

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 Nuclear Generating Station
Power Reactor Operating Licences for
Darlington and Pickering A and B

Hearing
Date November 28, 2008

RECORD OF PROCEEDINGS

Applicant: Ontario Power Generation Inc.

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

Purpose: Application for amendments to Ontario Power Generation's Nuclear Generating Station Power Reactor Operating Licences for Darlington and Pickering A and B.

Applications received: August 1, 2008
September 3, 2008
September 12, 2008

Date of hearing: November 28, 2008

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

Table of Contents

Introduction	1
Decision	3
Issues and Commission Findings	3
<i>Qualifications and Protection Measures</i>	3
Application of the <i>Canadian Environmental Assessment Act</i>	5
Conclusion	5

Introduction

1. Ontario Power Generation Inc. (OPG) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for amendments to the Darlington Nuclear Generating Station (NGS) Power Reactor Operating Licence and the Pickering A and B NGS Power Reactor Operating Licences. Darlington NGS is located in Clarington while the Pickering A and B NGS is located in Pickering, all in Ontario. The current licences are PROL 13.02/2013 for Darlington NGS and PROL 04.08/2010 and PROL 08.00/2013 for Pickering A and B NGS, respectively.
2. OPG is seeking CNSC's approval for several amendments to the Darlington NGS operating licence; the requested changes are as follows:
 - A. Remove Licence Condition 2.1b) and consequently the reference document entitled "Staffing Levels and Organizational Structure at the Darlington Nuclear Generating Station";
 - B. Return to Revision 1 from Revision 2 of the CNSC document: *"Requirements for the Requalification Testing of Certified Shift Personnel at Canadian Nuclear Power Plant"*;
 - C. Maintain the amendments requirements for written requalification testing of certified shift personnel until June 30, 2009; and
 - D. Revise the document: "Chief Nuclear Officer Expectations, N-CHAR-AS-002 R11".
3. OPG is seeking CNSC's approval for the following amendment to the Pickering A NGS operating licence:
 - Maintain the amendments requirements for written requalification testing of certified shift personnel until June 30, 2009.
4. OPG is also seeking CNSC's approval for several amendments to the Pickering B NGS operating licence; the requested changes are as follows:
 - A. Remove Licence Condition 2.1b) and consequently the reference document entitled "Staffing Levels and Organizational Structure at the Pickering B Generating Station" and consequently the reference document "Pickering NGS-B Licence Renewal – Request for Additional Information on Staffing Levels and Organizational Structure";

¹ 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.

- B. Return to Revision 1 from Revision 2 of the CNSC document: “Requirements for the Requalification Testing of Certified Shift Personnel at Canadian Nuclear Power Plant”;
 - C. Maintain the amendments requirements for written requalification testing of certified shift personnel until June 30, 2009;
 - D. Revise the document: “Chief Nuclear Officer Expectations, N-CHAR-AS-002 R11” ; and
 - E. Incorporate Revision 31 of the Operating Policies and Principles (OP&P).
5. These changes are administrative in nature or would not change the existing physical works or the physical activities at the licensed facilities.

Issue

6. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*² (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.

Hearing

7. 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.
8. The Commission, in making its decision, considered information presented for a hearing held on November 28, 2008 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 08-H141) and OPG (CMD 08-H141.1).

² S.C. 1997, c. 9.

Decision

9. 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 04.08/2010, Pickering B Operating Licence 08.00/2013 and Darlington Operating Licence 13.02/2013 issued to OPG Inc. for its Nuclear Generating Stations Pickering A and B and Darlington. The amended licence, PROL 04.09/2010, remains valid until June 30, 2010, the amended licence PROL 08.01/2013 is valid until June 30, 2013 and the amended licence PROL 13.03/2013 remains valid until February 28, 2013.

10. The Commission includes in the amended licences the revisions as recommended by CNSC staff in CMD 08-H141.

Issues and Commission Findings

11. 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

12. CNSC staff has reviewed information in support of OPG's applications for the requested amendments. The first request to remove Licence Condition 2.1b) for Darlington and Pickering B NGS licences also required removal of Darlington PROL reference document: "*Staffing Levels and Organizational Structure at the Darlington nuclear Generating Station*" and the Pickering B PROL reference document "*Pickering NGS-B Licence Renewal- Request for Additional Information on Staffing Levels and Organization Structure*" as they were not referenced elsewhere. Licence condition 1.3 of Darlington and Pickering B already included a clause that OPG had to notify CNSC of any revision to N-STD-AS-0020, "Nuclear Organization" referred to in condition 2.1. CNSC staff has determined that N-STD-AS-0020 provided sufficient information regarding the organizational structure and position responsibilities, accountabilities and authority to ensure correlation in the Quality Assurance program described by OPG and referred to in condition 1.3. CNSC staff concluded that the condition 2.1 b) was not required anymore in either licence.

13. The next request from OPG was to replace the reference to Revision 2 of the CNSC document: “*Requirements for the Requalification Testing of Certified Shift Personnel at Canadian Nuclear Power Plant*” in Darlington and Pickering B PROLs, to Revision 1 of the same document. Revision 2 of the CNSC document has not yet been issued therefore Revision 1 and the related Appendices (G for Darlington and H for Pickering B) would allow simulator and written requalification testing of certified shift personnel to be conducted until Revision 2 is issued. CNSC staff concluded that this licence amendment was needed since the issuance of Revision 2 of the document had been delayed.
14. The next amendments requested to the Darlington, Pickering A and Pickering B PROLs were to maintain the transitional provisions, until June 30, 2009, for the written requalification testing requirements as outlined in Revision 1 of the CNSC document “*Requirements for the Requalification Testing of Certified Shift Personnel at Canadian Nuclear Power Plants*” dated June 26, 2003.
15. The next requested amendments are to revise the document: “*Chief Nuclear Officer Expectations, N-CHAR-AS-002 R11*” in the Darlington and Pickering B PROLs to reflect that accountability for the Nuclear Waste Operations has been placed directly under the control of the Chief Nuclear Officer and maintenance of commercial facilities outside of the inner security fence has been removed from the charter document. CNSC staff reported that the proposed changes would comply with the requirements of the applied standard CAN/CSA N286.0-92.
16. Finally CNSC staff reviewed OPG’s request to incorporate the revised Operating Policies and Principles (OP&Ps) revision 31 in the Pickering B PROL. This revision includes a new fuel bundle power limit of 680kW in the eight bundle shift region of the reactor core. This amendment is required following the Pickering B Large Loss of Coolant Accident (LLOCA) analysis report that assumed a bundle power limit of 680 kW in the eight bundle shift region of the reactor core and 750kW in the four bundle shift region. In the previous the LLOCA analysis, all channels had 750 kW bundle power limits. CNSC staff concluded that the incorporation of revision 31 of the OP&P in Pickering B PROL poses no unreasonable risk to the health and safety of persons and recommended the approval of OPG’s request.
17. CNSC staff recommended that the Commission approves the amendments requested by OPG.

Application of the *Canadian Environmental Assessment Act*

18. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*³ (CEAA) have been fulfilled.
19. 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.
20. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

Conclusion

21. The Commission has considered the information and submissions of OPG and CNSC staff as presented in the material available for reference on the record.
22. 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.
23. The Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends Pickering A Operating Licence 04.08/2010, Pickering B Operating Licence 08.00/2013 and Darlington Operating Licence 13.02/2013 issued to OPG Inc. for its Nuclear Generating Stations Pickering A, Pickering B and Darlington. The amended licence, PROL 04.09/2010, remains valid until June 30, 2010, the amended licence PROL 08.01/2013 remains valid until June 30, 2013 and the amended licence PROL 13.03/2013 remains valid until February 28, 2013.
24. The Commission includes in the licences the recommendations made by CNSC staff in CMD 08-H141.



Michael Binder
President,
Canadian Nuclear Safety Commission

NOV 28 2008

Date

³ S.C. 1992, c. 37.