



**Written submission from
Ontario Power Generation Inc. –
Pickering Nuclear Generating Station**

**Mémoire de
Ontario Power Generation Inc. –
Centrale nucléaire de Pickering**

In the Matter of

À l'égard de

Request from Ontario Power Generation Inc. to
modify the Pickering Nuclear Generating
Station integrated implementation plan
(Revision 1)

Demande de Ontario Power Generation Inc. pour
modifier le plan intégré de mise en œuvre,
révision 1, pour la centrale nucléaire de Pickering

Public Hearing - Hearing in writing based on
written submissions

Audience publique - Audience fondée sur des
mémoires

January 2021

Janvier 2021

November 24, 2020

P-CORR-00531-06224

Mr. M. A. LEBLANC
Commission Secretary
Secretariat

Canadian Nuclear Safety Commission
280 Slater Street
Ottawa, Ontario
K1P 5S9

Dear Mr. Leblanc:

Pickering NGS: Request for Approval to Amend the Integrated Implementation Plan (IIP) to Extend Resolution Action G01-RS1-06-01 (CSA N285.8 Compliance Plan Activities)

The purpose of this letter is to request Canadian Nuclear Safety Commission (CNSC) approval to amend the Pickering Periodic Safety Review 2 (PSR2) Integrated Implementation Plan (IIP) (Revision 1), which was accepted by the CNSC in Reference 1, in order to extend the completion date for resolution action G01-RS1-06-01.

This request is pursuant to licence condition 15.1 of the Pickering Power Reactor Operating Licence (PROL) 48.01/2028, which provides details of the IIP provided in Reference 2 and OPG's commitment to complete all IIP resolution actions by December 31, 2020.

This global issue G01-RS1-06-01 was identified through the PSR process (Reference 2) to look at Fitness for Service (FFS) of fuel channels, for the planned service life of the station. This action was to complete the compliance plan activities for CSA standard N285.8 *Technical Requirements for In-Service Evaluation of Zirconium Alloy Pressure Tubes in CANDU Reactors*, as accepted by the CNSC in Reference 3.

OPG completed the required actions and requested closure of IIP resolution action G01-RS1-06-01 in Reference 4. CNSC staff reviewed this submission and responded (References 5 and 6) that further action is required, before the IIP resolution action can be closed.

In Reference 5, CNSC staff requested supplemental information to support the use of nominal cooldown transient for the Pickering NGS Leak-Before-Break (LBB) evaluation. This information will be submitted on or before April 23, 2021.

In Reference 6, CNSC staff requested that pressure tube flaw inspection data be provided to support validation of the PLBB code, and that OPG perform probabilistic predications of pressure tube rupture using the Probabilistic Leak-Before-Break (P-LBB) code. OPG is targeting to provide this additional information to CNSC staff before the end of February 2021.

Pursuant to paragraphs 140, 141 and 675 of the Record of Decision for the Pickering NGS licence renewal (Reference 7), the Commission must be informed of the delay in completion of IIP resolution action G01-RS1-06-01 and must approve the IIP change and the need for an extension beyond December 31, 2020.

OPG is requesting CNSC approval to extend IIP resolution action G01-RS1-06-01 beyond the current due date of December 31, 2020. OPG is requesting to extend the completion date of G01-RS1-06-01 until April 23, 2021, in alignment with the timing of our previous request for extension in Reference 8.

The delay in the closure of this IIP resolution action does not have any impact on the safe operation of Pickering until 2024.

OPG is requesting a response to this request for CNSC approval to extend IIP resolution action G01-RS1-06-01, by December 31, 2020 in keeping with OPG's commitment to close IIP actions by the end of 2020.

If you have any questions, please contact Sara Irvine, Manager Pickering Regulatory Affairs at 289-314-3367.



Jon Franke
Senior Vice President
Pickering Nuclear

cc: K. Campbell, Acting Director, Pickering Regulatory Program Division,
Ottawa
CNSC Pickering Regulatory Program Division
CNSC Records Office

References:

1. CNSC Letter, A. Viktorov to R. Lockwood, "Pickering NGS: CNSC Staff Acceptance of Pickering NGS Periodic Safety Review 2 (PSR2) Integrated Implementation Plan (IIP), Revision 1", March 2, 2018, e-Doc 5470609, CD# P-CORR-00531-05333.

2. OPG Letter, R. Lockwood to A. Viktorov, "Pickering NGS Periodic Safety Review 2 – Submission of Integrated Implementation Plan Revision 1", March 1, 2018, CD# P-CORR-00531-05311.
3. CNSC Letter, A. Viktorov and M. Santini to W.S. Woods, "Darlington and Pickering NGS: Revised CSA N285.8 Compliance Plan Submission – New Action Item 2016-OPG-8975", December 5, 2016, e-Doc 512609. CD# N-CORR-00531-18357.
4. OPG letter, R. Lockwood to A. Viktorov, "Pickering NGS: Request for Closure of Periodic Safety Review 2 Integrated Implementation Plan Action: G01-RS1-06-01 and Action Item 2014-OPG-4782", December 20, 2019, CD# P-CORR-00531-05884.
5. CNSC Letter, A. Viktorov and J. Burta to M. Knutson, "Pickering and Darlington NGS – Response to OPG's P-LBB Computer Code Validation Report", November 6, 2020, e-Doc 5755097, CD# N-CORR-00531-22426.
6. CNSC Letter, K. Campbell and J. Burta to M. Knutson, "Pickering and Darlington NGS – Response to OPG's Use of a Nominal Cooldown Transient for Leak-Before-Break Evaluation", November 13, 2020, e-Doc 5914156, CD# N-CORR-00531-22438.
7. Commission Document, "Record of Decision – In the Matter of Ontario Power Generation Inc. – Application to Renew the Nuclear Power Reactor Operating Licence for the Pickering Nuclear Generating Station", December 20, 2018, e-Doc 5718117, CD# P-CORR-00531-05594.
8. OPG letter, J. Franke to M.A. Leblanc, "Pickering NGS: Pickering NGS: Request for Approval to Amend the Integrated Implementation Plan (IIP) to Extend Resolution Action G04-RS2-06-08", October 20, 2020, CD# P-CORR-00531-06202.