



**Oral presentation**

**Exposé oral**

**Written submission from  
Northwatch**

**Mémoire de  
Northwatch**

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**

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

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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**

# NORTHWATCH

March 28, 2022

Canadian Nuclear Safety Commission  
280 Slater St., P.O. Box 1046  
Ottawa, Ontario K1P 5S9

Email: [cns.interventions.ccsn@canada.ca](mailto:cns.interventions.ccsn@canada.ca)

Ref. 2022-H-02

Dear Members of the Commission:

**Re. Application to Amend the Decommissioning Licence for the Douglas Point Reactor**

On August 17, 2021 the Canadian Nuclear Safety Commission (CNSC) issued a notice that it would hold public hearings on January 26, 2022 and May 4–5, 2022 (later revised to May 11-12) to consider an application from New Brunswick Power to renew its licence for the Point Lepreau Nuclear Generating Station.

NB Power is the owner and licensed operator of the Point Lepreau NGS, which is the only nuclear power plant in Atlantic Canada. The Point Lepreau NGS site is located on the Lepreau Peninsula, on the northern shore of the Bay of Fundy, which is 40 km southwest of Saint John, New Brunswick. The Point Lepreau NGS site consists of a single, refurbished, CANDU-6 pressurized heavy water reactor and a solid radioactive waste management facility.

The current Point Lepreau NGS PROL is a consolidated licence for both facilities. The PROL was issued on July 1, 2017 and will expire on June 30, 2022. New Brunswick Power Corporation (NB Power) has applied to renew the current power reactor operating licence (PROL) for the Point Lepreau Nuclear Generating Station (Point Lepreau NGS) for a period of 25 years.

In their January 2022 Commission Member Document, CNSC staff recommended that the Commission extend the licence for 20 years and accept NB Power's 2020 Preliminary Decommissioning Plan and associated Financial Guarantee. Staff also requested a delegation of the Commission's authority to CNSC staff to approve reactor restart a reactor after a serious process failure and for the start of operations at the Phase II Extension of the Solid Radioactive Waste Management Facility (SRWMF).

## **Northwatch's Interest**

Northwatch is a public interest organization concerned with environmental protection and social development in northeastern Ontario. Founded in 1988 to provide a representative regional voice in environmental decision-making and to address regional concerns with respect to energy, waste, mining and forestry related activities and initiatives, we have a long term and consistent interest in the nuclear chain, and its serial effects and potential effects with respect to northeastern Ontario, including issues related to uranium mineral exploration and mining, uranium refining and nuclear power generation, and various nuclear waste management initiatives and proposals.



Northwatch has a longstanding interest in the management of nuclear waste, as well as other environmental and social impacts of using nuclear power for the purpose of electricity generation. Our interest in nuclear waste was initiated by proposals dating back to the 1970's to site nuclear waste "disposal" projects in northern Ontario. There have been numerous proposals over the last several decades, including proposals for the import and burial of high level waste in the 1970s and 1980s and for low level waste in the 1990s.

Currently there are two municipalities who remain engaged with the Nuclear Waste Management Organization in a siting process for a proposed deep geological repository for high level nuclear fuel waste, one in southwestern Ontario and one in northwestern Ontario. The Revell Lake area in northwestern Ontario, between Ignace and Dryden, continues to be associated by the NWMO with the municipality of Ignace, despite its considerable distance outside the municipal boundaries of Ignace.<sup>1</sup>

## **Northwatch Key Issues**

### Fuel Defects

The CNSC staff CMD describes how in in 2018 NB Power was requested to provide their strategy to address the elevated fuel defect rates at the Point Lepreau NGS, which had consistently trended above the expected rate of 1 defect per unit per year.

Reportedly, NB Power clarified that the fuel defects were caused by foreign material introduced by outage work on the primary heat transport system in loop 2. CNSC concluded that "NB Power has established a response strategy including increased fuel inspections and is working with a third party to address the root cause of the issue. CNSC staff are satisfied with the actions taken by NB Power and will continue to monitor the situation and update the Commission of any significant developments through the Regulatory Oversight Report for Canadian Nuclear Generating Sites."<sup>2</sup>

CNSC staff have previously acknowledged that fuel defects are a precursor to public dose.<sup>3</sup>

Changes that alter the physical structure and mechanical properties of a fuel bundle can cause damage. For example, oxidation of the cladding weakens its mechanical properties and decreases its thermal conductivity. In-reactor corrosion can also lead to embrittlement. Any of the just described phenomena can lead to damage or even failure of the fuel bundle.<sup>4</sup>

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<sup>1</sup> The Nuclear Waste Management Organization is currently studying the Revell Lake area in Kenora District as part of their nine step siting process for a geological repository for high level nuclear fuel waste. See [www.knownuclearwaste.ca](http://www.knownuclearwaste.ca) for details.

<sup>2</sup> *CMD 22-H2, page 52*

<sup>3</sup> *CMD 13-H2.1B, page 1*

<sup>4</sup> "Evaluation of the Technical Basis for Extended Dry Storage and Transportation of Used Nuclear Fuel", United States Nuclear Waste Technical Review Board, December 2010

Over longer periods of time, even micro-defects in fuel bundles – which effectively become waste containers after removal from the reactor core – have increasingly more significant potential consequences. Long term storage – either dry storage on site or some form of centralized storage – rely on a multiple barrier approach. The weakening of the first barrier by any means – corrosion, dryout, temperature fluctuations – can potentially lead to failure. This, in turn, may lead to or hasten the release of radioactive materials into the storage container and then, ultimately, into the environment.

In our assessment, the CMD presentation of fuel defects at the Point Lepreau nuclear station understates the problem and omits the risk the fuel defects and associated issues present.

In a letter from the CNSC to New Brunswick Power dated December 18, 2020 CNSC staff state:

*Canadian Nuclear Safety Commission (CNSC) staff are concerned that the ongoing damage to fuel <sup>[1, 2]</sup>, from the primary heat transport system (PHTS) loop two, represents a significant threat to the integrity and lifespan of the Point Lepreau Nuclear Generating Station (PLNGS) pressure tubes (PTs). Furthermore, recent fuel channel (FC) volumetric and dimensional inspections of ten PTs led to 21 flaw dispositions being required <sup>[3]</sup>, which was a significant increase from the 9 flaw dispositions that were required from the inaugural inspection of 15 PTs in 2014 <sup>[4]</sup>. Although New Brunswick (NB) Power has taken a number of active measures to determine the source of the damage <sup>[5-8]</sup>, CNSC staff are requesting NB Power to expand the scope of the next fuel channel volumetric and dimensional inspection campaign (planned for 2024) by at least two additional FCs.*

*In addition, CNSC staff granted a concession request for Clause 4.3.1.3 of CSA N285.8 to postpone the submission of a Probabilistic Core Assessment (PCA) on the degradation mechanisms related to flaws <sup>[9]</sup> until after the second periodic inspection interval, concurring with PLNGS premise that there were not enough data points in the sample size to produce representative results of the core. The addition of at least two fuel channels in the next inspection campaign will serve to augment the results of the PCA by adding to the data point sample size.<sup>5</sup>*

New Brunswick Power replies, in a letter dated February 9, 2021:

*This letter is to advise the CNSC that NB Power concurs with Reference 1, that the foreign material in loop two of the primary heat transport system (PHT) causing the observed damage to fuel [Reference 2 and 3], could also have the potential to affect long term health of the pressure tubes and needs to be investigated further.*

*NB Power is currently in the process of evaluating methods of potentially removing foreign material from the Primary Heat Transport System outlined in the feasibility study as communicated in Reference 4. Monitoring for defect fuel as well as trending*

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<sup>5</sup> CMD H-22-2, Reference 123. Letter from P. Webster to M. Power, Point Lepreau NGS: Foreign Material in the PHTS and CNSC staff Request to Expand the Scope of the Next Fuel Channel Volumetric and Dimensional Inspection, December 18, 2020, e-Doc 6434546

*indications of foreign material found during fuel bundle inspections has and will continue. Appropriate measured action has been taken as required, such as targeted or increased fuel bundle inspections.*<sup>6</sup>

By Northwatch's assessment, the seriousness of the issues set out in the exchange of letters noted above is not adequately reflected in the summary presented in the CNSC staff CMD. Further, we are not persuaded that the CNSC staff action of granting NBPower's request to postpone the submission of a Probabilistic Core Assessment (PCA) on the degradation mechanisms related to flaws because there were not enough data points in the sample size was the appropriate response.

In our view, the damage to the fuel and the "significant threat to the integrity and lifespan of the Point Lepreau Nuclear Generating Station (PLNGS) pressure tubes" are very serious matters, and should be fully and immediately addressed.

**REQUEST:** NB Power should provide a stand-alone report which is made publicly available on the condition of the issues related to the potential presence of foreign material in the primary heat transport system, and related fuel damage and risks to the pressure tubes. The investigation should include the degree and potential consequences of the resulting fuel damage / fuel defects, including over various time frames (short, medium and very long term).

### Irradiated Fuel Waste

According to the Nuclear Waste Management Organization's 2021 used fuel estimates, the Point Lepreau Nuclear Generating Station had produced a total of 162,066 irradiated fuel bundles as of June 2021, with 39,488 still in the irradiated fuel bays (wet storage) and 122,578 in the Spent Radioactive Waste Management Facility. The NWMO report indicated that typical annual production is 4,800 fuel bundles.<sup>7</sup> The 2021 Regulatory Oversight Report on Nuclear Power Plants reported that in 2020, no spent fuel was transferred to Phase II of the SRWMF from the Point Lepreau NGS, and the spent fuel inventory at the SRWMF remained at 225 canisters filled (121,498 bundles).<sup>8</sup>

The Point Lepreau Nuclear Generating Station site also includes the Solid Radioactive Waste Management Facility (SRWMF). The SRWMF is used for the storage of solid radioactive waste, including nuclear spent fuel, produced exclusively at the Point Lepreau NGS.<sup>9</sup>

In its application for licence renewal, NB Power states that they will submit an implementation plan by March 30, 2022 for REGDOC-2.11.1, Waste Management Volume 1: Management of

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<sup>6</sup> CMD H-22-2, Reference 124. Letter from M. Power to A. Bulkan, Point Lepreau NGS: Foreign Material in the PHTS and CNSC Staff Request to Expand the Scope of the Next Fuel Channel Volumetric and Dimensional Inspection, February 9, 2021, e-Doc 6487657

<sup>7</sup> Nuclear Fuel Waste Projections in Canada – 2021 Update, NWMO-TR-2021-17, September 2021

<sup>8</sup> Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2020, CMD 21-M36

<sup>9</sup> CMD 22-H2, page 4

Radioactive Waste.<sup>10</sup> Northwatch intends to request this report on March 30<sup>th</sup>, and may provide supplementary comments after considering the report content.

In our review of the license application, the CNSC staff and NB Power submissions and several supporting documents we found very little information about the status of the irradiated fuel bays, the aging management systems in place for the irradiated fuel bay, or the function and performance of the irradiated fuel bays. We did request several references cited in the CNSC staff CMD which we had expected to provide additional information, but were provided with only the cover letters, and not the actual reports. We have resubmitted our request, specifying that our request includes the related report being referenced in the cover letter, and may provide supplementary comments after considering those reports.

Nowhere in the CNSC staff or licensee CMDs or in the NB Power application is there a description or even statement of the long term management strategy for irradiated fuel waste, although there is a reference to the Nuclear Waste Management Organization having provided cost estimated for the Financial guarantee calculations.

The preliminary decommissioning plan provides a very general description:

*Handling of irradiated fuel will occur twice during the dormancy period: first with the offloading from the fuel bay into the canisters and ending seven years following plant shutdown; and, second, with the transfer of the fuel to shipping casks for removal from the Point Lepreau Site. Plant personnel are envisioned to perform all required tasks in both instances. The shipment of fuel to a final repository is expected to be complete by the end of 2067.<sup>11</sup>*

This general reference and assumed reliance on the Nuclear Waste Management Organization's intended deep geological repository raises multiple issues, including the failure by New Brunswick Power to provide even a brief description of how they will achieve the transfer of aging (and potentially damaged) irradiate fuel from its current storage system to the transportation containers, and the potential for failure by the NWMO to actually site, design, construct and operate a deep geological repository for all of Canada's high level nuclear waste, including New Brunswick Power's waste.

As has been clearly stated by the Nuclear Waste Management Organization, it is the responsibility of each operator to develop the method and technology to transfer the irradiated fuel from dry or wet storage at the reactor station (the majority will be in dry storage) into transportation containers for the presumed transfer off-site.

When describing the transportation system, NWMO makes clear that it is a "gate-to-gate" system, and it is the operator's responsibility to prepare their waste to exit through their gate:

*At each interim storage facility, the waste owner is responsible for the retrieval of used fuel from storage, preparing and loading the transportation package with used fuel, and loading and securing the transportation package onto the conveyance.*

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<sup>10</sup> CMD 22-H2, page 96

<sup>11</sup> Point Lepreau Generating Station Document N29-1771-002, Rev. 1 Preliminary Decommissioning Plan Section 6, Page 5 of 14

*Therefore, the conveyance (with secured transportation package) is prepared and ready for transport.*

*As a result, transportation infrastructure, facility infrastructure, equipment for transportation package and conveyance loading, at the storage facilities are excluded from this report. At the DGR facility, this work is assumed to conclude upon arrival of the loaded shipment. Hence the term 'gate-to-gate' appropriately describes these limits. As the transportation packages are reusable, the same limits apply for empty return shipments.<sup>12</sup>*

Since the NWMO's intended package for non-Ontario Power Generation wastes is still in the concept design stage, Northwatch acknowledges that there are some challenges for New Brunswick Power in proceeding with their responsibilities as the waste owner, but at minimum the licensee should be setting out a timeline for how and when they are going to meet this technical challenge.

The second area of uncertainty for the waste owners relates to the DGR itself. Now twenty years into their exercise to develop and site a deep geological repository for all of Canada's high level radioactive waste the NWMO is facing a number of challenges, and there are some indications that their timeline may have to be adjusted again. A central uncertainty is with respect to their ability to produce an "informed and willing community" to which they can legitimately assign the label of "host" to their proposed deep geological repository.

As with other nuclear power plant operators, New Brunswick Power's assumption of off-site transfer relies on the perpetuation of the illusion that a convincing technical case has been made for geological disposal, and the ability of a geological repository – even as part of a multi-barrier approach – to effectively isolate and contain the wastes for a sufficient period of time.

In point of fact, there is currently no operating geological repository for used fuel, and for more than 40 years several countries have been depicting themselves at various times as being on the brink of operating a geological repository for used fuel, and yet none have, despite decades of effort and extremely large sums of public funding. Canada, for one, is now further away from "opening day" of a geological repository than the nuclear industry considered it to be twenty years ago. The U.S. equally so.

As outlined in several international reports, there are a host of technical deficiencies of the geological disposal concept, and numerous unresolved technical issues, including the longevity of the containers, the availability of rock formations of the size and quality required, and the reliability of all of the computer predictions being made, to name a few.

In addition to not having made the technical case for the geological "disposal" of used nuclear fuel, neither the federal government or the nuclear industry have convincingly made the social case for geological disposal.

This was a matter of great significance during the 10 year federal review of Atomic Energy of Canada Limited's geological disposal concept. In the end, the Panel concluded that broad public support was necessary in Canada to ensure the acceptability of a concept for managing nuclear

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<sup>12</sup> Deep Geological Repository Transportation System Conceptual Design Report Crystalline / Sedimentary Rock APM-REP-00440-0209 R001, September 2021, AECOM for NWMO

fuel wastes and that the AECL concept for deep geological disposal had not been demonstrated to have broad public support, and the concept did not have the required level of acceptability to be adopted as Canada's approach for managing nuclear fuel wastes.

In Canada, there are many indications that social acceptability will continue to elude nuclear fuel waste repository proponents, as has been the subject of several academic papers. While the NWMO is currently engaged in a siting process through which they intend to contract a community to become the recipient of geological repository for nuclear fuel waste – in the case of the Revell Lake area in northwestern Ontario the NWMO intent appears to be to contract a municipality to accept a geological repository in an area that is distant to the municipality and considerable distance outside their municipal boundaries - the process is still in the preliminary stages (Step 3 of 9) and the outcomes are wholly unknown. To rely on such a conceptual notion as the NWMO's "Adaptive Phased Management" approach for the long term management of the nuclear fuel wastes currently in "storage" at Point Lepreau is equivalent to saying that there is no plan, simply an idea, or – at best – a plan to have a plan.

Given the uncertainties with the NWMO option, the Commission must direct CNL to develop realistic long term alternatives for the management and isolation of high level radioactive waste.

While the storage / containments requirements extend out into perpetuity, a realistic alternative that New Brunswick Power should be directed to consider is extended on-site storage.

Increasingly, discussion both in North America and internationally is shifting to an examination of options related to extending on-site storage of nuclear fuel waste into the long or very long term, for periods ranging from 100 to 300 years. The precise location of the waste management facility within the nuclear generating station boundaries may not be the most appropriate for extended storage that may reasonably be expected to be in place for 100 to 300 years. This will be particularly evident in light of the features of robust storage.

Three features make spent fuel storage more secure, in terms of potential security threats:

- Wastes are placed in a condition where it is passively safe, i.e. it does not rely on electrical power, cooling water or active ongoing maintenance
- The facility is "hardened", through layers of concrete, steel, gravel or other materials being placed – in various combinations – above and around the irradiated fuel waste
- The fuel wastes are dispersed, with the fuel spread more uniformly across the site rather than concentrated in a single area

The feature of passive safety is key in making the waste more secure from human or operational error or natural events. In some situations and designs, dispersal can also be advantageous in keeping the waste secure from human or operational error or natural events.

Inarguably, there are benefits to taking a planned approach to extending on site storage, rather than simply have "short term" or "interim" storage extend over the long term simply due to program failure.

**REQUEST:** Direct New Brunswick Power to develop as an alternative a plan for extended on-site storage of the irradiated fuel; this alternative should be developed as alternative to off-site shipments, and should include comparative costs and benefits (environmental, social and fiscal) of on-site versus off-site, which incorporate transportation impacts.



## **Additional Issues**

### License Term

New Brunswick Power has requested an unprecedented 25-year license term. CNSC staff indicated that they have reviewed NB Power's request for a 25-year licence term and determined that the period requested "was not adequately substantiated" but then go on to recommend an also-not-adequately-substantiated license term of 20 years.<sup>13</sup> CNSC staff's review concludes that NB Power's a license term of 20 years "is more closely aligned with end-of-life decisions since the post-refurbishment life extension of the plant is approximately 25-30 years".

We would agree that a 20 year term aligns more closely with end-of-life decisions than a 25 year term, but wholly disagree that an estimation of end-of-life is the appropriate determinant for license term.

License terms should be set at intervals appropriate to a) the Commission providing oversight and exercising their decision-making authority, b) public participation and Indigenous engagement, and c) the evolution of the site, site operations, technical developments, and emerging knowledge.

Despite having argued – albeit weakly – for a 20 year term, the CNSC staff CMD sets out several supporting reasons for a five year term, including:

- NPP licensees are required to conduct an ERA every 5 years
- CNSC staff plan to publish an EPR report every 5 years
- NPP license follow reporting requirements that include a 5 year update to the final safety analysis report, a 5-year update to the station security report, an update to the Probabilistic Safety Assessment every 5 years; an update to the Preliminary Decommissioning Plan every 5 years.<sup>14</sup>

The CNSC staff argument that 20 years is the optimum licence term for NB Power to continue operating the Point Lepreau NGS because it is the estimated timeframe where NB Power will have to make a decision on whether to refurbish Point Lepreau NGS or implement end of commercial operations measures is inconsistent with CNSC licensing history, practice and rationale.<sup>15</sup>

**REQUEST:** CNSC renew the license for the Point Lepreau PROL for a period not longer than 5 years.

### Delegation of Authority

CNSC staff are recommending that the Commission delegate their authority to a CNSC staff member to make decisions on two license conditions:

- LC 3.2 - The licensee shall not restart a reactor after a serious process failure without the prior written approval of the Commission, or the prior written consent of a person authorized by the Commission.

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<sup>13</sup> CMD-H22-2

<sup>14</sup> CMD-H22-2, pages 13-17

<sup>15</sup> CMD-H22-2, pages 18-19

- LC 15.2 - The licensee shall obtain written approval of the Commission, or consent of a person authorized by the Commission prior to the start of operations at the Phase II Extension of the SRWMF.

Northwatch's view is that both of these matters should be left in the decision-making domain of the Commission, and should not be delegated to staff.

With respect to the provision of written approval prior to the start of operations at the Phase II Extension of the SRWMF

The environmental assessment for this project commenced in 2001, and an approval was granted in 2004 by the Commission. The rationale for the project was that "the proposed modifications and construction of new structures are needed in order for NB Power to manage radioactive waste resulting from refurbishment activities being considered by NB Power for the Point Lepreau Nuclear Generating Station (NGS)".<sup>16</sup>

The licensee provides very limited information about operations in the Solid Radioactive Waste Management Facility (SRWMF) in their application or Commission Member Document, and no information is provided about the status of this project, beyond a statement that "Preliminary engineering currently underway in terms of the Phase II Extension, which will provide sufficient storage capacity for spent fuel until the end-of-life of the Station"<sup>17</sup>. Note that the stated purpose in the EA summary is to accommodate refurbishment waste while the stated purpose in the CMD is for storage of spent fuel.

**REQUEST:** Insert a hold point into the license conditions and require New Brunswick Power to provide a detailed status report on developments since the 2004 approval of the Phase II extension, all of which should be the subject of a public comment opportunity prior to the Commission making its decision

### Workers and Dose

The CNSC staff CMD describes dose levels at the Point Lepreau nuclear station in such a way as to create an impression that the overall approach is not one of keeping doses as low as achievable but rather one of keeping them in a range that is acceptable. For example, the CMD describes "dose management tools" as including "administrative dose limits, allowable dose and work planning" to "ensure radiation doses to workers are controlled, monitored and maintained ALARA." While the "reasonable" qualifier in "As Low As Reasonably Achievable" is perhaps going to inevitably be plagued by subjectivity, the presentation of dose in this CMD is particularly troubling.<sup>18</sup>

The CMD has a very accepting tone with respect to worker dose, arguing that the "trend" is "reflective of the work activities at Point Lepreau NGS and are influenced by factors such as the type and scope of the radiological work activities", saying "NEWs at Point Lepreau NGS are exposed to radiation during the completion of routine operations activities and maintenance

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<sup>16</sup> [https://nuclearsafety.gc.ca/eng/resources/environmental-protection/environmental-assessments/project\\_pl.cfm](https://nuclearsafety.gc.ca/eng/resources/environmental-protection/environmental-assessments/project_pl.cfm)

<sup>17</sup> CMD 22-H2.1, page 114

<sup>18</sup> CMD-H22-2, pages 66

when the reactor is operating, as well as activities carried out during planned and unplanned outages.”<sup>19</sup>

Equally troubling is the finding of a 2020 inspection by CNSC staff that that approximately 10% of the monitored workers did not provide bioassay samples as per the required schedule. The CMD qualified this failure by noting that “internal exposure is a small percentage of the total dose to workers” but noting that following the required schedule could affect the timely detection of intakes of radionuclides. The NB Power remedy was to establish a sub-committee; CNSC came to an overall conclusion that they are satisfied with NB Power’s efforts over the current licensing period in controlling the effective and equivalent doses to workers at Point Lepreau NGS.

In our view, these are serious matters, and we are concerned that there is not sufficient commitment shown to protecting workers. We would remind the Commission of the BIER VII findings that there is no level of exposure to ionizing radiation which does not accompany some increase in the level of risk, despite what administrative levels may have been set.

**REQUEST:** that additional details on worker exposure and exposure sources be provided in Regulatory Oversight Report and Commission Member Documents for future license reviews

**REQUEST:** that dose and exposure levels be presented to include a comparison of exposure levels per worker category, including and for example the comparative levels of exposure for management, supervisors, trades and labourers

#### Releases of Radionuclides to Air

The CNSC staff CMD provides actual data when describing non-radiological air monitoring results, whereas in discussing radiological air monitoring the CMD identifies that air releases are monitored for airborne particulates (gross alpha and gross beta), noble gases, radio-iodines, tritium and carbon-14, but provides no data or actual information about the monitoring results. Instead, it describes ambient gamma radiation as being “slightly lower offsite compared with onsite due to the proximity of SRWMF and reactor building” and then goes on to dismissively state that “the measurements at onsite locations are not significantly different from those at offsite locations, and no adverse effects to relevant human receptors are expected.”<sup>20</sup>

This inconsistency in the presentation of monitoring information for non-radiological air monitoring versus radiological air monitoring is problematic. It is problematic for the public because information is being selectively presented, or selectively denied. It is problematic for the Commission because it adds to the public perception radiological risk is not fully accounted for or acknowledged.

**REQUEST:** that radiological monitoring results be included in Commission reporting (for example, releases of radionuclides to air), and that radiological releases be given at least commensurate attention, relative to non-radiological releases.

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<sup>19</sup> CMD-H22-2, pages 67

<sup>20</sup> CMD-H22-2, pages 80-81

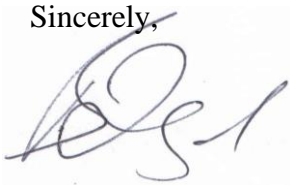
## Conclusion

Having reviewed New Brunswick Power's Application and supporting attachments, we draw the following conclusions:

- The recommendations set out in earlier sections of this submission should be adopted by the Commission
- New Brunswick Power's request for a 25 year license and CNSC staff's recommendation of a 20 year license should both be rejected; if the Commission determines that the PROL for Point Lepreau is to be renewed, it should be for no longer than a five year term
- CNSC staff recommendation that decision-making with respect to Phase II extended of the SWRMF should be rejected; instead, a hold point should be inserted into the license and New Brunswick Power should provide a detailed status report on developments since the 2004 approval of the Phase II extension, all of which should be the subject of a public comment opportunity prior to the Commission making its decision

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brennain Lloyd', is written over a light gray rectangular background.

Brennain Lloyd  
Northwatch