

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicants      Ontario Power Generation Inc., Bruce Power  
Inc., Hydro-Québec, New Brunswick Power  
Nuclear Corporation

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Subject          Applications to Amend the Power Reactor  
Operating Licences to Incorporate the  
Requirements of Regulatory Document RD-204,  
*Certification of Persons Working at Nuclear  
Power Plants*

Hearing  
Date              December 11, 2008

## **RECORD OF PROCEEDINGS**

Applicants: Bruce Power Inc., Hydro-Québec, New Brunswick Power Nuclear Corporation, Ontario Power Generation Inc.

Address/Location: Bruce Power Inc.: P.O. Box 1540, B10, 4<sup>th</sup> Floor W., Tiverton, Ontario, N0G 2T0

Hydro-Québec: Centrale nucléaire de Gentilly-2, 4900, boul. Bécancour, Bécancour (Québec), G9H 3X3

New Brunswick Power Nuclear Corporation: Point Lepreau Generating Station, P.O. Box 600, Lepreau, N.B., E5J 2S6

Ontario Power Generation Inc.: 700 University Avenue, Toronto, Ontario, M5G 1X6

Purpose: Applications to Amend the Power Reactor Operating Licences to Incorporate the Requirements of Regulatory Document RD-204, *Certification of Persons Working at Nuclear Power Plants*

Applications received: Bruce Power Inc.: November 22, 2007  
Hydro-Québec: November 21, 2007  
NB Power: November 21, 2007  
Ontario Power Generation Inc.: November 21, 2007

Date of hearing: December 11, 2008

Location: Ajax Convention Centre, 550 Beck Crescent, Ajax, Ontario, L1Z 1C9

Members present: M. Binder, Chair            M. J. McDill  
A.R. Graham                    A. Harvey  
C.R. Barnes                      R. Barriault

Secretary: K. McGee  
Senior General Counsel J. Lavoie  
Recording Secretary: P. Bourassa

<b>Applicants Represented By</b>	<b>Document Number</b>
<ul style="list-style-type: none"> <li>• <b>Bruce Power Inc.:</b> <ul style="list-style-type: none"> <li>- F. Saunders, Vice-President Regulatory Oversight</li> <li>- C. Horton, Training Manager</li> <li>- M. Durham, Department Manager, Certification Training</li> </ul> </li> <li>• <b>Hydro-Québec:</b> <ul style="list-style-type: none"> <li>- N. Sawyer, Central Chief</li> </ul> </li> <li>• <b>NB Power:</b> <ul style="list-style-type: none"> <li>- D. Parker, Station Manager</li> </ul> </li> <li>• <b>Ontario Power Generation Inc.:</b> <ul style="list-style-type: none"> <li>- P. Tremblay, Senior Vice President Nuclear Programs and Training</li> <li>- A. Sheiver, Director Nuclear Training</li> </ul> </li> </ul>	<p style="text-align: center;">CMD 08-H28.1</p> <p style="text-align: center;">CMD 08-H28.2</p> <p style="text-align: center;">CMD 08-H28.3</p> <p style="text-align: center;">CMD 08-H28.4</p>
<b>CNSC Staff</b>	<b>Document Number</b>
<ul style="list-style-type: none"> <li style="width: 50%;">• I. Grant</li> <li style="width: 50%;">• J. Cameron</li> <li style="width: 50%;">• K. Heppell-Masys</li> <li style="width: 50%;">• G. Turcotte</li> </ul>	<p style="text-align: center;">CMD 08-H28</p> <p style="text-align: center;">CMD 08-H28.A</p>
<b>Intervenors</b>	<b>Document Number</b>
<ul style="list-style-type: none"> <li>• D. Stafford</li> <li>• Power Workers' Union</li> </ul>	<p style="text-align: center;">CMD 08-H28.5</p> <p style="text-align: center;">CMD 08-H28.6</p>

**Licences:**      Amended

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## Introduction

1. In 2000, the Canadian Nuclear Safety Commission<sup>1</sup> (CNSC) decided to begin withdrawing from a direct CNSC staff role in the certification process of personnel at Nuclear Power Plants (NPP) and adopt a program of assessments and audits of licensee administered training and examinations processes and their results. This decision is consistent with the CNSC policy that licensees be directly responsible for safely managing regulated activities. The approach is also aligned with international practices and guidance for personnel training and qualification.
2. As part of the planned transfer of CNSC certification examinations to the NPP licensees, the Commission approved, at the September 2007 public meeting<sup>2</sup>, the publication and implementation of Regulatory Document RD-204, *Certification of Persons Working at Nuclear Power Plants*. This document provides the detailed requirements to be met by persons seeking certification or renewal of a certification by the CNSC for a position referred to in the licence of a nuclear power plant, in accordance with the *Nuclear Safety and Control Act*<sup>3</sup> (the “Act”) and the regulations made under the Act. RD-204 also sets out the supporting programs and processes that the NPP licensees must implement to train and examine these persons. RD-204 becomes a legal requirement once it is referenced in a licence.
3. Ontario Power Generation Inc. (OPG), Bruce Power Inc. (Bruce Power), Hydro-Québec, and New Brunswick Power Nuclear Corporation (NB Power) have applied to the CNSC to amend their current Power Reactor Operating Licences (PROLs) issued for their respective Nuclear Generating Stations (NGSs). The amendments are to incorporate RD-204 in their licence and authorize NPP licensees to directly manage the training and examination for their personnel that require certification.

## Issue

4. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*:
  - a) if the applicants are qualified to carry on the activity that the amended licence would authorize; and
  - b) if, in carrying on that activity, the applicants 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.

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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> Refer to the Minutes of the CNSC Meeting held on September 12 and 13, 2007.

<sup>3</sup> S.C. 1997, c. 9.

### Hearing

5. Pursuant to section 22 of the Act, the President of the Commission established a panel of the Commission to hear this matter.
6. The Commission, in making its decision, considered information presented for a hearing held on December 11, 2008 in Ajax, Ontario. The hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*<sup>4</sup>. During the hearing, the Commission considered written submissions from CNSC staff (CMD 08-H28 and 08-H28.A), Bruce Power (CMD 08-H28.1), Hydro-Québec (CMD 08-H28.2), and NB Power (CMD 08-H28.3), OPG (CMD 08-H28.4) and from two intervenors (CMD 08-H28.5 and CMD 08-H28.6)

### **Decision**

7. 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 the applicants are qualified to carry on the activity that the amended licence will authorize. The Commission is of the opinion that the applicants, in carrying on that activity, will 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. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends the Power Reactor Operating Licences issued to Ontario Power Generation Inc. for its Darlington, Pickering A and Pickering B NGSs, to Bruce Power Inc. for its Bruce A and Bruce B NGSs, to Hydro-Québec for its Gentilly-2 NGS, and to New Brunswick Power Nuclear Corporation for its Point Lepreau NGS. The following amended licences are effective as of February 1, 2009:

Darlington NGS PROL 13.04/2013  
Pickering A NGS PROL 04.10/2010  
Pickering B NGS PROL 08.02/2013  
Bruce A NGS PROL 08.17/2009  
Bruce B NGS PROL 16.18/2009  
Point Lepreau NGS PROL 17.08/2011.

The amended Operating Licence for Gentilly-2 will come into effect following approval of documentation listed below, with an expected effective date of no later than May 1, 2009.

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<sup>4</sup> S.O.R./2000-211.

8. The Commission notes that Hydro-Québec does not need to carry out certification training and examination programs until the end of 2009 at the earliest. The Commission also notes that some documentation matters need to be addressed with regard to Hydro-Québec's certification process before it can be fully implemented as per the terms of the amended licence. Therefore the Commission has decided to amend the licence but with a later effective date dependent on the approval of Hydro-Québec's documents « Partage des responsabilités à la Direction production nucléaire, MG-01-01 », revision 1.0 and « Programme de radioprotection, DR-46 », revision 0.1. The Commission delegates the approval of these documents to the CNSC Director General, Directorate of Power Reactor Regulation.
9. The Commission includes in the licence the conditions as recommended by CNSC staff in CMD 08-H28.A, with the modifications as indicated in the following paragraphs.
10. Hydro-Québec and NB Power's licence conditions 2.2, 2<sup>nd</sup> paragraph shall be modified such that the licensee must seek the written approval of the Commission to deviate from items a) and b) that deal with the minimum personnel requirements to be met at all times in the nuclear facility and in the main control room. This modification will align Hydro-Québec and NB Power's operating licences with those of Ontario Power Generation Inc. and Bruce Power Inc.
11. With this decision, the Commission requests that CNSC staff report on the licensees' performance in their administration of certification training and examinations through the NPP Report on the industry, presented annually at a Commission public meeting.

### **Issues and Commission Findings**

12. In making its licensing decision, the Commission considered relevant issues relating to the applicants' qualifications to carry out the proposed activities and the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed.

### *Qualifications and Protection Measures*

13. CNSC staff provided details of the proposed licence conditions to be modified or added to the licences that would set out the regulatory requirements to be met by the licensees when administering their certification programs. CNSC staff added that the licensees have taken the measures to commence implementing these regulatory changes, with certain transitional provisions in place for each NPP. CNSC staff explained that the transitional provisions were needed to minimize the impact and coordinate the introduction of new requirements for each licensee.

14. CNSC staff submitted that the licensees' training staff meet regulatory expectations regarding qualifications, and that this staff effectively discharge their assigned duties. CNSC staff also noted that it had verified that the licensees' processes and procedures maintain documented qualifications requirements for trainers.
15. CNSC staff noted that all licensees currently have qualified examiners in place. However, the licensees' documentation has not clearly demonstrated compliance with the requirements for maintaining the examiner qualifications and the process for developing new examiners. In this regard, CNSC staff stated that it would continue to assess the qualifications of the examiners on a case-by-case basis until the licensees' documentation is adequate.
16. With respect to the licensees' certification examination procedures, CNSC staff stated that the procedures are acceptable to allow the licensees to administer initial certification examinations.
17. CNSC staff noted that the licensees would be required to conduct a set of formal evaluations of candidates during their training to confirm that the candidate has all the required knowledge and skills to perform the duties of the position. In this regard, OPG has committed to an upgraded formal evaluation system while the other licensees are retaining their current systems. CNSC staff noted that it would continue to review the licensees' progress to upgrade their systems but considers that current practices are acceptable to support the proposed amendments.
18. Noting that the proposed licence for Hydro-Québec did not refer to the same personnel position as the other NPPs, the Commission sought clarification that the positions subject to certification were similar. CNSC staff confirmed that positions may have different titles and different roles and responsibilities that are specific to the NPP site but all are subject to the same requirements. Hydro-Québec concurred and further noted that the title of the positions, and associated broad accountabilities, was a choice that it had made for its organisational structure.
19. The Commission sought CNSC staff's views on an intervenor's comment that the licensees may be limiting the training material to limit the examinable core training material. CNSC staff disagreed that there was intent to limit training and explained that the licensees perform their training programs based on a systematic approach to training that is job performance oriented.
20. The Power Workers Union (PWU), in its intervention, submitted that it supported OPG and Bruce Power's applications for the NPPs where it has representation.



### *Regulatory Oversight*

21. CNSC staff provided an overview of its proposed program of enhanced regulatory oversight to verify the quality of the licensees' certification training and examination programs. CNSC staff noted that the implementation of its compliance program would provide the basis for acceptance of the results of the licensees' programs and their assurance regarding the competence of their personnel.
22. CNSC staff noted that it has developed a compliance strategy for its regulatory oversight of certification training and examinations that would include such activities as desk top reviews and inspections. CNSC staff added that it would report on the licensees' compliance performance to the Commission during licence renewal and through the annual power reactor industry report.
23. CNSC staff submitted that the implementation of RD-204 would augment the CNSC's existing regulatory tools for ensuring that selective personnel are qualified, trained and certified to operate nuclear reactors in Canada, as well as strengthen the licensees' accountability in these areas.
24. The Commission sought further information regarding CNSC monitoring of the licensees' programs and the proposed enforcement measures. CNSC staff responded that it has a documented compliance strategy that includes the evaluation of each licensee's programs to verify it meets requirements. CNSC staff noted that it would be entering into a baseline compliance phase for the licensees' training and examination programs where CNSC staff could verify that the licensees' programs remain acceptable. CNSC staff added that the strategy would initially be reviewed annually and subsequently subject to five-year reviews after full implementation. CNSC staff also explained its risk-based graduated enforcement approach in the event of non-compliance.
25. In response to the Commission's enquiry on how other countries administer examination processes, a licensee representative noted that, in the United States, licensees administer the programs which are inspected by the regulatory body, the U.S. Nuclear Regulatory Commission. CNSC staff noted that the proposed approach is aligned with that recommended by the International Atomic Energy Agency (IAEA).

### **Application of the *Canadian Environmental Assessment Act***

26. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*<sup>5</sup> (CEAA) have been fulfilled.

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<sup>5</sup> S.C. 1992, c. 37.

27. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. CNSC staff stated that there was no requirement for an EA pursuant to subsection 5(1) of the CEEA as the proposed amendments are administrative in nature.
28. Therefore, the Commission is satisfied that an EA is not required before it can consider the licence amendment applications.

### **Conclusion**

29. The Commission has considered the information and submissions of the applicants, CNSC staff and the intervenors as presented in the material available for reference on the record.
30. The Commission is satisfied that the Ontario Power Generation Inc., Bruce Power Inc., Hydro-Québec, and New Brunswick Power Nuclear Corporation meet the requirements of subsection 24(4) of the *Nuclear Safety and Control Act*. That is, the Commission is of the opinion that the applicants are qualified to carry on the activities that the amended licences will authorize and that they will 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.
31. As indicated in the CNSC staff's recommendations, the Commission notes that the CNSC has not completed its review of Hydro-Québec's document « Partage des responsabilités à la Direction production nucléaire, MG-01-01 », revision 1.0, and « Programme de radioprotection, DR-46 », revision 0.1, included in the proposed licence. Considering that the documentation needs to be approved by the CNSC before being implemented and that Hydro-Québec is not currently in need of carrying out certification training and examination programs for its personnel, the Commission decides to provide a later effective date for the amended licence. The amended licence will be effective once Hydro-Québec's documents MG-01-01 and DR-46 have been approved by a person authorized by the Commission. In this regard, the Commission delegates the authority to approve the documents to the CNSC Director General, Directorate of Power Reactor Regulation. It is expected that the documentation will be finalized so that the amended licence can have an effective date of no later than May 1, 2009.
32. The Commission therefore amends, pursuant to section 24 of the *Nuclear Safety and Control Act*, the Power Reactor Operating Licences issued to Ontario Power Generation Inc., Bruce Power Inc., Hydro-Québec, and New Brunswick Power Nuclear Corporation for their respective Nuclear Generating Stations.

33. The Commission includes in the licences the recommendations made by CNSC staff in CMD 08-H28 and 08-H28.A, and the modifications listed in paragraph 10 of this Record of Proceedings.



Michael Binder,  
President  
Canadian Nuclear Safety Commission

JAN 29 2009

Date