

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 Perform Complete Operational Tests
on Shutdown Systems Every Three Years
Instead of Two

Hearing Date June 17, 2008

RECORD OF PROCEEDINGS

Applicant: Ontario Power Generation Inc.

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

Purpose: Application to amend the Darlington nuclear generating station power reactor operating licence to perform complete operational tests on Shutdown Systems every three years instead of two

Application received: May 5, 2008

Date of hearing: June 17, 2008

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

Members present: M. Binder, Chair

Secretary: K. McGee
Recording Secretary: M. Young

Licence: Amended
Date of Release of Decision: June 24, 2008

Table of Contents

Introduction	1
Decision	2
Issues and Commission Findings	2
<i>Shutdown Systems Operational Testing Frequency</i>	2
<i>Update Appendix B to Reflect Revision in Documentation</i>	3
<i>Administrative Changes</i>	3
Application of the <i>Canadian Environmental Assessment Act</i>	3
Conclusion	4

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 (PROL) for its Darlington nuclear generating station (NGS) located in the Municipality of Clarington, Ontario. The current licence is PROL 13.01/2013.
2. OPG has requested the following changes to its licence:
 - amendment of the requirement contained in Licence Condition 3.9 b) “REQUIREMENTS FOR SHUTDOWN SYSTEMS FOR CANDU NUCLEAR POWER PLANTS”, to perform complete operational tests every three years instead of two; and
 - update Appendix B, Licence Condition 1.4 to incorporate Revision 7 of N-PROG-AS-0006, “RECORDS AND DOCUMENT CONTROL”.
3. In addition, the following administrative changes have been requested:
 - change the word “guard” to “officer” under Licence Condition 10.1; and
 - move a paragraph under Licence Condition 3.9 to 3.9 a).

Issue

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

5. 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 June 17, 2008 in Ottawa, Ontario. The hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*³. During the hearing, the Commission considered written submissions from CNSC staff (CMD 08-H118) and OPG (CMD 08-H118.1).

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 S.C. 1997, c. 9.

³ S.O.R./2000-211.

Decision

6. 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 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 PROL 13.01/2013 issued to Ontario Power Generation Inc. for its Darlington nuclear generating station. The amended licence, PROL 13.02/2013, remains valid until February 28, 2013.

7. The Commission includes in the licence the conditions as recommended by CNSC staff in CMD 08-H118.

Issues and Commission Findings

8. 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.

Shutdown Systems Operational Testing Frequency

9. OPG requested an amendment to permit OPG to perform complete operational tests to demonstrate the effectiveness of each shutdown system every three years, rather than two. OPG stated that the three year arrangement will benefit the station safety and reliability by improving workload execution during outages and operation periods. OPG stated that the safety implications of changing the testing frequency to once every three years are negligible, and the intent of the regulatory requirement will continue to be met.
10. CNSC staff stated that it reviewed OPG's request, and hired an independent consulting company to examine the associated risk. CNSC staff stated that it agreed with the consulting company's assessment that there were no unacceptable technical matters in OPG's request.
11. CNSC staff further stated that the testing of components of each special safety system is performed on a continual basis, and the full system test is used as confirmation of these component tests. CNSC staff stated that the frequency of the full system test can be varied without reducing confidence in the unavailability of the system.

12. CNSC staff stated that it would provide the Commission with an update on the effectiveness of the 3-year outage cycle in the Darlington mid-term report, scheduled to be presented in a public proceeding of the Commission as part of the 2009 Annual Industry Report.

Update Appendix B to Reflect Revision in Documentation

13. OPG requested that Revision 7 of N-PROG-AS-0006, “RECORDS AND DOCUMENT CONTROL” be incorporated into Appendix B, Licence Condition 1.4 of the Darlington PROL. OPG stated that the changes made to this document are administrative in nature and do not have any substantive impact on records and document control within OPG.
14. CNSC staff stated that it reviewed the request and determined that the revised program document continues to adequately address the requirements of the Darlington PROL. CNSC staff confirmed that the changes were administrative in nature only.

Administrative Changes

15. CNSC staff proposed the following two administrative changes:
 - change the word “guard” to “officer” under Licence Condition 10.1; and
 - move the last paragraph under Licence Condition 3.9 to 3.9 a).
16. CNSC staff explained that the first change would ensure consistent terminology between the PROL and the *Nuclear Security Regulations*⁴. CNSC staff stated that the second change would allow for a more consistent format in the PROL.

Application of the *Canadian Environmental Assessment Act*

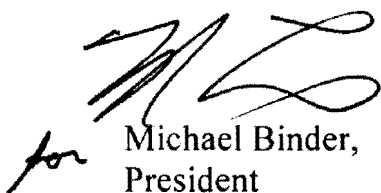
17. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*⁵ (CEAA) have been fulfilled.
18. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. CNSC staff stated that there was no requirement for an EA pursuant to subsection 5(1) of the CEAA, as there is no “project”, within the meaning of the CEAA, related to this amendment.
19. Therefore, the Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

⁴ S.O.R./2000-209.

⁵ S.C. 1992, c. 37.

Conclusion

20. The Commission has considered the information and submissions of OPG and CNSC staff as presented in the material available for reference on the record.
21. 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.
22. The Commission therefore amends, pursuant to section 24 of the *Nuclear Safety and Control Act*, PROL 13.01/2013 issued to OPG for its Darlington NGS, located in the Municipality of Clarington, Ontario. The amended licence PROL 13.02/2013 remains valid until February 28, 2013.
23. The Commission includes in the licence the recommendations made by CNSC staff in CMD 08-H118.



for Michael Binder,
President
Canadian Nuclear Safety Commission

Date of release of Decision: June 24, 2008