



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant New Brunswick Power

Subject Application to Amend the Point Lepreau  
Nuclear Generating Station Operating Licence

Hearing Date October 3, 2014

## **RECORD OF PROCEEDINGS**

Applicant: New Brunswick Power

Address/Location: PO Box 2000, 515 King Street, Fredericton NB, E3B 4X1

Purpose: Application to Amend the Point Lepreau Nuclear  
Generating Station Operating Licence

Application received: May 16, 2014

Date of hearing: October 3, 2014

Location: Canadian Nuclear Safety Commission (CNSC)  
280 Slater St., Ottawa, Ontario

Members present: M. Binder, Chair

Assistant Secretary: M. Leblanc  
Recording Secretary: M. Hornof

**Licence:** Amended

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## 1.0 INTRODUCTION

1. New Brunswick Power (NB Power) has submitted a request to the Canadian Nuclear Safety Commission<sup>1</sup>, under subsection 24(2) of the *Nuclear Safety and Control Act*<sup>2</sup> (NSCA), for an amendment to the Power Reactor Operating Licence (PROL) for the Point Lepreau Nuclear Generating Station (PLNGS) located on Lepreau Peninsula, 40 km southwest of Saint John, New Brunswick. The current licence, PROL 17.02/2017, expires on June 30, 2017.
2. NB Power owns and operates the PLNGS under the Class IA nuclear facility PROL. In addition to the reactor, the site also includes the Solid Radioactive Waste Management Facility which is used for the storage of solid radioactive waste, including used nuclear fuel, produced exclusively at PLNGS.
3. The proposed licence amendment would update the Unsealed Source Maximum Quantities for Activation Products and Fission Products (PROL 17.02/2017 appendix B.2) to 1 GBq each at PLNGS from 800 MBq of unsealed Activation Products and 200 MBq of unsealed Fission Products. During the 2012 licence renewal, a clerical error was made and these possession limits were decreased. This discrepancy was found in 2013 when, during an annual compliance inspection, it was discovered that NB Power was in possession of materials in excess of possession limits in the current licence. To correct this, NB Power is requesting a licence amendment to increase the possession limits to what they should have been at licence renewal.

### Issue

4. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the NSCA:
  - a) if NB Power is qualified to carry on the activity that the amended licence would authorize; and
  - b) if in carrying on that activity, NB Power would make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

### Hearing

5. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. The Commission, in making its decision, considered information presented for a hearing held on October 3, 2014 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from NB Power (CMD 14-H113.1) and CNSC staff (CMD 14-H113).

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<sup>1</sup> The *Canadian Nuclear Safety Commission* is referred to as the “CNSC” when referring to the organization and its staff in general, and as the “Commission” when referring to the tribunal component.

<sup>2</sup> Statutes of Canada (S.C.) 1997, chapter (c.) 9.

## 2.0 DECISION

6. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concludes that NB Power has met the conditions of subsection 24(4) of the NSCA. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends the Power Reactor Operating Licence PROL 17.02/2017 issued to New Brunswick Power for the Point Lepreau Nuclear Generating Station located on the Lepreau Peninsula, New Brunswick. The amended licence, PROL 17.03/2017, is valid until June 30, 2017.

7. The Commission includes in the licence the conditions as recommended by CNSC staff in CMD 14-H113.

## 3.0 ISSUES AND COMMISSION FINDINGS

8. CNSC staff reported that during the 2012 licence renewal, the isotope categories “Atomic Numbers 1-89” and “Atomic Numbers greater than 89” were renamed Fission Products and Activation Products, respectively. This change was made to better categorize the types of nuclear substances that NB Power possessed.
9. CNSC staff noted that prior to the 2012 licence renewal, NB Power was authorized to possess 1 GBq in unsealed sources of Atomic Numbers 1-89 and 10 GBq in unsealed sources of Atomic Numbers greater than 89. During the 2012 licence renewal, a clerical error was made and the possession limits were changed to 200 MBq Unsealed Fission Products and 800 MBq Unsealed Activation Products.
10. NB Power stated that although the inventory of nuclear substances at PLNGS has not changed significantly in the last 30 years, the possession limits in the current PROL are and will remain significantly less than those in previously issued PROLs.
11. CNSC staff reported that the discrepancy in the PROL possession limits was discovered by NB Power during a 2013 annual compliance review. At the time, NB Power possessed 40 MBq of Unsealed Activation Products which is well within its 800 MBq possession limit. NB Power also possessed 612 MBq of Unsealed Fission Products, over the 200 MBq possession limit. Consequently, NB Power submitted a licence amendment request to revise the Unsealed Source Maximum Quantity for Activation and Fission Products in Appendix B.2 of the PROL to 1 GBq each.
12. CNSC staff noted that any additions or deletions to the contents of Appendix B.2 of the PROL require Commission approval.
13. CNSC staff stated that NB Power has a robust radiation protection program for PLNGS

and that the possession of the nuclear substances listed in Appendix B.2 of the PROL is to support the primary activities authorized at PLNGS. Furthermore, NBP's request is for minor increases in the possession limits for these isotopes.

14. The requested changes are extremely small in the overall scope of operations at the Point Lepreau site and the safety case is not impacted since the original limits that predate the 2012 error were 10 GBq and 1 GBq. Also, prior to this error, NB Power was authorized to possess these materials in quantities greater than the requested possession limits. As such, CNSC staff considers this request to be strictly administrative in nature, and that raising these possession limits does not increase the risk to safety or security.

#### 4.0 CONCLUSION

15. The Commission has considered the information and submissions from NB Power and CNSC staff, and is satisfied that the requested amendments are administrative in nature and will not adversely impact the safety of the PLNGS operations.



Michael Binder  
President,  
Canadian Nuclear Safety Commission

OCT 03 2014

Date