



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Ontario Power Generation Inc.

Subject Application for licence amendments to Ontario  
Power Generation's Power Reactor Operating  
Licences for the Nuclear Generating Stations  
Darlington, Pickering A and Pickering B

Hearing  
Date September 22, 2009

## **RECORD OF PROCEEDINGS**

Applicant: Ontario Power Generation Inc.

Address/Location: 700 University Avenue, Toronto, Ontario, M5G 1X6

Purpose: Application for licence amendments to Ontario Power Generation's Power Reactor Operating Licences for the Nuclear Generating Stations Darlington, Pickering A and Pickering B

Applications received: June 17, 2009

Date of hearing: September 22, 2009

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

Members present: M. Binder, Chair

Secretary: K. McGee

Recording Secretary: P. Reinhardt

**Licences:** amended

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## Introduction

1. Ontario Power Generation Inc. (OPG) has applied to the Canadian Nuclear Safety Commission<sup>1</sup> (CNSC) for amendments to the Power Reactor Operating Licences (PROLs) for the Darlington and the Pickering A and Pickering B Nuclear Generating Stations (NGSs). Darlington NGS is located in Clarington while the Pickering A and B NGSs are located in Pickering, all in Ontario. The current licences are PROL 13.05/2013 for Darlington NGS and PROL 04.11/2010 and PROL 08.03/2013 for Pickering A and B NGSs, respectively.
2. OPG is seeking two amendments to the licences. OPG's first request is to amend the Darlington, Pickering A and Pickering B NGSs PROLs to include a condition that incorporates CNSC Regulatory Document 363<sup>2</sup> (RD-363) requirements. The RD-363, entitled "*Nuclear Security Officer Medical, Physical and Psychological Fitness*", was developed to address key considerations for licences of nuclear power plants and nuclear facilities who provide Nuclear Security Officer (NSO) authorization under the *Nuclear Security Regulations*<sup>3</sup>.
3. Secondly, OPG is seeking CNSC's approval for an extension of the implementation date of the Fire Protection and Probabilistic Risk Assessment (PRA) programs for the Darlington and the Pickering B NGSs PROLs.
4. The requested modifications are administrative in nature, and would not change the existing physical works or the physical activities at the licensed facilities.

## Issue

5. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*<sup>4</sup> (NSCA):
  - a) if OPG is qualified to carry on the activity that the amended licences would authorize; and
  - b) if in carrying on that activity, OPG 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> CNSC RD-363: Nuclear Security Officer Medical, Physical, and Psychological Fitness, November 2008

<sup>3</sup> SOR/2000-209

<sup>4</sup> S.C. 1997, c. 9.

### Hearing

6. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. In establishing the process, a standing panel on procedural matters determined that it was not necessary to hold a public hearing on these matters, and the hearing was conducted by a panel of one commission member, based on written submissions.
7. The Commission, in making its decision, considered information presented for a hearing held on September 22, 2009 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 09-H120) and OPG (CMD 09-H120.1).

### **Decision**

8. 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 OPG is qualified to carry on the activities that the amended licences will authorize. The Commission is also satisfied that OPG, in carrying on these activities, 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 Pickering A Operating Licence 04.11/2010, Pickering B Operating Licence 08.03/2013 and Darlington Operating Licence 13.05/2013 issued to OPG Inc. for its Nuclear Generating Stations Pickering A and B and Darlington. The amended licence, PROL 04.12 /2010 for Pickering A, remains valid until June 30, 2010, PROL 08.04/2013 for Pickering B, until June 30, 2013 and PROL 13.06/2013 for Darlington, until February 28, 2013.

9. The Commission includes in the amended licences the revisions as recommended by CNSC staff in CMD 09-H120.

### **Issues and Commission Findings**

10. In making its licensing decisions, the Commission considered a number of issues relating to OPG's qualification to carry out the proposed activities and the impact of the proposed changes on 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*

11. In regards of the first amendment requested by OPG, CNSC staff noted that the regulatory document entitled “*Nuclear Security Officer Medical, Physical and Psychological Fitness*” sets out CNSC requirements for NSO medical, physical and psychological certificates and applies to all persons to whom the licensee is considering authorizing or has authorized to act as an NSO at a high security site as defined in the *Nuclear Security Regulations*. CNSC added that OPG had confirmed in a letter dated June 3, 2009 that it was compliant with RD-363 requirements.
12. CNSC staff has reviewed OPG’s submission to incorporate the requirements of RD-363 in the licences mentioned in paragraph 2 and is satisfied that OPG meets the requirements determined in the regulatory document. CNSC staff therefore recommends that the licences be amended.
13. OPG requested two further amendments, the first being revisions to the Darlington and Pickering B PROLs to extend the compliance date with CSA Standard N293-07 entitled “Fire Protection for CANDU Nuclear Power Plants” from March 1, 2010 to December 31, 2011. With regard to fire safety, OPG has sufficiently complied with the 2007 CSA Standard and developed adequate contingencies for the additional 12 months. A meeting conducted between OPG and CNSC staff has indicated a sufficient compliance to the 2007 version of the Fire Protection standard as well as the development of adequate contingencies if required. CNSC specialists are satisfied with OPG’s commitment and have indicated that the extensions are acceptable considering what has already been developed and what is currently implemented. Therefore, CNSC staff recommended that Darlington and Pickering B licences be amended.
14. The second amendment requested by OPG was to revise the required compliance dates specified in the Darlington and Pickering B PROLs for CNSC RD S-294 entitled “Probabilistic Safety Assessment for Nuclear Power Plants” from December 31, 2010 to December 31, 2011 for Darlington and December 31, 2010 to December 31, 2012 for Pickering B. OPG currently uses the Darlington and Pickering B Risk Assessments to support the planning and execution of safety significant work and these are upgraded to comply with RD-294. OPG stated that work was underway to meet full compliance with RD-294 and to complete their Level 2 Probabilistic Safety Assessments and that the requested extension will not impact on the safe operation of the facilities. CNSC staff has reviewed OPG’s submission in respect to the revision of completion dates of implementation of RD-294 and finds it acceptable. Therefore, CNSC staff recommended that Darlington and Pickering B licences be amended.

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

15. 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.
16. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. Since the proposed amendments are not for the purpose of enabling a project, CNSC staff stated that there was no requirement for an EA pursuant to subsection 5(1) of the CEAA.
17. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

**Conclusion**

18. The Commission has considered the information and submissions of OPG and CNSC staff as presented in the material available for reference on the record.
19. The Commission is satisfied that the applicant meets the requirements of subsection 24(4) of the *Nuclear Safety and Control Act*. That is, the Commission is of the opinion that OPG is qualified to carry on the activities that the amended licences will authorize and that it 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.
20. The Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends Pickering A Operating Licence 04.11/2010, Pickering B Operating Licence 08.03/2013 and Darlington Operating Licence 13.05/2013 issued to OPG Inc. for its Nuclear Generating Stations Pickering A and B and Darlington.
21. The Commission includes in the licences the recommendations made by CNSC staff in CMD 09-H120.



Michael Binder  
President,  
Canadian Nuclear Safety Commission

SEP 22 2009

Date

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