

Record of Decision

In the Matter of

Applicant

Hydro-Québec

Subject

Financial guarantee for the future

decommissioning of Gentilly-2, located in

Bécancour, Quebec

Date of hearing

August 25, 2017



RECORD OF DECISION

Applicant: Hydro-Québec

Address: Gentilly-2, 4900 Bécancour Blvd, Bécancour, Quebec

G9H 3X3

Subject: Financial guarantee for the future decommissioning of the

Gentilly-2 nuclear reactor and the nuclear waste facilities

located in Bécancour, Quebec

Application received: March 31, 2015

Date of decision: August 25, 2017

Location: Canadian Nuclear Safety Commission (CNSC),

280 Slater Street, Ottawa, Ontario K1P 5S9

Members present: M. Binder, President

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Introduction

- Hydro-Québec asked the Canadian Nuclear Safety Commission¹ (CNSC) to accept the revised value of the financial guarantee that it submitted for the future decommissioning of the Gentilly-2 nuclear reactor and nuclear waste facilities located in Bécancour, Quebec. This change was submitted in accordance with condition G.4 of the PRDL 10.00/2026 licence.
- 2. As per subsection 24(5) of the *Nuclear Safety and Control Act*,² the Commission may require that a licence holder provide a financial guarantee in a form that is acceptable to the Commission. The CNSC Regulatory Guide G-206³ provides guidance on the attributes of an acceptable financial guarantee in terms of liquidity, certainty of value, adequacy of value and continuity.
- 3. The estimated cost of decommissioning-related obligations is C\$808 million. The financial instrument proposed by Hydro-Québec is a Financial Guarantee Agreement of \$835 million, with \$685 million guaranteed by the Government of Quebec and \$150 million provided by the Hydro-Québec Trust.
- 4. Gentilly-2 is a power reactor in the decommissioning phase, and the waste facilities contain irradiated nuclear fuel. The decommissioning licence was issued for a period of 10 years and will expire on June 30, 2026.

Issue

- 5. In considering the application, the Commission was required to decide:
 - a) whether the revised \$835 million value of the financial guarantee is an acceptable financial guarantee for the future decommissioning of Gentilly-2 and the waste facilities located in Bécancour, Quebec; and
 - b) whether the application complies with condition G.4 of the PRDL 10.00/2026 licence.

Hearing

6. Pursuant to section 22 of the *Nuclear Safety and Control Act*, the President of the Commission established a panel to study the proposed financial guarantee. The Commission took into consideration the brief submitted by CNSC staff (CMD 17-H107). The public was provided with the opportunity to submit written briefs, but none were received.

³ CNSC Regulatory Guide G-206, Financial Guarantees for the Decommissioning of Licensed Activities, June 2000.

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.).

Decision

7. Based on its consideration of the matter, as described in more detail in the following sections of this Record of Decision,

The Commission accepts the proposed financial guarantee.

Issue and Commission Findings

8. In making its decision, the Commission considered issues related to the acceptability of the financial guarantee.

Preliminary decommissioning plan and proposed financial guarantee

- 9. On March 31, 2015, Hydro-Québec submitted a preliminary decommissioning plan (PDP) for Gentilly-2. The plan was deemed acceptable by CNSC staff. The Financial Guarantee Agreement was in line with existing licence conditions and regulations. This Agreement has been in force since 2003 as a licensing condition for operating the nuclear reactor.
- 10. The Gentilly-2 decommissioning plan includes the dismantling of all systems and structures, the remediation of any radioactive contamination or harmful or potentially dangerous substances to bring the values under the prescribed limits, and the long-term management of radioactive waste, including spent fuel. As the decommissioning strategy adopted by Hydro-Québec has a 40-year dormancy period, the dismantling will be gradually phased in. This strategy was accepted by CNSC staff.
- 11. The Commission's staff finds that the PDP complies with the criteria in the CNSC Regulatory Guide G-219, *Decommissioning Planning for Licensed Activities*.
- 12. CNSC staff has reviewed the cost of decommissioning and concluded that the total cost estimates are now \$808 million. CNSC staff finds that this amount is sufficient to complete the decommissioning of facilities, is a credible estimate of costs and is deemed acceptable.
- 13. Hydro-Québec would like to make adjustments to the financial guarantee in order to indicate that the facilities are being closed down and not refurbished. These changes include the same amount as before for the Guarantor (the Government of Quebec), i.e., \$685 million (the amount guaranteed by the Government of Quebec), but the assets of the Hydro-Québec Trust will cover the additional amount required to attain at least the total amount of the financial guarantee. The amount from the Hydro-Québec Trust is \$150 million, amounting

to a total financial guarantee of \$835 million (\$27 million more than the estimated decommissioning cost).

- 14. The Commission's staff recommends that the Commission accept this tripartite agreement involving Hydro-Québec, the Government of Quebec and the Canadian Nuclear Safety Commission.
- 15. The Commission's staff recommends that the Commission approve and sign the amended Financial Guarantee Agreement amended to read "Second Financial Guarantee Agreement" for the Hydro-Québec Gentilly-2 nuclear and waste facilities. This new agreement includes the proposed changes to the financial guarantee and stipulates that the assets of the trust must be of sufficient value to cover any amount in excess of the Guarantor's financial guarantee.

Conclusion

- 16. The Commission has reviewed the submissions of CNSC staff as presented for reference on the record for the hearing.
- 17. The Commission considers that the amended value of the financial guarantee proposed by Hydro-Québec is acceptable and is deemed sufficient and adequate by CNSC staff. The Commission is of the opinion that Hydro-Québec meets the requirement of its PRDL 10.00/2026 licence. The Commission notes that a review of the amount of the financial guarantee is slated for March 2020, based on a five-year cycle.
- 18. Therefore, the Commission accepts the total financial guarantee of C\$835 million proposed by Hydro-Québec as a financial guarantee for the future decommissioning of the Gentilly-2 nuclear reactor and the nuclear waste facilities located in Bécancour, Quebec.

Michael Binder
President
Canadian Nuclear Safety Commission

AUG 2 5 2017

Date