



Record of Decision

DEC 22-H104

In the Matter of

Applicant Ontario Power Generation Inc.

Subject Application for Acceptance of Ontario Power
Generation's Revised Consolidated Financial
Guarantee

Date of
Decision December 6, 2022

RECORD OF DECISION – DEC 22-H104

Applicant: Ontario Power Generation

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

Purpose: Application for Acceptance of Ontario Power Generation's Revised Consolidated Financial Guarantee

Application received: August 2, 2022

Hearing: Public Hearing in Writing – Notice of Hearing in Writing published on August 10, 2022

Date of decision: December 6, 2022

Panel of Commission: Dr. T. Berube, Presiding Member

Financial Guarantee: Accepted

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1.0 INTRODUCTION

1. On [August 2, 2022](#), Ontario Power Generation Inc. (OPG) submitted an application to the Canadian Nuclear Safety Commission¹ (CNSC) for the acceptance of its revised consolidated financial guarantee for the future decommissioning of OPG's nuclear facilities. OPG's current consolidated financial guarantee expires on December 31, 2022. OPG requested that the Commission accept the revised financial guarantee for the 2023-2027 period.
2. The facilities under OPG's consolidated financial guarantee, along with their current operating licences, are as follows:
 - Darlington Nuclear Generating Station (PROL 13.03/2025)
 - Darlington Waste Management Facility (WFOL-W4-355.01/2023)
 - Pickering A and B Nuclear Generating Station (PROL 48.01/2028)
 - Pickering Waste Management Facility (WFOL-W4-350.00/2028)
 - Bruce A and B Nuclear Generating Station² (PROL 18.02/2028)
 - Central Maintenance Facility (under PROL 18.02/2028)
 - Central Storage Facility³ (under PROL 18.02/2028)
 - Western Waste Management Facility (WFOL-W4-314.00/2027)
 - Radioactive Waste Operations Site-1 (WNSL-W1-320.05/2029)
3. OPG's nuclear facilities are located at various sites in the province of Ontario. The Pickering and Darlington Nuclear Generating Stations are located in the traditional territory of the Michi Saagiig Anishinaabe people. These lands are covered by the Williams Treaty between Canada and the Mississauga and Chippewa Nations. The Bruce Nuclear Generating Station location is in the traditional territory of the Anishinabek Nation: the peoples of the 3 fires known as Ojibway, Odawa and Pottawatomie Nations. Thanks are given to the Chippewas of Saugeen, and the Chippewas of Nawash, now known as the Saugeen Ojibway Nation, as the traditional keepers of this land. The Bruce region is also homeland to the Historic Saugeen Métis and to the Métis Nation of Ontario.
4. Subsection 24(5) of the [Nuclear Safety and Control Act](#)⁴ (NSCA) provides that a licence may contain any term or condition that the Commission considers necessary for the purposes of the NSCA, including a condition that an applicant provide a financial guarantee in a form that is acceptable to the Commission. The Commission has imposed such licence conditions requiring that OPG maintain an acceptable financial guarantee for the future decommissioning of its nuclear facilities. CNSC regulatory document

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 Although operated by Bruce Power, OPG retains ownership of and responsibility for the decommissioning costs associated with the Bruce A and B Nuclear Generating Stations.

³ The Central Storage Facility is also referred to as the Contaminated Tools Storage Facility or the Contaminated Tooling Storage Facility. The CSF is a newly constructed storage facility to support the Major Component Replacement outages at the Bruce A and B Nuclear Generating Stations.

⁴ Statutes of Canada (S.C.) 1997, c. 9.

[REGDOC 3.3.1 Financial guarantees for decommissioning of nuclear facilities and termination of licensed activities](#)⁵ provides guidance on the attributes of an acceptable financial guarantee in terms of liquidity, certainty of value, adequacy of value, and continuity.

5. OPG's current consolidated financial guarantee is satisfied by the "Nuclear Funds" which consist of Ontario Nuclear Funds Agreement (ONFA) Funds and the Nuclear Fuel Waste Act (NWFA) Trust. The Nuclear Funds are discussed further in Section 3.2 of this *Record of Decision*. OPG proposed that its financial guarantee continue to be satisfied by the Nuclear Funds for the 2023-2027 period.

Issue

6. OPG is required to maintain a financial guarantee for the decommissioning of the nuclear facilities listed in paragraph 2 of this *Record of Decision*, per the conditions of the facilities' respective licences. OPG is required to revise its financial guarantee and associated decommissioning plans at least every 5 years or when requested by the Commission. As such, OPG has revised the preliminary decommissioning plans, the associated cost estimates, and the financial guarantee for the 2023-2027 period. OPG is requesting that the Commission accept its revised financial guarantee.

Panel

7. Pursuant to section 22 of the NSCA, the President established a panel of the Commission consisting of Dr. Timothy Berube to consider the application. A [notice of hearing in writing](#) was published on August 10, 2022. The Commission, in conducting a public hearing based on written materials, considered written submissions from OPG ([CMD 22-H104.1](#)) and CNSC staff ([CMD 22-H104](#)). The Commission also considered a written intervention from the Nuclear Transparency Project ([CMD 22-H104.2](#)).

Participant Funding Program

8. Pursuant to paragraph 21(1)(b.1) of the NSCA, the Commission has established a [Participant Funding Program](#) (PFP) to facilitate the participation of Indigenous Nations and communities, members of the public and stakeholders in Commission Proceedings or in engagement activities with CNSC staff on matters of regulatory interest. Participant Funding was not made available for this hearing in writing, however, the CNSC received a request for funding from the Nuclear Transparency Project to facilitate their engagement with CNSC staff on this matter. In accordance with the PFP process, the CNSC subsequently provided the Nuclear Transparency Project with \$3,000 to meet with CNSC staff, review the CMDs on the record for this hearing, and to submit an intervention.

⁵ REGDOC-3.3.1 *Financial guarantees for decommissioning of nuclear facilities and termination of licensed activities*, CNSC, January 2021

2.0 DECISION

9. Based on its consideration of this matter, as described in more detail in the following sections of this *Record of Decision*, the Commission concludes that the proposed revised financial guarantee for the future decommissioning of OPG's nuclear facilities is acceptable.

Therefore,

the Commission, pursuant to licence conditions imposed on OPG under section 24(5) of the *Nuclear Safety and Control Act*, accepts the revised consolidated financial guarantee proposed by Ontario Power Generation Inc. for its nuclear facilities located in Ontario for the period from 2023-2027.

10. With this decision, the Commission accepts OPG's revised financial guarantee of \$20,480 million (January 1, 2023 present value dollars), increasing on a yearly basis to \$22,303 million in 2027, as described in Schedule B of the Fifth Amending Agreement.⁶ The Commission accepts OPG's proposed financial guarantee instruments in the form of the Nuclear Funds.
11. The Commission is satisfied that, with this decision, the CNSC Financial Security and ONFA Access Agreement shall be amended to reflect the revised financial guarantee amount in accordance with the Fifth Amending Agreement no later than December 31, 2022.

3.0 ISSUES AND COMMISSION FINDINGS

12. The Commission assessed the evidence submitted on the record for this hearing and considered the acceptability of OPG's proposed revised financial guarantee. The Commission considered whether the proposed financial guarantee met the criteria set out in REGDOC 3.3.1 and whether OPG would satisfy the applicable licence conditions for each facility. Each of the nuclear facility licences have a licence condition requiring the Commission's acceptance of its financial guarantee. With the exception of PROL 18.02/2028, each licence has a condition that states:

"The licensee shall maintain a financial guarantee for decommissioning that is acceptable to the Commission."

Bruce Power's licence for the Bruce A and B NGS licence, PROL 18.02/2028, contains licence condition 11.2 which states that:

"The licensee shall notify the Commission of any changes regarding the obligations of decommissioning and financial guarantees under the Lease Agreement with Ontario

⁶ Attachment 1, [CMD 22-H104.1](#)

Power Generation Inc., as described in 15.1".

3.1 Decommissioning Plans and Cost Estimates

13. OPG submitted information on the revised preliminary decommissioning plans for its nuclear generating stations, nuclear waste management facilities, and other nuclear facilities, and provided information on its plans for the management of used nuclear fuel and low and intermediate level waste.⁷
14. OPG provided the Commission with the cost estimates for its various decommissioning programs from January 1, 2023 onwards and with information on the methodology used to calculate the cost estimates.^{8,9} OPG reported that the total decommissioning cost estimate for 2023 is \$20,480 million (January 1, 2023 present value dollars¹⁰), increasing to \$22,303 million in 2027, as shown in Table 1.¹¹

Table 1: Proposed 2023-2027 Total Financial Guarantee Cost Estimate

Year	Total Cost Estimate (M\$)
2023	20,480
2024	21,149
2025	21,764
2026	22,140
2027	22,303

15. OPG submitted that the total revised cost estimate for January 1, 2023 had increased by \$919 million, to \$20,480 million, since the last review in 2017.¹² OPG explained that this increase was due to updated planning assumptions including: updated nuclear generating station end of life dates, cancellation of OPG's proposed low and intermediate level waste deep geological repository project, and updated waste management costs.
16. CNSC staff assessed OPG's preliminary decommissioning plans and found that the revised plans provide a basis for credible cost estimate for the future decommissioning of OPG's nuclear facilities.¹³ CNSC staff confirmed that OPG's cost estimation methodology is aligned with both international practices for decommissioning cost estimation and with REGDOC 3.3.1.¹⁴

⁷ Section 3.0, [CMD 22-H104.1](#)

⁸ Tables 2 to 6, [CMD 22-H104.1](#)

⁹ Section 4.0, [CMD 22-H104.1](#)

¹⁰ Dollar amounts in this *Record of Decision* are in 2023 present value dollars unless otherwise indicated.

¹¹ Table 7, [CMD 22-H104.1](#)

¹² Appendix D, [CMD 22-H104.1](#)

¹³ Section 3.1, [CMD 22-H104](#)

¹⁴ Section 2.2.3, [CMD 22-H104](#)

3.2 Financial Guarantee

17. OPG proposed that its financial guarantee continue to be satisfied by the Nuclear Funds. The Nuclear Funds consist of Ontario Nuclear Funds Agreement (ONFA) Funds, pursuant to [O. Reg. 53/05: PAYMENTS UNDER SECTION 78.1 OF THE ACT](#)¹⁵, and the Nuclear Fuel Waste Act (NWFA) Trust, pursuant to the [Nuclear Fuel Waste Act](#).¹⁶ CNSC staff provided detailed information on each of these funds in section 2.1 of CMD 22-H104.
18. OPG submitted that the Nuclear Funds are projected to have a fair market value in excess of the proposed cost estimate throughout the 2023-2027 period. The fair market value of the Nuclear Funds is projected to be \$25,148 million on January 1, 2023 and increase to \$28,250 million by January 1, 2027, as shown in Table 2.¹⁷

Table 2: 2023-2027 Forecasted Fair Market Value of the Nuclear Funds

Year	Nuclear Funds (M\$)
2023	25,148
2024	26,102
2025	27,011
2026	27,768
2027	28,250

19. CNSC staff provided the Commission with information on the Provincial Guarantee, a guarantee made payable to the CNSC by the Province of Ontario should OPG not meet its decommissioning obligations. CNSC staff noted that OPG met the financial guarantee requirement for the 2018-2022 period without provision of the Provincial Guarantee, and that, given that the value of the Nuclear Funds is projected to exceed the total financial guarantee, OPG anticipates that the Provincial Guarantee will not be required for the 2023-2027 period. CNSC staff assessed OPG's financial guarantee proposal and concurred with OPG that, at this time, a Provincial Guarantee is not required for the 2023-2027 period.¹⁸
20. OPG provided a draft of the Fifth Amending Agreement to the CNSC Financial Security and ONFA Access Agreement.¹⁹ The primary purpose of the amendment is to update the financial guarantee amount on a yearly basis from 2023-2027. CNSC staff confirmed that, should the Commission accept OPG's proposed financial guarantee, the Fifth Amending Agreement will be signed by the parties responsible for its execution.²⁰
21. CNSC staff assessed OPG's revised financial guarantee against the criteria set out in

¹⁵ O. Reg 53/05 under the [Ontario Energy Board Act](#), S.O. 1998, c.15, Sched B

¹⁶ S.C. 2002, c. 23

¹⁷ Table 8, [CMD 22-H104.1](#)

¹⁸ Section 2.2.5, [CMD 22-H104](#)

¹⁹ Attachment 1, [CMD 22-H104.1](#)

²⁰ Section 2.2.5, [CMD 22-H104](#)

REGDOC 3.3.1 and determined that the financial guarantee met the criteria pertaining to liquidity, certainty of value, adequacy of value, and continuity.²¹ CNSC staff reported that OPG's proposed financial guarantee for the 2023-2027 period is adequate for the decommissioning of the facilities and recommended that the Commission accept the revised consolidated financial guarantee.²²

22. CNSC staff confirmed that OPG is required to report annually to the CNSC on the status and adequacy of the financial guarantee. CNSC staff reported that OPG has satisfied this requirement throughout the current financial guarantee term through the submission of an annual written report and ONFA year-end statements.²³

3.3 Intervention

23. The intervention by the Nuclear Transparency Project ([CMD 22-H104.2](#)) provided several recommendations pertaining to transparency and accessibility of financial guarantee information. The Commission acknowledges the importance of transparency and encourages OPG and CNSC staff to continue to make relevant financial guarantee information available to the public and to consider the recommendations raised by this intervenor.

3.4 Commission Findings

24. Following the Commission's analysis of the evidence submitted on the record for this hearing, the Commission concludes that OPG's proposed financial guarantee instruments and revised financial guarantee amount are acceptable. The Commission is satisfied that OPG's revised preliminary decommissioning plans provide the basis for a credible cost estimate. The Commission is also satisfied that OPG continues to meet licensing requirements related to financial guarantees. The Commission comes to these conclusions on the basis that:
- The Commission agrees with CNSC staff's assessment that OPG's financial guarantee submission meets the criteria set out in REGDOC-3.3.1.
 - The Commission agrees with CNSC staff's assessment that OPG's revised preliminary decommissioning plans provide the basis for a credible cost estimate for the future decommissioning of the nuclear facilities covered under OPG's consolidated financial guarantee.
 - The Commission is satisfied that the Nuclear Funds are appropriate financial guarantee instruments per REGDOC 3.3.1.
 - The Commission agrees with CNSC staff's assessment that the proposed consolidated financial guarantee is adequate for the future decommissioning of the nuclear facilities covered under OPG's consolidated financial guarantee.

²¹ Executive Summary, [CMD 22-H104.1](#)

²² Section 3, [CMD 22-H104](#)

²³ Section 2.2.6, [CMD 22-H104](#)

25. The Commission notes that OPG is required to report annually to the CNSC on the status and adequacy of the financial guarantee. The Commission expects to be notified if CNSC staff identify any concerns with the adequacy of the financial guarantee in its review of the annual reports.
26. The Commission expects to be informed should there be an impact on decommissioning cost estimates due to revised decommissioning timelines, such as any future changes to the anticipated end of life dates of the nuclear facilities.

4.0 CONCLUSION

27. The Commission concludes that OPG's proposed revised financial guarantee will continue to provide for the future decommissioning of OPG's nuclear facilities. Therefore, the Commission accepts OPG's proposed revised financial guarantee for 2023-2027. The Commission is satisfied that, with this decision, the CNSC Financial Security and ONFA Access Agreement shall be amended to reflect the revised financial guarantee amount in accordance with the Fifth Amending Agreement.

Dr. Timothy Berube
Presiding Member,
Canadian Nuclear Safety Commission

Date