

May 31, 2021

Mr. Jim Delaney
Director, Uranium and Radioactive Waste Division
Electricity Resources Branch
Natural Resources Canada

Dear Mr. Delaney:

Subject: Canada's Radioactive Waste Policy Framework Modernization – Joint Response from Waste Owners/Producers

NB Power as part of the CANDU Owners Group (COG) Radioactive Waste Leadership Forum (RWLF) would like to thank Natural Resources Canada (NRCAN) for the opportunity to participate in each of the Roundtables hosted by NRCAN to gather input from the Radioactive Waste Owners in Canada.

The facilitated sessions were seen to be very engaging with discussions around the questions posed in the NRCAN White Papers on the following topics:

1. Waste Minimization
2. Waste Storage Facilities
3. Waste Disposal
4. Decommissioning

NB Power as a single unit facility in eastern Canada is very engaged in the nuclear industry in Canada by collaborating with our Nuclear Power Colleagues in Canada and with the COG RWLF. As an organization, we are committed to the safe and reliable production of electricity from nuclear power and in that process, the safe storage of any waste that is produced in the production of that electricity.

The radioactive waste that is produced at Point Lepreau is in the form of high-level waste (HLW), intermediate-level waste (ILW) and low-level waste (LLW) and is currently stored at the Solid Radioactive Waste Management Facility (SRWMF) on the Point Lepreau site.

NB Power is an active member of the Nuclear Waste Management Organization (NWMO), which has the overall accountability to provide a method to safely store high-level waste as part of the Nuclear Fuel Act for all waste producers in Canada.

NB Power actively monitors continually evolving research and development methods of safely storing intermediate and low-level waste and currently has proposed methods for long-term storage of ILW in our Long-Range Capital Plans.

NB Power uses many of the current practices for minimization of low-level waste (i.e., incineration, compaction, volume reduction, Likely Clean Program) that is stored at the Station site.

These storage programs have been in place for the duration of the Station operation and have proven to be very effective. The current approach and forecast will ensure that current storage facilities on site will be adequate for the long-term operation of the facility.

The Station meets all the requirements of the Power Reactor Operating Licence (PROL) as it pertains to the financial obligations and planning for the eventual shutdown of the Station and disposal of the radioactive waste.

The latest Preliminary Decommissioning Plan that was produced as per the PROL was issued in 2020 and is updated on a 5-year frequency. This plan explains in great detail the plan and timeline for decommissioning of the Station and the eventual return to a brownfield site.

As NB Power is planning for further reductions of CO₂ for the future as part of the Integrated Plan, Small Modular Reactors (SMR) may be part of that mixture of generating options. As the details of the reactor type and thus the waste from the associated processes are developed, NB Power would like to have the eventual policy for radioactive waste be broad enough to allow for many different methods and options for final high-level waste disposal to be investigated and considered.

As the engagement process unfolded on the 4 topics above, it became evident in the conversations that many considerations for dealing with radioactive waste can and should be explored, and the policy should allow for that. Items for consideration included but were not limited to:

1. A Deep Geological Repository (DGR) for high-level CANDU waste is required but may not be the only option for SMR high-level waste and other options should be considered.
2. The existence of a DGR prior to a site decommissioning drives the timeline for the actual decommissioning period.
3. Shared waste facilities between Waste Owners would minimize the waste impact on the environment as the waste facilities will eventually be waste themselves.

4. Shared facilities will drive the necessity to be able to transfer waste between the producer and the receiver and they will be in different provinces. This arrangement needs to be permissible.
5. Decommissioning timelines can be different for different owners based on socio-economic factors of the area in which the Station is located.

If you require additional information, please contact [REDACTED]
[REDACTED]

Sincerely,

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