

Napanee Generating Station Expansion Frequently Asked Questions

Below are frequently asked questions and answers about the Napanee Generating Station (NGS) Expansion (the project). More information is available in the **Environmental Review Report** and Technical Study Documents on the project webpage.

If you cannot find the answer to your question, please send us an email at napaneeexpansion@aturapower.com and a project representative will respond to your enquiry. This document may be updated to include frequently asked questions received during the review period of the Environmental Review Report.

How will the project benefit the community?

The NGS Expansion will have several benefits specific to the community including:

- The project will reduce the likelihood of blackouts in the area.
- Construction of the project will provide jobs and contribute to the local economy through the purchase of goods and services in the area.
- Atura Power is contributing \$400,000 per year to a Community Development Fund for the duration of the Independent Electricity System Operator (IESO) contract to help fund community projects.

General benefits of the NGS Expansion include:

- Natural gas is an enabler of renewable energy, providing the flexibility required to ensure a reliable electricity system.
- Additional electricity resources, such as the NGS Expansion, can help transition heavy greenhouse gas (GHG) producing sectors such as transportation and manufacturing to electricity. The decarbonization of these sectors is expected to have an overall reduction of GHG emissions. As a low GHG emitting source, the NGS Expansion will become part of the solution to meet the increased electricity demand needed for the broader decarbonization of our economy.
- The reliable operation of the electricity system depends on the continual balancing of supply and demand in real time. Natural gas can be quickly switched on and off and be

available on standby to respond to sudden changes in demand (demand routinely changes by 35% throughout the day).

- Due to its ability to run for extended periods of time, natural gas is currently the only resource available that can operate on demand for extended periods of time regardless of weather conditions and does not rely on electricity from other resources to charge.

What is causing the energy supply gap in Ontario?

Ontario's electricity sector is undergoing a period of major 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 (2024) Annual Planning Outlook (APO) reflects these trends. The APO projects a steady rise in electricity demand that highlights the strengths of Ontario's communities and economy in navigating the challenges of the pandemic, pursuing electrification, and supporting economic growth.

The IESO recently released an [updated demand forecast](#) which predicts a 75 per cent increase in electricity demand by 2050, with annual consumption rising from 151 terawatt-hours (TWh) in 2025 to 263 TWh in 2050, higher than what was previously thought.

Why is a natural gas power plant being expanded and burning fossil fuels in the process?

Natural gas plays an important role in maintaining Ontario's system reliability and has become even more important with the addition of intermittent wind and solar generation. Although Ontario is making the transition to renewable energy sources, it is not uncommon to have a week or more of low wind or overcast conditions, and for these periods of time, wind and solar are not yet sufficient to provide the power to meet the growing demand.

The reliable operation of the electricity system depends on the continual balancing of supply and demand in real time. Natural gas generation operates on demand regardless of weather conditions. Through its availability to generate power during peak demand periods in both the summer and winter, and by providing readily dispatchable balancing and peaking power, natural gas serves as the enabler of renewable energy.

Not only is natural gas electricity generation reliable and affordable, but it supports the decarbonization of the broader economy through the electrification of heavy GHG-producing

sectors such as transportation, manufacturing and industrial processes.

How will the project impact provincial and federal environmental targets to reduce GHG emissions and move towards net-zero emissions?

Increased electricity production will support converting big polluters, like gas-powered vehicles and coal-fired industry, to electricity resulting in a 1.5x net reduction in emissions overall for the province. Electricity sector emissions are going up but are more than offset by reductions in the broader economy, reaching net zero by 2029.

Will the project make electricity cheaper?

Atura Power does not dictate the price that customers pay for electricity, nor do we set government policies. Our business is to safely, reliably and affordably generate electricity to meet the needs of Ontarians.

Will the project release air pollutants?

The project has the potential to affect the local air quality and emit GHGs during the operations and maintenance phase as well as the construction phase. Any potential effects during construction are expected to be of short duration and unlikely to have long-lasting effects. The principal air quality constituents released during project operations include standard products of combustion consisting mainly of water and carbon dioxide (CO₂) with lesser amounts of nitrous oxide and carbon monoxide. Other constituents such as sulphur dioxide, particulate matter, metals, polycyclic aromatic hydrocarbons, and volatile organic compounds are emitted in trace amounts.

An air quality assessment has been completed for the project in support of the Environmental Review which demonstrates compliance with the Ministry of the Environment, Conservation and Parks Ambient Air Quality Criteria (AAQC) and the Canadian Ambient Air Quality Standards (CAAQS). 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. A GHG assessment was also completed for the project in support of the Environmental Review which concluded that the maximum increase of NGS facility CO_{2e} (equivalent CO₂) emissions due to the project is estimated to be less than four per cent and nine per cent for the expected and worst-case project scenarios, respectively.

In addition to the air quality assessment, an amendment to the existing NGS Environmental Compliance Approval (ECA) is being undertaken for air and noise emissions as required under

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Section 9 of Ontario's *Environmental Protection Act*. The application for amendment will include an air quality assessment which demonstrates compliance with MECP O. Reg. 419/05, which limits substances released into air that can affect human health and the environment. The existing NGS ECA requires continuous monitoring and reporting of end of stack emissions from the existing combined cycle gas combustion generators. The ECA amendment will also require continuous monitoring and reporting of end of stack emissions from the proposed simple cycle combustion turbine generator. The facility will continue to operate within all environmental permitting requirements. Will the noise from the NGS increase?

While the project is anticipated to produce additional noise, the project will not exceed the MECP 40-decibel (dB) sound limit at night nor the 45 dB MECP limit during the day. Additionally, sound walls and other noise mitigation measures will be implemented as part of the project to reduce noise pollution to adjacent properties.

Will lights from the project be visible to neighbouring properties?

We understand that the facility's lighting could affect the local community and wildlife. Lighting will be limited to light required for operations and designed to minimise off-site visibility.

Will the project affect the Upper Gap Archaeological Site?

The Upper Gap Archaeological Site, as it is geographically defined currently, will not be tangibly or intangibly affected by the project. A Cultural Heritage Impact Assessment determined that no adverse impacts of destruction, alteration, shadows, direct or indirect obstruction of views, change in land use or land disturbances to the Upper Gap Archaeological Site are anticipated.