



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Hydro-Québec

Subject Application to amend Hydro-Québec's operating licence for the Gentilly-2 Nuclear Generating Station

Hearing Date July 22, 2014

RECORD OF PROCEEDINGS

Applicant: Hydro-Québec

Address: 4900 Bécancour Boulevard, Bécancour, Quebec
G9H 3X3

Subject: Application to amend Hydro-Québec's operating licence for the
Gentilly-2 Nuclear Generating Station

Application received: March 6, 2014

Date of hearing: July 22, 2014

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

Members present: M. Binder, President

Secretary: M. Leblanc
Recording Secretary: M. Hornof

Licence: Amended

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1.0 Introduction

1. Hydro-Québec has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for an amendment to its operating licence for the Gentilly-2 Nuclear Generating Station (NGS), located in Bécancour, Quebec. The current licence – PROL 10.01/2016 – expires on June 30, 2016.
2. Following the decision to proceed with the decommissioning of the Gentilly-2 NGS, the reactor's defuelling has been completed. The station has been in a defueled core state since September 4, 2013. Its transition to a safe storage state is planned for 2015. Cobalt-60 production ceased in 2011, and will not resume.
3. The proposed amendments to the operating licence would adapt the regulatory requirements to the reduction in risks associated with the plant, and remove certain licence conditions that no longer apply to Gentilly-2's new status. Hydro-Québec also proposes to amend its obligations as set out in regulatory document S-99, *Reporting Requirements for Operating Nuclear Power Plants*, and licence condition 4.6 (which specifies reporting requirements for scheduled reports).

Issue

4. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act* (NSCA):
 - a) whether Hydro-Québec is qualified to carry on the activities authorized by the amended licence
 - b) whether, in carrying on that activity, Hydro-Québec 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 Commission panel to review the application. In making its decision, the Commission considered the information presented at a hearing held on January 22, 2014, in Ottawa, Ontario. During the hearing, the Commission considered written submissions from Hydro-Québec (CMD 14-H103.1) and CNSC staff (CMD 13-H103). The Commission invited members of the public to file written submissions, but did not receive any.

¹The 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.

2.0 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 Hydro-Québec meets the conditions of subsection 24(4) of the NSCA. Therefore,

pursuant to section 24 of the *Nuclear Safety and Control Act*, the Commission amends operating licence PERP 10.01/2016, issued to Hydro-Québec for its Gentilly-2 Nuclear Generating Station, located in Bécancour, Quebec. The amended licence, PERP 10.02/2016, remains valid until June 30, 2016.

The Commission also approves Hydro-Québec's application for exemption from the obligation to produce certain scheduled reports, as provided for in CNSC regulatory document S-99, *Reporting Requirements for Operating Nuclear Power Plants*, and licence condition 4.6, as described in CMD 14-H103.

7. The Commission includes in the licence the conditions recommended by CNSC staff in CMD 14-H103.

3.0 Issues and Commission Findings

8. The amendments proposed to the Gentilly-2 operating licence are to align the licence with the changes being made to the facility (to transition it to the safe storage state). The CNSC staff considers the proposed amendments to the licence to be of an administrative nature.

3.1 Clerical amendments

9. Hydro-Québec has applied to the CNSC for clerical amendments to the operating licence. The proposed amendments to the licence conditions and the rationale for those changes are detailed in CMD 14-H103.
10. Hydro-Québec requested amendments to specify that the facility may be operated in the defueled core state or safe storage state only. The amendments clearly define the states in which plant operation is authorized until the next licence renewal in 2016. Hydro-Québec also requested that Appendix 3 to the licence be removed, and that the derived release limits be included in the *Licence Conditions Handbook* (LCH). The same action was taken for Pickering's last licence renewal. Hydro-Québec requested that the licence conditions specify that the licensee must implement the decommissioning program, not only maintain it.
11. The CNSC staff indicated that the amendments would have no impact on the safety of Gentilly-2, and that they clearly define the states in which the plant's operation is authorized. The CNSC staff recommends the approval of those amendments to the

Gentilly-2 operating licence.

3.2 Removal of licence conditions that no longer apply

12. Hydro-Québec applied to the CNSC to remove licence conditions that no longer apply, since the Gentilly-2 NGS is in a defueled core state. The licence conditions proposed for removal and the rationale for the changes are detailed in CMD 14-H103.
13. Hydro-Québec is requesting the removal of the licence conditions that no longer apply to the station (since cobalt-60 production ceased in 2011), and to the reactor (which is in a defueled core state, in transition to the safe storage state).
14. In regard to Hydro-Québec's application to remove a licence condition referring to CNSC regulatory document RD-360, *Life Extension of Nuclear Power Plants*, the CNSC staff indicated that certain elements of the environmental impact assessment for the refurbishment of Gentilly-2 and the expansion of the storage site still apply, even though the plant will not be refurbished. The CNSC staff proposes including in the LCH Hydro-Québec's obligation to maintain the follow-up program for those elements of the environmental impact assessment that are still pertinent.
15. The CNSC staff has reviewed the amendments proposed by Hydro-Québec concerning licence conditions that no longer apply and should be removed (since Gentilly-2 is in a defueled core state). The CNSC staff recommends the approval of those amendments.

3.3 Amendments to licence conditions, to account for reduced risk and Gentilly-2's change of status

16. Hydro-Québec applied to the CNSC to amend the licence conditions to take into account that the risk of operating the Gentilly-2 NGS is greatly reduced, given its defueled core state. The licence conditions proposed for amendment and the rationale for the changes are detailed in CMD 14-H103.
17. Hydro-Québec requested amendments to the operating licence to amend its obligations respecting the minimum shift crew (number of workers required and their accreditation), to reflect the reduced risk associated with the plant's state. Hydro-Québec also requested the minimum shift crew table to be moved within the LCH, to facilitate changes to that team.
18. Hydro-Québec is requesting the removal or amendment of several licence conditions that refer to the standards and regulatory documents applicable to an operating power reactor, to reflect the plant's current status and to prohibit fuelling. These standards and regulatory documents are identified in CMD 14-H103.

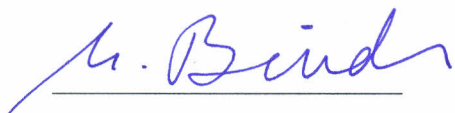
19. The CNSC staff has reviewed the amendments proposed to take into account the reduced risk associated with Gentilly-2, and recommends the approval of those amendments.

3.4 Application for exemption from S-99 for certain scheduled reports

20. Hydro-Québec applied to the CNSC for exemption from (or amendments to) its obligation to produce certain scheduled reports, as set out in regulatory document S-99, as cited in licence condition 4.6 of the operating licence. Those reports are identified in CMD 14-H103.
21. As Gentilly-2 is in a defueled core state, and the risk associated with a reactor in that state is greatly reduced, Hydro-Québec requests exemption from the obligation to produce those reports. Hydro-Québec also requests a reduction in frequency (from quarterly to annually) for the report on pressure boundary degradations.
22. CNSC staff has reviewed Hydro-Québec's applications for exemption from (or amendments to) its obligation to produce certain scheduled reports, as per regulatory document S-99, and recommends the approval of those amendments.

4.0 Conclusion

23. The Commission has considered the information and submissions from Hydro-Québec and CNSC staff. It concludes that the requested amendments are administrative in nature, and will not adversely affect the safety of Hydro-Québec's operations.



Michael Binder
President
Canadian Nuclear Safety Commission

JUL 22 2014

Date