

Record of Proceedings and Decision

In the Matter of

Applicant Ontario Power Generation Inc.

Subject Licence Amendment of the Pickering NGS-B
Nuclear Generating Station Power Reactor
Operating Licence to Reflect Updates in
Documentation

Hearing
Date June 25, 2007

RECORD OF PROCEEDINGS

Applicant: Ontario Power Generation Inc.

Address/Location: 889 Brock Road, P82 6A-1, Pickering , ON L1W 3J2

Purpose: Licence amendment of the Pickering NGS-B Nuclear Generating Station Power Reactor Operating Licence to reflect updates in documentation

Application received: May 2, 2007

Date of hearing: June 25, 2007

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

Members present: L.J. Keen, Chair

Secretary: K. McGee
Recording Secretary: M. Young

Licence: Amended
Date of Release of Decision: August 22, 2007

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Introduction

1. Ontario Power Generation Inc. (OPG) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for an amendment to its Power Reactor Operating Licence for its Pickering NGS-B Nuclear Generating Station (NGS) located in Pickering, Ontario. The current licence is PROL 08.12/2008.
2. OPG requested the following changes to the licence:
 - Licence Condition 5.1
 - replacement of the 1995 edition of Canadian Standards Association (CSA) N285.0 with the 2006 edition and
 - replacement of the 1997 edition of CSA B51 with the 2003 edition.
 - Modify Appendix B of the licence to reference the current revision of the Pickering NGS-B Operating Policies and Principles (OP&P), Rev. 28, March 2007; and
 - Modify Appendix A: Part II(i) and Part III(i) to reference the latest revision of the Pickering NGS-B Safety Report document – Plant/Site Description, Design Description and Accident Analysis.
3. In addition, CNSC staff proposed an administrative correction to PROL 08.12/2008.

Issues

4. 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 licence 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.

¹ In this *Record of Proceedings*, 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.

² S.C. 1997, c. 9.

Hearing

5. 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 the matter, and the hearing was conducted by a panel of one commission member, based on written submissions.
6. The Panel of the Commission (hereafter referred to as the Commission), in making its decision, considered information presented for a hearing held on June 25, 2007 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 07-H134) and OPG (CMD 07-H134.1).

Decision

7. Based on its consideration of the matter, the Commission concludes that OPG is qualified to carry on the activity that the amended licence will authorize. The Commission is of the opinion that OPG, 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 Licence PROL 08.12/2008 issued to OPG for its Pickering NGS-B Nuclear Generating Station. The amended licence, PROL 08.13/2008, remains valid until June 30, 2008, unless suspended, amended, revoked or replaced.

8. The Commission includes in the licence the conditions as recommended by CNSC staff in CMD 07-H134.

Issues and Commission Findings

9. In making its licensing decision, the Commission considered a number of issues relating to OPG's qualification 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.

Modification to Licence Condition 5.1

10. CNSC staff stated that in the current licence, Licence Condition 5.1 states that “the licensee shall design, manufacture, fabricate, procure, install, modify, repair, test, examine, inspect, or otherwise perform work related to vessels, boilers, systems, piping, fittings, parts, components and supports according to the technical requirements in CSA standards N285.0-95 and B51-97.”
11. OPG requested a licence amendment to transition to the 2006 edition of the CSA N285.0 Standard – “General Requirements for Pressure-Retaining Systems and Components in CANDU Nuclear Power Plants” (CSA 285.0-06) and to update the 1997 edition of CSA B51 Standard – “Boiler, Pressure Vessel, and Pressure Piping Code” (B51-97) to the 2003 edition (B51-03).
12. CNSC staff stated that the CSA N285.0 Standard specifies the technical requirements for the work related to pressure-retaining and containment systems, components, and supports over the service life of a CANDU nuclear power plant. CNSC staff explained that the 1995 version of the CSA N285.0 Standard has been revised to update definitions, names of agencies, and language to be consistent with the current regulatory framework and with the NSCA and its current regulations. CNSC staff stated that the 2006 version allows a process-based approach, which permits more effective and efficient regulatory oversight of Nuclear Power Plant Pressure Boundary Programs.
13. CNSC staff further stated that the purpose of the CSA B51 Standard is to promote safe work practices for boilers, pressure vessels, pressure piping and fittings. CNSC staff noted that this Standard does not apply to nuclear pressure equipment, which is covered by the CSA N285.0 Standard. CNSC staff stated that the CSA B51 Standard was revised in 2003 due to technical and editorial revisions.
14. OPG stated that in order for it to fully comply with the new Standards, it will require an 18-month transition period. OPG stated that as individual elements of the new Standards are implemented, it would provide 30 days advance notice to the CNSC of each new element to be implemented, and provide confirmation at the end of the 18-month period that the new standards are fully implemented.
15. OPG also requested that a new Appendix, Appendix H, be added to the Pickering NGS-B PROL to help facilitate the reconciliation between the older Standards and the updated editions of the Standards during the 18-month period. CNSC staff noted that Appendix H would be removed from the PROL through a licence amendment once OPG is fully compliant with the updated Standards.

16. CNSC staff stated that it reviewed the request. CNSC staff stated that the amendment will bring the licence up to date with the latest edition of the Standards, which will implement risk-informed improvements to the Pressure Boundary Regulatory Process allowing the CNSC to risk-manage its resources in a more effective manner.

Modification to the Pickering NGS-B Operating Policies and Principles

17. OPG requested a licence amendment to update the licence to revision 28 of the Operating Policies and Principles (OP&P).
18. CNSC staff stated that most of the changes are administrative in nature. CNSC staff stated that the changes include:
 - conversion of the legacy Interleaf document to a Microsoft Word document;
 - revision of OP&P 54.2 and 54.5 to clearly differentiate the required start-up capability of both standby generators and emergency power generators; and
 - revision of OP&P Section 00.2.8 Radiation Protection Requirements, to align the OP&P with the environmental documents referenced in PROL 08.12/2008.
19. CNSC staff stated that it reviewed the request. CNSC staff stated that these administrative changes are acceptable and pose no unreasonable risk to the health and safety of persons.

Modification to the Pickering NGS-B Safety Report

20. CNSC staff stated that, according to Licence Condition 1.6, OPG is required to review and update, where necessary, the Pickering NGS-B Safety Report for each of its nuclear power plants within three years of the submission of the previous revision.
21. OPG requested changes to the Facility Description sections (Parts 1 and 2) and Accident Analysis (Part 3). OPG also requested a concurrent update to Appendix A of the PROL in order to accommodate the editorial changes to the Safety Report.
22. CNSC staff stated that it reviewed the updated Pickering NGS-B Safety Report and found it to be satisfactory. CNSC staff stated that the changes were found to be acceptable and would not pose any unreasonable risk to the health and safety of persons or the environment.

Administrative Correction to the Pickering NGS-B PROL

23. CNSC staff stated that on the first page of the current Pickering B PROL, Section II, the following is written: “Pursuant to Section 24 and subsection 37(2) of the NSCA...” CNSC staff proposed that the portion “and subsection 37(2)” of the above statement should be removed, as Designated Officers, to which subsection 37(2) refers, are not authorized to issue licences to Class 1A facilities. CNSC staff noted that amendment of a Class 1A facility licence is solely a function for the Commission.
24. Based on the above information, the Commission is of the opinion that OPG is qualified to carry on the activity that the proposed amended licence will authorize, and, 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.

Application of the *Canadian Environmental Assessment Act*

25. 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.
26. 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 CEAA.
27. Therefore, the Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

Conclusion

28. The Commission has considered the information and submissions as presented in the material available for reference on the record.
29. 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 activity that the amended licence 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.

³ S.C. 1992, c. 37.

30. The Commission therefore amends, pursuant to section 24 of the *Nuclear Safety and Control Act*, the Power Reactor Operating Licence PROL 08.12/2008 issued to OPG for its Pickering NGS-B Nuclear Generating Station. The amended licence, PROL 08.13/2008, remains valid until June 30, 2008, unless suspended, amended, revoked or replaced.
31. The Commission includes in the licence the conditions recommended by CNSC staff as set out in the draft licence attached to CMD 07-H134.

Linda J. Keen,
President
Canadian Nuclear Safety Commission

Date of Release of Decision: August 22, 2007