Atura Power

Halton Hills Generating Station Efficiency Upgrades

Public Meeting

An opportunity to learn about the proposed efficiency upgrades and share your feedback.

June 15, 2023

Order of Events

Agenda

1. Introductions and Land Acknowledgement
2. Project and Proponent Information
3. Environmental Assessment Process
4. Next Steps
5. Question Period
6. Closing Comments

Presentation is being recorded

Materials will be available online

Moderator will mute participants; chat function is available for questions

Land Acknowledgement

Halton Hills is on the traditional lands of the Mississaugas of the Credit, part of the Anishinaabe Nation that extends from the Niagara Peninsula across Hamilton, Halton and Toronto to the Rouge River Valley.

Project Information

Name of Project

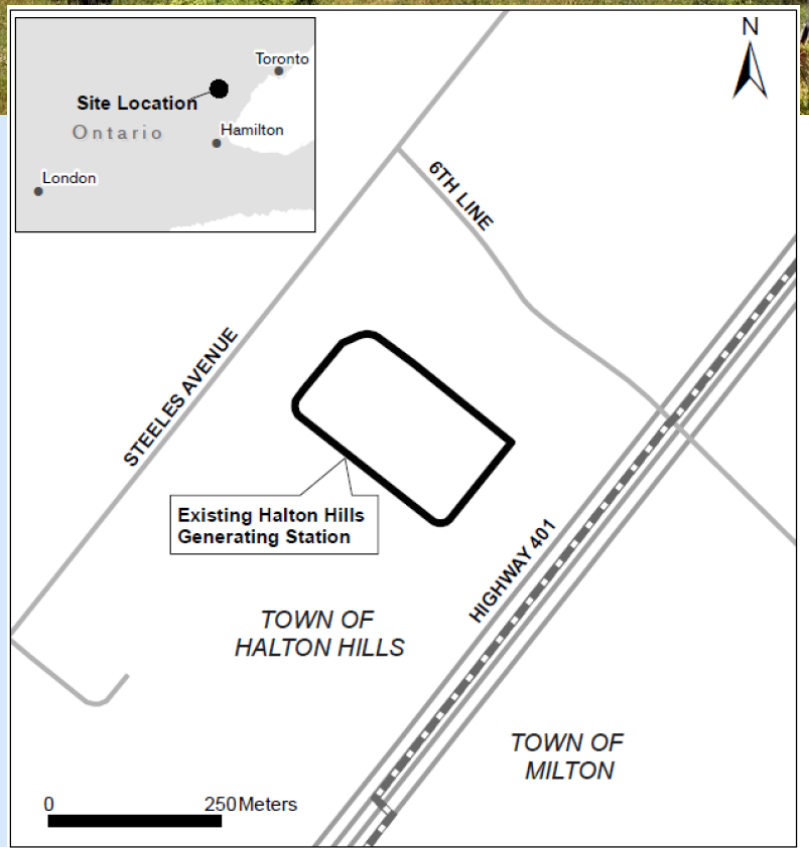
- Halton Hills Generating Station (HHGS) Efficiency Upgrades

Location

- Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line

Proposed Activity

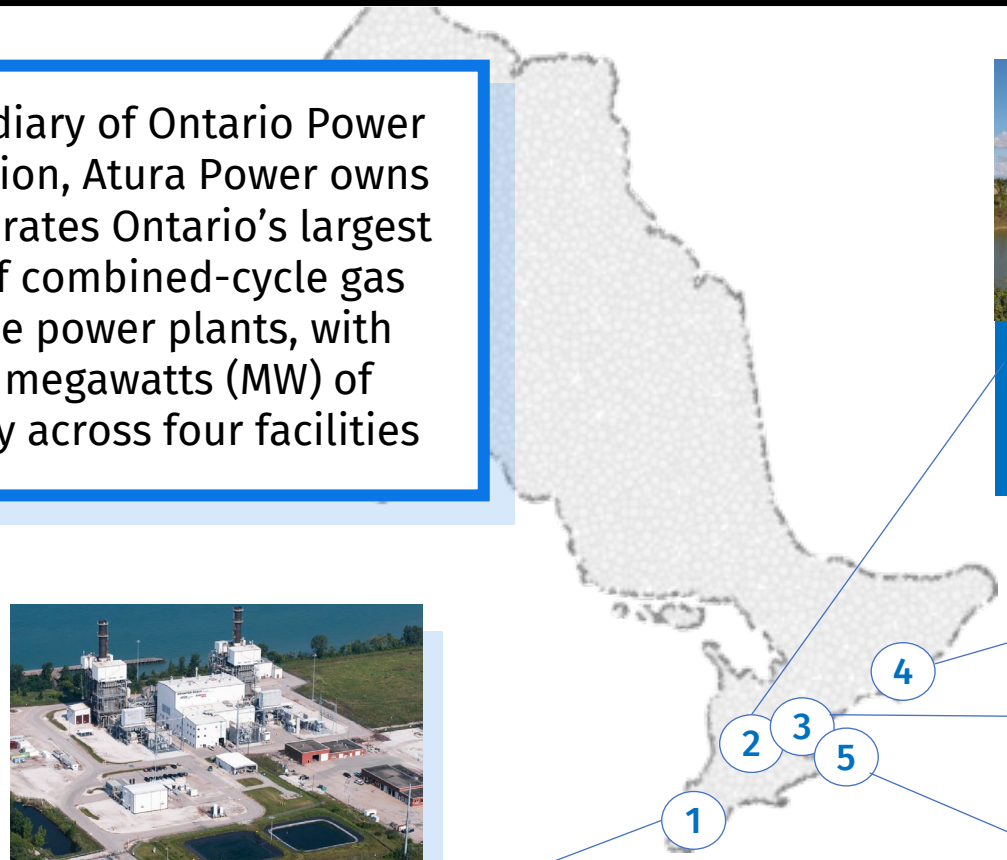
- Replacing parts of the combustion turbines with upgraded parts that will result in a minor increase in plant output capacity



Proponent Information

Atura Power's Fleet of Generation Assets

A subsidiary of Ontario Power Generation, Atura Power owns and operates Ontario's largest fleet of combined-cycle gas turbine power plants, with 2,715 megawatts (MW) of capacity across four facilities



1. Brighton Beach Generating Station
2004-2044
Capacity 570 MW

2. Halton Hills Generating Station
2010-2050
Capacity 683 MW

5. Oakville Head Office

3. Portlands Energy Centre
2009-2049
Capacity 562 MW

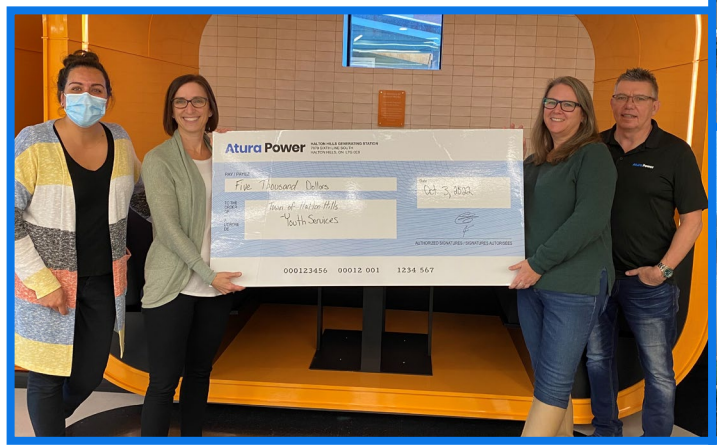
4. Napanee Generating Station
2020-2060
Capacity 900 MW

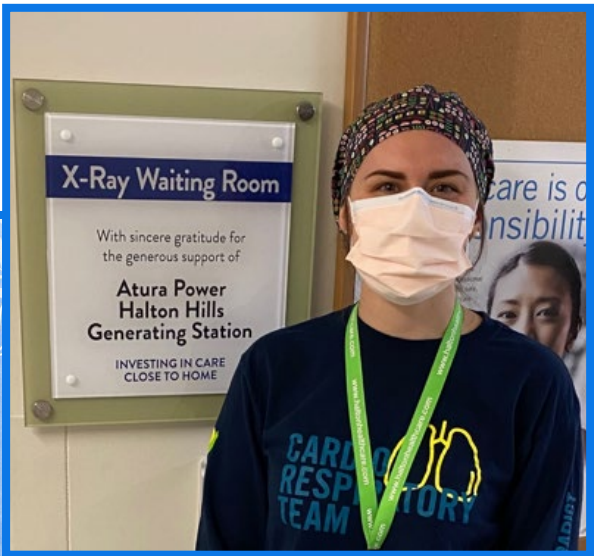
Community Outreach and Support

Committed to Supporting the Halton Hills Community

Atura Power annually donates thousands of dollars to local charities and organizations including:

- Georgetown Hospital Foundation
- Halton Learning Foundation - trades/engineering scholarships
- More than 800 healthy food packages to schools via Food4Kids
- Youth Leadership Program
- Lions Club Santa Clause Parade
- Free public skating at local arenas





FOOD4KIDS Halton

Project Need

- The Independent Electricity System Operator (IESO) is the Crown corporation responsible for operating the electricity market in Ontario
- The IESO predicts Ontario will face an energy shortage as a result of growing demand and nuclear refurbishments; an additional 4,000 MW are needed by the end of the decade to maintain the system's reliability
- Proposed HHGS upgrades are part of Atura Power's efforts to address this supply gap, providing a cost-effective and timely solution to secure operational flexibility in the Ontario electricity grid
- Upgrading the two turbines with more efficient parts will increase the output capacity of HHGS by 27 MW, or about 4% (at 15°C reference level ambient air conditions)

ieso
Connecting Today.
Powering Tomorrow.

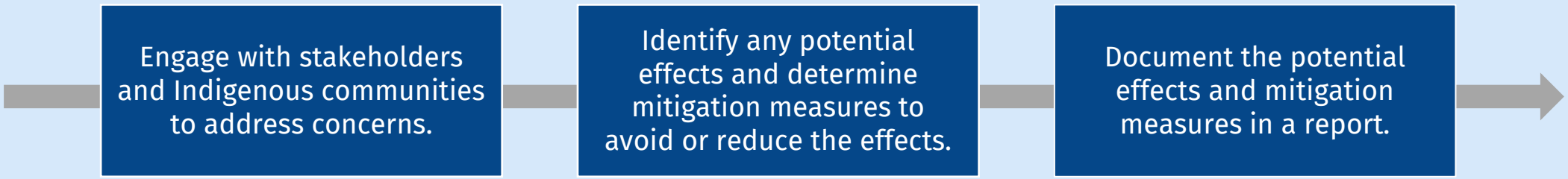
Project Description

- Replacing parts of the two turbines with parts made of materials with optimized cooling characteristics
- Will allow a higher turbine firing temperature
- Will increase output capacity by 27 MW
- All activities within the existing building; **no changes or expansion of existing footprint**

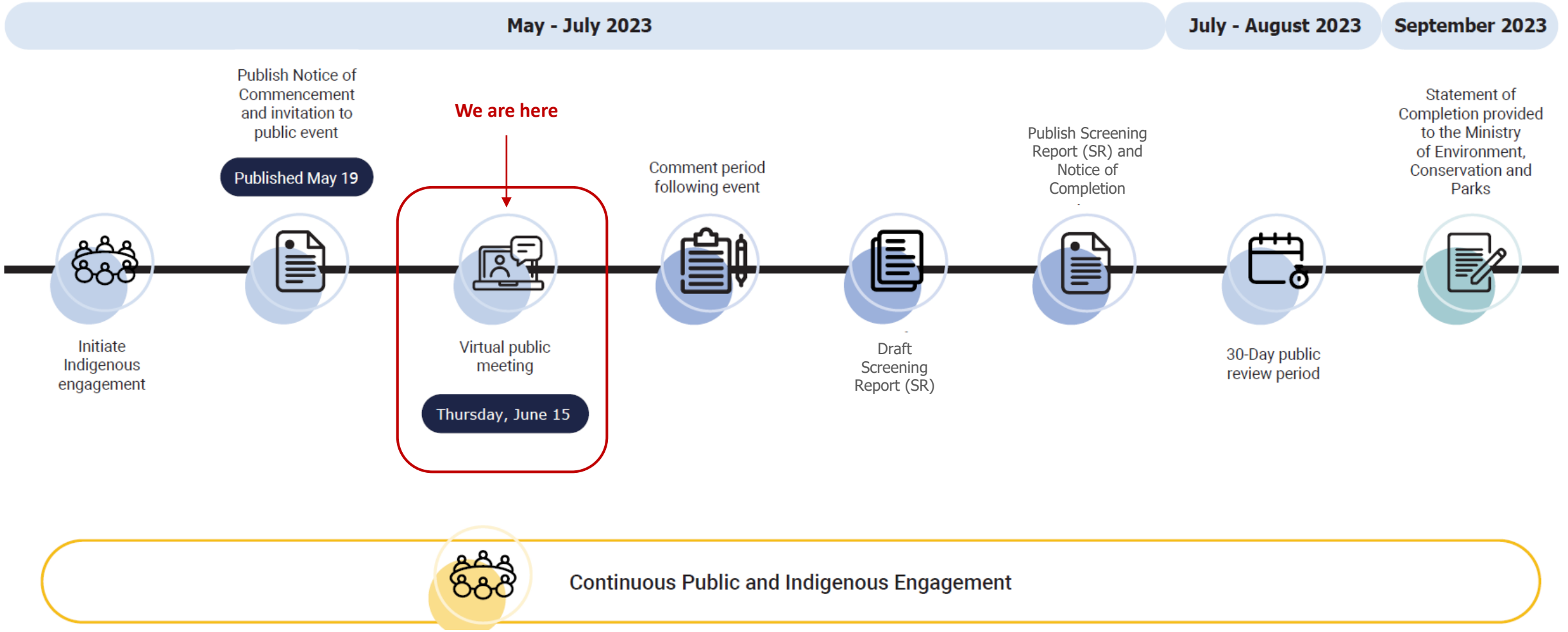
Environmental Assessment (EA) Process

- The project will result in a >5 MW increase in the output capacity of HHGS
- The capacity increase of 27 MW triggers the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*
- Project is classified as a Category B project under the Environmental Screening Process
- Atura Power is proceeding with a **Screening Stage assessment**

Purpose of the Screening Stage Assessment



Public and Indigenous Engagement



Environmental Effects

- Upgrades will improve operational efficiency, grid resiliency, and bring economic benefits through procurement of local labour and materials
- Upgrades were reviewed against the Screening criteria in Ontario Regulation 116/01
- **No negative environmental effects were identified related to the following sub-criteria:**
  - surface and groundwater
  - land
  - the natural environment
  - resources
  - socio-economic
  - heritage and culture
  - or other environmental features
- **No increase to noise emissions** are anticipated and HHGS will continue to operate within established bylaws and regulations

Environmental Effects

- Minimal changes in air emissions are the **only potential negative effect for the project**
- An Emission Summary and Dispersion Modelling (ESDM) report was completed to support the Environmental Compliance Approval (ECA) amendment application which determined that the facility will continue to comply with Ontario Regulation 419/05 following the proposed upgrades
- An air quality assessment will be completed as part of the Screening Stage assessment to consider baseline conditions and projected concentration of conventional contaminants relative to the Ambient Air Quality Criteria (AAQC)
- As a result of the upgrades, the HHGS will be subject to updated and more stringent air emissions limits in accordance with the revised “Guideline A-5 Atmospheric Emissions from Stationary Combustion Turbines” (MECP, 2021) and will continue with in-stack continuous emissions monitoring

Next Steps and Timeline

Next steps and timelines associated with completing upgrades are:

Activity	Timeline
Permits and Approvals: Environmental Compliance Approval Amendment	Submitted March 29, 2023
IESO Same Technology Upgrade Successful Proponent Announcement	May 16, 2023
Turbine Upgrades	Spring 2024
Commissioning and Testing	Spring 2024
Operations	Spring/Summer 2024

Exemption Process

- Proponents can request the Ministry of Environment, Conservation and Parks (MECP) exempt a project from the *Environmental Assessment Act*. Atura Power is requesting an exemption from the MECP, based on the following rationale:
  - HHGS facility activities are heavily regulated under permits
  - Activities to complete the upgrades will occur within the existing facility
  - Upgrades will improve operational efficiency, grid resiliency, and bring economic benefits
  - Atura Power is in the process of obtaining an amended air emissions permit which includes updated technical studies and consultation with agencies, and
  - The only environmental effect anticipated are nominal changes to air emissions
- Atura Power has initiated this process in parallel with the Environmental Screening Process.

Question Period

Thank You

Questions?

Please email further comments and feedback to:
haltonupgrade@aturapower.com

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