Record of Proceedings, Including Reasons for Decision

in the Matter of

Applicant

Hydro-Québec

Subject

Application by Hydro-Québec for a six-month renewal of the Gentilly-2 Nuclear Generating Station and radioactive waste storage facility operating licences, and for postponement of the submission of the revised safety report for that same station

Date of public hearing:

December 10, 2010



RECORD OF PROCEEDINGS

Applicant Hydro-Québec

Address/Location: 4900 Bécancour Blvd., Bécancour, Quebec G9H 3X3

Subject: Application by Hydro-Québec for a six-month renewal of the

Gentilly-2 Nuclear Generating Station and radioactive waste storage facility operating licences, and for postponement of the submission of the revised safety analysis report for that same

station

Applications received: October 4, 2010 (safety report) and October 22, 2010 (licences)

Date of public hearing: December 10, 2010

Location: Canadian Nuclear Safety Commission (CNSC) Public Hearing

Room, 280 Slater Street, 14th floor, Ottawa, Ontario

Members present: M. Binder, Chair R. J. Barriault

D. D. Tolgyesi K. Pereira

A. Harvey

Secretary: M. A. Leblanc Recording Secretary: S. Gingras Counsel: L. Collard

| Applicant Represented By | | Document |
|---|---------------|---------------|
| M. Désilets, Director, Nuclear Production | | |
| • L. Pelletier, General Manager, Nuclear Development and | | CMD 10-H15.1 |
| Production Projects | | CMD 10-H15.1A |
| • C. Gélinas, Plant Manager | | CMD 10-H15.1C |
| • P. Desbiens, Chief, Technical Services | | CMD 10-H15.1D |
| • D. Villeneuve, Chief, Environment | | |
| CNSC staff | | Document |
| • R. Jammal | • P. Thompson | CMD 10-H15 |
| • F. Rinfret | • M. Couture | CMD 10-H15.A |
| • C. David | • L. Nicolai | CMD 10-H15.B |
| • A. Blahoianu | • Z. Bounagui | CMD 10-H15.C |
| | | CMD 10-H15.D |
| | | CMD 10-H15.E |
| Others | | |
| • Department of Fisheries and Oceans, represented by SE. Picard | | |
| • Environment Canada, represented by C. Lobo | | |

Licences: renewed

Table of Contents

| Introduction | .] |
|---------------------------------------|-----|
| Decisions: | |
| Issues and Commission Findings | |
| Canadian Environmental Assessment Act | |
| Conclusion | |

Introduction

- 1. Hydro-Québec applied to the Canadian Nuclear Safety Commission (CNSC)¹ for renewal for a six-month period (to June 30, 2011) of the current operating licence for the Gentilly-2 Nuclear Generating Station in Bécancour, Quebec. The current licence, PERP 10.04/2010, expires on December 31, 2010. Hydro-Québec also applied to continue to be exempted from clause 6.4.4 of Standard S-99, cited in condition 1.6 of the operating licence, in order that it might postpone to December 2011 the submission of its revised safety analysis report for the Gentilly-2 nuclear reactor.
- 2. Hydro-Québec also applied to the CNSC for renewal for a six-month period (to June 30, 2011) of its current radioactive waste storage facility licence, PEID-W4-319.00/2010.
- 3. The Gentilly-2 nuclear facility is on the south shore of the St. Lawrence River, approximately 15 km east of the city of Trois-Rivières, Quebec. The reactor is a CANDU² PHW (pressurized heavy water) reactor with a design capacity of 675 MW(e) (megawatt electric). The power station went into commercial operation on October 1, 1983.
- 4. The radioactive waste storage facility is within the exclusion zone of the Gentilly-2 Nuclear Generating Station and includes three distinct areas:
 - the radioactive waste storage area (RWSA)
 - the solid radioactive waste management facility (SRWMF)
 - the used fuel dry storage facility (UFDSF)
- 5. The activities in the proposed licences are the same as those in the current licences for the nuclear generating station and the radioactive waste storage facility.

<u>Issues</u>

- 6. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*³ (NSCA):
 - a) if Hydro-Québec is qualified to carry on the activity that the licences would authorize; and
 - b) if, in carrying on that activity, Hydro-Québec would make adequate provision for protection of the environment, the health and safety of persons, and the maintenance of national security and measures required to implement national obligations to which Canada has agreed.

,

¹ The Canadian Nuclear Safety Commission is called the "CNSC" to refer to the organization and its staff in general. The tribunal component is referred to as the "Commission".

² Canada Deuterium Uranium

³ Statutes of Canada (S.C.) 1997, chapter (c.) 9.

Public Hearing

7. Pursuant to section 22 of the NSCA, the President of the Commission established a panel (hereinafter referred to as the Commission) to review Hydro-Québec's application. The Commission, in making its decision, considered information presented at a public hearing held on December 10, 2010, in Ottawa, Ontario. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*⁴. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 10-H15, CMD 10-H15.A, CMD 10-H15.B, CMD 10-H15.C and CMD 10-H15.D) and from Hydro-Québec (CMD 10-H15.1, CMD 10-H15.1A and CMD 10-H15.1B).

Decisions:

Licence renewals

8. On the basis of its consideration of the matter, as described in more detail in the following sections of this Record of Proceedings, the Commission concludes that Hydro-Québec is qualified to carry on the activity that the licences will authorize and that, in carrying on those activities, 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.

Accordingly, the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews Gentilly-2 Nuclear Generating Station operating licence PERP 10.04/2010. The PERP 10.00/2011 nuclear power reactor operating licence is valid from January 1 to June 30, 2011.

Accordingly, the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews Hydro-Québec's PEID-W4-319.00/2010 licence for its radioactive waste storage facility. Radioactive waste facility operating licence PEID-W4-319.00/2011 is valid from January 1 to June 30, 2011.

- 9. In the Gentilly-2 Nuclear Generating Station licence, the Commission includes the conditions recommended by CNSC staff in the document CMD 10-H15.D, with the following amendments:
 - for licence condition 3.6, add a footnote indicating that the testing was done before June 30, 2009
 - for licence condition 10.2, add a footnote indicating that a response force in compliance with regulatory standard S-298 is in place

_

⁴ Statutory Orders and Regulations (S.O.R)./2000-211.

10. In the radioactive waste storage facility licence, the Commission includes the conditions recommended by CNSC staff in the draft licence attached to document CMD 10-H15.D.

Safety analysis report

11. On the basis of its consideration of the matter, the Commission concludes that Hydro-Québec's application to continue to be exempted from clause 6.4.4 of Standard S-99, cited in condition 1.6 of the Gentilly-2 Nuclear Generating Station operating licence, is acceptable, and that Hydro-Québec will continue to 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.

Accordingly, the Commission, pursuant to section 7 of the *Nuclear Safety and Control Act*, exempts Hydro-Québec from clause 6.4.4 of Standard S-99, *Reporting Requirements for Operating Nuclear Power Plants*, cited in condition 1.6 of the Gentilly-2 Nuclear Generating Station operating licence, to June 30, 2011.

Issues and Commission Findings

- 12. In making its decision under section 24 of the *Nuclear Safety and Control Act*, the Commission considered a number of matters relating to Hydro-Québec's qualifications to carry out the proposed activities.
- 13. Hydro-Québec applied for a six-month renewal (to June 30, 2011) of the operating licences for the Gentilly-2 Nuclear Generating Station and its radioactive waste storage facility. The proposed activities are the same as those in the current licences.
- 14. CNSC staff reviewed Hydro-Québec's application and considers this licence renewal acceptable, since, in its opinion, Hydro-Québec is qualified to carry out the activities that the licences authorize. CNSC staff concludes that adequate provision has been made 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.
- 15. On the basis of this information, the Commission considers that Hydro-Québec is qualified to carry out the activities that these licences will authorize, and, accordingly, it renews the licences for a six-month period, i.e., to June 30, 2011.
- 16. A hearing for a five-year renewal, from July 1, 2011 to June 30, 2016, is under way, and the second day of the hearing will take place in Bécancour on April 13 and 14, 2011.

- 17. The Commission also reviewed the issues related to Hydro-Québec's application to postpone the safety report update to December 2011.
- 18. CNSC staff reported that a first application by Hydro-Québec in this regard in 2009⁵ had been approved by the Commission, and that the deadline for submission of this document had been extended to December 2010. In October 2010, Hydro-Québec repeated its application for extension of the deadline to December 2011.
- 19. CNSC staff added that the safety report update is an administrative instrument compiling the safety studies carried out at the Gentilly-2 Nuclear Generating Station. These safety studies are constantly updated. Consequently, the risk related to postponement of the safety report update is extremely minor.
- 20. CNSC staff considers the information presented by Hydro-Québec in connection with this application to be acceptable and recommends approval by the Commission.
- 21. On the basis of this information, the Commission approves Hydro-Québec's application for exemption from clause 6.4.4 of Standard S-99, *Reporting Requirements for Operating Nuclear Power Plants*, cited in condition 1.6 of the licence. Under this exemption, Hydro-Québec may postpone to the end of the licensing period, i.e. to June 30, 2011, the submission of the safety report update for the Gentilly-2 Nuclear Generating Station. The Commission will consider Hydro-Québec's application for the extension of this deadline to December 2011 in its deliberations concerning Hydro-Québec's application for licence renewal for a five-year period.

Canadian Environmental Assessment Act

- 22. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*⁶ (CEAA) have been fulfilled.
- 23. CNSC staff reported that it had completed an Environmental Assessment determination. Since neither the licence renewal nor the requested exemption are for the purposes of enabling a project, CNSC staff determined that an environmental assessment was not required pursuant to subsection 5(1) of the CEAA.
- 24. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

⁵ Record of proceedings, including reasons for decision, "Application for approval to postpone the submission of the safety report update for the Gentilly-2 Nuclear Generating Station" (hearing date: April 14, 2009). ⁶ S.C. 1992, c. 37.

Conclusion

- 25. The Commission has considered the information and submissions of Hydro-Québec and CNSC staff as presented in the material available for reference on the record.
- 26. The Commission concludes that all applicable requirements of the CEAA have been fulfilled.
- 27. The Commission is satisfied that Hydro-Québec meets the requirements of subsection 24(4) of the *Nuclear Safety and Control Act*. The Commission is of the opinion that Hydro-Québec is qualified to carry on the activities that the licences will authorize and that, in the carrying out of those activities, 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.
- 28. Accordingly, pursuant to section 24 of the *Nuclear Safety and Control Act*, the Commission renews licence PERP 10.04/2010, which authorizes Hydro-Québec to operate the Gentilly-2 Nuclear Generating Station. Nuclear power reactor operating licence PERP 10.00/2011 is valid to June 30, 2011, unless it is suspended, amended, revoked or replaced.
- 29. Accordingly, pursuant to section 24 of the *Nuclear Safety and Control Act*, the Commission renews licence PEID-W4-319.00/2010, which authorizes Hydro-Québec to operate its radioactive waste storage facility. Radioactive waste facility operating licence PEID-W4-319.00/2011 is valid to June 30, 2011, unless it is suspended, amended, revoked or replaced.
- 30. The Commission includes in the licences the conditions recommended by CNSC staff in the document CMD 10-H15.D, with the amendments detailed in the "Decisions" section of the present document.
- 31. At this public hearing, the Commission noted that a number of action items were still open, and, in some cases, had been open for a number of years. The Commission expressed its concern regarding these open action items, and it expects Hydro-Québec and CNSC staff to work together to close the majority of these action items by Day 2 (planned for April 13 and 14 in Bécancour, Quebec) of the public hearing for Hydro-Québec's application for renewal of the licences for five years. The Commission expects Hydro-Québec to fulfill the commitments made to CNSC staff and the Commission.

Michael Binder

President,

Canadian Nuclear Safety Commission

DEC 2 3 2010

Date