Record of Decision

DEC 22-H107

In the Matter of

Applicant Ontario Power Generation Inc.

Subject

Application to Extend Deadline under PROL 48.01/2028 Licence Conditions 15.1 and 15.4 Related to the End of Commercial Operations for the Pickering Nuclear Generating Station

Date of Decision

November 24, 2022

RECORD OF DECISION – DEC 22-H107

Applicant: Ontario Power Generation

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

Purpose: Application to extend deadline under PROL 48.01/2028

Licence Conditions 15.1 and 15.4 related to the end of

commercial operations for the Pickering Nuclear

Generating Station

Application received: October 5, 2022

Hearing: Public Hearing in Writing – Notice of Hearing in Writing

published on November 1, 2022

Date of decision: November 24, 2022

Panel of Commission: Rumina Velshi, President

Extension of deadline for filing submissions: Granted

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1.0 INTRODUCTION

- 1. On October 5, 2022, Ontario Power Generation Inc. (OPG) submitted an application to the Canadian Nuclear Safety Commission¹ (CNSC) requesting an extension to the deadline for filing documents related to the end of commercial operation for the Pickering Nuclear Generating Station (NGS), from December 31, 2022 to June 30, 2023. The Pickering NGS is located in the municipality of Pickering, Ontario. It is on the traditional territory of the Wendat, Anishinabek Nation, and the territory covered by the 1923 Williams Treaty Clause #2 area with the Michi Saagiig and Chippewa Nations, which include Curve Lake, Hiawatha, Alderville, Scugog Island, Rama, Beausoleil, and Georgina Island First Nations.
- 2. The Pickering NGS consists of eight CANDU (CANada Deuterium Uranium) pressurized heavy water reactors. Units 1-4 went into service in 1971-1973. Units 2 and 3 are currently in a safe storage state and will remain so until the eventual decommissioning of the station. Units 5-8 were brought into service in 1983-1986. OPG's licence, PROL 48.01/2028, which expires on August 31, 2028, authorizes the operation of the Pickering NGS until December 31, 2024.
- 3. As part of its 2018 decision² to issue OPG's current licence, the Commission required that, should OPG intend to seek authorization to operate the Pickering NGS beyond December 31, 2024, it must notify the CNSC and file specific information by December 31, 2022. Under licence conditions 15.1 and 15.4, OPG must inform the CNSC by December 31, 2022, of its intent to operate any reactor unit beyond December 31, 2024, and submit an updated Integrated Implementation Plan (IIP) based on a reassessment of the continued validity of the results of the periodic safety review (PSR) conducted in support of the 2018 licence renewal. The updated IIP is to incorporate the results of the reassessment as new or modified IIP actions, and be submitted for CNSC acceptance.
- 4. OPG seeks to extend the deadline for filing the PSR reassessment results and the information required under licence conditions 15.1 and 15.4 to June 30, 2023. OPG has requested this extension in order to complete the additional work required to update the PSR reassessment and IIP for commercial operation to September 2026. OPG's application follows the Ontario Ministry of Energy's announcement in September 2022 supporting the continued operation of Pickering Units 5-8 until September 2026, subject to Commission authorization. Prior to that announcement, OPG had been working towards a potential application for commercial operation through December 2025.

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.

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² Record of Decision, *Application to Renew the Nuclear Power Reactor Operating Licence for the Pickering Nuclear Generating Station*, Hearing Dates April 4, 2018 and June 25-29, 2018, paragraph 27.

Issue

- 5. The Commission must decide whether to grant OPG's request to extend the deadline required under conditions 15.1 and 15.4 of PROL 48.01/2028, from December 31, 2022 to June 30, 2023, for the periodic safety review reassessment results and the application to operate the Pickering NGS beyond December 31, 2024.
- 6. In its 2018 decision, the Commission stated:

"The commercial operation of any reactor unit of the PNGS beyond December 31, 2024 would constitute a change in OPG's licensing basis. Operation of any reactor unit beyond this date would require authorization from the Commission in the context of a separate public hearing during which Indigenous groups, members of the public and stakeholders would be able to intervene. An application from OPG for the continued operation of any PNGS reactor unit would be submitted to the Commission well before December 31, 2024 to ensure that sufficient time is available for such a proceeding to take place." (paragraph 27)

As part of its consideration in deciding whether to grant the requested extension, the Commission must consider whether and how granting the extension could affect the timelines to hold a public hearing on the anticipated future application.

Panel

7. Pursuant to section 22 of the NSCA, the President established herself as a panel of the Commission to consider the application. A <u>notice of hearing in writing</u> was published on November 1, 2022. The Commission, in conducting a public hearing based on written materials, considered written submissions from OPG (<u>CMD 22-H107.1</u>) and CNSC staff (<u>CMD 22-H107</u>).

2.0 DECISION

8. 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 extension to the deadline for filing submissions related to the end of commercial operations for the Pickering NGS is reasonable and still provides sufficient time for a public hearing to take place for the Commission to consider a future application on the commercial operation of any reactor unit of the PNGS beyond December 31, 2024.

Therefore,

the Commission grants OPG's request to extend the deadline prescribed under conditions 15.1 and 15.4 of PROL 48.01/2028 for the periodic safety review reassessment results and the application to operate the Pickering NGS beyond December 31, 2024, from December 31, 2022 to June 30, 2023.

- 9. The Commission is satisfied that CNSC staff will update the corresponding sections of the LCH to reflect this decision, as described in Appendix A of CMD 22-H107.
- 10. The Commission is satisfied that 18 months from June 30, 2023 to December 31, 2024 can accommodate the time for CNSC staff to assess OPG's application and make its recommendations, and for the Commission hearing process, including public participation. The Commission expects OPG to make its application publicly accessible as early as possible so as to give interested persons as much time as possible to review it before the hearing.

3.0 ISSUES AND COMMISSION FINDINGS

11. The Commission assessed the evidence submitted on the record for this hearing and considered the reasonableness of OPG's request. The Commission considered OPG's proposed approach to meeting the requirements under licence conditions 15.1 and 15.4 and their accompanying criteria in the licence conditions handbook (LCH), as well as the potential impact on the timelines for a future Commission hearing.

3.1 Licence Conditions and Criteria

12. Section 2 of CNSC staff's CMD sets out the licence conditions and associated compliance verification criteria pertaining to the end of commercial operations for the Pickering NGS, namely licence conditions 15.1 and 15.4. Licence condition 15.1 states "The licensee shall implement the Integrated Implementation Plan".

CNSC staff explained that the IIP referred to in this licence condition resulted from the PSR conducted in support of the 2018 Pickering licence renewal. CNSC staff noted that this PSR covers the entire licence period (2018-2028), but assumes the end of commercial operation in 2024, followed by stabilization activities from 2025-2028.

13. As detailed in section 15.1 of the LCH:

"For any of the Pickering units to operate beyond December 31, 2024, the licensee shall perform and complete by or before December 31, 2022 a reassessment of the continued validity of the PSR results and, as a minimum, shall:

- Reassess the results of the global assessment included in the PSR Global Assessment Report (GAR);
- Include new or revised requirements, expectations and practices that became available since the freeze-date of the PSR stated in P-REP-03680-0001, "Pickering NGS Periodic Safety Review 2 (PSR2) Basis Document";
- For any newly identified findings, utilize the consolidation, prioritization and ranking methods employed in performing the PSR global assessment to formulate new global issues and resolutions plans;
- Evaluate the continued validity of conclusions reached in PSR; and
- Revise the IIP by incorporation the results of the reassessment as new or modified IIP actions, and submit the revised IIP for CNSC acceptance."
- 14. Thus, to operate any Pickering unit beyond December 31, 2024, OPG is required to reassess the impact of such extended operation on the licensing basis and continued plant safety, and to submit the results of the reassessment to the CNSC in accordance with REGDOC-2.3.3, *Periodic Safety Reviews*³.
- 15. Further, Licence condition 15.4 states:

"The licensee shall implement and maintain plans for end of commercial operations of all Pickering units."

The associated criteria in the LCH are as follows:

"The licensee shall notify the CNSC, in writing and no later than December 31, 2022, of its intent to operate any reactor unit of Pickering NGS beyond December 31, 2024, and provide as a minimum the following:

- Changes to OPG P-PLAN-09314-00003, "Pickering Site Strategic Plan";
- Revised dates for end of commercial operation of each Pickering operating reactor units;
- The reassessment of the impact of operations beyond 2024, based on the global assessment included in P-REP-03680-00032, "Pickering NGS PSR2 Global Assessment Report", and the consequential impact on identifying new findings that could result in new IIP actions (See also LC 15.1); and
- Request for CNSC acceptance, by a specific date, of potential new or revised actions in the Pickering NGS Periodic Safety Review 2 (PSR2) Integrated Implementation Plan (See LC 15.1 for WN of the IIP)."

³ CNSC Regulatory Document, REGDOC-2.3.3, *Periodic Safety Reviews*, April 2015.

- 16. OPG submitted that, in December 2021, it had informed the CNSC of its intent to pursue approval to operate Pickering units 5-8 through December 2025. However, owing to the Ontario Minister of Energy's announcement in September 2022, OPG required additional time to complete the reassessment for operation of Units 5-8 into 2026.
- 17. In section 2 of its CMD, CNSC staff report that OPG has completed extensive work on the PSR reassessment to support commercial operation of units 5-8 to the end of 2025, including most of the actions required under licence condition 15.1. CNSC staff explained that OPG has identified all gaps and completed a satisfactory PSR Global Assessment Report, and that OPG is expected to submit an IIP by November 2022 to support commercial operation to the end of 2025. CNSC staff's view is that a 6-month extension would be sufficient for OPG to complete and submit the new PSR reassessment results required to meet licence conditions 15.1 and 15.4 for operation of Pickering Units 5-8 into 2026.
- 18. OPG submitted that it would notify the CNSC of the final end of commercial operation dates of all Pickering units by December 31, 2022. CNSC staff confirmed that OPG will also submit the revised Pickering Site Strategic Plan by December 31, 2022, in accordance with bullets 1 and 2 under section 15.4 of the LCH.
- 19. CNSC staff's assessment is that OPG's request does not impact plant operations or nuclear safety. CNSC staff noted that, should the Commission grant OPG's request, CNSC staff would update the corresponding sections of the LCH to reflect this decision, as described in Appendix A of CMD 22-H107.

3.2 Impact on Future Hearing Timelines

- 20. In its 2018 decision, the Commission stated its intention of holding a public hearing to consider any future application regarding the commercial operation of any Pickering NGS reactor unit of the PNGS beyond December 31, 2024. The Commission noted the importance of receiving such an application from OPG "well before December 31, 2024 to ensure that sufficient time is available for such a proceeding to take place."
- 21. If granted the extension, OPG has indicated that it would file its application no later than June 30, 2023, leaving 18 months until December 31, 2024. Both OPG and CNSC staff submit that this 6-month extension would leave sufficient time for a public hearing and for the Commission to make a decision before December 31, 2024.
- 22. The Commission notes that recent Commission hearings have seen applicants and CNSC staff filing their submissions approximately 90 to 105 days before a hearing, and intervenors filing their submissions approximately 45 days before a hearing, or 60 days after CNSC staff and the applicants. The Commission is satisfied that 18 months can accommodate the time for CNSC staff to assess OPG's application and make its recommendations, and for the Commission hearing process, including public

participation, to follow the timelines used in recent hearings. The Commission expects OPG to make its application publicly available as early as possible so as to give interested persons as much time as possible to review it before the hearing.

3.3 Commission Findings

- 23. Following the Commission's analysis of the evidence submitted on the record for this hearing, the Commission concludes that OPG's request for an extension is reasonable. The Commission comes to this conclusion on the basis that:
 - The Commission recognizes that OPG's request stems from recent direction from the Government of Ontario;
 - The Commission is satisfied that OPG has already completed much of the work required to satisfy the conditions of the licence and the criteria in the LCH;
 - The Commission agrees with CNSC staff's assessment that the request will
 have no impact to the ongoing safety of the current operations of the Pickering
 NGS; and
 - The Commission agrees with OPG and CNSC staff that the extension to the deadline for filing submissions related to the end of commercial operations for the Pickering NGS should allow sufficient time for a public hearing to take place for the Commission to consider a future application on the commercial operation of any reactor unit of the PNGS beyond December 31, 2024.

4.0 CONCLUSION

24. The Commission concludes that the requested extension to the deadline for filing submissions related to the end of commercial operations for the Pickering NGS is reasonable and can still allow sufficient time for a meaningful public hearing to take place for the Commission to consider a future application on the commercial operation of any reactor unit of the PNGS beyond December 31, 2024. Therefore, the Commission grants OPG's request. The Commission is satisfied that CNSC staff will update the corresponding sections of the licence conditions handbook to reflect this decision, as described in Appendix A of CMD 22-H107.

Velshi, Rumina	Digitally signed by Velshi, Rumina DN, C=CA, O=GC, OU-ENSC-CCSN, CN="Velshi, Rumina" Reason: I am approving this document Location: your signing location here Date: 2022-11-25 13:35:36 Foxit PhantomPDF Version: 9.7.1	November 25, 2022
Rumina Velshi		Date
President,		
Canadian Nuclea	r Safety Commission	