



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 to Amend the Darlington Nuclear
Generating Station Power Reactor Operating
Licence to Reflect an Update in Documentation

Hearing
Date

February 7, 2012

RECORD OF PROCEEDINGS

Applicant: Ontario Power Generation Inc.

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

Purpose: Application to amend the Darlington Nuclear Generating Station Power Reactor Operating Licence to Reflect an Update in Documentation

Application received: June 27, 2011 and October 18, 2011

Date of hearing: February 7, 2012

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

Members present: M. Binder, Chair

Secretary: M. Leblanc
Recording Secretary: D. Carrière

Licence: Amended

Table of Contents

Introduction	1
Decision	1
Issues and Commission Findings	2
<i>Qualifications and Protection Measures</i>	2
Application of the <i>Canadian Environmental Assessment Act</i>	3
Conclusion	3

Introduction

1. Ontario Power Generation Inc. (OPG) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for two amendments to the Power Reactor Operating Licence for its Darlington Nuclear Generating Station (NGS) located in Clarington, Ontario. The current licence, PROL 13.16/2013, expires on February 28, 2013.
2. The changes requested by OPG update the operating licence to reflect the most current revision of the OPG documents entitled “Organizational Change Control” and “Derived Release Limits and Environmental Action Levels for Darlington Nuclear Generating Station”.

Issue

3. 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.

Hearing

4. 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 February 7, 2012 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from OPG (CMD 11-H126.1) and CNSC staff (CMD 11-H126).

Decision

5. 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 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 13.16/2013 issued to Ontario Power Generation Inc. for its Darlington Nuclear Generating Station located in Clarington, Ontario. The amended licence, PROL 13.17/2013, is valid until February 28, 2013.

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.

² Statutes of Canada (S.C.) 1997, chapter (c.) 9.

Issues and Commission Findings

Qualifications and Protection Measures

6. OPG requested an update to Appendix B of the operating licence to reflect the most current revision, Revision 6, of the OPG document entitled “Organizational Change Control”. OPG revised this document to reduce duplication within the document, reorder procedural steps, and revise the levels of organizational changes from two levels (Major and not Major) to three levels (Low, Standard and Major).
7. CNSC staff reported having reviewed this document and found that it meets the regulatory requirements. CNSC staff stated that there is sufficient indication that all changes are evaluated, documented and controlled. CNSC staff also reported having submitted comments to OPG for inclusion in the next revision of the document, which have no impact on the safe operation of the station.
8. OPG also requested an update to Appendix B of the operating licence to reflect the most current revision, Revision 1, of the OPG document entitled “Derived Release Limits and Environmental Action Levels for Darlington Nuclear Generating Station”. CNSC staff explained what derived release limits (DRLs) are and how they are calculated. CNSC staff stated that the DRL presented in revision 1 of OPG’s document conform to the recently updated CSA N288.1-2008 standard entitled “Guidelines for calculating derived release limits for radioactive material in airborne and liquid effluents for normal operation of nuclear facilities”. CNSC staff also stated that the DRLs incorporate changes in the locations and characteristics of nearby members of the public as identified by the latest Darlington Site Specific Survey.
9. CNSC staff stated that the DRLs have increased for certain radionuclides or radionuclide release groups because the new DRLs were calculated using revised age classes recently recommended by the International Commission on Radiological Protection (ICRP) and incorporated in the latest revision of CSA N288.1. CNSC staff also stated that the actual releases from the Darlington NGS are typically less than one percent of the DRLs. CNSC staff reported that OPG’s revision to their document contains revised Environmental Action Levels (EALs) for Darlington NGS, which are based on the DRLs.
10. CNSC staff reported having reviewed the new DRLs and found that overall, the approach, methodology, parameters and assumptions used in the calculation of the new DRLs and EALs are consistent with CSA N288.1-2008 and CNSC Regulatory Guide G-228 *Developing and Using Action Levels*. CNSC staff also reported having requested further clarification on definitions and assumptions made by OPG for the calculation of the new DRLs. CNSC staff stated that they have received acceptable responses from OPG.

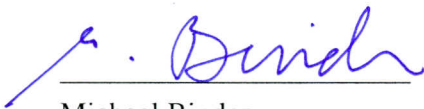
11. CNSC staff reported that the proposed changes to the operating licence are administrative in nature and will not adversely affect the safe operation of the Darlington NGS. CNSC staff also considers that the proposed revised document is acceptable to reference in the operating licence.
12. CNSC staff has determined that the changes will have no adverse impact on potential or established Aboriginal or Treaty rights. CNSC staff stated that the duty to consult with Aboriginal groups does not arise in relation to the proposed licence amendment.

Application of the *Canadian Environmental Assessment Act*

13. 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.
14. 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.

Conclusion

15. The Commission has considered the information and submissions from CNSC staff and OPG and is satisfied that the requested amendment is administrative in nature and will not adversely impact the safety of the Darlington NGS operations. The Commission is also satisfied that Aboriginal consultation is not necessary in relation to the proposed amendments.
16. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.



Michael Binder
President,
Canadian Nuclear Safety Commission

FEB 07 2012

Date

³ S.C. 1992, c. 37.