



Oral presentation

Exposé oral

**Written submission from the
North American Young
Generation in Nuclear**

**Mémoire de la
North American Young
Generation in Nuclear**

In the Matter of the

À l'égard d'

Ontario Power Generation Inc.

Ontario Power Generation Inc.

Application to extend the operation of
Pickering Nuclear Generating Station
Units 5 to 8 until December 31, 2026

Demande visant à prolonger l'exploitation
des tranches 5 à 8 de la centrale nucléaire de
Pickering jusqu'au 31 décembre 2026

Commission Public Hearing

Audience publique de la Commission

June 2024

Juin 2024



NAYGN Oral Intervention

**ONTARIO POWER GENERATION'S APPLICATION FOR
AUTHORIZATION TO OPERATE PICKERING NGS
UNITS 5 TO 8 BEYOND DECEMBER 31, 2024
JUNE 24-26, 2024**

Matthew Mairinger, P. Eng., PMP
PRESIDENT
NORTH AMERICAN YOUNG GENERATION IN NUCLEAR (NAYGN)

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Matthew Mairinger, for the record.

I would like to start by thanking the Canadian Nuclear Safety Commission (CNSC) for providing an opportunity to intervene on Ontario Power Generation's application to extend the operation of Pickering Nuclear Generating Station (NGS) Units 5 to 8 until December 31, 2026. I have over eleven years of experience working for Ontario Power Generation at both the Pickering and Darlington nuclear sites. I have worked in Project Controls, Minor Modifications, Reactor Safety, Stakeholder Relations, Performance Engineering, and Nuclear Sustainability Services. Currently, I am on a secondment with Laurentis Energy Partners as the manager of Business Development. I earned my Bachelor of Engineering degree in Nuclear Engineering and Graduate Diploma in Nuclear Technology from the University of Ontario Institute of Technology, and I am both a Professional Engineer in the province of Ontario and a Project Management Professional. I am a Bowmanville resident and work at the OPG Pickering corporate office.

I am here representing North American Young Generation in Nuclear (NAYGN) as the NAYGN continental past-president. [NAYGN](#) is a non-profit organization of young professionals and students passionate about the nuclear industry. Our organization is focused on professional development, public information, knowledge transfer & retention, and networking. There are currently over 150 chapters across North America, with 24 chapters in Canada.

My confidence in this application is based on completion of the Periodic Safety Review (PSR2-B). The PSR2-B concluded that the current plant design, operation, processes, and management system will ensure continued safe operation of Pickering NGS units 5 to 8 to the end of December 2026. OPG is actively managing the remaining commitments to completion and expects to finish them before December 31, 2024, as required by the Integrated Implementation Plan. Additionally, the Pickering NGS Units 5 to 8 Fuel Channels, Feeders, and Steam Generators Fitness-for-Service (FFS) Assurance Memo has been completed and submitted to the CNSC. The FFS of major components has been conservatively assessed to 305,000 EFPH and demonstrates FFS assurance for safe operation to the projected EFPH of each unit. In July 2023, the CNSC staff concluded that the IIP meets CNSC regulatory requirements, and OPG's re-assessment strategy document supports the continued operation of Pickering NGS units 5 to 8 until 2026.

Over the past years, there has been an improving trend in indicators such as the Fuel Handling Equipment Reliability Index (FH ERI), collective radiation exposure, maintenance work order backlogs, Forced Loss

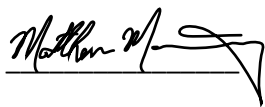
Rate (FLR), and in 2023 the Pickering NGS Maintenance Index achieved industry top quartile performance. These improvements give confidence in the continued operation of the units.

Diversity, Equity, and Inclusion (DE&I) is important to NAYGN, so I am also happy to see that as a company, Ontario Power Generation remains committed to working with the Williams Treaties First Nations to develop positive and mutually beneficial relationships. Ontario Power Generation is also updating their Reconciliation Action Plan (RAP) to include additional targets that were developed based on feedback from Indigenous Nations, communities, and businesses.

The extension of the Pickering plant is not just a local issue – it is essential to maintain Ontario as a world leader in clean energy generation and to help Canada achieve its net-zero by 2050 pledge. With the refurbishment of Darlington and Bruce ongoing there needs to be a dependable, base load generation to ensure uninterrupted services such as hospitals and essential services. Ontario has such a stable grid that brownouts and blackouts are unusual, and as a result most of us are not prepared and not willing to tolerate power interruptions. The extension, and hopefully refurbishment, will also protect flora and fauna that would otherwise be disturbed from the construction of new electricity generation facilities.

In closing, I truly believe that nuclear power is the safest, cleanest, and most reliable electricity production method that should be one of the main strategies that humanity utilizes to combat climate change and protect the environment. I believe the Pickering plant can continue to deliver low cost, clean, dependable energy across Ontario safely. On behalf of North American Young Generation in Nuclear, I strongly support the continued operation of the Pickering Nuclear Generating Station and the renewal of their Power Reactor Operating Licence.

Thank you,



Matthew Mairinger,

NAYGN President