Atura Power

Halton Hills Generating Station Efficiency Upgrades

Screening Report for Electricity Projects

OCTOBER 2023

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Screening Report for Electricity Projects

Atura Power

PREPARED FOR:

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Executive Summary

Halton Hills Generating Station (HHGS) is owned and operated by Portlands Energy Centre LP, which operates under the trade name Atura Power. Atura Power is a subsidiary of Ontario Power Generation (OPG) and is planning to make efficiency upgrades (upgrades) within its existing facility located in the Town of Halton Hills, Ont. HHGS is a combined-cycle natural gas-fuelled electricity generating station (GS) with an electrical output of 683 megawatts (MW). The station is located between Highway 401 to the south and Steeles Ave. to the north, west of Sixth Line on approximately 32 hectares (ha) of land.

The Independent Electricity System Operator (IESO) quantified the near-term additional energy supply need in Ontario, stating that an additional 4,000 MW of new capacity is required by May 2027. Procurements for projects capable of meeting the increased energy demand in 2027 will need to be completed in the short-term. Atura Power is prepared to help meet that need and support ratepayers in Ontario through upgrades that will optimise and increase energy generation at HHGS in south-eastern Ontario.

Atura Power is planning to make upgrades which will increase the facility generating capacity by 27 MW (at 15 degrees Celsius (°C) reference level ambient air conditions) to achieve a total output of 710 MW. The upgrades involve replacing internal parts of the natural gas fired combustion turbines with more efficient parts that will result in greater electrical output from the gas turbine generators. The parts that are being replaced are the same parts that would normally be replaced at regular maintenance overhauls, but due to improved technology, will be more efficient. Better materials are used to manufacture the parts, and these can withstand a higher operating temperature and therefore produce more power. The upgrades will be completed as part of the annual spring plant outage and will take approximately eight weeks to disassemble, replace parts and reassemble the gas turbines. The project will take place entirely within the facility; the facility footprint will not change, and no additional external laydown areas will be required.

Given that the upgrades result in an increase in the nameplate capacity (electrical output) of more than 5 MW, the planned upgrades are subject to the Environmental Screening Process for Electricity Projects pursuant to Ontario Regulation (O.Reg.) 116/01, under the Ontario *Environmental Assessment Act* (EAA – also known as the *Act*). Projects subject to the Environmental Screening Process are to follow the "*Guide to Environmental Assessment Requirements for Electricity Projects*" (Government of Ontario, 2011) (the Guide) as outlined by the Ontario Ministry of the Environment, Conservation, and Parks (MECP). The Guide requires a Screening Criteria Checklist to be applied to the project to identify potential negative environmental effects resulting from nine different criteria categories based on current knowledge or preliminary investigations. Application of the Screening Criteria for the planned upgrades at HHGS resulted in a score of 'No' for potential negative environmental effects resulting from the project.

Engagement with the public, agencies and Indigenous communities is a key component of the Environmental Screening Process and was integrated from the initial development stages. This included sharing project information on the project's webpage, advertising and distributing notices,

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hosting a virtual public meeting, responding to project enquiries, hosting one-on-one meetings with Indigenous communities, and sharing information with municipal representatives.

Atura Power remains committed to a continuous process of relationship-building and communication with Indigenous communities neighbouring current and future projects.

Land Acknowledgement

We acknowledge that Halton is rich in the history and modern traditions of Indigenous people. We acknowledge we are situated on the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. We further acknowledge that this land is also part of the Treaty Lands and Territory of the Mississaugas of the Credit.

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Appendices

Appendix A. Letter from the Independent Electricity System Operator

Appendix B. Letter from Siemens Energy

Appendix C. Engagement Records

Glossary of Terms

AAQC	Ambient Air Quality Criteria
	Areas of Natural or Scientific Interest
	British thermal unit
°C	
	consultation and accommodation process
	continuous emission monitoring system
	carbon monoxide
	Environmental Assessment
	Ontario Environmental Assessment Act
	Environmental Compliance Approval
	Environmentally Sensitive Area
ET	
	Frequently Asked Questions
	Generating Station
GJ	
	gas turbine generator
ha	
	Haudenosaunee Development Institute
	.Halton Hills Generating Station
	. Hydro One Networks Inc.
HRSG	Heat Recovery Steam Generator
	Independent Electricity System Operator
km	.kilometres
kWh	. kilowatt-hour
LRC	Lands, Resources and Consultations
μg/m³	micrograms per cubic metre
m	
m ³ /s	cubic metres per second
	Mississaugas of the Credit First Nation
	Ontario Ministry of the Environment, Conservation and Parks
	Métis Nation of Ontario
MW	megawatts
NO ₂	
NO _x	
	Ontario Regulation
_	point of impingement
	fine particulate matter (less than 2.5 microns)
	inhalable particulate matter (less than 10 microns)
	Six Nations of the Grand River Elected Council
SO ₂	
	Special Policy Area
	suspended particulate matter
	steam turbine generator
<u> </u>	. Otoani tarbino gonorator

1. Introduction

1.1 Background

Halton Hills Generating Station (HHGS) is owned and operated by Portlands Energy Centre LP, which operates under the trade name Atura Power. Atura Power is a subsidiary of Ontario Power Generation (OPG) and is planning to make efficiency upgrades (upgrades) within its existing facility located in the Town of Halton Hills, Ont. HHGS is a combined-cycle natural gas-fuelled electricity generating station (GS) with an electrical output of 683 megawatts (MW). The station is located between Highway 401 to the south and Steeles Ave. to the north, west of Sixth Line on approximately 32 hectares (ha) of land. Approximately 10 ha of this land is occupied by HHGS and its associated infrastructure.

Figure 1-1 below provides a map of HHGS.

Atura Power is planning to make upgrades which will increase the facility generating capacity by 27 MW (at 15 degrees Celsius (°C) reference level ambient air conditions) to achieve a total output of 710 MW. Given that the upgrades result in an increase in the nameplate capacity (electrical output) of more than 5 MW, the planned upgrades are subject to the Environmental Screening Process for Electricity Projects pursuant to Ontario Regulation (O.Reg.) 116/01, under the Ontario Environmental Assessment Act (EAA – also known as the Act). HHGS opened in 2010, after meeting the Environmental Screening Process for Electricity Projects requirements under O.Reg. 116/01 and obtaining all required construction permits.

The original proponent, TransCanada Energy Ltd., completed an Environmental Review Report in 2007 which concluded that, "the net effects of construction and operation are not considered to be significant. Any measurable effects are short in duration, localized in effect, or do not represent a substantive or order of magnitude change from baseline conditions." (SENES Consultants Limited, 2007).

HHGS has operated for almost 13 years, since its original commissioning, without any compliance issues.

1.2 Purpose of the Project

The Independent Electricity System Operator (IESO) quantified the near-term additional energy supply need in Ontario, stating that an additional 4,000 MW of new capacity is required by May 2027. Procurements for projects capable of meeting the increased energy demand in 2027 will need to be completed in the short-term. Atura Power is prepared to help meet that need and support ratepayers in Ontario through upgrades that will optimise and increase energy generation at HHGS in south-eastern Ontario. In a letter provided in **Appendix A**, the IESO provides its support for the HHGS upgrades as a means to meet Ontario's future electricity system needs.

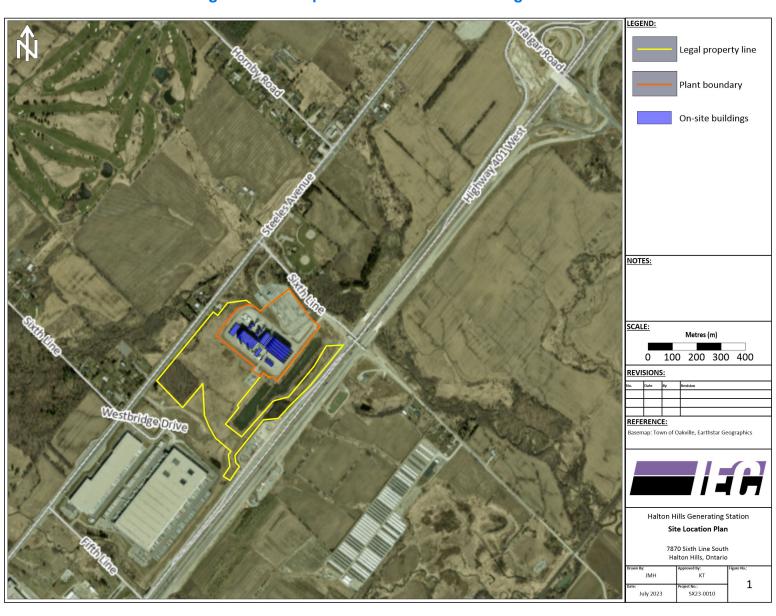


Figure 1-1: Map of Halton Hills Generating Station

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1.3 Environmental Assessment Process

1.3.1 Process

The applicable portions of the Environmental Screening Process for Electricity Projects, per O.Reg 116/01, which define the type of environmental assessment (EA) to be undertaken under the *Act* are Section 4 (1) and (3).

Section 4 (1) states that,

"The planning, designing, establishing, constructing, operating, changing, expanding or retiring of any of the following things is defined as a major commercial or business enterprise or activity and is designated as an undertaking to which the *Act* applies:

[Part] 4. A generation facility that has a name plate capacity of *five megawatts or more* [emphasis added] and that uses biomass or natural gas as its primary power source." (Government of Ontario, 2021).

Section 4 (3) states that,

"Any expansion of or change in a generation facility, transmission line, transformer station or distribution station that would result in it becoming a thing described in Subsection (1) is defined as a major commercial or business enterprise or activity and is designated as an undertaking to which the *Act* applies" (Government of Ontario, 2021).

Since the HHGS upgrades will result in an increase in the nameplate capacity of more than 5 MW, the *Act* requires that an EA be undertaken in accordance with O.Reg.116/01, and subsequently, the "*Guide to Environmental Assessment Requirements for Electricity Projects*" (Government of Ontario, 2011) (the Guide) as outlined by the Ontario Ministry of the Environment, Conservation, and Parks (MECP). As such, the EA for the project follows the Environmental Screening Process as described in the Guide, which states that natural gas projects in Ontario are classified into one of three categories based on their generation capacity and anticipated environmental effects:

- **Category A:** Generates less than 5 MW of electricity and has minimal environmental effects. These projects do not require approval under the EAA.
- Category B: Generates 5 MW of electricity or more and has potential environmental effects that can be mitigated. These projects require an Environmental Screening Process.
- Category C: Major projects with known environmental effects. These projects require an Individual EA.

Given that the upgrades will increase the nameplate capacity of HHGS by 27 MW (to 710 MW from 683 MW), generating an increase greater than 5 MW, the project is classified as a Category B project and triggers an Environmental Screening Process which is a proponent-driven, self-assessment process.

Under the Environmental Screening Process, there are two possible stages of review depending on the environmental effects of a project:

- a Screening stage, and
- Environmental Review stage.

The difference between the two stages of review under the Environmental Screening Process is the level of detail included in the assessment. The Environmental Review stage involves more detailed study and is typically undertaken based on the environmental effects of a project and the proponent's ability to address potential concerns. Based on the scale and nature of the undertaking (i.e., all activities to complete the upgrades require no physical changes at the site and will occur within the existing facility), the HHGS upgrades will be undertaken as a Screening stage assessment.

The Screening stage involves the following steps (refer to Figure 2 of the Guide for more detail):

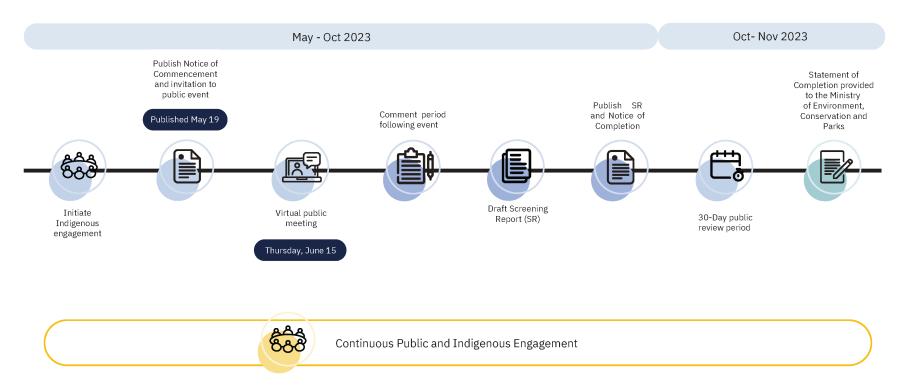
- Publish a Notice of Commencement of a Screening
- Prepare a project description
- Apply Screening Criteria to identify potential negative effects
- Engage Indigenous communities, agencies and the public to identify any issues or concerns
- Assess potential negative effects, develop mitigation and impact management, engage and address issues and concerns
- Prepare a Screening Report
- Publish Notice of Completion of Screening Report and commence a 30-day review period
- Submit Statement of Completion

1.3.2 Timelines

Atura Power has commenced the Environmental Screening Process by initiating Indigenous engagement in May 2023 prior to distributing the Notice of Commencement. The Notice of Commencement was published on May 19, 2023, to notify the general public about the project and a virtual public meeting was held on June 15, 2023. Further details on engagement activities for the project are provided in **Section 4**. The Screening Report was prepared between June and September 2023 and published in October 2023.

Figure 1-2 provides a summary of the key project milestones undertaken to fulfill the requirements of the Environmental Screening Process.

Figure 1-2: Key Project Milestones



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1.4 Project Description

Atura Power is planning to make upgrades to its existing facility by replacing internal parts of the natural gas fired combustion turbines with more efficient parts that will result in greater electrical output from the gas turbine generators. The parts that are being replaced are the same parts that would normally be replaced at regular maintenance overhauls, but due to improved technology, will be more efficient. Better materials are used to manufacture the parts, and these can withstand a higher operating temperature and therefore produce more power. The advanced materials and the optimized cooling flows enable the engine to run at higher operating temperatures and use fuel more effectively, allowing for a higher power output per gigajoule (GJ) of fuel consumed. The steam turbine generator is not being modified and the steam turbine output will not increase; however, the upgrades to the gas turbines will also increase the exhaust energy from the gas turbines which will result in less duct firing being required for the same steam turbine output resulting in improved efficiency of the plant. The current natural gas supply to HHGS is sufficient and therefore no increase is required for the upgrades. Additionally, no modifications are required to any interconnection equipment. The electrical output of HHGS following the planned upgrades will be 710 MW of electricity at reference conditions, derived from two 208 MW gas turbine generators (GTGs) and one 294 MW steam turbine generator (STG). This represents an increase of 27 MW (at 15 °C reference level ambient air conditions).

The planned upgrades will be completed as part of the annual spring plant outage and will take approximately eight weeks to disassemble, replace parts and reassemble the gas turbines. The project will take place entirely within the facility (see **Figure 1-3**). The facility footprint will not change, and no additional external laydown areas will be required.

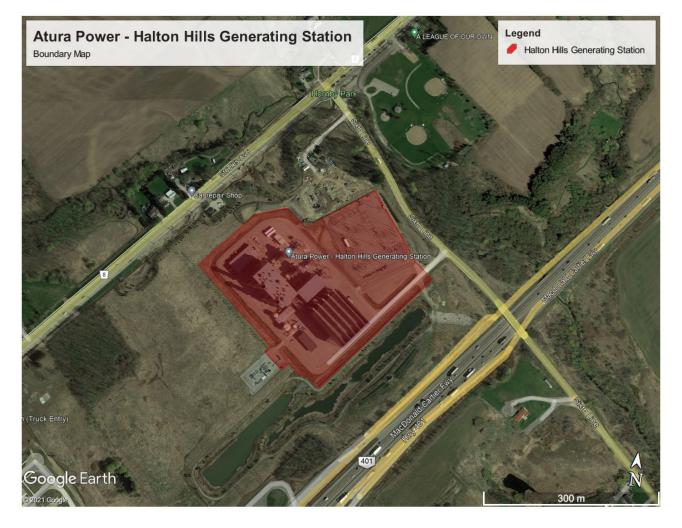


Figure 1-3: Aerial Image of the Site

1.5 Project Parts and Activities

1.5.1 Project Parts

The planned project consists of replacing the existing parts within the turbines with improved parts made of materials with optimised cooling characteristics that will allow a high operating temperature. This will increase the output of the gas turbine and therefore increase the electrical output of HHGS by an average electrical output capacity of 27 MW (at 15 °C reference level ambient air conditions).

Figure 1-4 illustrates the parts which will be replaced on both gas turbines currently located within HHGS:

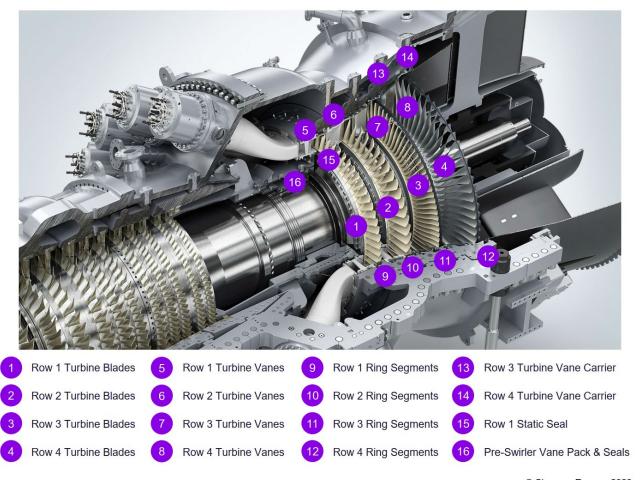


Figure 1-4: Parts to be Upgraded

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The upgrades, including both the replaced parts of the turbine detailed in **Figure 1-4** as well as the parts being replaced further downstream of the turbine, will include the following:

- Turbine Row 1 4 Blades, Vanes, and Ring Segments
- Turbine Stages 3 & 4 Vane Carriers
- Row 1 Static Seals
- FD3(Xh) Pre-swirler Vanes and Seals
- Larger Capacity bleed valves Stages 2 and 3
- Stage 2 Letdown system
- Upgraded Exhaust Thermocouple design
- Control System Logic Changes

1.5.2 Activities

The upgrade-specific work will take approximately eight weeks to complete and take place during a standard hot gas path inspection in the spring of 2024. At this time specialised crews of skilled trades staff will disassemble the gas turbines, replace the existing parts with new ones, and reassemble the gas turbines. Project activities are anticipated to include site preparation, transportation of equipment and parts, replacement of parts, and returning the used parts back to the original equipment manufacturer. The work will take place during a standard maintenance outage and the facility will be shut down for this work. Once back in service, there will be no change to continued operations.

Table 1-1 summarises the anticipated schedule to complete the planned upgrades.

Activity	Timeline
Environmental Compliance Approval Amendment	Submitted March 29, 2023
Environmental Screening Process	Spring to Fall, 2023
Turbine Upgrades	Spring 2024
Commissioning & Testing	Spring 2024
Operations	Spring/Summer 2024

Table 1-1: Project Schedule

1.6 Report Organisation

This Screening Report documents the Environmental Screening Process undertaken for the project and is organised as follows:

- Section 1 Introduction
- Section 2 Permits and Approvals
- Section 3 Environmental Screening
- Section 4 Summary of Engagement
- Section 5 Environmental Advantages and Disadvantages
- **Section 6** References

The report also includes the following appendices which provide supplemental detail:

- Appendix A Letter from the Independent Electricity System Operator
- Appendix B Letter from Siemens Energy
- Appendix C Engagement Records

2. Permits and Approvals

2.1 Environmental Compliance Approval (Air/Noise)

HHGS currently operates under the Environmental Compliance Approval (ECA) for air and noise (number 0060-8ALS3M issued November 23, 2010, and amended December 21, 2012). An ECA is required for air and noise emissions from the facility as required under Section 9 of Ontario's *Environmental Protection Act*. Given that the facility upgrades will increase the MW output of the facility and change air emissions from the facility, an amendment to the ECA is required.

Atura Power submitted an amendment to the existing ECA on March 29, 2023. The amendment includes detailed technical information on atmospheric emissions (e.g., nitrogen oxides (NO_x)). Atura Power's request for priority review was accepted by the MECP Client Services and Permissions.

2.2 Ontario Environmental Assessment Act

As noted in Section 1.3 of this report, the planned upgrades at HHGS are subject to the Environmental Screening Process for Electricity Projects pursuant to O.Reg.116/01 under the *Act*. The upgrades will result in an increase in the nameplate capacity of more than 5 MW (to an output of 710 MW from the current 683 MW), classifying it as a Category B project under the Environmental Screening Process. This Screening Report addresses the requirements, and documents the results, of the Environmental Screening Process.

2.3 Other Permits and Approvals

Given that the upgrades will occur within the existing facility and no ground disturbance is required, no additional environmental permits and approvals will be required.

3. Environmental Screening

3.1 Existing Conditions

HHGS is an industrialised facility and the activities to complete the upgrades will take place entirely within the existing facility on previously developed land and will require no physical changes to the HHGS footprint. As part of an Environmental Review completed in 2007 by TransCanada Energy Ltd. (SENES Consultants Limited, 2007), environmental baseline studies were conducted to characterise the local environment. This Environmental Review was used to inform the screening in **Section 3**.

As previously mentioned, the project is located in the Town of Halton Hills, Ont. According to the Town of Halton Hills Official Plan, consolidated in December 2020, the project is planned on lands within the Premier Gateway Employment Area and designated as Prestige Industrial Area (Town of Halton Hills, 2020). Stormwater ponds are located south of the existing HHGS facility. Schedule A8 from the Halton Hills Official Plan (**Figure 3-1**) identifies the land uses in the area surrounding HHGS.

According to the Halton Hills Official Plan, the Premier Gateway Employment Area is identified as the town's Prestige Employment Area where large scale employment growth is to be directed. As the "gateway" to the town, a high standard of design is required for new office, warehousing, manufacturing, and commercial development located in this area. Prestige Industrial Areas refer to land that permits the manufacturing of industrial products, factories, power plants, warehouses, and other uses that are important to that area's economy. This includes spaces that create, store or distribute products, or produce or refine energy or fuel.

Just east of the project site and continuing east of Sixth Line are lands, including Hornby Creek, designated as Greenlands according to the Halton Hills Official Plan. At the southeast corner of Steeles Ave. and Sixth Line are lands designated as Major Parks and Open Space Area, as well as Hornby Park, a community park. North of Steeles Ave. are lands designated as Protected Countryside Area. South of Highway 401 are lands designated as Agricultural Area according to the Town of Milton Official Plan, consolidated in August 2008. These are bordered by the Permanent Urban Separator, which protects the farmlands from urbanisation (Town of Milton, 2008). West of the project site is Special Policy Area (SPA) 3, which allows outdoor storage that is accessory to permitted manufacturing and business office use. Beyond SPA 3 there is an industrial complex containing Kraft Heinz Distribution Centres and Hopewell Logistics – Kraft Canada.

The project is located within the watershed managed by Conservation Halton. The project is not located within the Greenbelt, Oak Ridges Moraine, Niagara Escarpment or Lake Simcoe Protection area.

Phase 1B Employment Area SCHEDULE A8
PREMIER GATEWAY EMPLOYMENT
AREA LAND USE PLAN Phase 2B Employment Area Prestige Industrial Area Gateway Area Major Parks and Open Space Area Private Open Space Area Greenlands Employment Phase 1A Employment Phase 1B Employment Phase 2A (Regional Phasing 2021-2031) Employment Phase 2B (Regional Phasing 2021-2031) Existing Rural Residential Concentration Special Policy Area HPBATS/GTA West Corridor Protection Area Town of Halton Hills Boundary Urban Boundary Waterbody Watercourse Community Park Building with Historic Significance Stormwater Management Pond Potentially Unstable Slopes **DECEMBER 31, 2020** CONSOLIDATION This schedule forms part of the Official Plan and must be read together with the text. Parts of this Schedule are currently pending approval. Please Refer to Figure 1 in the Preamble. TOWN OF HALTON HILLS OFFICIAL PLAN

Figure 3-1: Halton Hills Official Plan Schedule A8 Premier Gateway Employment Area Land Use Plan

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3.2 Rationale for Effects Assessment

Appendix C of the Guide includes a Screening Criteria Checklist that needs to be applied to every project subject to the Environmental Screening Process (see **Section 3.4**). As the proponent, Atura Power is required to identify potential negative environmental effects resulting from the project as it relates to each screening criterion based on current knowledge or preliminary investigations.

The Screening Criteria used to identify potential negative effects of the project are listed under the following categories:

- 1. Surface and ground water
- 2. Land
- 3. Air and noise
- 4. Natural environment
- Resources
- 6. Socio-economics
- 7. Heritage and culture
- 8. Indigenous communities
- 9. Other (including wastes)

The Guide states that, in cases where there is uncertainty about the project's potential for negative effects pertaining to a select criterion within the above-mentioned categories, further studies may be undertaken to accurately identify and understand the potential for effects.

3.3 Environmental Effects Assessment

Of the nine categories listed above, one category (i.e., air and noise) was associated with some uncertainty in determining the potential for negative effects on air quality. For the remaining categories, there are no uncertainties regarding the potential for negative effects and there are no additions to be made under the 'Other' category and no wastes.

To provide further details on the Screening Criteria related to air emissions, an assessment was undertaken and is outlined in **Sections 3.3.1 to 3.3.3**.

3.3.1 Air Quality

The potential environmental effects of the project on air quality include potential changes in air emissions of combustion products (i.e., NO₂, SO₂, CO and particulate matter) from the gas turbines.

The assessment of the environmental effects of the project on local air quality considered emissions from the following sources at the facility:

- Combustion emissions from two natural gas fired combustion turbines to generate electricity, each having a nominal rating of 208 MW and equipped with a dry low-NO_x burner system having a nominal heat input of 2,268 GJ per hour and an evaporative cooler to chill the inlet air for each combustion turbine;
- Combustion emissions from two horizontal Heat Recovery Steam Generators (HRSGs), each serving a combustion turbine described above for recovery of heat from the combustion gases exiting the combustion turbine to generate steam. Each HRSG is equipped with a natural gas fired duct burner having a nominal heat input of 487.6 GJ per hour and exhausts into the atmosphere at a volumetric flow rate of approximately 550 cubic metres per second (m³/s) (with the duct burner operating at full capacity) at an exhaust temperature of about 92.1°C, through its individual HRSG stack, each having an exit diameter of 6.25 m and extending 61 m above grade;
- Combustion emissions from one natural gas fired auxiliary boiler, equipped with dry low-NO_x burners having a nominal heat input of 139 GJ per hour, exhausting into the atmosphere at a volumetric flow rate of approximately 23 actual m³/s at an exhaust temperature of approximately 266°C through a stack having an exit diameter of 1.36 m and extending 13.7 m above grade; and
- Combustion emissions from one dew point heater exhausting into the atmosphere at a maximum volumetric flow rate of 1.7 m³/s at an exhaust temperature of approximately 593°C through a stack having an exit diameter of 0.31 m and extending 5.2 m above grade.

The methodology used to assess potential effects on local air quality from the project involved:

- Quantifying existing background air quality levels based on local monitoring data made available by the MECP;
- Modelling potential project air emissions in accordance with applicable MECP guidance (Ontario Ministry of the Environment, Conservation, and Parks [MECP], 2018; MECP, 2017); and
- Adding predicted project air emissions to the existing background air quality levels and comparing total concentrations against applicable air quality criteria set by the MECP to determine the potential effects on local air quality due to the project.

3.3.2 Air Quality Criteria and Background

A summary of applicable air quality criteria from the MECP's list of Ambient Air Quality Criteria (AAQC) for these contaminants is provided below in **Table 3-1** (MECP, 2020). An AAQC is not a regulatory value, but a concentration of a contaminant in air that is protective against adverse effects on health and/or the environment. The MECP bases AAQCs on the most sensitive effects identified through a review carried out at the time of AAQC development. Therefore, air

concentrations that meet the applicable MECP AAQC would not represent health effects that may be acute (e.g., pulmonary irritation) or chronic (e.g., a life-time increased risk of cancer).

Averaging AAQC CAS No. **Contaminant Name Basis Period** $(\mu g/m^3)$ Nitrogen dioxide (NO₂) 10102-44-0 1-Hour 400 Health 24-Hour 200 Health Carbon monoxide (CO) 630-08-0 1-Hour 36,200 Health 15,700 8-Hour Health 10-Minute Sulphur dioxide (SO₂) 7446-09-5 178 Health 1-Hour 106 Health Annual 10.6 Vegetation Suspended particulate matter (SPM) N/A 24-Hour 120 Visibility Annual 60 Visibility Particulate matter – PM_{2.5} (fine fraction) 27 N/A 24-Hour Health Health Annual 8.8 50 Particulate matter – PM₁₀ (inhalable fraction) N/A 24-Hour Health

Table 3-1: Ambient Air Quality Criteria

The MECP maintains an air quality monitoring station at 1120 Main St. E. in Milton, Ont., located approximately 5 km from HHGS. The pollutants measured at this monitoring station common to HHGS are NO_2 , SO_2 , and fine particulate matter $(PM_{2.5})$. The monitoring station in Milton only has three complete years of published data (i.e., January 2019 to December 2021). However, due to its proximity to the HHGS site, it was determined that this data would still be the most representative of the existing air quality conditions for NO_2 , SO_2 and $PM_{2.5}$.

The closest MECP air quality monitoring station which monitors CO is Toronto West located at 125 Resources Rd., Toronto, Ont., approximately 40 km from HHGS. The Toronto West monitoring station has five complete years of published data (i.e., January 2017 to December 2021). Data collected from this station is representative of a more urban area compared to the location of the project and therefore provides a conservative estimate of the existing air quality conditions of CO at HHGS.

To provide a conservative assessment of existing air quality at HHGS, the 90th percentile 1-hour, 8-hour and 24-hour average and the maximum annual average background concentrations measured at the stations were carried forward to the air quality effects assessment for NO₂, CO, SO₂, SPM and PM₁₀. In accordance with the AAQC (MECP, 2020), the three-year average of the annual 98th percentile 24-hour average and the three-year average of the annual average background concentrations were carried forward to the air quality effects assessment for PM_{2.5}. Note that suspended particulate matter (SPM) and particulate matter PM₁₀ (inhalable fraction) have not been monitored at any MECP monitoring stations since 2000 and 2001, respectively. In the initial EA for HHGS completed in February 2007, general ratios for SPM and PM₁₀ to PM_{2.5} were developed to estimate baseline concentrations. The same ratios have been employed herein to

estimate SPM and PM₁₀ baseline concentrations based on current PM_{2.5} levels monitored at the Milton station. The applicable monitoring data from the Milton and Toronto stations are summarised in **Table 3-2**.

		Averaging	Background Air Concentration (μg/m³)		
Contaminant Name	CAS No.	Averaging Period	Milton Station (2019-2021)	Toronto West Station (2017-2021)	
Nitrogen dioxide (NO ₂)	10102-44-	1-Hour	36.6	=	
	0	24-Hour	29.5	-	
Carbon monoxide (CO)	630-08-0	1-Hour	-	411	
		8-Hour	-	399	
Sulphur dioxide (SO ₂)	7446-09-5	10-Minute	6.58	-	
		1-Hour	3.99	-	
		Annual	3.01	-	
Suspended particulate matter ¹ (SPM)	N/A	24-Hour	46.1	-	
		Annual	23.7	-	
Particulate matter – PM _{2.5} (fine fraction)	N/A	24-Hour	19.6	-	
		Annual	7.39	-	
Particulate matter - PM ₁₀ (inhalable fraction) ¹	N/A	24-Hour	20.2	-	

Table 3-2: Representative Background Air Concentrations

Note: 1. SPM and PM₁₀ concentrations estimated from measured PM_{2.5} concentration

3.3.3 Air Quality Assessment

The assessment of the environmental effects of the project on local air quality considered natural gas combustion emissions from two combustion turbines, two duct burners, one auxiliary boiler, and one dew point heater as described in **Section 3.3.1**. In accordance with MECP guidance (MECP, 2018), combustion emissions from the natural gas-fired comfort heating equipment, standby diesel generator, and emergency diesel fire pump were not considered significant. Combustion emissions from the auxiliary boiler and dew point heater were also shown to be insignificant in accordance with this guidance and were excluded from the ECA amendment application. For completeness, however, these combustion sources were conservatively included in the assessment herein.

Estimates of maximum combustion product emission rates from each source were developed using emissions guarantees supplied by the manufacturer, historic HHGS source testing, and published emission factors. The NO_x and CO emissions of a combustion turbine vary with load. When the unit is starting up or operating under no load or light load, emissions are typically higher than when the unit is operating at a steady state full load. To capture the intermittent plant emissions associated with start-up and shutdown conditions into the operating scenario of the effects assessment, the emissions of NO_x and CO from the GTGs and associated HRSG duct burners was calculated based on recent continuous emission monitoring system (CEMS) data for startup and shutdown conditions with consideration to the change in the manufacturer's guarantee at full load conditions.

To provide a conservative assessment of project effects on air quality, only the worst-case operating scenario for each source of air emissions was considered in the assessment, which included each source operating at its individual maximum rate of operations. The list of air emissions sources considered in the effects assessment is shown in **Table 3-3**.

Table 3-3: Source Parameters and Emission Rates

		Source I	Е	mission Data	1		
Source Description	Stack Volumetric Flow Rate (m³/s)	Stack Temperature (°C)	Stack Inner Diameter (m)	Stack Height Above Grade (m)	Contaminant Name	CAS No.	Maximum Emission Rate (g/s)
Gas turbine	550	92.1	6.25	61.0	NO _x (as NO ₂)	10102-44-0	40.6
generator 1					CO	630-08-0	1040.0
and HRSG duct burner					SO ₂	7446-09-5	1.0
duct burner					SPM	-	0.6
					PM ₁₀	-	0.6
					PM _{2.5}	-	0.6
Gas turbine	550	92.1	6.25	61.0	NO _x (as NO ₂)	10102-44-0	40.6
generator 2 and HRSG					CO	630-08-0	1040.0
duct burner					SO ₂	7446-09-5	1.0
duct burner					SPM	-	0.6
					PM ₁₀	-	0.6
					PM _{2.5}	-	0.6
Auxiliary	23	266	1.36	13.7	NO _x (as NO ₂)	10102-44-0	2.3
Boiler					СО	630-08-0	1.4
					SO ₂	7446-09-5	0.01
					SPM	-	0.03
					PM ₁₀	-	0.03
					PM _{2.5}	-	0.03
Dew Point	1.7	593	0.31	5.2	NO _x (as NO ₂)	10102-44-0	0.07
Heater					CO	630-08-0	0.06
					SO ₂	7446-09-5	0.0004
					SPM	-	0.001
					PM ₁₀	-	0.001
					PM _{2.5}	-	0.001

In accordance with MECP guidance (MECP, 2017), emissions from the sources shown in **Table 3-3** were modelled with the AERMOD air dispersion model to predict the concentrations of each of the listed contaminants at the maximum point of impingement (POI). The maximum POI concentrations were based on the operating conditions where all identified sources are operating simultaneously and continuously at their individual maximum rates of emission.

The results of this modelling were then added to the representative existing air quality conditions (see **Table 3-2**) to provide estimates of local air quality during operations of the project for each contaminate (i.e., maximum predicted air concentrations at POI). **Table 3-4** (MECP, 2020) provides

a comparison of the maximum predicted air concentrations at POI to the applicable MECP AAQC (**Table 3-1**). Predicted air concentrations meet all applicable MECP AAQC and do not represent health effects that may be acute (e.g., pulmonary irritation) or chronic (e.g., a life-time increased risk of cancer) and no mitigation measures are required.

Contaminant Name	Total Facility Emission Rate (g/s)	Averaging Period	Max. Predicted Incremental Concentration at POI (μg/m³)	Background Concentration (µg/m³)	Total Predicted Conc. At POI (µg/m³)	Ontario AAQC (µg/m³)	Total Conc. As Percent of AAQC
NO (as NO-)	83.5	1-Hour	223.8	36.6	260.4	400	65.1%
NO _x (as NO ₂)	03.5	24-Hour	133.1	29.5	162.6	200	81.3%
CO.	2081.1	1-Hour	5,185.3	411.4	5,596.7	36,200	15.5%
СО	2001.1	8-Hour	4,100.9	399.3	4,500.2	15,700	28.7%
		10-Minute	7.9	6.6	14.5	178	8.2%
SO_2	1.9	1-Hour	4.8	4.0	8.8	106	8.3%
		Annual	0.1	3.0	3.1	10.6	29.1%
SPM	1.3	24-Hour	2.0	46.1	48.1	120	40.1%
SFIVI	1.3	Annual	0.1	23.7	23.8	60	39.7%
PM _{2.5}	1.3	24-Hour	2.0	19.6	21.7	28	80.2%
□ IVI2.5	1.3	Annual	0.1	7.39	7.5	10	85.2%
PM ₁₀	1.3	24-Hour	2.0	20.2	22.2	50	44 3%

Table 3-4: Summary of Maximum Predicted Air Concentrations at POI

As shown in **Table 3-4**, emissions of air contaminants from the facility's operations were predicted to comply with applicable AAQC set by the MECP at the maximum POI. Notably, this includes the addition of conservative background concentrations. For example, although the total predicted annual concentration of PM_{2.5} at the POI was 7.50 micrograms per cubic metre (μ g/m³) (or 85.2% of the 8.8 μ g/m³ limit), 98.5% of this predicted value (7.39 μ g/m³) was attributable to background PM_{2.5} and only 1.5% was attributable to emissions from HHGS. Further, it was conservatively assumed that all particulate emissions from the facility were within the fine particulate fraction known as PM_{2.5} (i.e., emissions of PM_{2.5} and PM₁₀ were assumed to be equal to SPM emissions). During actual operations of the facility, it is expected that fine particulates (PM₁₀ and PM_{2.5}) will comprise only a fraction of total SPM emissions. As a result, actual concentrations of the particulate fractions (PM₁₀ and PM_{2.5}) will likely be less than the levels shown in **Table 3-4**. It is also important to note that no conversion factor of NO_x to NO₂ was applied to the predicted incremental concentration and therefore the total predicted concentration of NO₂ is equal to NO_x. This assumption is also conservative.

When assessed without mitigation, the project has resulted in emissions that meet the applicable AAQC set by the MECP. Additionally, the modelling results were conservative and local air quality is expected to be lower than those values in **Table 3-4**.

3.4 Review of Screening Criteria

The Screening Criteria Checklist as presented in Appendix C of the Guide provides the following questions that must be answered with 'Yes' or 'No' based on whether the project has potential for negative effects on these criteria prior to any mitigation being applied. Additional information is also provided to support the selected response.

1. Surface and Ground Water

Criterion	Yes	No	Additional Information
1.1 have negative effects on surface water quality, quantities or flow?		X	The planned project will not have any effects on Hornby Creek east of the site or stormwater ponds south of the site. Surface water quality, quantities or flow will not be affected by project activities.
1.2 have negative effects on ground water quality, quantity or movement?		Х	The planned project will not have any effects on ground water quality or quantity as project activities will not require water taking or change water drainage at the existing HHGS facility.
1.3 cause significant sedimentation, soil erosion or shoreline or riverbank erosion on or off-site?		Х	All planned project activities will occur within the existing HHGS footprint and do not require soil movement.
1.4 cause potential negative effects on surface or ground water from accidental spills or releases to the environment?		Х	All planned project activities will occur within the existing HHGS footprint within an industrialised area and away from water resources. If an accidental spill occurred it would be within the plant and existing spills management protocols will be undertaken to report and clean the spill.

2. Land

Criterion	Yes	No	Additional Information
2.1 have negative effects on residential, commercial or institutional land uses within 500 metres (m) of the site?		Х	All planned project activities will occur within the existing HHGS footprint.
2.2 be inconsistent with the Provincial Policy Statement, provincial land use or		Х	The planned project is consistent with Section 1.6.11.1 of the Provincial Policy Statement.
resource management plans?			Provincial land use will not change as a result of the project.
			The project is being undertaken in response to the IESO's plan to meet Ontario's energy needs.
2.3 be inconsistent with municipal land use policies, plans and zoning bylaws?		Х	The planned project is consistent with municipal land use policies and zoning amendments are not required as a result of the project.
			The project is located within the Premier Gateway Employment Area and on lands designated as Prestige Industrial Area.

Criterion	Yes	No	Additional Information
2.4 use hazard lands or unstable lands subject to erosion?		Х	All planned project activities will occur within the existing HHGS footprint and will not affect hazard or unstable lands.
2.5 have potential negative effects related to the remediation of contaminated land?		Х	The planned project works would not require remediation of contaminated land.

3. Air and Noise

Criterion	Yes	No	Additional Information
3.1 have negative effects on air quality due to emissions of nitrogen dioxide, sulphur dioxide, suspended particulates, or other pollutants?		X	Section 3.3 of this report provides an assessment of environmental effects of air emissions. The assessment determined that without mitigation, emissions meet the applicable AAQC set by the MECP.
3.2 cause negative effects from the emission of greenhouse gases (CO ₂ , methane)?		X	Planned project works will improve the efficiency of the gas turbines and as a result reduce the greenhouse gas intensity (i.e., the ratio of CO ₂ equivalent emissions to total electricity generation) of the facility.
3.3 cause negative effects from the emission of dust or odour?		Х	The project will not have effects from the emissions of dust or odour.
3.4 cause negative effects from the emission of noise?		Х	The project will not have any effects from the emissions of noise. Appendix B provides a letter from the equipment manufacturer stating that no changes to the Heat Recovery Steam Generator (HRSG) exhaust stack sound levels are expected as a result of project upgrades.

4. Natural Environment

Criterion	Yes	No	Additional Information
4.1 cause negative effects on rare, threatened or endangered species of flora or fauna or their habitat?		X	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on rare, threatened or endangered species of flora or fauna or their habitat are anticipated.
4.2 cause negative effects on protected natural areas such as ANSIs (Areas of Natural and Scientific Interest), ESAs (Environmentally Sensitive Areas) or other significant natural areas?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on protected natural areas such as ANSIs, ESAs or other significant natural areas will occur.
4.3 cause negative effects on wetlands?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on wetlands will occur.

Criterion	Yes	No	Additional Information
4.4 have negative effects on wildlife habitat, populations, corridors or movement?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on wildlife habitat, populations, corridors or movement will occur.
4.5 have negative effects on fish or their habitat, spawning, movement or environmental conditions e.g., water temperature, turbidity, etc.)?		X	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on fish or their habitat, spawning, movement or environmental conditions will occur.
4.6 have negative effects on migratory birds, including effects on their habitat or staging areas?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on migratory birds will occur.
4.7 have negative effects on locally important or valued ecosystems or vegetation?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on locally important or valued ecosystems or vegetation will occur.

5. Resources

Criterion	Yes	No	Additional Information
5.1 result in inefficient (below 40%) use of a non-renewable resource (efficiency is defined as the ratio of output energy to input energy, where output energy includes electricity produced plus useful heat captured)?		Х	Though improved thermal efficiency has not been quantified on a net plant basis, there will be a decrease in 450 British thermal units (BTU)/kilowatt-hour (kWh) per unit. The overall plant efficiency will remain above the ECA thermal efficiency requirement.
5.2 have negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on agricultural lands will occur.
5.3 have negative effects on existing agricultural production?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on agricultural lands will occur.
5.4 have negative effects on the availability of mineral, aggregate or petroleum resources?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects mineral, aggregate or petroleum resources will occur.
5.5 have negative effects on the availability of forest resources?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on forest resources will occur.
5.6 have negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects game and fishery resources will occur.

6. Socio-economic

Criterion	Yes	No	Additional Information
6.1 have negative effects on neighbourhood or community character?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on neighbourhood or community character will occur.
6.2 have negative effects on local businesses, institutions or public facilities?		Х	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on local businesses, institutions or public facilities will occur.
6.3 have negative effects on recreation, cottaging or tourism?		X	Planned project works will take place entirely within lands that have been built-up and industrialised. No effects on neighbourhood or community recreation, cottaging or tourism are anticipated.
6.4 have negative effects related to increases in the demands on community services and infrastructure?		Х	The planned project will not increase demands on community services and infrastructure.
6.5 have negative effects on the economic base of a municipality or community?		Х	The planned project will not have negative effects on the economic base of a municipality or community.
6.6 have negative effects on local employment and labour supply?		Х	The planned project will not have negative effects on local employment and labour supply.
6.7 have negative effects related to traffic?		Х	The planned project will not have negative effects related to traffic as all the necessary parts will likely be delivered in one vehicle, similar to current maintenance activities.
6.8 cause public concerns related to public health and safety?		Х	The planned project will not affect public health or safety.

7. Heritage and Culture

Criterion	Yes	No	Additional Information
7.1 have negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes?		Х	The planned project will not affect a farmhouse with Historic Significance north of site or Bloomfield Pioneer Cemetery approximately 1 km south of site.
7.2 have negative effects on scenic or aesthetically pleasing landscapes or views?	gative effects on scenic or		Planned project works will take place entirely within lands that have been built-up and industrialised and will not result in taller structures. No effects on scenic or aesthetically pleasing landscapes or views will occur.

8. Indigenous Communities

Criterion	Yes	No	Additional Information
8.1 cause negative effects on First Nations or other Aboriginal communities?			Planned project works will take place entirely within lands that have been built-up and industrialised. Engagement activities with Indigenous communities to date are documented in Section 4 ; engagement with these communities is ongoing and will continue beyond the Environmental Screening Process.

9. Other

Criterion	Yes	No	Additional Information
9.1 result in the creation of waste materials requiring disposal?		Х	Waste disposal will not be required as replaced parts will become the property of the original equipment manufacturer and will be refurbished or recycled.
9.2 cause any other negative environmental effects not covered by the criteria outlined above?		Х	No other environmental effects have been identified as a result of the planned project.

The above review of the HHGS upgrades project against the Screening Criteria in Appendix C of the Guide has determined that the response to all questions is "No", indicating that there are no potential negative environmental effects resulting from the HHGS upgrades project.

3.5 Mitigation Measures, Residual Net Effects and Impact Management Commitments

The screening identified that, without any mitigation, all regulatory requirements will be met, and no other impact management commitments will be required. Atura Power will continue to manage air emissions from HHGS through ongoing continuous emissions monitoring per the terms and conditions of their ECA.

4. Summary of Engagement

Engagement with the public, agencies and Indigenous communities is a key component of the EA process and was integrated from the initial development stages of the project planning and throughout the Environmental Screening Process.

This section describes the activities that were undertaken to engage with members of the public, agencies and Indigenous communities, and demonstrates how Atura Power meets and exceeds the requirements of the O.Reg. 116/01 Environmental Screening Process. This section is organised as follows:

- **Section 4.1** Engagement Program
- **Section 4.2** Project Commencement and Notification
- Section 4.3 Summary of Public Engagement
- Section 4.4 Summary of Engagement with Municipal Staff and Elected Officials
- **Section 4.5** Summary of Agency Engagement
- Section 4.6 Summary of Indigenous Engagement
- Section 4.7 Other Engagement
- **Section 4.8** Notice of Completion
- Section 4.9 Exemption Request

4.1 Engagement Program

According to the Guide, proponents are required to prepare a Notice of Commencement at the beginning of the Environmental Screening Process and a Notice of Completion upon the completion of the Environmental Screening Process. Proponents are also required to document the engagement program and engagement activities, agencies contacted, a summary of concerns or issues, and how concerns and issues have been addressed. Further, the public engagement program should:

- "identify potentially affected stakeholders;
- describe how the project may affect the environment;
- provide appropriate notification to identified stakeholders as prescribed in the Environmental Screening/Review Process;
- inform the public where, when and how they can be involved;
- identify public concerns and issues raised during the program; and
- document how public input is taken into account in the screening process and in the project planning and development" (Government of Ontario, 2011).

The goal of the HHGS upgrades engagement program is to ensure that all concerns and issues are collected and addressed as appropriate, and to build a positive relationship between Atura Power, the local community, Indigenous communities and any members of the public who may be interested in the project. To achieve this goal and meet the above EA engagement requirements, several communication tools and engagement activities were undertaken as described in **Section 4.1.1**. **Sections 4.2** to **4.9** provide details on how the engagement activities were completed and the responses received from the public, the municipality, agencies and Indigenous communities, as well as provide a summary of comments and questions received from these groups to date.

4.1.1 Communication Tools and Engagement Activities

Below is an overview of the communication tools and engagement activities that were undertaken for the HHGS upgrades.

- Project contact list a project contact list was developed by researching the area to identify potentially interested groups, including elected officials and municipal staff.
 Agencies were identified using the "Environmental Assessment Government Review Team Master Distribution List" (MECP, 2023). Indigenous communities were identified based upon proximity to, and potential interest in, the project.
- **Comment tracking tool** a database was developed to track comments that were received on the project. The database includes details such as who provided comments and when and how comments were received, as well as responses provided by the project team, and when and how the responses were provided.
- Project webpage a project webpage (<u>www.aturapower.com/haltonupgrade</u>) was
 developed and maintained throughout the duration of the project. The webpage
 contains information on the project, the Environmental Screening Process, project
 timeline, project documents, public meeting materials, and a contact form for sending
 questions and comments to the project team.
- Newspaper advertisements, hand deliveries, emails and direct mailouts of notices and accompanying letters – several methods were used to distribute project notices. These methods were selected based on either identified preference or previous project experience as the most appropriate and effective way of communicating with the public, agencies and Indigenous communities. Sections 4.2, 4.6 and 4.8 provide details on the distribution methods for each notice.
- **Virtual public meeting** the project team hosted a virtual public meeting to share information about the project and provide an opportunity for attendees to ask questions and provide feedback. Details on the meeting are provided in **Section 4.3.2**.
- Frequently Asked Questions (FAQs) an FAQs document was developed and provided on the project webpage, including general project information as well as responses to common questions and comments received on the project.

4.1.2 Documentation and Record of Engagement

Sections 4.3 to **4.7** include a summary of the comments received from the public, agencies and Indigenous communities to date. Copies of correspondence are provided in **Appendix C** from the date the project commenced on May 19, 2023 to September 26, 2023. Note, any personal information for members of the public are redacted from these records to maintain privacy.

4.2 Project Commencement and Notification

The project commenced with the publication of the Notice of Commencement on May 19, 2023, in *Halton Hills Today*, a local online newspaper. A copy of the publication is provided in **Appendix C**. The Notice of Commencement included a project description stating the nature of the project, location, details, and purpose. The notice also communicated the start of the Environmental Screening Process and concluded by providing project contacts and details of an upcoming virtual meeting. This notice can be found in **Appendix C**.

The Notice of Commencement was distributed to recipients potentially interested in the project via a variety of methods as shown in **Table 4-1**. Covering letters, when provided, included details on the project and explained the planned engagement process, including the virtual public meeting (see **Appendix C**).

Table 4-1: Notice of Commencement Recipients

Туре	Name	Method	Date	
Provincial and Federal Ministries			Mail – May 18, 2023 Email – May 19, 2023	
			, ,	
	Ontario Ministry of Natural Resources and Forestry			
	Ontario Ministry of Energy			
	Ontario Ministry of Mines			
	Ontario Ministry of Municipal Affairs and Housing			
	Ontario Ministry of the Solicitor General			
	Ministry of Transportation Ontario			
	Ontario Ministry of Education			
Municipalities	Town of Halton Hills	Mail / email of	Mail – May 18, 2023	
	Member of Provincial Parliament for Wellington-Halton Hills	covering letter and notice	Email – May 19, 2023	
	Federal Member of Parliament for Wellington-Halton Hills			
	Regional Municipality of Halton			
	Town of Milton			
	City of Brampton			
	Town of Caledon			
	Town of Erin			

Туре	Name	Method	Date
	City of Mississauga		
	Guelph/Eramosa Township		
Other Agencies	Hydro One Networks Inc. (HONI)	Mail / email of	Mail – May 18, 2023 Email – May 19, 2023
	Independent Electricity System Operator (IESO)	covering letter and notice	
	Halton Hills Hydro		
	Conservation Halton		
	Halton Hills Fire and Emergency Services		
Adjacent Property Owners/ Tenants/ Residents	Fifteen notices delivered to neighbours directly adjacent to the project site, including twelve residences and three businesses	Hand delivered	May 19, 2023
Indigenous Communities	Mississaugas of the Credit First Nation (MCFN)	Email of covering letter and notice	May 19, 2023
	Six Nations of the Grand River		
	Haudenosaunee Development Institute (HDI)		
	Métis Nation of Ontario (MNO)		
	Credit River MNO Council		

Several Indigenous communities were contacted through an early engagement process (**Section 4.6**). No specific Indigenous communities are located within the boundaries of the Town of Halton Hills. Initial phone calls were made to Indigenous communities to establish the main point of contact on May 5, 2023, ensuring that dialogue with communities commenced prior to the announcement of the project to the general public. This initial contact was followed by an email introduction to Atura Power's point of contact. The Notice of Commencement and an accompanying covering letter to contacts were shared on May 19, 2023.

A separate letter was emailed on May 19, 2023, to four contacts from the MECP. This letter contained information about the project, as well as a request for any Indigenous communities to be engaged as part of the planned project. This MECP covering letter can be found in **Appendix C**.

4.3 Summary of Public Engagement

4.3.1 Engagement with Adjacent Landowners

While hand-delivering the Notice of Commencement to adjacent landowners on May 19, 2023, two of 11 recipients engaged in dialogue with the project team. These recipients were interested in the potential project effects on their properties (e.g., noise effects and property values). Comments and questions received during these discussions were documented and included in the FAQs document that was posted on the project webpage (**Appendix C**).

4.3.2 Virtual Public Meeting

An invitation to the virtual public meeting was provided in the Notice of Commencement. Along with the initial distribution of the Notice of Commencement on June 14, 2023, Atura Power sent an email to remind participants of the upcoming virtual public meeting.

The virtual public meeting took place over Microsoft Teams Live on June 15, 2023. The meeting began at 6:30 p.m. Eastern Time (ET) and ended at 6:52 p.m. ET. During the virtual public meeting the project team shared a presentation and provided time for questions and answers.

There were nine attendees at the virtual public meeting. No questions from the public were received during the meeting.

4.4 Summary of Engagement with Municipal Staff and Elected Officials

Throughout the operation of HHGS, Atura Power has built a strong relationship with the Town of Halton Hills and continues to build this relationship. As such, communication between the project team and municipal staff and elected officials has been open and ongoing to ensure that the Town of Halton Hills and its representatives are aware of the project's status and activities. Prior to issuing the Notice of Commencement, Atura Power met with the Town of Halton Hills Mayor at the Town Hall on February 9, 2023, to discuss Atura Power's plans for HHGS, including upgrades to the facility. As mentioned in **Section 4.2**, the Town of Halton Hills was provided a Notice of Commencement. The notice was sent via email to municipal staff, the mayor, and provincial and federal Members of Parliament on May 19, 2023. **Table 4-2** below provides a summary of the correspondence between the municipal representatives and the project team following the distribution of the Notice of Commencement. All correspondence with municipal staff and elected officials following the distribution of the notice occurred via email and are provided in **Appendix C**.

 Table 4-2:
 Correspondence with Municipal Representatives

Organisation	Title	Comment and Date	Response and Date
Town of Halton Hills	Senior Manager, Climate Change & Asset Management Senior Manager, Climate	June 14, 2023 "Thank you for the email and for the heads up regarding the public meeting. We look forward to learning more about the upgrade project. Should we send our questions by email beforehand?" June 27, 2023	June 14, 2023 "There will be an opportunity to submit questions to us through the MS Teams Live platform after our presentation tomorrow evening. You can also email questions or comments to our dedicated project email address: haltonupgrade@aturapower.com." July 27, 2023
	Change & Asset Management	"Thank you for the virtual public meeting on June 15th about the proposed Halton Hills Generating Station efficiency upgrades. It was very informative and we appreciate the opportunity to ask follow-up questions as per below. 1. Can you clarify the scope of the Upgrade Project since the project description refers to a number of elements, including increase of generating capacity, replacement of parts, efficiency and regular maintenance activities? Which components are being replaced or upgraded?	"Thank you for your questions. My responses are below. 1. Atura Power is proposing to make efficiency upgrades of our existing Halton Hills Generating Station (HHGS) which will include replacing internal parts of the natural gas fired combustion turbines with parts that will allow the gas turbine firing temperatures to be increased, resulting in greater electrical output from the gas turbine generators. The parts that are being replaced are the same parts that would be replaced and repaired at regular maintenance overhauls but, due to improved technology, will have better performance. The output of HHGS following the proposed performance upgrades will be 710 MW of electricity at reference conditions, representing an increase of 27 MW. The following parts will be replaced on both gas turbines: • Turbine rows 1–4 blades, vanes, and ring segments • Turbine stages 3 & 4 vane carriers • Row 1 static seals

Organisation	Title	Comment and Date	Response and Date
		2. How is efficiency being measured? Is it defined as using less natural gas while generating more MWs?	FD3(Xh) pre-swirler vanes and seals Larger capacity bleed valves – stages 2 and 3 Stage 2 letdown system Upgraded exhaust thermocouple design, and Control system logic changes. Additional details related to these items will be provided in our Halton Hills Generating Station Screening Report which will be posted and available for review at aturapower.com/haltonupgrade in the next few weeks. 2. The proposed project consists of replacing the existing parts within the turbines with improved parts made of materials with optimised cooling characteristics that will allow a high firing
		3. How will GHG emissions change due to the efficiency upgrades?	temperature. This will increase the output capacity of HHGS by an average of 27 MW. The ECA defines the thermal efficiency of the units and how it is measured, and that test is performed every two years. 3. An assessment of environmental effects related to air emissions (combustion products, i.e., NO ₂ , SO ₂ , CO and
			particulate matter) from the gas turbines was done and results will be provided in our Halton Hills Generating Station Screening Report which will be posted and available for review at aturapower.com/haltonupgrade. Based on the preliminary assessment to date, air emissions associated with the project are expected to be minimal.

Atura Power

Organisation	Title	Comment and Date	Response and Date
		4. Does Atura Power have plans to offset any increased GHG emissions caused by the efficiency upgrades? If yes, what are the planned actions?	4. As noted in our response to the above question number 3, air emissions associated with the project are expected to be minimal and results of the assessment of the environmental effects will be provided in our Halton Hills Generating Station Screening Report which will be available for review at aturapower.com/haltonupgrade.
		5. Is the efficiency upgrade project related at all to hydrogen blending? If not, will this upgrade impact future projects regarding hydrogen blending?	5. No, the HHGS efficiency upgrades are not related to hydrogen blending.
		6. In addition to the efficiency upgrade and future hydrogen blending, does AP have plans for any additional generation/physical plant expansion at the site of the existing Halton Hills plant? We look forward to hearing back from you."	Operator (IESO) determined the need for 4,000 MW of flexible capacity that can generate and store electricity, especially in the near-term. Ontario is entering a period of growing electricity demand and actions are needed to ensure the continued reliability of the electricity grid. To meet the projected demand, the IESO announced they are moving forward with efficiency upgrades at some existing natural gas facilities, adding new natural gas generation at some existing facilities, and new energy storage projects to connect to the grid by 2026. Atura Power is currently exploring potential opportunities to address the need for additional capacity to ensure the continued reliability of Ontario's electricity grid."
Member of Provincial Parliament, Wellington-	Executive Assistant	May 23, 2023	n/a
Halton Hills		"Thank you for the update. We appreciate receiving this information."	

Atura Power

Organisation	Title	Comment and Date	Response and Date
Town of Halton Hills	Regional Councillor	June 14, 2023	June 14, 2023
		[Expressed interest in the public meeting].	"Thanks. I can send you a link to the deck if you can't."
Town of Halton Hills	Mayor	June 15, 2023	June 15, 2023
		"Thank you very much for holding this public meeting and for keeping interested residents informed about activity at the generating station. Unfortunately, I have another commitment and am unable to join in myself, but I will definitely be accessing the presentation on the project webpage."	"Thanks for letting me know. Yes, the presentation will be posted on the project website as will a summary of the Qs & As shortly after the meeting. And, of course, you are always welcome to reach out to me for a personal overview of the project."

4.5 Summary of Agency Engagement

As discussed in **Section 4.2**, several agencies were sent a Notice of Commencement for the project. A full list of agency contacts can be found in **Appendix C**.

Table 4-3 below provides a summary of the correspondence between agencies and the project team following the distribution of the Notice of Commencement. All correspondence following the distribution of the notice occurred via email.

In addition to the correspondence below, Atura Power wrote to a representative of MECP requesting an exemption from the EA process on May 31, 2023, and a follow-up email to this request on June 30, 2023. On June 27, 2023, Atura Power wrote to the EA Branch at the MECP providing an update on the status of the Environmental Screening Process and engagement conducted to date. Atura Power also informed the MECP of their intent and timing for issuing of the Notice of Completion and asked for any feedback that the ministry may have prior to completing the Screening Report.

Correspondence records with agencies are provided in **Appendix C**.

 Table 4-3:
 Correspondence with Agencies

Organisation	Title	Comment and Date	Response and Date
MECP	Regional Environmental Planner	May 24, 2023 "Thanks for providing the Notice of Commencement for this project. Please also complete and return the attached Project Information Form for the project to this email address."	May 31, 2023 "Please see attached Project Information for the Atura Power HHGS Upgrade project. If there is any additional information required, please let me know."
	Regional Environmental Planner	June 29, 2023 "Thank you for providing the update on the status of the Environmental Screening Process for your project. We look forward to receiving the Notice of Completion and the Screening Report.	n/a
		Please note that for regular EA notifications and updates, we would prefer they not be sent directly to the Director of the Environmental Approvals Branch. I will be your primary point of contact with the ministry, and please do continue to copy eanotification.cregion@ontario.ca on all our correspondence."	
Conservation Halton	Regulations Officer	May 25, 2023 "My colleague passed along your letter to me. I have had a glance over it and wanted to confirm that all of the work that is being completed is internal to the building? If all work is taking place within the building or existing infrastructure, no approval will be needed from Conservation Halton."	May 25, 2023 "Yes, I confirm that all work related to the same technology efficiency upgrades at Halton Hills Generating Station will take place within the existing buildings. Essentially, we are replacing some parts on our turbines during a scheduled maintenance period. Thanks for your message and please let me
		place within the building or existing infrastructure, no approval will be needed from	some parts on our turbine maintenance period.

Atura Power

Organisation	Title	Comment and Date	Response and Date
Halton Region	Director of Water & Wastewater Treatment	June 23, 2023 "I'm inquiring about efficiency upgrades project at the Halton Hills Generating Station. I realise this is a small change of efficiency, but will there be any changes to the anticipated volume of water usage and wastewater generated? I assume it will be marginal but want to confirm."	June 27, 2023 "The efficiency upgrades at HHGS will not result in appreciable changes to water use or wastewater generation at the station. Thanks for your question and please let me know if you have any others."
Hydro One Networks Inc. (HONI)	No title given	May 23, 2023 "Please see the attached for Hydro One's Response. Hydro One Networks Inc SecondaryLandUse@HydroOne.com"	June 23, 2023 "Please see the attached email and letter from Hydro One re: HHGS upgrades. Note the request to send and future correspondence to the email address within the letter."

4.6 Summary of Indigenous Engagement

Atura Power's project team engaged with the HDI, the MNO, the Six Nations of the Grand River, and the MCFN prior to publicly issuing the Notice of Commencement, and has since worked to foster continuous dialogue with these communities. The following **Sections 4.6.1 to 4.6.4** describe engagement that was undertaken with these communities from the pre-engagement phase in spring 2023 to late September 2023, when this Screening Report was being finalized.

4.6.1 Summary of Engagement with HDI

The project team contacted HDI in the spring and learned HDI's preferred methods for receiving project information. In June, the project team and HDI met to determine a process for reviewing project documentation. At this time, HDI also noted their desire to set up future engagements with the project team. Over the summer months, the project team communicated via email to coordinate a meeting, share meeting materials prior to and following the meeting, discuss the process for reviewing project documentation, and discuss details associated with the upgrades project such as project timelines and technical details. In September, the project team met with HDI again and followed up after the meeting to share an update on project status, timelines and anticipated next steps.

Atura Power will continue to meet with HDI for discussion and will remain available for further engagement, as needed. The project team is currently planning the next meeting with HDI for November 2023.

4.6.2 Summary of Engagement with MNO

The project team contacted MNO in the spring to begin coordinating a meeting to discuss the project. MNO and the project team corresponded for several weeks to schedule a meeting and discuss engagement processes. In July, the project team met with MNO and shared a presentation on the project. The meeting was attended by the Presidents of the Oshawa and Durham Region Métis Council, Toronto and York Region Métis Council, and Credit River Métis Council. Following the meeting, the MNO requested recurring updates and meetings and shared a question raised by a meeting attendee. The project team also requested an opportunity to meet with MNO Region 9. Further correspondence ensued later in the summer when the project team reached out to share a change in project team membership and discussed next steps to continue communications following the change. The project team also followed up with the MNO to provide a response to the enquiry raised following the meeting in July.

Atura Power will continue to meet with MNO for discussion and will remain available for further engagement, as needed. The project team is currently planning their next meeting with MNO for October 2023.

4.6.3 Summary of Engagement with Six Nations of the Grand River

The project team contacted the office of the Chief of the Six Nations of the Grand River in the spring to begin coordinating a meeting to discuss the project. During discussions to coordinate the

meeting, the Six Nations of the Grand River Elected Council (SNGREC) shared details associated with engagement processes. In July, the project team met with Six Nations of the Grand River and shared a presentation on the project. Following the presentation, the project team shared a copy of the presentation and engaged in further discussions regarding engagement processes.

Atura Power will continue to meet with Six Nations of the Grand River for discussion and will remain available for further engagement, as needed. The project team is currently planning their next meeting with Six Nations of the Grand River for October 2023.

4.6.4 Summary of Engagement with MCFN

The project team contacted the MCFN Chief's office in the spring to begin coordinating a meeting to discuss the project. In July, the project team met with MCFN to introduce the project team and provide a general overview of the HHGS upgrades project. Following the meeting, the MCFN Acting Coordinator shared availability for upcoming opportunities to meet with MCFN Business Corporation. In September, the project team met with MCFN to share more details associated with the project, including an overview of the project status at that time, a timeline for the project, and next steps associated with the project. Copies of materials were also shared following the meeting.

Atura Power will continue to meet with MCFN for discussion and will remain available for further engagement, as needed.

A copy of this Screening Report was shared with the above four communities that were engaged during the Environmental Screening Process prior to the public release of the report on October 10, 2023.

Atura Power is committed to a continuous process of relationship-building and communication with Indigenous communities neighbouring current and future projects. As such, engagement is ongoing to provide continued open communication and dialogue between Indigenous communities engaged on this project.

4.7 Other Engagement

In addition to the correspondence summarised above, Atura Power also received an enquiry from an individual representing the Toronto Star who asked about the availability of the Environmental Screening materials referenced at the virtual public meeting held on June 15, 2023. Atura Power responded to this inquiry, noting that the Screening Report, which collectively documents the Environmental Screening, will be posted online for public review and comment, and offered to email a copy of the report to the individual should they be interested in receiving one. In the same correspondence, Atura Power also answered an inquiry from this individual related to the scheduled maintenance that occurred at HHGS in spring/summer 2023.

4.8 Notice of Completion

As required by the Guide, a Notice of Completion was prepared to inform all interested parties that the Environmental Screening Process for the project was completed and to provide details

regarding the 30-day review and comment period of this Screening Report. The notice included: a map identifying the project location; the proponent and contact information; a description of the project; the results of the Environmental Screening Process; details regarding the review period; the location where the Screening Report may be reviewed; and instructions for making an elevation request in accordance with the provisions of the Guide. The Notice of Completion was distributed to the project contacts who received the Notice of Commencement via the same methods on October 10, 2023; additionally, it was advertised in the *Halton Hills Today* newspaper on October 10, 2023. A copy of the Notice of Completion is provided in **Appendix C**. As noted in **Section 4.6**, a copy of this Screening Report was shared with the four Indigenous communities that were engaged during the Environmental Screening Process, prior to the public release of the report on October 10, 2023.

According to the Guide, and as described in the Notice of Completion, if a concerned party has outstanding environmental concerns about the project, they should raise these concerns with Atura Power. If Atura Power and the interested party are unable to resolve the matter, the concerned party may make a written request to the Director of the Environmental Assessment Branch, MECP, to elevate the project to either an Environmental Review or to an Individual EA. A copy of the elevation request must also be sent to Atura Power. Elevation requests must be made in accordance with the provisions set out in the MECP's Environmental Screening Process for Electricity Projects.

4.9 Exemption Request

Proponents can request the MECP to exempt a project from the EAA. In a letter dated May 26, 2023, along with a copy of the HHGS Efficiency Upgrades Project Description, Atura Power made a request to the MECP to exempt the project from the O.Reg. 116/01 Environmental Screening Requirements based on the following rationale:

- HHGS is an industrialised facility whose activities are heavily regulated under many existing permits, standards, and approvals.
- Activities to complete the upgrades require no physical changes at the site and will
 occur within the existing HHGS facility. The process will improve operational efficiency,
 improve grid resiliency in Ontario, and bring economic benefits to the area through the
 procurement of local labour and materials.
- Atura Power is in the process of obtaining an amended ECA from the MECP for the
 upgrades. This amendment requires submission of updated technical studies as well as
 engagement with agencies. Given this, subjecting the undertaking to the EA process is
 duplicative and will result in unnecessary project delays.
- The screening identified that, without any mitigation, all regulatory requirements will be met, and no other impact management commitments will be required (see **Section 3.4**).

Note, as of the time of writing this report, the project team and the MECP had a discussion regarding the exemption request and Atura Power is awaiting a decision from the MECP.

5. Environmental Advantages and Disadvantages

In concluding the Environmental Screening, the overall advantages and disadvantages of the HHGS upgrades are presented below (see **Table 5-1**). This section provides an overall conclusion as to whether the negative net environmental effects of the project are acceptable, based on a balanced assessment against the positive benefits.

Table 5-1: Environmental Advantages and Disadvantages of the Project

Advantages	Disadvantages
As part of the normal replacement of equipment at the end of their service life, the existing equipment would be upgraded with more efficient equipment but resulting in more electrical output.	• None
 Helps to address energy supply gap in Ontario by providing additional power generation capacity to meet the growing demand. 	
Close proximity to existing transmission facilities and natural gas supply.	
Provides a cost-effective and timely solution to secure operational flexibility in the Ontario electricity grid.	
Brings economic benefits through procurement of local labour and materials.	

As shown in **Table 5-1**, a consideration of the overall advantages and disadvantages of the project indicate that the project advantages outweigh the disadvantages. Further, the Environmental Screening determined that all Screening Criteria scored 'No' as a result of the HHGS upgrades project, and without any mitigation, all regulatory requirements will be met.

Atura Power remains committed to continuing to build relationships with Indigenous communities and the local community beyond the timeframe of the EA process.

6. References

- Government of Ontario (2011). Guide to Environmental Assessment Requirements for Electricity Projects. Accessed September 12, 2023, at: https://www.ontario.ca/page/guide-environmental-assessment-requirements-electricity-projects
- Government of Ontario (2021). O.Reg. 116/01: Electricity Projects. Retrieved on September 12, 2023, from: https://www.ontario.ca/laws/regulation/010116
- Ontario Ministry of the Environment, Conservation and Parks [MECP] (2017). Guideline A-11 Air Dispersion Modelling Guideline for Ontario. PIBS# 5165e03. Accessed September 12, 2023, at: https://www.ontario.ca/document/guideline-11-air-dispersion-modelling-guideline-ontario-0
- MECP (2018). Guideline A-10 Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report. PIBS# 3614e04.1. Accessed September 12, 2023, at: https://www.ontario.ca/document/guideline-10-procedure-preparing-emission-summary-and-dispersion-modelling-esdm-report
- MECP (2020). Ontario's Ambient Air Quality Criteria. Accessed September 12, 2023, at: https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria
- MECP (2023). Environmental Assessment Government Review Team Master Distribution List. *Government of Ontario.*
- SENES Consultants Limited (2007). Environmental Review Report: Halton Hills Generating Station. Prepared for TransCanada Energy Limited.
- Town of Halton Hills (2020). Official Plan. Accessed June 20, 2023, at: https://www.haltonhills.ca/en/business/official-plan.aspx
- Town of Milton (2008). Official Plan. Accessed June 20, 2023, at:

 https://www.milton.ca/en/business-and-development/resources/FINAL-VERSION-TEXT-ONLY---OP-Consolidation---Aug2008.pdf

Appendix A

Letter from the Independent Electricity System Operator





Stephen Smith
Environmental Specialist
Atura Power
1415 Joshuas Creek Drive, Unit 101, Oakville, ON L6H 7G4

Independent Electricity System Operator

1600-120 Adelaide Street West Toronto, ON M5H 1T1 t 416.967.7474

www.ieso.ca

Dear Mr. Smith

RE: MECP Request for Project Prioritization for Halton Hills Generating Station

Thank-you for participating in the IESO's Same Technology Upgrades Solicitation.

I am writing this letter in support of your discussions with the Ministry of Environment, Conservation and Parks (the Ministry) on obtaining the necessary environmental approvals for your project (Halton Hills Generating Station). The Ministry has notified the IESO that projects that are critical to meeting electricity system needs may be eligible for prioritization through their respective processes.

This letter serves to document the IESO's view of your project as critical in meeting Ontario's future electricity system needs. As Ontario's economy grows and businesses and individuals invest in electrification, the demands on the electricity system are expected to continue to increase over the next decade. Beginning in 2025, Ontario's electricity system is expected to surpass the capabilities of its existing resource fleet and enter a period of needing new resources and capacity on the system. Your project is critical in meeting these needs, particularly as it is expected to be in service in 2025.

Please note that this letter on its own does not qualify your project for any prioritization by the Ministry. Prioritization decisions remain the sole responsibility of the Ministry who will make decisions based on their processes and criteria. The IESO would encourage you to begin engaging with the Ministry as soon as possible. Requests to prioritize applications should be submitted to the Ministry's General Inquiry, Client Services and Permissions Branch, at enviropermissions@ontario.ca and should include the following information:

- Project description/ summary
- Project location
- Detailed rationale why the project requires priority review

Regards,

Chuck Farmer

Vice President, Planning, Conservation and Resource Adequacy

Independent Electricity System Operator

CC: Steen Hume, Assistant Deputy Minister, Energy Supply Policy Division, Ministry of Energy

Lisa Trevisan, Assistant Deputy Minister, Environmental Assessment and Permissions Division, Ministry of Environment, Conservation and Parks

Michael Lyle, Vice President, Legal Resources and Corporate Governance, Independent Electricity System Operator

Tom Patterson, Director, Energy Management, Atura Power

Margaret Koontz, Manager, Market Affairs, Atura Power

Nora Vasquez, Manager, Contracts and Settlement, Atura Power

Appendix B

Letter from Siemens Energy





Technical Response

The information in this technical response from Siemens Energy is provided to Atura Power to assist them in making technical and commercial decisions regarding the equipment described in this document. This information shall be protected by the terms and conditions set forth in the AMENDED AND RESTATED PARTS AND SERVICES CONTRACT (Agreement # 6132 SAP 46000000104 between ATURA POWER and SIEMENS ENERGY CANADA LIMITED dated October 30, 2015.

Date of Transmittal: December 22, 2022

Equipment: Halton Hills GT1 & 2

Issue Title: Halton Hills Generating Station ECA Amendment for Gas Turbine

Upgrades Information Request

Siemens Energy is pleased to provide the following information in response to your request.

- 1. The nominal gross output rating of the two (2) natural gas fired SGT6-5000F combustion turbines following system upgrades is 226MW per unit at 15°C, 60% relative humidity, and 101.3 kPa barometric pressure.
- 2. The emissions following system upgrades during normal operation (not during start-up, shutdown, transient conditions) from 60-100% Normalized Load on natural gas for Compressor Inlet Temperature of 0°F to 100°F are as follows:
 - a. NOx at 15% oxygen: 15 ppmvd
 - b. CO at 15% oxygen: 10 ppmvd
- No changes to HRSG exhaust stack sound levels are expected following system upgrades.

We trust that this information meets your needs. We are available at your convenience to provide clarifications or answer additional questions.

Response Reviewed and Approved for Customer Release by:

Jeff Lipnicky

Service Programs Project Manager

o=Siemens, email=jeff.lipnicky@siemensenergy.com Date: 2022.12.22 07:59:59 -05'00'

Appendix C

Engagement Records:

- Appendix C1: Distribution of Notice of Commencement
- Appendix C2: Virtual Public Meeting Materials
- Appendix C3: Correspondence Records with Municipal Representatives
- Appendix C4: Correspondence Records with Agencies
- Appendix C5: Other Correspondence
- Appendix C6: Notice of Completion



Appendix C1: Distribution of Notice of Commencement

Notice of Commencement of a Screening and Invitation to a Virtual Public Meeting

Halton Hills Generating Station Upgrades

Atura Power is planning to make efficiency upgrades at the Halton Hills Generating Station (HHGS).

Project Description

HHGS has been in operation since 2010 in the Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line. It is capable of producing an output of 683 megawatts (MW) to the Ontario electrical grid.

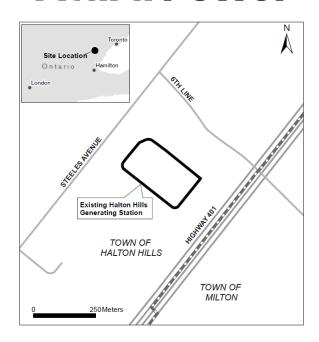
The upgrades will be limited to replacing parts of the existing natural gas fired combustion turbines during their regular maintenance cycle with more efficient parts that will result in an increased output to 710 MW. All upgrades will take place within the existing building and there will be no changes or expansion beyond the existing HHGS footprint.

Atura Power is committed to building a resilient electricity grid in Ontario and is working to address the energy supply shortfall that Ontario will experience in the near future. The proposed upgrades to HHGS are part of Atura Power's efforts to address this supply gap and to make energy production more efficient and affordable.

Environmental Screening Process

Since the project will result in a 27 MW increase in the output of HHGS, it is subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*. This Notice has been issued to communicate the start of the Environmental Screening Process.

Atura Power



Virtual Public Meeting

Atura Power is committed to engaging with Indigenous groups, the public and other stakeholders on all our projects. We invite you to attend an upcoming virtual public meeting to learn more and provide feedback. You can access the link to join the public meeting on the project webpage.

How to Join

Date: Thursday, June 15, 2023 Time: 6:30 – 7:30 pm EST

Project webpage: <u>aturapower.com/haltonupgrade</u>

Project Contacts

If you are unable to participate, meeting materials will be posted on the project webpage for review following the meeting. Please email your questions or comments to haltonupgrade@aturapower.com.

For more information: https://aturapower.com/

Comments and information regarding this project are being collected in accordance with the *Freedom of Information* and *Protection of Privacy Act* for the purpose of meeting environmental assessment requirements.



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Public virtual meeting being held for efficiency upgrades at the Halton Hills Generating Station (HHGS)



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tura Power is planning to make efficiency upgrades at the Halton Hills Generating Station (HHGS).

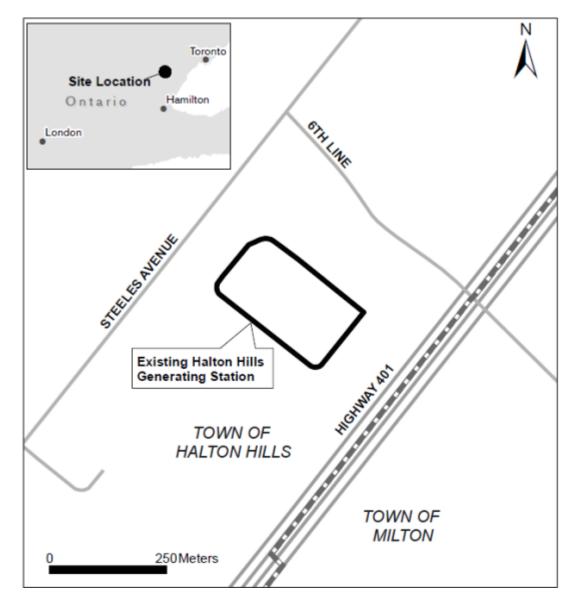
Project Description

HHGS has been in operation since 2010 in the Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line. It is capable of producing an output of 683 megawatts (MW)

to the Ontario electrical grid.

The upgrades will be limited to replacing parts of the existing natural gas fired combustion turbines during their regular maintenance cycle with more efficient parts that will result in an increased output to 710 MW. All upgrades will take place within the existing building and there will be no changes or expansion beyond the existing HHGS footprint.

Atura Power is committed to building a resilient electricity grid in Ontario and is working to address the energy supply shortfall that Ontario will experience in the near future. The proposed upgrades to HHGS are part of Atura Power's efforts to address this supply gap and to make energy production more efficient and affordable.



Environmental Screening Process

Since the project will result in a 27 MW increase in the output of HHGS, it is subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01,

under the Environmental Assessment Act. This Notice has been issued to communicate the start of the Environmental Screening Process.

Virtual Public Meeting

Atura Power is committed to engaging with Indigenous groups, the public and other stakeholders on all our projects. We invite you to attend an upcoming virtual public meeting to learn more and provide feedback. You can access the link to join the public meeting on the project webpage.

How to Join

- Date: Thursday, June 15, 2023 Time: 6:30 7:30 pm EST
- Project webpage: aturapower.com/haltonupgrade
- Project Contacts If you are unable to participate, meeting materials will be posted on the project webpage for review following the meeting.

Please email your questions or comments to haltonupgrade@aturapower.com.

For more information: Visit Atura Power online

Comments and information regarding this project are being collected in accordance with the Freedom of Information and Protection of Privacy Act for the purpose of meeting environmental assessment requirements.

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Friday, May 19, 2023

XX-Agency Contact Name Title, Agency Sample of Cover Letter sent to Agency Contacts

Dear Contact Name,

This letter is to inform you that Atura Power (Atura) has commenced a work plan to undertake efficiency upgrades at the Halton Hills Generating Station (HHGS) in Halton Hills, Ont. The proposed work will be limited to replacing parts of the existing natural gas fired combustion turbines with upgraded parts that will allow a higher turbine firing temperature. These upgrades will be similar to regular maintenance activities but due to improved technology, will result in better performance. All activities to complete the upgrades will take place within the footprint of the existing HHGS. This project is part of Atura's effort to build a more efficient and resilient electricity grid in Ontario.

Currently, the HHGS is capable of producing an output of 683 MW. The upgrades will increase the turbine firing temperature, resulting in an output of 710 MW. This proposed increase of 27 MW results in the upgrade being subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*. The attached Notice has been issued to communicate the start of the Environmental Screening Process. A copy of the Notice was published in the Halton Hills Today online on Friday, May 19, 2023, and is also available on the Project webpage at <a href="https://doi.org/10.2007/ntm2.2007/

Atura is committed to engaging agencies, the public and other stakeholders on all projects. A virtual public meeting will be hosted on Thursday, June 15, 2023, from 6:30 to 7:30pm EST to share more about the proposed upgrades and collect feedback from members of the public. The attached Notice includes details on how to join. Outreach to Indigenous groups is also underway to learn how they wish to be engaged about the project.

For more information about the project, please visit our project webpage (see link above). If you have any other questions and inquiries, please do not hesitate to contact us at haltonupgrade@aturapower.com.

Sincerely,

Ryan Dube

1/e

Project Manager, Technical Development



Friday, May 19, 2023

Cover letter sent to MECP

To whom it may concern,

This letter is to inform you that Atura Power (Atura) has commenced a work plan to undertake efficiency upgrades at the Halton Hills Generating Station (HHGS) in Halton Hills, Ont. The proposed work will be limited to replacing parts of the existing natural gas fired combustion turbines with upgraded parts that will allow a higher turbine firing temperature. These upgrades will be similar to regular maintenance activities but due to improved technology, will result in better performance. All activities to complete the upgrades will take place within the footprint of the existing HHGS. This project is part of Atura's effort to build a more efficient and resilient electricity grid in Ontario.

The HHGS is capable of producing an output of 683 MW. The upgrades will increase the turbine firing temperature, resulting in an output of 710 MW. This proposed increase of 27 MW results in the upgrade being subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*. The attached Notice has been issued to communicate the start of the Environmental Screening Process. A copy of the Notice was published in the Halton Hills Today online on Friday, May 19, 2023, and is also available on the Project webpage at aturapower.com/haltonupgrade.

Atura is committed to engaging agencies, the public and other stakeholders on all projects. A virtual public meeting will be hosted on Thursday, June 15, 2023, from 6:30 to 7:30pm EST to share more about the proposed upgrades and collect feedback from members of the public. The attached Notice includes details on how to join.

Atura is also seeking input on the Indigenous communities that should be engaged as part of the Environmental Screening Process. The attached Notice includes a map of the project area. We would appreciate if you would provide us with a list of Indigenous communities with whom we should engage on this project.

Given that that proposed upgrades to the HHGS are minor, similar to routine maintenance activities, and will be contained entirely withing the footprint of the HHGS, Atura is in contact with Mr. Andrew Evers, Manager of Environmental Assessment Services with the Ministry of Environment, Conservation and Parks, to pursue an exemption to the Environmental Assessment Act for this project.

For more information about the project, please visit our project webpage (see link above). If you have any other questions and inquiries, please do not hesitate to contact us at haltonupgrade@aturapower.com.

Sincerely,

Ryan Dube

10

Project Manager, Technical Development



Friday, May 19, 2023

Cover letter sent to Landowners/Tenants

Dear Landowner/Tenant,

This letter is to inform you that Atura Power has commenced a work plan to undertake efficiency work of its nearby Halton Hills Generating Station (HHGS). The upgrades will be limited to replacing parts of the existing natural gas fired combustion turbines with new, more efficient parts that will allow a higher turbine firing temperature. These upgrades will be similar to regular maintenance activities but due to improved technology, it will result in better performance. All activities to complete the upgrades will take place within the existing building and there will be no changes or expansion beyond the HHGS footprint. This project is part of Atura's effort to build a more efficient and resilient electricity grid in Ontario.

The HHGS is capable of an output of 683 MW. The upgrades will increase the turbine firing temperature, resulting in an output of 710 MW. This proposed increase of 27 MW results in the upgrade being subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*. The attached Notice has been issued to communicate the start of the Environmental Screening Process. A copy of the Notice was published in the Halton Hills Today online on Friday, May 19, 2023, and is also available on the Project webpage at https://doi.org/10.1007/nj.nlm.nih.gov/

Atura is committed to engaging all interested parties on all projects. This includes you, our valued neighbours. We want to hear from you and would like to **invite you to attend a virtual public meeting on Thursday, June 15, 2023, from 6:30 to 7:30pm EST** to learn more about the proposed upgrades and give us your feedback. The attached Notice includes details on how to join.

For more information about the project, please visit our project webpage (see link above). If you have any other questions and inquiries, please do not hesitate to contact us at haltonupgrade@aturapower.com.

Sincerely,

Ryan Dube

Project Manager, Technical Development

Email sent to Agency Contacts

FW: Halton Hills Generating Station Efficiency Upgrades

From: Darius Sokal < Darius. Sokal@aturapower.com>

Sent: Friday, May 19, 2023 12:07 PM

To: Stephen Smith <Stephen.Smith@aturapower.com>; Darius Sokal <Darius.Sokal@aturapower.com>

Subject: Halton Hills Generating Station Efficiency Upgrades

Good afternoon.

The attached letter is to let you know that Atura Power is planning to make efficiency upgrades at our Halton Hills Generating Station in Halton Hills, Ont. Please read the attached letter and Notice of Commencement for details about our proposed activities, engagement opportunities, and how to learn more.

Sincerely,

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

Appendix C2: Virtual Public Meeting Materials

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



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



4. Napanee Generating Station 2020-2060Capacity 900 MW



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



2 Portlands Energy Control

3. Portlands Energy Centre 2009-2049 Capacity 562 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











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)





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

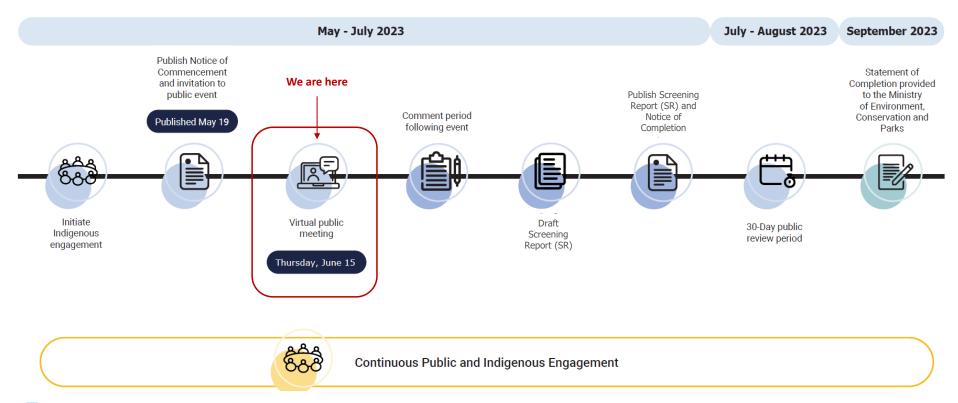
Engage with stakeholders and Indigenous communities to address concerns.

Identify any potential effects and determine mitigation measures to avoid or reduce the effects.

Document the potential effects and mitigation measures in a report.



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



Atura Power



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.

Appendix C3: Correspondence Records with Municipal Representatives

FW: Halton Hills Generating Station Efficiency Upgrades

From: Darius Sokal

Sent: Thursday, May 18, 2023 3:58 PM

To: Mayor Ann Lawlor <annl@haltonhills.ca>; mayor@haltonhills.ca

Cc: Neil Finnerty <Neil.Finnerty@aturapower.com>

Subject: Halton Hills Generating Station Efficiency Upgrades

Hi Mayor Lawlor.

It's Darius Sokal from Atura Power.

Atura Power is planning to make efficiency upgrades at our Halton Hills Generating Station (HHGS) that will increase its electricity production capacity by 27 MW to 710 MW. These upgrades will be limited to replacing parts of the existing turbines with more efficient parts during regular maintenance cycles. All upgrades will happen within the existing building and there will be no change to the station's current footprint.

Our public, stakeholder and Indigenous engagement and environmental screening processes officially begin tomorrow. I've attached samples of the Notice of Commencement which will be published tomorrow in Halton Hills Today, and the letter that we will hand-delivered to adjacent neighbours tomorrow, to this email. Other letters will be mailed or emailed to additional stakeholders, agencies and Indigenous communities starting tomorrow as well, and a dedicated project webpage is live now: www.aturapower.com/haltonupgrade.

Please note that I'll be sending Ward 2 Councillors Brass and Racinsky, and Regional Councillor Somerville, emails to notify them of our project and community outreach plans as well.

Thanks for your attention, and please let me know if you have any questions or concerns.

Best regards,

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

From: Dharmen Dhaliah <ddhaliah@haltonhills.ca>

Sent: Wednesday, June 14, 2023 12:40 PM

To: Darius Sokal <Darius.Sokal@aturapower.com>

Cc: Ellen Perschbacher <ellen.perschbacher@avaanz.ca>; Anoushka Martil <anoushka.martil@avaanz.ca>; Upgrade

project for HHGS <haltonupgrade@aturapower.com>

Subject: Re: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hello Darius.

Thank you for the email and for the heads up regarding the public meeting.

We look forward to learning more about the upgrade project.

Should we send our questions by email beforehand?

Best regards,



Dharmen Dhaliah, P.Eng, MBA, PMP, CAMA, MMP, CMRP

Director of Climate Change & Asset Management

Business, Environment and Culture

905-873-2600 ext. 2258 | c: 905-691-9733

ddhaliah@haltonhills.ca

haltonhills.ca

From: Darius Sokal <Darius.Sokal@aturapower.com>

Sent: Wednesday, June 14, 2023 1:14 PM
To: Dharmen Dhaliah <ddhaliah@haltonhills.ca>

Cc: Ellen Perschbacher <ellen.perschbacher@avaanz.ca>; Anoushka Martil <anoushka.martil@avaanz.ca>; Upgrade

project for HHGS <haltonupgrade@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hi Dharmen.

Nice to hear from you.

There will be an opportunity to submit questions to us through the MS Teams Live platform after our presentation tomorrow evening. You can also email questions or comments to our dedicated project email address: haltonupgrade@aturapower.com.

Thanks and I look forward to hearing from you tomorrow!

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

From: Clark Somerville <clarks@haltonhills.ca>
Sent: Wednesday, June 14, 2023 12:41 PM
To: Darius Sokal <Darius.Sokal@aturapower.com>

Cc: Anoushka Martil <anoushka.martil@avaanz.ca>; Ellen Perschbacher <ellen.perschbacher@avaanz.ca>; Upgrade

project for HHGS <haltonupgrade@aturapower.com>

Subject: Re: Halton Hills Generating Station Efficiency Upgrades Public Meeting

I will try and attend

From: Darius Sokal

Sent: Wednesday, June 14, 2023 2:42 PM
To: Clark Somerville <clarks@haltonhills.ca>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Thanks Clark. I can send you a link to the deck if you can't.

From: Mayor Lawlor <anni@haltonhills.ca> Sent: Thursday, June 15, 2023 12:12 PM

To: Darius Sokal <Darius.Sokal@aturapower.com>

Cc: Ellen Perschbacher <ellen.perschbacher@avaanz.ca>; Anoushka Martil <anoushka.martil@avaanz.ca>; Upgrade

project for HHGS <haltonupgrade@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Good afternoon, Darius

Thank you very much for holding this public meeting and for keeping interested residents informed about activity at the generating station. Unfortunately I have another commitment and am unable to join in myself, but I will definitely be accessing the presentation on the project webpage.

Best Wishes.

Mayor Lawlor



Ann Lawlor (She/Her)

Mayor

905-873-2600, ext. 2342

mayor@haltonhills.ca

haltonhills.ca

From: Darius Sokal < Darius. Sokal@aturapower.com>

Sent: Thursday, June 15, 2023 1:32 PM To: Mayor Lawlor <annl@haltonhills.ca>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hello, Mayor Lawlor.

Thanks for letting me know. Yes, the presentation will be posted on the project website as will a summary of the Qs & As shortly after the meeting.

And, of course, you are always welcome to reach out to me for a personal overview of the project.

Best regards,

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

From: Dharmen Dhaliah <ddhaliah@haltonhills.ca>

Sent: Tuesday, June 27, 2023 9:00 AM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Cc: Dharmen Dhaliah <ddhaliah@haltonhills.ca>

Subject: Follow-Up: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hello.

Thank you for the virtual public meeting on June 15th about the proposed Halton Hills Generating Station efficiency upgrades. It was very informative and we appreciate the opportunity to ask follow-up questions as per below.

- 1. Can you clarify the scope of the Upgrade Project since the project description refers to a number of elements, including increase of generating capacity, replacement of parts, efficiency and regular maintenance activities? Which components are being replaced or upgraded?
- How is efficiency being measured? Is it defined as using less natural gas while generating more MWs?
- How will GHG emissions change due to the efficiency upgrades?
- 4. Does Atura Power have plans to offset any increased GHG emissions caused by the efficiency upgrades? If yes, what are the planned actions?
- Is the efficiency upgrade project related at all to hydrogen blending? If not, will this upgrade impact future projects regarding hydrogen blending?
- 6. In addition to the efficiency upgrade and future hydrogen blending, does AP have plans for any additional generation/physical plant expansion at the site of the existing Halton Hills plant?

We look forward to hearing back from you.

Best regards,

Dharmen Dhaliah, P.Eng, MBA, PMP, CAMA, MMP, CMRP

Director of Climate Change & Asset Management

Business, Environment and Culture

905-873-2600 ext. 2258 | c: 905-691-9733

ddhaliah@haltonhills.ca

haltonhills.ca



FW: HHGS Upgrade Q&A for Town of HH

From: Dharmen Dhaliah <ddhaliah@haltorhills.ca>

Sent: Wednesday, July 26, 2023 9:29 AM

Te: Upgrade project for HHGS < haltonupgrade@aturapower.com>

Subject: Re: Follow-Up: Halton Hills Generating Station Efficiency Upgrades Public Meeting

You don't often get email from <u>deballab@haltonbills.ca</u>. Learn why this is important

HI,

We are just following up on this email to see when we can expect a response to the follow-up questions.

Please let us know.

Best regards,

Dharmen Dhaliah, P.Eng. MBA, PMP, CAMA, MMP, CMRP

Director of Climate Change & Asset Management

Business, Environment and Culture

905-873-2600 ext. 2258 | c: 905-691-9733

ddhaliah@haltonhills.ca

haltonhills.ca

FW: HHGS Upgrade Q&A for Town of HH

From: Upgrade project for HHGS

Sent: Wednesday, July 26, 2023 9:58 AM

To: Dharmen Dhaliah <a href="mailto:sqb:left-alto:sqb:left

Subject: RE: Follow-Up: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hi Dharmen

Sorry for the delayed response. Answers to your questions are being reviewed by the project team. I'll follow up with them and provide them in the next day or two.

Thank you for your patience.

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

From: Upgrade project for HHGS Sent: Thursday, July 27, 2023 9:48 AM

To: Dharmen Dhaliah <ddhaliah@haltonhills.ca>; Upgrade project for HHGS <haltonupgrade@aturapower.com>

Subject: RE: Follow-Up: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hi Dharmen.

Thank you for your questions. My responses are below.

1. Can you clarify the scope of the Upgrade Project since the project description refers to a number of elements, including increase of generating capacity, replacement of parts, efficiency and regular maintenance activities? Which components are being replaced or upgraded?

Atura Power is proposing to make efficiency upgrades of our existing Halton Hills Generating Station (HHGS) which will include replacing internal parts of the natural gas fired combustion turbines with parts that will allow the gas turbine firing temperatures to be increased, resulting in greater electrical output from the gas turbine generators. The parts that are being replaced are the same parts that would be replaced and repaired at regular maintenance overhauls but, due to improved technology, will have better performance. The output of HHGS following the proposed performance upgrades will be 710 MW of electricity at reference conditions, representing an increase of 27 MW.

The following parts will be replaced on both gas turbines:

- Turbine rows 1–4 blades, vanes, and ring segments
- Turbine stages 3 & 4 vane carriers
- Row 1 static seals
- · FD3(Xh) pre-swirler vanes and seals
- Larger capacity bleed valves stages 2 and 3
- Stage 2 letdown system
- · Upgraded exhaust thermocouple design, and
- Control system logic changes.

Additional details related to these items will be provided in our Halton Hills Generating Station Screening Report which will be posted and available for review at aturapower.com/haltonupgrade in the next few weeks.

2. How is efficiency being measured? Is it defined as using less natural gas while generating more MWs?

The proposed project consists of replacing the existing parts within the turbines with improved parts made of materials with optimized cooling characteristics that will allow a high firing temperature. This will increase the output capacity of HHGS by an average of 27 MW. The ECA defines the thermal efficiency of the units and how it is measured, and that test is performed every two years.

3. How will GHG emissions change due to the efficiency upgrades?

An assessment of environmental effects related to air emissions (combustion products, i.e., NO₂, SO₂, CO and particulate matter) from the gas turbines was done and results will be provided in our *Halton Hills Generating Station Screening Report* which will be posted and available for review at aturapower.com/haltonupgrade. Based on the preliminary assessment to date, air emissions associated with the project are expected to be minimal.

4. Does Atura Power have plans to offset any increased GHG emissions caused by the efficiency upgrades? If yes, what are the planned actions?

As noted in our response to the above question number 3, air emissions associated with the project are expected to be minimal and results of the assessment of the environmental effects will be provided in our *Halton Hills*Generating Station Screening Report which will be available for review at aturapower.com/haltonupgrade.

5. Is the efficiency upgrade project related at all to hydrogen blending? If not, will this upgrade impact future projects regarding hydrogen blending?

No, the HHGS efficiency upgrades are not related to hydrogen blending.

6. In addition to the efficiency upgrade and future hydrogen blending, does Atura Power have plans for any additional generation/physical plant expansion at the site of the existing Halton Hills plant?

The Independent Electricity System Operator (IESO) determined the need for 4,000 MW of flexible capacity that can generate and store electricity, especially in the near-term. Ontario is entering a period of growing electricity demand and actions are needed to ensure the continued reliability of the electricity grid. To meet the projected demand, the IESO announced they are moving forward with efficiency upgrades at some existing natural gas facilities, adding new natural gas generation at some existing facilities, and new energy storage projects to connect to the grid by 2026. Atura Power is currently exploring potential opportunities to address the need for additional capacity to ensure the continued reliability of Ontario's electricity grid.

Thank you again for your questions, Dharmen. I will send you a link to the Screening Report once it is posted on the project webpage.

Darius Sokal (hear it) Sr. Communications Advisor | Atura Power 1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

From: Dharmen Dhaliah <ddhaliah@haltonhills.ca>

Sent: Monday, July 31, 2023 11:59 AM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Subject: Re: Follow-Up: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Hi Darius,

Thank you for the responses.

Look forward to reviewing the Screening Report.

With regards,



Dharmen Dhaliah, P.Eng, MBA, PMP, CAMA, MMP, CMRP

Director of Climate Change & Asset Management

Business, Environment and Culture

905-873-2600 ext. 2258 | c: 905-691-9733

ddhaliah@haltonhills.ca

haltonhills.ca

FW: Halton Hills Generating Station Efficiency Upgrades

From: Arnott-CO, Ted <ted.arnottco@pc.ola.org>

Sent: Tuesday, May 23, 2023 8:47 AM

To: Darius Sokal <Darius.Sokal@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades

You don't often get email from ted.amottco@pc.ola.org, Learn why this is important

Dear Darius,

Thank you for the update.

We appreciate receiving this information.

Judy Brownrigg

Executive Assistant

Ted Arnott, MPP

Wellington-Halton Hills

Toll Free: 1-800-265-2366

Phone: 519-787-5247

Appendix C4: Correspondence Records with Agencies

Appendix C4a: List of Agency Contacts

Atura - Halton Hills GS Upgrades Contact List



Category	Subcategory	Organization	Contact Name & Title	Email	Phone Number	Address	Delivery Date of Notice of Commencement	Contact Method
MECP Contacts								
Agency	Provincial	Ministry of the Environment, Conservation and Parks	General Contact	ClassEAnotices@ontario.ca			19-May-23	Email
Agency	Provincial	Ministry of the Environment, Conservation and Parks	General Contact	eanotification.cregion@ontario.ca			19-May-23	Email
Agency	Provincial	Ministry of the Environment, Conservation and Parks (Project Review Unit, Environmental Assessment Branch)	Trevor Bell, Regional Environmental Planner	trevor.bell@ontario.ca	437-770-3731	5775 Yonge Street, 8th Floor Toronto, ON M2M 4J1	19-May-23	Email
Agency	Provincial	Ministry of the Environment, Conservation and Parks (Environmental Assessment Services Unit)	Nick Colella, Manager, Environmental Assessment Services	nick.colella@ontario.ca	647-961-4850		19-May-23	Email
Agency	, , , , , , , , , , , , , , , , , , ,		Denise Plourde, Senior Environmental Officer	denise.plourde@ontario.ca	905-330-3043	Halton-Peel District Office Suite 300, 4145 North Service Road Burlington, ON L7L 6A3	19-May-23	Email
Agency	Provincial	Ministry of Environment, Conservation, and Parks (Environmental Assessment Branch)	Kathleen O'Neill, Director	kathleen.oneill@ontario.ca	647-287-5664	7th Floor, 135 St Clair Avenue West Toronto, ON M4V 1P5		Email
Municipalities and E								
Elected Official	Municipal	Town of Halton Hills	Ann Lawlor, Mayor	mayor@haltonhills.ca	905-873-2600 ext. 2342	1 Halton Hills Drive Halton Hills, ON L7G 5G2	19-May-23	Email
Elected Official	Municipal	Town of Halton Hills	Jason Brass, Ward 2 Councillor	jbrass@haltonhills.ca	416-605-2978		19-May-23	Email
Elected Official	Municipal	Town of Halton Hills	Joseph Racinsky, Ward 2 Councillor	jracinsky@haltonhills.ca	905-691-2405		19-May-23	Email
Elected Official	Municipal	Town of Halton Hills	Clark Somerville, Regional Councillor Wards 1 and 2	clarks@haltonhills.ca	905-703-6388		19-May-23	Email
Elected Official	Municipal	Town of Halton Hills	Jane Fogal, Regional Councillor Wards 3 and 4	Contact form on website	905-877-5806	1 Halton Hills Drive Halton Hills, ON L7G 5G2		Email
Elected Official	Municipal	Regional Municipality of Halton	Gary Carr, Halton Regional Chair	gary.carr@halton.ca	905-825-6115	1511 Bronte Road Oakville, ON L6M 3L1	19-May-23	Email
Elected Official	Municipal	Town of Milton	Gordon Krantz, Mayor	executiveservices@milton.ca	905-878-7252 ext. 2104		19-May-23	Email
Elected Official	Provincial	Member of Parliament for Wellington- Halton Hills	Ted Arnott	ted.arnottco@pc.ola.org	519-787-5247	181 St. Andrew Street East, 2nd Floor Fergus, ON N1M 1P9	19-May-23	Email
Elected Official	Federal	Member of Parliament for Wellington- Halton Hills	Michael Chong	michael.chong@parl.gc.ca	613-992-4179		19-May-23	Email
Municipality		City of Brampton	General Contact - Clerks Office	cityclerksoffice@brampton.ca	905-874-2100	2 Wellington Street West Brampton, ON L6Y 4R2	19-May-23	Email
Municipality		Town of Caledon	Carey de Gorter, General Manager, Town Clerk	info@caledon.ca	905-584-2272	6311 Old Church Road Caledon, ON L7C 1J6	19-May-23	Email
Municipality		Town of Erin	General Contact - Clerks Office	clerks@erin.ca	519-855-4407	5684 Trafalgar Road Hillsburgh, ON N0B 1Z0	19-May-23	Email
Municipality		Township of Guelph/Eramosa	Amanda Knight, Clerk and Director of Legislative Services	Contact form on website.	519-856-9596 ext. 125	8348 Wellington Road 124 P.O. Box 700 Rockwood, ON N0B 2K0	18-May-23	Mail
Municipality		Town Environmental Advisory Committee (Halton Hills)	General Contact	teac@haltonhills.ca			19-May-23	Email (failed to Delivercommittee no longer exists
Municipality		Town of Halton Hills	General Contact		905-873-2600 ext. 2900	1 Halton Hills Drive Halton Hills, ON L7G 5G2	18-May-23	Mail

Atura - Halton Hills GS Upgrades Contact List



Category	Subcategory	Organization	Contact Name & Title	Email	Phone Number	Address	Delivery Date of Notice of Commencement	Contact Method
Municipality		Town of Halton Hills	Valerie Petryniak, Clerk and Director of Legislative Services	valeriep@haltonhills.ca	905-873-2600 ext. 2331		19-May-23	Email
Municipality		Town of Halton Hills (Strategic Initiatives)	Dharmen Dhaliah, Senior Manager Climate Change & Asset Management	ddhaliah@haltonhills.ca			19-May-23	Email
Municipality		Town of Milton	Meaghen Reid, Town Clerk - Director, Legislative and Legal Services	townclerk@milton.ca	905-878-7252	150 Mary Street Milton, ON L9T 6Z5	19-May-23	Email
Municipality		City of Mississauga	General Contact - Clerks Office		905-615-4311	300 City Centre Drive Mississauga, ON L5B 3C1	18-May-23	Mail
Agencies								
Agency	Regional	Conservation Halton	General Contact	envserv@hrca.on.ca	905-336-1158	2596 Britannia Road West Burlington, ON L7P 0G3	19-May-23	Email
Agency	Regional	Conservation Halton	Justin McArthur, Regulations Officer	jmcarthur@hrca.on.ca	905.336.1158 ext.2264	2596 Britannia Road West Burlington, ON L7P 0G3	19-May-23	Email
Agency	Regional	Conservation Halton	Mark Connell, Director of Water & Wastewater Treatment	Mark.Connell@halton.ca	905-825-6000 ext. 7322			Email
Agency	Regional	Halton Hills Fire and Emergency Services	District Three Station		905-877-113	14007 10 Sideroad Halton Hills, ON L7G 4S5	18-May-23	Mail
Agency	Regional	Halton Hills Hydro	Scott Knapman, President and CEO	sknapman@haltonhillshydro.com			19-May-23	Email
Agency	Regional	Halton Region	Regional Clerk	regionalclerk@halton.ca	905-825-6000 ext. 7110	1151 Bronte Road Oakville, ON L6M 3L1	19-May-23	Email
Agency	Regional	Halton Region	Jane MacCaskill, CAO	Jane.MacCaskill@halton.ca	905-825-6000 ext. 6070		19-May-23	Email
Agency	Provincial	Hydro One Networks Inc. (HONI)	General Contact	SecondaryLandUse@HydroOne.com	1-888-664-9376	PB Box 5700 Markham, ON L3R 1C8	19-May-23	Email
Agency	Provincial	Independent Electricity System Operator (IESO)	General Contact	contract.management@ieso.ca	905-403-6900	1600-120 Adelaide Street West Toronto, ON M5H 1T1	19-May-23	Email
Agency	Provincial	Ministry of Education Halton Catholic District School Board	John Klein, Director of Education	director@hcdsb.org	905-632-6300	Catholic Education Centre 802 Drury Lane Burlington, ON L7R 2Y2	18-May-23	Mail
Agency	Provincial	Ministry of Education Halton District School Board	Curtis Ennis, Director of Education	contact@hdsb.ca	905-335-3663	J.W. Singleton Education Centre 2050 Guelph Line Burlington, ON L7P 5A8	18-May-23	Mail
Agency	Provincial	Ministry of Education French Catholic School Board	Mikale-Andree Joly, Executive Director of Corporate Relations and Strategic Planning	mjoly@cscmonavenir.ca	416-397-6564 or 1-800-274-3764 ext. 73130	110 Drewry Avenue Toronto, ON M2M 1C8	18-May-23	Mail
Agency	Provincial	Ministry of Energy	Joerg Wittenbrinck, Manager (A) Governance, Strategy and Analytics Branch	joerg.wittenbrinck@ontario.ca	289-980-8124	77 Grenville Street, 6th Floor Toronto, ON M7A 1B3	19-May-23	Email
Agency	Provincial	Ministry of Energy	Michael Di Cosmo, A/Coordinator, Strategic Policy and Cabinet Liaison	michael.dicosmo@ontario.ca	437-770-7960		19-May-23	Email
Agency	Provincial	Ministry of Mines	Tracey Burton, Manager (A) Strategic Support Unit	tracey.burton@ontario.ca	705-918-1609	933 Ramsey Lake Road Sudbury, ON P3E 6B5	19-May-23	Email
Agency	Provincial	Ministry of Municipal Affairs and Housing	Heather Watt, Manager Community Planning and Development (west)	heather.watt@ontario.ca	437-232-9474	13th Floor, 777 Bay Street Toronto, ON M5G 2E5	19-May-23	Email
Agency	Provincial	Ministry of Natural Resources and Forestry	Keith Johnston, Environmental Planning Team Lead	keith.johnston@ontario.ca			19-May-23	Email
Agency	Provincial	Ministry of the Solicitor General	Fuad Abdi, Director Facilities and Capital Planning Branch	fuad.abdi@ontario.ca Alternate: Allan Jaffee Alan.Jaffee@ontario.ca	416-884-5632	25 Grosvenor Street, 13th Floor Toronto, ON M7A 1Y6	01-Jun-2023 (email initially failed to deliver due to misspelled address)	Email
Agency	Provincial	Ministry of Transportation Ontario	Jason White, Manager, Design and Engineering Branch	jason.white@ontario.ca	416-235-5575	159 Sir Willian Hearst Avenue, 5th Floor, Building D Toronto, ON M3M 0B7	18-May-23	Mail
Agency	Federal	Environment and Climate Change Canada	Rob Clavering, Manager Environmental Assessment Section	robert.clavering@ec.gc.ca	416-458-9670		19-May-23	Email

Atura - Halton Hills GS Upgrades Contact List



Category	Subcategory	Organization	Contact Name & Title	Email	Phone Number	Address	Delivery Date of Notice of Commencement	Contact Method
Indigenous Contacts								
Indigenous Community		Haudenosaunee Development Institute	Dana (Surname not given), Reception	info@hdi.lands	519-445-4222	P.O. Box 714 Ohsweken, ON N0A 1M0	Initial contact made: 05-May-2023	Email and Phone
Indigenous Community		Mississaugas of the Credit First Nation	Stacey Laforme, Chief		905-979-9254	2789 Mississauga Road, R.R. #6 Hagersville, ON N0A 1H0	Initial contact made: 05-May-2023	Phone
Indigenous Community		Mississaugas of the Credit First Nation	Casey Jonathan, Major Projects Coordinator	Casey.Jonathan@mncfn.ca		2789 Mississauga Road, R.R. #6 Hagersville, ON N0A 1H0	Initial contact made: 05-May-2023	Email
Indigenous Community		Métis Nation of Ontario (MNO)	Laura Desaulniers, Lands, Resources & Consultations (LRC) Branch Coordinator	Laurad@metisnation.org	807-375-0208	Thunder Bay, ON	Initial contact made: 05-May-2023	Email
Indigenous Community		MNO Credit River Council	Debra Keaney, President	CRMC@metisnation.org	905-450-4844		Initial contact made: 05-May-2023	Email and Phone
Indigenous Community		Oshawa Durham Métis Council	Helen Giacchetta, President	ODRMC@metisnation.org			Attended meeting 05-Jul-2023	Email
Indigenous Community		Toronto and York Métis Council	Shirley Debassige, President	squirl 24@hotmail.com			Attended meeting 05-Jul-2023	Email
Indigenous Community		Provisional Council of the Métis Nation of Ontario	Kate Stewart McNeil, Councillor	kateS@metisnation.org			Attended meeting 05-Jul-2023	Email
Indigenous Community		Six Nations of the Grand River Elected Council	Tammy Martin, Executive Assistant to Chief Mark Hill	tammymartin@sixnations.ca	519-717-5637	1695 Chiefswood Road P.O. Box 5000 Ohsweken, ON N0A 1M0	Initial contact made: 05-May-2023	Email and Phone

Appendix C4b: Correspondence Records with the Ministry of the Environment, Conservation, and Parks

FW: Halton Hills Generating Station Efficiency Upgrades

From: EA Notices to CRegion (MECP) <eanotification.cregion@ontario.ca>

Sent: Wednesday, May 24, 2023 1:01 PM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Cc: Stephen Smith <Stephen.Smith@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades

Hi Stephen,

Thanks for providing the Notice of Commencement for this project. Please also complete and return the attached Project Information Form for the project to this email address.

Thanks,

Trevor

Trevor Bell | Regional Environmental Planner

Project Review Unit, Environmental Assessment Branch

Ministry of the Environment, Conservation and Parks

5775 Yonge Street, 8th floor, Toronto ON, M2M 4J1

New Phone: 437-770-3731 | trevor.bell@ontario.ca

FW: Halton Hills Generating Station Efficiency Upgrades

From: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Sent: Wednesday, May 31, 2023 1:32 PM

To: EA Notices to CRegion (MECP) <eanotification.cregion@ontario.ca>; Upgrade project for HHGS

<haltonupgrade@aturapower.com>

Cc: Stephen Smith <Stephen.Smith@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades

Good Afternoon,

Please see attached Project Information for the Atura Power HHGS Upgrade project.

If there is any additional information required, please let me know.

Thanks,

Stephen Smith

Environmental Specialist | Atura Power 289-259-2377 | Stephen.smith@aturapower.com

What to do:

Step 1: Look for the type of EA project in column B that applies to you.

Step 2: Complete columns C to J for that project.

Step 3: Send this form in Excel format to the MECP regional office email address where the project is located.

MECP regional office email addresses are listed at

www.notair.or.apin.or.ep

	www.ontario.ca/page/preparing-environmental-assessments								
	Class EA/Streamlined EA	Proponent Name	Proponent Contact	Project Name	Project Schedule	Project Type	Project Location	MOECC Region	Project Initiation Date
1	CO - Remedial flood and erosion control projects								
2	GO Transit - Class EA								
	Hydro One - Minor transmission facilities								
	MEA - Class EA for municipal infrastructure projects								
	Ministry of Infrastructure - Public work								
6	MNDM - Activities of the Ministry of Northern Development and Mines under the Mining Act								
	MNRF - Provincial parks and conservation reserves								
	MNRF - Resource stewardship and facility development projects								4
	MTO - Provincial transportation facilities								
10	O. Reg. 101/07 - Waste management projects								
	O. Reg. 116/01 - Electricity projects		Stephen Smith; haltonupgrade@aturapower.com	Halton Hills Generating Station Upgrades	Category B	Natural gas	Halton Hills, Town of	Central	2023-05-19
12	OWA - Waterpower projects								

Enter the proponent's name.

Enter the name and email address of the person who the MECP should contact about your project. This should be the same contact person who is listed on the notice.

Select the project schedule Select the project type from the drop-down menu.

Select the name of the municipality or unorganized/unsurveyed area where your project is located from the drop-down menu.

Select the MECP region from the drop. sheamlined EA process was down menu. Read initiated (e.g. notice of the "MECP regions" commencement). This date worksheet to find the may be when the project MECP region where notice was first published. your project is located.

FW: Halton Hills Generating Station Efficiency Upgrades

From: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Sent: Tuesday, June 27, 2023 11:54 AM To: Eanotification.cregion@ontario.ca

Cc: Upgrade project for HHGS https://doi.org/10.1001/j.j.g. https://doi.org/10.1001/j.j

kathleen.oneill@ontario.ca; Trevor.bell@ontario.ca; Nick.Colella@ontario.ca; Denise.Plourde@ontario.ca; Stephen

Smith <Stephen.Smith@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades

Good afternoon:

Atura Power (Atura) is planning to undertake efficiency upgrades at the Halton Hills Generating Station (HHGS) located in the Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line. Atura commenced the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01 (O.Reg. 116/01), under the Environmental Assessment Act in May 2023.

The attached letter is to provide an update on the status of the Environmental Screening Process for the project and share our anticipated timeline for completion. This letter is being submitted to ensure MECP is aware of our anticipated timeline and seek any feedback on the project before we issue the Notice of Completion in July. If you have any additional questions about the project or if you would like to meet to discuss the project in more detail, please do not hesitate to email us at haltonupgrade@aturapower.com.

Thank you,

David Patterson

EHS Manager | Atura Power 905 870-4233 | david.patterson@aturapower.com





June 27, 2023

Environmental Assessment Branch
Environmental Assessment and Permissions Division
Ministry of the Environment, Conservation and Parks (MECP)
135 St. Clair Avenue West
Toronto, ON M4V 1P5

To whom it may concern,

Regarding: Atura Power Halton Hills Generating Station Efficiency Upgrades Environmental Screening Process Follow-Up

Atura Power (Atura) is planning to undertake efficiency upgrades at the Halton Hills Generating Station (HHGS) located in the Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line. Atura commenced the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01 (O.Reg. 116/01), under the *Environmental Assessment Act* in May 2023. On May 19, 2023, Atura published a Notice of Commencement and provided a copy to the Ministry of the Environment, Conservation and Parks (MECP), as well as other relevant agencies, adjacent landowners, and Indigenous communities. A copy of the Notice of Commencement is attached to this letter.

The purpose of this letter is to provide an update on the status of the Environmental Screening Process for the project and share our anticipated timeline for completion. At this time, we are planning to finalize the Screening Report and then publish a Notice of Completion in July 2023. Further details, particularly related to engagement activities associated with the project are provided below, for your information.

Notice of Commencement - Engagement Summary

Atura kicked off the engagement process by conducting a desktop analysis to identify Indigenous communities who may wish to be engaged in the Environmental Screening Process. This effort identified four Indigenous communities including, Mississaugas of the Credit First Nation, Six Nations of Grand River, Métis Nation of Ontario - Credit River, and Haudenosaunee Development Institute (HDI). Next, Atura contacted the four communities via phone calls, to learn about their engagement preferences and to share that a Notice of Commencement formally announcing the beginning of the Environmental Screening Process would be published in a local newspaper in the coming weeks. On May 19, 2023, Atura published the Notice of Commencement in the local newspaper (Halton Hills Today). Since then, Atura has moved forward with providing interested Indigenous communities, as well as other interested agencies and members of the public, with opportunities to share their feedback, submit questions, and learn more about the planned upgrades at HHGS.

On the date of publishing (May 19, 2023), Atura hand delivered a covering letter and copy of the Notice of Commencement to landowners and tenants on properties adjacent to the HHGS. Letters and copies of the Notice were also emailed and/or mailed to relevant agencies, including the MECP (head office and region), according to the communication preferences indicated in the



Environmental Assessment Government Review Team Master Distribution List, on May 19, 2023. Finally, Indigenous communities, who had already been engaged via phone calls to explain that the Notice of Commencement would be published in May and discuss engagement preferences related to the project, were emailed a letter and copy of the Notice of Commencement on May 19, 2023.

Public Meeting

The Notice of Commencement invited Indigenous communities, members of the public, and agencies to attend a virtual public meeting scheduled for June 15, 2023, to learn about the planned upgrades and to share their questions or feedback. As a courtesy, Atura also sent an email on June 14, 2023, reminding contacts of the upcoming virtual public meeting. The meeting was held on June 15, 2023, from 6:30 – 7:30pm EST as planned. It included a presentation summarizing the planned upgrades, the Environmental Screening Process, and information on how members of the public can be involved and learn more. The presentation was followed by a live question period where the project team was available to answer questions. No questions were received from participants during the meeting.

Project Engagement Tools

Atura developed and operates a project webpage that provides details of the project including background information, a summary of the technical details associated with the planned upgrades, and an explanation of the Environmental Screening Process being followed and how Indigenous communities, agencies, and members of the public can participate in this process. Copies of project documentation are also available for viewing on the project webpage, including a PDF copy of the PowerPoint presented at the virtual public meeting and a Frequently Asked Questions document providing more detail about the project to those who might be interested. Accessibility is important to Atura; both the project webpage and the project materials posted on the webpage are *Accessibility for Ontarians with Disabilities Act* (AODA) compliant to ensure all Ontarians can access and interact with the project information.

Atura is also maintaining a project-specific email that can be accessed from the project website, that members of the public can use to request additional information or to submit feedback on the project. The email has had minimal activity – no major questions about the project have been submitted, to date – but the project team continues to monitor this email closely in order to provide timely and meaningful responses to any inquiries that may be received.

Indigenous Engagement

The primary Indigenous communities were identified based upon proximity to the project and influence around the project, and included, Mississaugas of the Credit First Nation, Six Nations of Grand River, Métis Nation of Ontario - Credit River, and HDI. Atura continues to share information and engage with these Indigenous communities since the start of the planning process. When Atura reached out to pre-engage Indigenous communities prior to publishing the Notice of Commencement, Atura offered to coordinate meetings with any Indigenous communities wishing to learn more about the project and/or share their engagement preferences or feedback. Atura has since met with HDI and has established a Framework



Agreement with them. Virtual meetings have been scheduled with Mississaugas of the Credit First Nation, Six Nations of Grand River, and Métis Nation of Ontario - Credit River in the coming weeks, to continue to share information about the planned upgrades and learn about feedback shared by communities.

Technical Studies

Atura is now in the process of drafting the Screening Report. Atura anticipates minimal changes in air emissions would be the only potential negative effect for the project. An air quality assessment is being 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). The assessment and results will be included in the Screening Report.

An Emission Summary and Dispersion Modelling (ESDM) report has been completed to support the Environmental Compliance Approval (ECA) amendment application which determined that the HHGS will continue to comply with Ontario Regulation 419/05 following the planned upgrades. 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" and will continue with in-stack continuous emissions monitoring.

Next Steps

As noted above, Atura hopes to publish the Screening Report in July along with a Notice of Completion and commence the 30-day public review period. At this time, per the guidelines we will share a copy of the Notice of Completion with relevant agencies, adjacent landowners and Indigenous communities using the same communication processes used to share the Notice of Commencement.

This letter is being submitted to ensure MECP is aware of our anticipated timeline and seek any feedback on the project before we issue the Notice of Completion in July. If you have any additional questions about the project or if you would like to meet to discuss the project in more detail, please do not hesitate to reach out using the information provided below.

Sincerely,

David Patterson

Patter:

Environmental Health & Safety Manager

david.patterson@aturapower.com

905-870-4233

Notice of Commencement of a Screening and Invitation to a Virtual Public Meeting

Halton Hills Generating Station Upgrades

Atura Power is planning to make efficiency upgrades at the Halton Hills Generating Station (HHGS).

Project Description

HHGS has been in operation since 2010 in the Town of Halton Hills between Highway 401 and Steeles Avenue, West of 6th Line. It is capable of producing an output of 683 megawatts (MW) to the Ontario electrical grid.

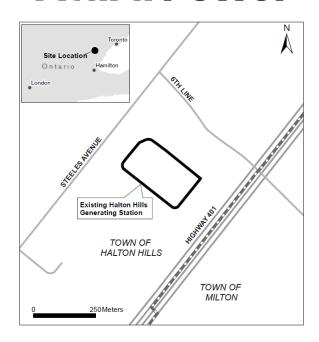
The upgrades will be limited to replacing parts of the existing natural gas fired combustion turbines during their regular maintenance cycle with more efficient parts that will result in an increased output to 710 MW. All upgrades will take place within the existing building and there will be no changes or expansion beyond the existing HHGS footprint.

Atura Power is committed to building a resilient electricity grid in Ontario and is working to address the energy supply shortfall that Ontario will experience in the near future. The proposed upgrades to HHGS are part of Atura Power's efforts to address this supply gap and to make energy production more efficient and affordable.

Environmental Screening Process

Since the project will result in a 27 MW increase in the output of HHGS, it is subject to the Environmental Screening Process for Electricity Projects subject to Ontario Regulation 116/01, under the *Environmental Assessment Act*. This Notice has been issued to communicate the start of the Environmental Screening Process.

Atura Power



Virtual Public Meeting

Atura Power is committed to engaging with Indigenous groups, the public and other stakeholders on all our projects. We invite you to attend an upcoming virtual public meeting to learn more and provide feedback. You can access the link to join the public meeting on the project webpage.

How to Join

Date: Thursday, June 15, 2023 Time: 6:30 – 7:30 pm EST

Project webpage: <u>aturapower.com/haltonupgrade</u>

Project Contacts

If you are unable to participate, meeting materials will be posted on the project webpage for review following the meeting. Please email your questions or comments to haltonupgrade@aturapower.com.

For more information: https://aturapower.com/

Comments and information regarding this project are being collected in accordance with the *Freedom of Information* and *Protection of Privacy Act* for the purpose of meeting environmental assessment requirements.

From: Bell, Trevor (MECP) < Trevor. Bell@ontario.ca>

Sent: Thursday, June 29, 2023 3:33 PM

To: David Patterson <david.patterson@aturapower.com>

Cc: Battarino, Gavin (MECP) <Gavin.Battarino@ontario.ca>; Plourde, Denise (MECP) <Denise.Plourde@ontario.ca>; Stephen Smith <Stephen.Smith@aturapower.com>; Upgrade project for HHGS <haltonupgrade@aturapower.com>;

EA Notices to CRegion (MECP) <eanotification.cregion@ontario.ca>
Subject: RE: Halton Hills Generating Station Efficiency Upgrades

Hi David.

Thank you for providing the update on the status of the Environmental Screening Process for your project. We look forward to receiving the Notice of Completion and the Screening Report.

Please note that for regular EA notifications and updates, we would prefer they not be sent directly to the Director of the Environmental Approvals Branch. I will be your primary point of contact with the ministry, and please do continue to copy eanotification.cregion@ontario.ca on all our correspondence.

Thanks,

Trevor

Trevor Bell | Regional Environmental Planner

Project Review Unit, Environmental Assessment Branch

Ministry of the Environment, Conservation and Parks

5775 Yonge Street, 8th floor, Toronto ON, M2M 4J1

New Phone: 437-770-3731 | trevor.bell@ontario.ca

Appendix C4c: Correspondence Records with Other Agencies

FW: Halton Hills Generating Station Efficiency Upgrades Public Meeting

From: Darius Sokal <Darius.Sokal@aturapower.com>

Sent: Wednesday, June 14, 2023 12:12 PM

To: nick.colella@ontario.ca; denise.plourde@ontario.ca; trevor.bell@ontario.ca; kathleen.oneill@ontario.ca; Justin McArthur <jmcarthur@hrca.on.ca>; tracey.burton@ontario.ca; Dharmen Dhaliah <ddhaliah@haltonhills.ca>; michael.chong@parl.gc.ca; ted.arnottco@pc.ola.org; contract.management@ieso.ca; envserv@hrca.on.ca; SecondaryLandUse@HydroOne.com; Scott Knapman <sknapman@haltonhillshydro.com>; mayor@haltonhills.ca; jbrass@haltonhills.ca; jracinsky@haltonhills.ca; gary.carr@halton.ca; executiveservices@milton.ca; townclerk@milton.ca; cityclerksoffice@brampton.ca; info@caledon.ca; clerks@erin.ca; Clark Somerville <clarks@haltonhills.ca>; Valerie Petryniak <ValerieP@haltonhills.ca>; regionalclerk@halton.ca; Jane.MacCaskill@halton.ca; robert.clavering@ec.gc.ca; andrew.evers@ontario.ca; keith.johnston@ontario.ca; joerg.wittenbrinck@ontario.ca; michael.dicosmo@ontario.ca; heather.watt@ontario.ca; fuad.abdi@ontario.ca; info@haltonhills.ca; Ellen Perschbacher <ellen.perschbacher@avaanz.ca>; Anoushka Martil <anoushka.martil@avaanz.ca>; Upgrade project for HHGS <haltonupgrade@aturapower.com>
Subject: Halton Hills Generating Station Efficiency Upgrades Public Meeting

Good afternoon.

The email is to remind you that Atura Power will be hosting a virtual public meeting tomorrow, June 15th from 6:30 to 7:30 p.m. EST, about the proposed Halton Hills Generating Station efficiency upgrades.

A link to access the meeting is available on the Halton Hills Generating Station Upgrade webpage here: aturapower.com/haltonupgrade.

Please note that meeting materials will be available on the project webpage (link above) following the meeting for those unable to participate.

Any questions or comments can be emailed to haltonupgrade@aturapower.com.

Thank you,

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

From: Justin McArthur <jmcarthur@hrca.on.ca> Sent: Thursday, May 25, 2023 12:31 PM

To: Darius Sokal <Darius.Sokal@aturapower.com>

Cc: Stephen Smith <Stephen.Smith@aturapower.com>; Darius Sokal <Darius.Sokal@aturapower.com>

Subject: RE: [EXTERNAL]Halton Hills Generating Station Efficiency Upgrades

Some people who received this message don't often get email from jmcarthur@hrca.on.ca. Learn why this is important

Good morning Darius,

My name is Justin McArthur, Regulations Officer with Conservation Halton. My colleague passed along your letter to me. I have had a glance over it and wanted to confirm that all of the work that is being completed is internal to the building? If all work is taking place within the building or existing infrastructure, no approval will be needed from Conservation Halton.

Please let me know and have a great day,

Justin

Justin McArthur

Regulations Officer

2596 Britannia Road West, Burlington, ON L7P 0G3

905.336.1158 ext.2264 | jmcarthur@hrca.on.ca

conservationhalton.ca

From: Darius Sokal

Sent: Thursday, May 25, 2023 12:44 PM To: Justin McArthur <jmcarthur@hrca.on.ca>

Cc: Stephen Smith <Stephen.Smith@aturapower.com>

Subject: RE: [EXTERNAL]Halton Hills Generating Station Efficiency Upgrades

Hi Justin.

Yes, I confirm that all work related to the same technology efficiency upgrades at Halton Hills Generating Station will take place within the existing buildings. Essentially, we are replacing some parts on our turbines during a scheduled maintenance period.

Thanks for your message and please let me know if you have any further questions.

Best regards,

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

From: Justin McArthur <imcarthur@hrca.on.ca> Sent: Thursday, May 25, 2023 12:46 PM

To: Darius Sokal Darius Sokal@aturapower.com
Co: Stephen Smith Stephen.Smith@aturapower.com

Subject: RE: [EXTERNAL]Halton Hills Generating Station Efficiency Upgrades

You don't often get email from jmcarthur@hrca.on.ca, Learn why this is important

Hi Darius,

Thank you so much for getting back to me. I have no other questions. I hope the work goes smoothly.

Have a great day,

Justin McArthur

Regulations Officer



905.336.1158 ext.2264 | jmcarthur@hrca.on.ca

conservationhalton.ca









Halton

Join us June 1, 2023 at Kelso Conservation Area for our annual fundraising dinner.

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From: Connell, Mark <Mark.Connell@halton.ca>

Sent: Friday, June 23, 2023 2:47 PM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com> Subject: Halton Hills Generating Station Efficiency Upgrades

You don't often get email from mark.connell@halton.ca. Learn why this is important

Good afternoon,

I'm inquiring about efficiency upgrades project at the Halton Hills Generating Station. I realize this is a small change of efficiency, but will there be any changes to the anticipated volume of water usage and wastewater generated? I assume it will be marginal but want to confirm. Thank you very much,

Mark

Mark Connell (he/him/his), P.Eng.

Director of Water & Wastewater Treatment Water & Wastewater Treatment Public Works Halton Region 905-825-6000, ext. 7322 | 1-866-442-5866



From: Upgrade project for HHGS Sent: Tuesday, June 27, 2023 8:17 AM

To: Connell, Mark <Mark.Connell@halton.ca>; Upgrade project for HHGS <haltonupgrade@aturapower.com>

Subject: RE: Halton Hills Generating Station Efficiency Upgrades

Good morning, Mark.

The efficiency upgrades at HHGS will not result in appreciable changes to water use or wastewater generation at the station.

Thanks for your question and please let me know if you have any others.

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

FW: Hydro One Response: 20230523-NoticeOfPIC1-Halton Hills Generating Station Upgrades

----Original Message-----

From: SUN Hongxia <Susan.SUN@HydroOne.com> On Behalf Of SECONDARY LAND USE Department

Sent: Tuesday, May 23, 2023 1:46 PM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Cc: SECONDARY LAND USE Department < Department.SecondaryLandUse@hydroone.com > Subject: Hydro One Response: 20230523-NoticeOfPIC1-Halton Hills Generating Station Upgrades

[You don't often get email from department.secondarylanduse@hydroone.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Please see the attached for Hydro One's Response.

Hydro One Networks Inc.

SecondaryLandUse@HydroOne.com



Hydro One Networks Inc.

483 Bay Street 8th Floor South Tower Toronto, Ontario M5G 2P5

HydroOne.com

May 23, 2023

Re: Halton Hills Generating Station Upgrades

Attention: Ryan Dube Project Manager, Technical Development Atura Power

Thank you for sending us notification regarding (Halton Hills Generating Station Upgrades). In our preliminary assessment, we confirm there are no existing Hydro One Transmission assets in the subject area. Please be advised that this is only a preliminary assessment based on current information.

If plans for the undertaking change or the study area expands beyond that shown, please contact Hydro One to assess impacts of existing or future planned electricity infrastructure.

Any future communications are sent to Secondarylanduse@hydroone.com.

Be advised that any changes to lot grading and/or drainage within proximity to Hydro One transmission corridor lands must be controlled and directed away from the transmission corridor.

Sent on behalf of,

Secondary Land Use Asset Optimization Strategy & Integrated Planning Hydro One Networks Inc.

FW: Hydro One Response: 20230623-NoticeOfPIC1-Halton Hills Generating Station Efficiency

----Original Message-----

From: SUN Hongxia <Susan.SUN@HydroOne.com> On Behalf Of SECONDARY LAND USE Department Sent: Friday, June 23, 2023 10:36 AM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Cc: SECONDARY LAND USE Department < Department. Secondary Land Use@hydroone.com > Subject: Hydro One Response: 20230623-NoticeOfPIC1-Halton Hills Generating Station Efficiency

[You don't often get email from department.secondarylanduse@hydroone.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Please see the attached for Hydro One's Response.

Hydro One Networks Inc.

SecondaryLandUse@HydroOne.com



Hydro One Networks Inc.

483 Bay Street 8th Floor South Tower Toronto, Ontario MSG 2P5

HydroOne.com

June 23, 2023

Re: Halton Hills Generating Station Efficiency

Attention: Darius Sokal Sr. Communications Advisor Atura Power

Thank you for sending us notification regarding (Halton Hills Generating Station Efficiency). In our preliminary assessment, we confirm there are no existing Hydro One Transmission assets in the subject area. Please be advised that this is only a preliminary assessment based on current information.

If plans for the undertaking change or the study area expands beyond that shown, please contact Hydro One to assess impacts of existing or future planned electricity infrastructure.

Any future communications are sent to Secondarylanduse@hydroone.com.

Be advised that any changes to lot grading and/or drainage within proximity to Hydro One transmission corridor lands must be controlled and directed away from the transmission corridor.

Sent on behalf of.

Secondary Land Use Asset Optimization Strategy & Integrated Planning Hydro One Networks Inc.

FW: Hydro One Response: 20230623-NoticeOfPIC1-Halton Hills Generating Station Efficiency

----Original Message-----

From: Upgrade project for HHGS Sent: Monday, June 26, 2023 10:25 AM

To: SECONDARY LAND USE Department < Department.SecondaryLandUse@hydroone.com >; Upgrade project for

HHGS <haltonupgrade@aturapower.com>

Subject: RE: Hydro One Response: 20230623-NoticeOfPIC1-Halton Hills Generating Station Efficiency

Good morning.

Thank you for your response. This email acknowledges recieiveng your email and attached letter.

Best regards, Darius Sokal Atura Power

Appendix C5: Other Correspondence

FW: questions about air emissions

From: Oved, Marco <moved@thestar.ca> Sent: Thursday, August 3, 2023 3:14 PM

To: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Subject: questions about air emissions

Hello,

I'm wondering if you would be able to share with me the documents mentioned in your Halton Hills Efficiency Upgrade presentation in June:

- Emission Summary and Dispersion Modelling report.
- Environmental Compliance Approval Amendment Application
- Air Quality Assessment
- Screening Stage Assessement
- Amended Air emissions permit (and the technical studies you mentioned)

Also, I wanted to ask why it appears the Halton Hills plants are barely operational in Summer 2023? Is there some kind of scheduled maintenance going on? I had a look at the IESOs generation data and all four Halton Hills Plants are operational for less than an hour a day since June. Why is that?

Thanks in advance for your help

Marco

Marco Chown Oved | Climate Change Reporter | Toronto Star

o: +1-416-869-4892 | c: +1-647-765-1615 @MarcoOved

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FW: questions about air emissions

From: Upgrade project for HHGS <haltonupgrade@aturapower.com>

Sent: Friday, August 4, 2023 1:31 PM

To: Oved, Marco <moved@thestar.ca>; Upgrade project for HHGS <haltonupgrade@aturapower.com>

Subject: RE: questions about air emissions

Hi Marco.

We will be posting the Halton Hills Generating Station Efficiency Upgrades Screening Report on the project webpage in the next week or two. This screening report documents the environmental screening process and discusses anticipated environmental effects that may result from the project. I can email you a copy once it's finalized and posted online if you wish.

Additionally, our Halton Hills Generating Station underwent maintenance from late May until the end of June and, as a result, did not generating and supply electricity to Ontario's grid during that period. I don't know what the status was for other generation facilities outside the Atura Power fleet.

I hope this help, Marco.

Thanks and let me know if you have any more questions.

Darius Sokal (hear it)

Sr. Communications Advisor | Atura Power

1415 Joshuas Creek Dr., Unit #101, Oakville, ON L6H 7G4

E: darius.sokal@aturapower.com

M: 289-795-6573

Appendix C6: Notice of Completion

Notice of Completion of a Screening Report

Halton Hills Generating Station Efficiency Upgrades

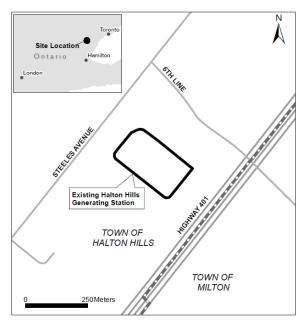
Atura Power is a subsidiary of Ontario Power Generation and is planning to make efficiency upgrades at the Halton Hills Generating Station (HHGS).

Project Description

HHGS is a combined-cycle natural gas-fuelled electricity generating station with an electrical output of 683 megawatts (MW). The station is located between Highway 401 to the south and Steeles Ave. to the north, west of Sixth Line.

The upgrades will involve replacing internal parts of the natural gas fired combustion turbines with more efficient parts which will increase the facility generating capacity by 27 MW (at 15 degrees Celsius reference level ambient air conditions) to achieve a total output of 710 MW. All upgrades will

Atura Power



take place within the existing facility and there will be no changes or expansion beyond the existing HHGS footprint.

The Independent Electricity System Operator (IESO) quantified the near-term additional energy supply need in Ontario, stating that an additional 4,000 MW of new capacity is required by May 2027. Procurements for projects capable of meeting the increased energy demand in 2027 will need to be completed in the short-term. Atura Power is prepared to help meet that need and support ratepayers in Ontario through upgrades that will optimise and increase energy generation at HHGS in south-eastern Ontario.

Environmental Screening Process

Given that the upgrades will result in a 27 MW increase in the nameplate capacity (electrical output) of HHGS, the upgrades are subject to the Environmental Screening Process for Electricity Projects pursuant to Ontario Regulation 116/01, under the Ontario *Environmental Assessment Act*. Atura Power has prepared a Screening Report that documents the results of the Environmental Screening Process undertaken to identify whether any potential environmental effects of the project would occur ('Yes' or 'No'). The Environmental Screening Process determined that all Screening Criteria scored 'No' as a result of the HHGS upgrades project, and without any mitigation, all regulatory requirements will be met. Atura Power intends to move forward with implementing the upgrades subject to other required approvals.

For more information: https://aturapower.com/

Comments and information regarding this project are being collected in accordance with the *Freedom of Information* and *Protection of Privacy Act* for the purpose of meeting environmental assessment requirements.

Indigenous communities, agencies, and members of the public are invited to review the Screening Report for 30 days, beginning on Oct. 10, 2023. The report is available online at aturapower.com/haltonupgrade.

Any outstanding concerns about the project should be shared with Atura Power by emailing haltonupgrade@aturapower.com. If the matter is unable to be resolved, the concerned individual may submit a written request to the Director of the Environmental Assessment and Approvals Branch, Ministry of the Environment, Conservation and Parks (MECP) to elevate the project to either an Environmental Review or to an Individual Environmental Assessment.

MECP Environmental Assessment and Approvals Branch Contact Information

Mailing Address	Director
	Environmental Assessment Branch
	Ministry of the Environment, Conservation and Parks
	135 St. Clair Ave. W., 1st Floor
	Toronto, ON M4V 1P5
Email Address	EABDirector@ontario.ca

Elevation requests must be made in accordance with the provisions set out in the MECP's Environmental Screening Process for Electricity Projects, with a copy sent to Atura Power. Any elevation requests must be received by the MECP's Environmental Assessment and Approvals Branch by Nov. 10, 2023.

Project Contact Information

More information including other project-related documentation is available online at aturapower.com/haltonupgrade.

If you require any assistance regarding accessibility concerns or wish to share questions or comments, please email us at haltonupgrade@aturapower.com.

For more information: https://aturapower.com/

Comments and information regarding this project are being collected in accordance with the *Freedom of Information* and *Protection of Privacy Act* for the purpose of meeting environmental assessment requirements.