the safe use and accounting of nuclear material.

- NB Power reports all activities related to the use of nuclear fuel as part of our fueling cycle.
- In addition, IAEA employs remote continuous monitoring surveillance systems to verify information provided by the licensee and provides real time views of all areas of importance to the IAEA.
- IAEA conducts numerous in-person inspections including announced and unannounced visits to the Station.

Potassium Iodide (KI) distribution

NB Power is committed to ensuring the protection of our neighboring communities, the public, and our staff through robust emergency planning.

- PLNGS, in coordination with New Brunswick Emergency Measures Organization (NBEMO), continues to ensure that KI pills are properly distributed, including updated demographic surveys for all residents within the 20 km Detailed Planning Zone.
- In 2021, KI pills were re-distributed to all residents within the Detailed Planning Zone (20km of the Station).
- KI pills are also stored and managed by NBEMO for the Contingency Planning Zone and Ingestion Planning Zone (20-57 km) and are available upon request.



First Nations, Community & Public Engagement

First Nations, Community and Public Engagement (cont'd)

The licence duration is independent of our unwavering commitment to engagement with First Nations and the public:

- Will always meet and engage with any person or organization that expresses interest.
- Continued commitment to open and transparent communications and broad engagement.
- Comprehensive public outreach program with various methods and activities to share information.
- Open forums to allow questions, share input and provide feedback.
- Continue to seek opportunities to improve our industry leading program, and check and adjust to meet needs and expectations.



First Nations, Community and Public Engagement (cont'd)

- NB Power's strategic approach for First Nations has three interdependent pillars: **Engagement and Community Relations - Education, Cultural Awareness & Sensitivity - Employment.**
- Active and ongoing dialogue to further develop understanding of First Nations rights and culture.
- Continue to facilitate and promote site visits.
- Dialogue on employment, education, training, business opportunities and economic development, regulatory matters, and environmental stewardship.
- Commitment to Indigenous Knowledge studies - findings and recommendations will be reviewed with both NB Power and First Nations groups.



First Nations, Community and Public Engagement (cont'd)

- Proactive communications to inform the public and stakeholders about the 25-year licence.
- Activities to ensure First Nations and public input and feedback will continue for decades to come.
- Active engagement with youth.
- Actions taken to increase understanding of a 25-year application.
 - Information posted to NB Power website
 - “From the Point” newsletter
 - Information sent to members of stakeholder distribution list
 - Personal outreach to specific stakeholders





Closing Remarks

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- We would like to thank all the Intervenors who took the time to participate in advance of this public hearing.
- We would like to thank the Commission for holding this hearing in our community, recognizing this is the first in-person public meeting since the beginning of the COVID-19 Pandemic.
- We are very pleased with the new connections that we are making through this process – the new relationships- the new learnings- which means new insights and better understanding.
- NB Power will continue to make adequate provision for the environment, health and safety of persons, and maintenance of national security and measures, as described in the Nuclear Safety and Control Act, Section 24(4)(b).
- We are pleased to participate in this licence application hearing for PLNGS' 25-year licence and feel that this term is appropriate based on the reasons outlined in this presentation. We look forward to answering any questions you may have.

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