

File / dossier : 6.01.07 Date: 2024-06-05 7296518 e-Doc:

#### **Supplementary Information**

**Presentation from Ontario Power Generation Inc.** 

#### **Renseignements supplémentaires**

Présentation d' **Ontario Power Generation Inc.** 

In the Matter of the

#### **Ontario Power Generation Inc.**

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

À l'égard d'

**Ontario Power Generation Inc.** 

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

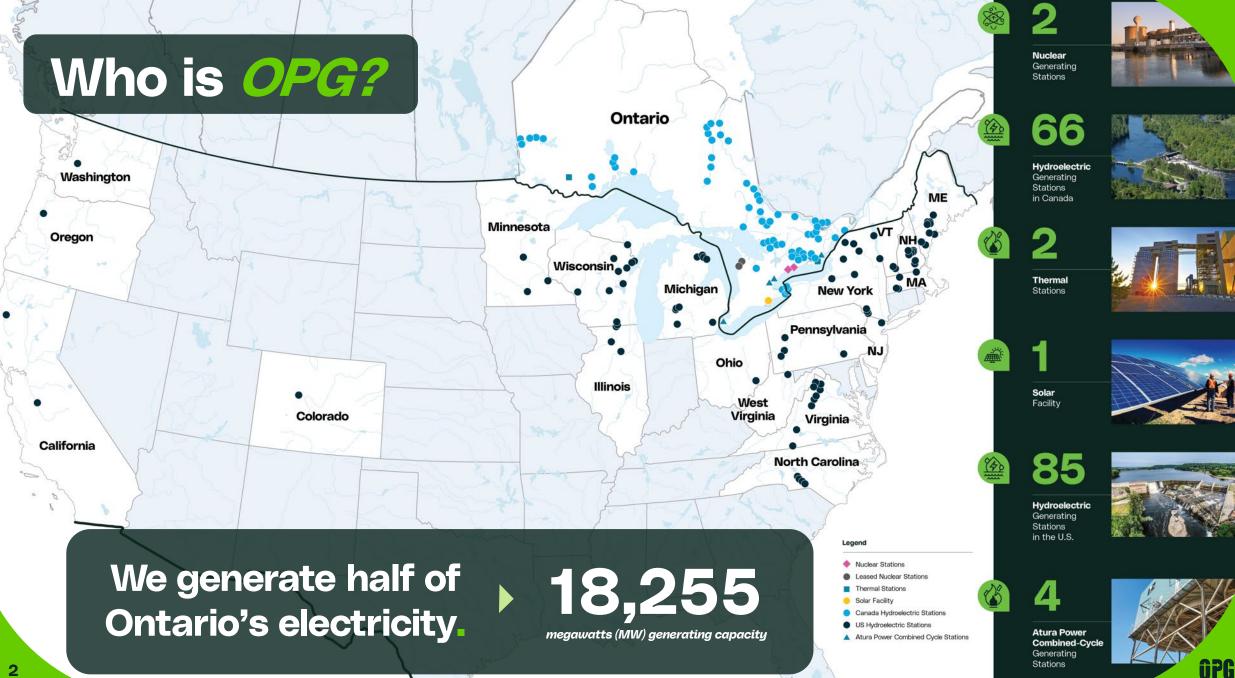


# **ÜPG** Pickering Nuclear Generating Station

Power Reactor Operating Licence Amendment 19-Jun-2024

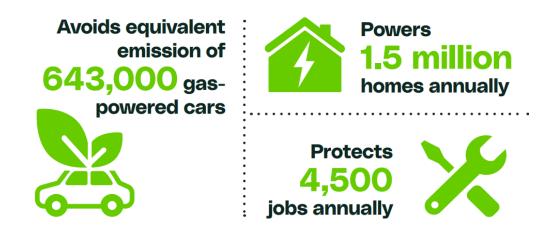


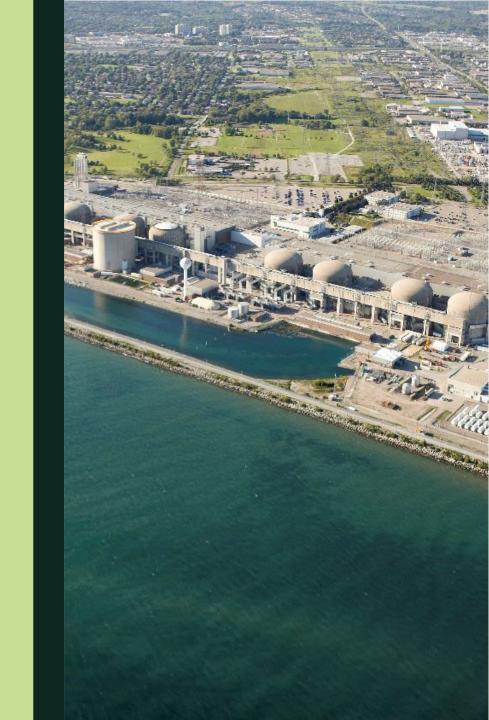


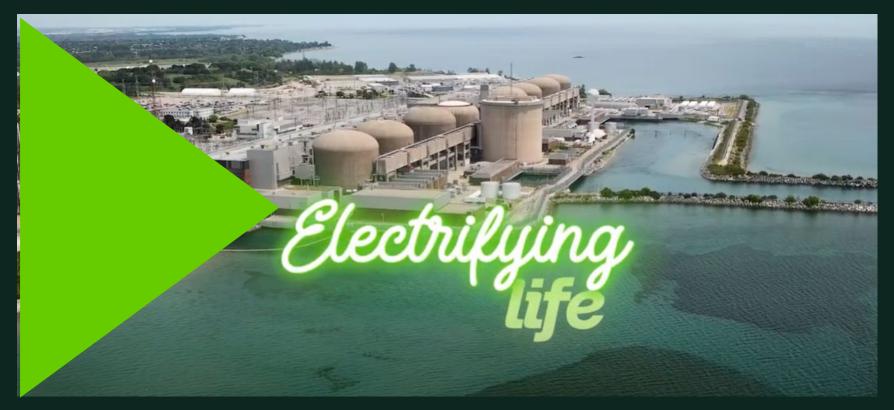




- Six CANDU reactors (CANadian Deuterium Uranium).
- Provides 14% of Ontario's electricity.
- Continued operation of Units 5 to 8 would generate approximately 2,100 MW of reliable, carbon-free electricity in a safe and sustainable manner.







## **Pickering Nuclear Video**

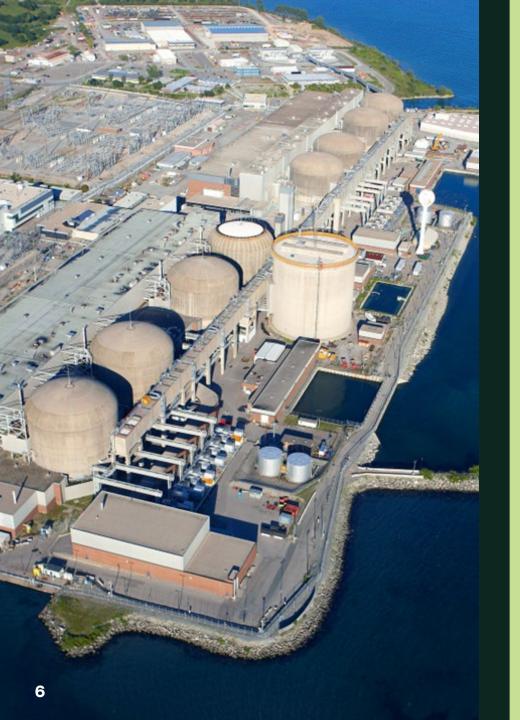


### **Request to Operate:**

- Pickering Units 5 to 8 until December 31, 2026.
- The pressure tubes up to 305,000 Equivalent Full Power Hours.



Meeting the growing energy needs expected for the Province of Ontario.





- OPG continues to meet the applicable regulatory requirements.
- Pickering Units 5 to 8 are fit for service to December 31, 2026.
- OPG is qualified to operate Pickering Units
  5 to 8 to December 31, 2026.
- OPG is committed to protecting the health, safety and security of persons and the environment.



- A comprehensive review confirmed the station meets all design, safety and operating requirements.
- The station is safe to operate through to the end of 2026.



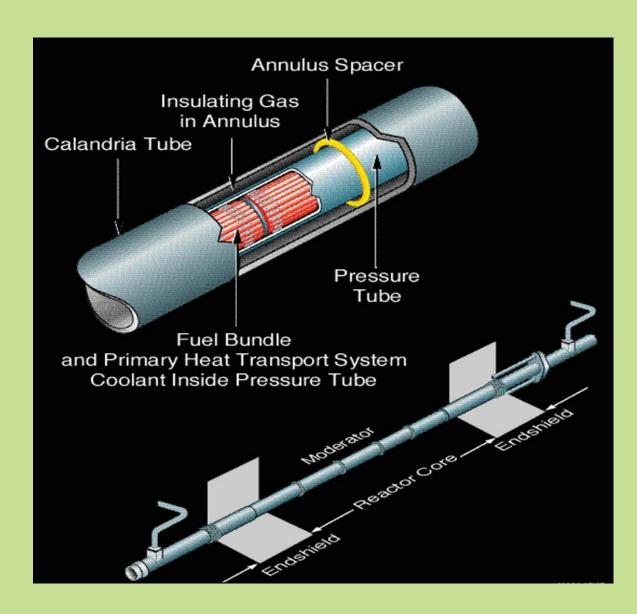
## Integrated Implementation Plan

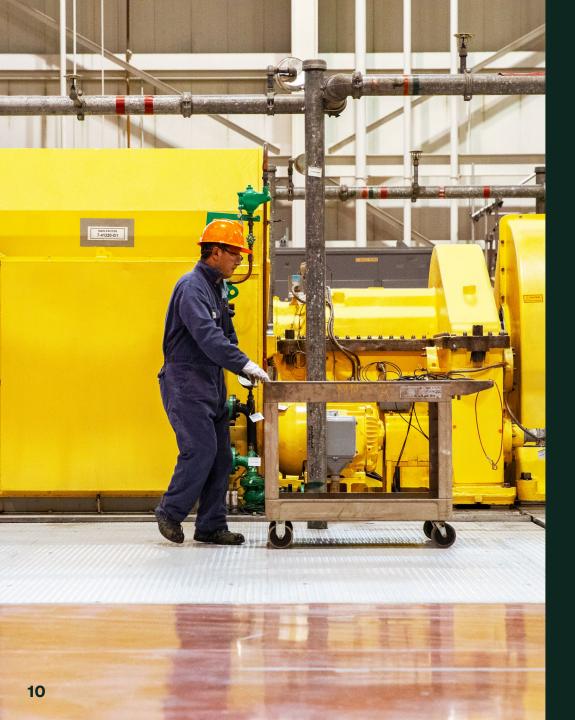


- The plan identified 32 actions.
- Since the implementation, OPG has successfully completed 25 of the 32 actions.
- All actions will be executed by the end of 2024.



- Fitness for Service of major components includes fuel channels, feeders, steam generators, reactor components and structures.
- OPG has a robust inspection and surveillance process.





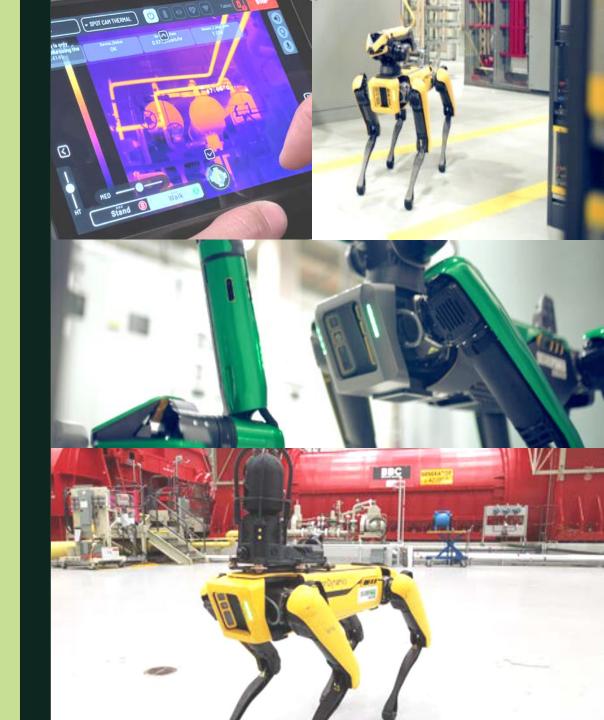


- Highest yearly production output.
- Best equipment reliability ratings.
- Reduction in forced loss rate.
- Longest run in station history.
- Five consecutive years with no lost time injuries.



OPG continues to utilize innovative solutions to improve performance, including:

- Robotics,
- Remotely piloted aircraft systems, and
- Virtual tours and 3D scanning technology.





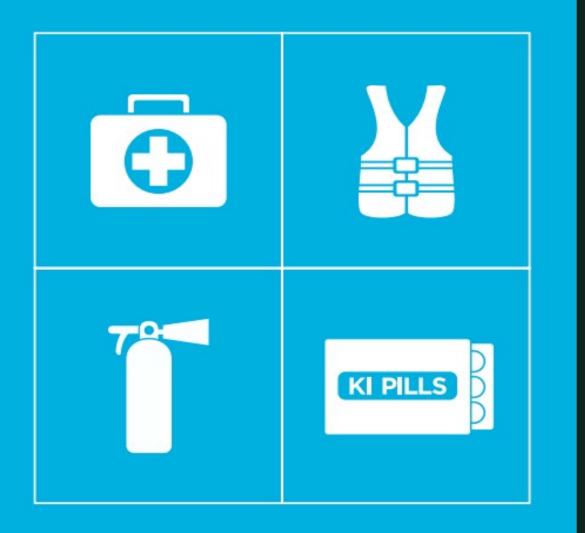
#### Participants included:

The Province of Ontario, the Government of Canada, the Regional Municipality of Durham, the City of Pickering, and the City of Toronto. OPG and its emergency response partners used Exercise Unified Command to collaborate and strengthen their level of preparedness.



- Completed Exercise Unified Command 2023 – a large scale, simulated nuclear emergency exercise involving stakeholders at the Federal, Provincial, and Municipal levels of government.
- Extensive drill and exercise program validates emergency plans and procedures.





### Being prepared is staying safe.

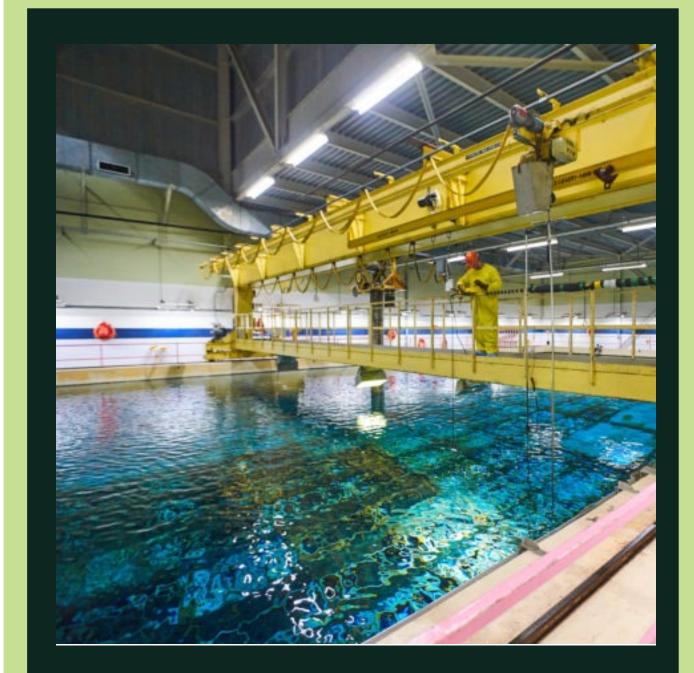


- Active potassium iodide (KI) distribution program.
- A variety of methods are used to engage and inform the public on OPG's operations and nuclear Emergency Preparedness.
- www.preparetobesafe.ca



OPG's waste management program:

- Meets regulatory requirements.
- Safely manages all waste.
- Reduces the amount of waste generated.





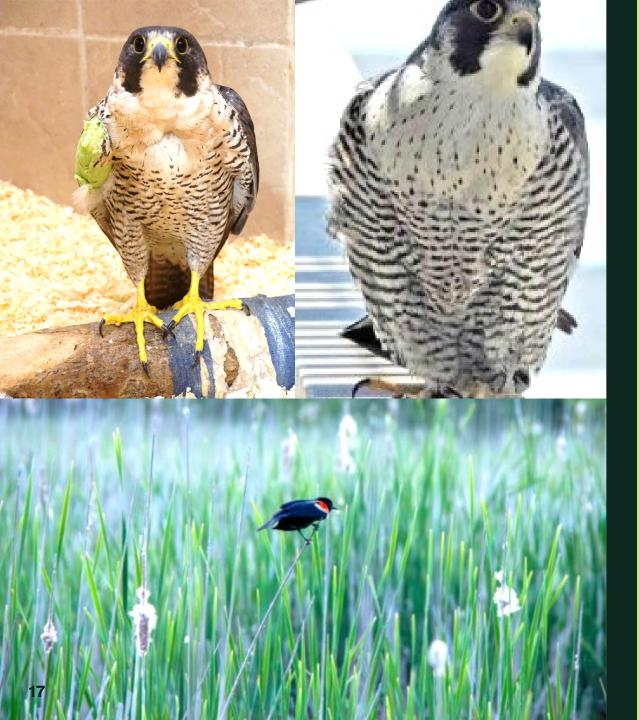
- Cobalt-60 is a life-saving isotope used to safely sterilize medical equipment and food products.
- Continued operations of Pickering Nuclear Units 5 to 8 will ensure additional supply of Cobalt-60.
- Pickering Nuclear provides 20% of the North American Cobalt-60 supply and 10% of the world's supply.





- Pickering Nuclear has a comprehensive Environmental Protection Program.
- The Environmental Monitoring Program regularly samples water, air and soil, and results are posted on OPG.com.
- Environmental studies concluded the environment and human health will be protected through operations to 2026.







- Since 2000, OPG has planted more than 9 million native trees and shrubs across the province.
- Supporter of the Canadian Peregrine Falcon Foundation.
- Pickering Nuclear holds the gold level certification from the Wildlife Habitat Council.



OPG is striving to be a global leader in equity, diversity and inclusion.







- OPG is committed to providing clear and transparent communication, and meaningful engagement.
- Pickering Nuclear has an Indigenous
   Engagement Plan developed with input
   from Indigenous Nations and
   communities.



- Delivered approximately \$237 million in economic benefits to Indigenous communities and businesses:
  - \$198 million in Indigenous procurement
  - \$39 million in distributions from our equity partnerships with Indigenous partners
- 53 skilled Indigenous workers recruited and placed in various energy sector occupations through our Indigenous Opportunities Network.
- Continuously seek and receive valuable feedback from Indigenous Nations and communities on the commitments in our Reconciliation Action Plan to understand our strengths and gaps.





## Committed to Community Engagement

### **Comprehensive outreach program includes:**

- Keeping our communities informed through community councils and committees.
- Educational programs and events.
- Tours and presentations.
- Environmental Stewardship.
- Community programming and partnerships.



- Implemented actions to improve the performance of the program and continues to advance plans with a focus on sustaining improvements.
- Security program meets requirements to support extended operations.



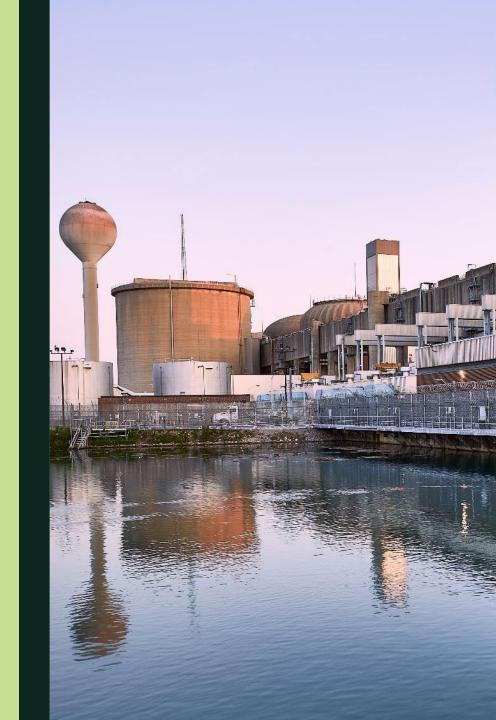


- 2020 2022 Gold Certification by Wildlife Habitat Council
- 2021 Progressive Aboriginal Relations Gold Designation from the Canadian Council for Aboriginal Business
- 2021 City of Pickering Environment Award
- 2022 Canada's Best 50 Corporate Citizens for 10<sup>th</sup> year by Corporate Knights
- 2022 Greater Toronto Top Employer
- 2022 Greater Oshawa Chamber of Commerce Sustainability Award
- 2022 Women's Executive Network Ally of Excellence Award
- 2023 Canada's Best Diversity Employers
- 2024 Government of Canada Employment Equity Achievement Award (Innovation category)





- OPG is committed to the safe and reliable operation of the station.
- Pickering Units 5 to 8 are fit for service.
- OPG is qualified to operate Units 5 to 8.
- OPG continues to meet the applicable regulatory requirements.



## *Electrifying life* in one generation

**ûPG**