

Halton Hills Generating Station Upgrades – Frequently Asked Questions

Below are some frequently asked questions and answers about the Halton Hills Generating Station (HHGS) efficiency upgrades. If you have a question that is not shown below, please send us an email at haltonupgrade@aturapower.com and a project representative will respond to your inquiry.

Why is Atura Power making these efficiency upgrades?

After years of strong supply, Ontario is entering a period of growing electricity system demand (a predicted energy supply gap) and actions are needed to ensure the continued reliability of the electricity grid.

To close this gap and meet the projected demand, the Independent Electricity System Operator (IESO) is moving forward with a procurement process to meet near, medium, and long-term energy needs while maintaining the province's focus on cost-effective reliability.

What is causing the energy supply gap in Ontario?

Ontario's electricity sector is undergoing a period of significant transformation. New decarbonization policies coupled with rapid growth in the mining, greenhouse and industrial sectors are accelerating electricity demand growth across the province and heightening needs in certain regions.

The IESO's most recent Annual Planning Outlook (APO) reflects these trends. It projects a steady rise in electricity demand that highlights the strengths of Ontario's communities and economy to navigate the challenges of the pandemic, pursue electrification and support economic growth.

I thought we wanted to stay away from coal and/or natural gas. Why are we upgrading a natural gas power plant?

To address this changing environment, the IESO established the Resource Adequacy Framework in 2021 to provide a flexible and cost-effective approach for competitively securing the resources necessary to meet demand. These upgrades are part of the plan IESO put in place to meet Ontario's energy needs.

What will the upgrades include? What changes will be made?

We will be replacing rotating and non-rotating components within the gas turbine (blades, seals, nozzles, etc.). These upgraded parts are more efficient due to the advanced materials used to allow the turbine to run hotter and more fuel efficiently, extracting the maximum amount of power possible.

How long will the upgrades take?

The upgrades will be done as part of our annual spring plant outage. The upgrade specific work will take approximately four weeks to disassemble, replace parts and reassemble the gas turbines.

Will there be more upgrades in the future?

Atura Power always strives to be on the leading edge of technology and will be open to future advancements that make the engines more fuel efficient. We also plan to blend green hydrogen into the HHGS fuel stream to reduce emissions.



Who will be undertaking the upgrades?

Siemens Energy Canada, the gas turbine original equipment manufacturer, will be providing the new parts and performing the work using local skilled trades from Ontario.

Will the upgrades make increase the noise at the plant?

The upgrades will not increase the noise levels of the station.

Will the upgrades increase the lights on top of the stack?

The upgrades will not affect the lights on the stack.

What environmental effects will the upgrades have?

The upgrades are limited to within the existing facility and therefore no changes or disturbances to the footprint are expected. The only potential negative environmental effect of the upgrades are minimal changes in air emissions due to the increase in facility output.

How much more air pollutants will be released because of these upgrades?

We will be undertaking an air quality assessment as part of the EA process to better understand if there will be an increase to air emissions, and by how much.

What will be measured in the air quality assessment?

We will consider current baseline conditions and assess projected concentration of conventional contaminants like nitrogen oxides, carbon monoxide, sulphur dioxide, and particulate matter relative to the Ambient Air Quality Criteria (AAQC) as part of the Screening Stage assessment. We will share the results of the air quality assessment in the Screening Report that will be made available to the public once prepared.

What is a Screening Stage assessment?

A Screening Stage assessment is a specific assessment process that certain projects that fall under the Electricity Project Regulation must complete to meet the environmental assessment requirements under the Environmental Assessment Act.

Will I get to review the Screening Report?

Yes, the assessment process includes a 30-day review period during which time anyone, including members of the public, can review the Screening Report. Information on the availability of the Screening Report will be published in Halton Hills Today online and posted on our project webpage.

Who can I speak to about this project?

Comments and questions about the project can be sent to haltonupgrade@aturapower.com at any time. A project representative will respond to your inquiry.