

Key messages

- As of March 21, 2017, the Green Electron has completed all of the Market Registration requirements and is now able to produce electricity and participate in the electricity market.
- Green South was briefly dispatched on March 27 but has not been dispatched since.
- There may be a variety of reasons for why a facility is not being dispatched, including but not limited to:
 - Transmission constraints
 - Scheduled outage or maintenance of a facility
 - Market conditions (facility may not be economic under certain system conditions)
- Because of confidentiality provisions, we are not able to provide specifics on why a resource has been dispatched or not.
- Napanee GS is currently under construction and has a milestone Commercial Operation Date of December 31, 2018.
- Natural gas facilities help to provide operational flexibility (ramping up and down on demand) to respond to changing conditions on the grid, which is necessary to operate a reliable electricity system.
- We can also expect a facility like Green Electron and Napanee GS to support a reliable power supply during times of the year with higher demands for electricity, like in the upcoming summer months.
- We're not just planning to ensure we have enough generators for today, but also to system needs in the future.
- Looking forward, Ontario is in a stable supply situation. However, we see greater use of the gas facilities during the nuclear refurbishment period and potential for new supply in the early 2020s.

How much electricity is Green Electron capable of producing?

- Green Electron has a total generating capability of 325 MW.

What is the status of Green Electron? Has the plant become fully operational? If so, when did it become fully operational?

- As of March 21, 2017, Green Electron has completed all of the Market Registration requirements and is now able to produce electricity to the grid.

- Market requirements include successful testing and commissioning of a facility to ensure the generation facility's equipment meets the market rules as well as provisions that relate to reliability standards.
- The IESO and the contract counterparty are working to ensure all contractual obligations are met.

Has Green Electron produced electricity to the grid yet? If not, why?

- Green Electron was dispatched on March 27 but has not been dispatched since.
- There may be a variety of reasons for why a facility is not being dispatched, including but not limited to:
 - Transmission constraints
 - Scheduled outage or maintenance of a facility
 - Market conditions (facility may not be economic under certain system conditions)
- Because of confidentiality provisions, we are not able to provide specifics on why a resource has been dispatched or not.
- The IESO does not make decisions about when a generator generates electricity. A generator will decide to offer electricity based on price signals in the market, and will only be called on to produce when they are economic.
- The market price reflects the marginal cost of electricity at each five minute interval. Both producers and consumers respond to this price signal by making efficient short-term decisions – either to produce or consume energy.

What is the status of Napanee GS?

- Napanee GS is currently under construction and has a milestone commercial operation date of December 31, 2018.

Are Green Electron and Napanee GS necessary given the current supply situation?

- The role of natural gas generation in Ontario's supply mix has increased in recent years with the phase out of coal-fired generation. Natural gas makes up approximately 10,000 MW of the province's installed capacity. (Total installed capacity is 36,000+ MW)
- Natural gas facilities provide the operational flexibility (ramping up and down on demand) that is critical to operate a reliable electricity system. Natural gas facilities are often used to ensure a reliable power supply during times of higher demand and can provide needed flexibility in response to changing conditions on the power system.

How Many natural gas facilities are there in Ontario?

- There are approximately 30 natural gas stations in Ontario capable of producing electricity to the grid. They are located across the province.

When will facilities like Green Electron and Napanee be used to provide electricity to the grid?

- Different resources provide different attributes – such as availability during peak demand, flexibility, energy production, and other considerations like low or no emissions. Because not every facility has all these attributes, diversity of supply is important.
- Looking ahead, we can expect a facility like Green Electron and Napanee to provide a reliable power supply during times of higher demand and can provide needed flexibility during summer months when we reach peak demand and during phases of the nuclear refurbishment period.
- Chuck—it may be helpful to also talk about the supply outlook and assumptions in the OPO.

What is the value of the Green Electron and Napanee GS Contracts?

- We are not able to provide information on pricing for individual contracts because of confidentiality provisions.

Does the IESO have any concerns about the recent labour relations issues that the Green Electron plant had during the construction phase?

- The IESO is not responsible for labour relations matters pertaining to Green Electron. As the contract counterparty, the IESO expects the facility to meet all its contractual and market rule requirements.

Why are you bringing more facilities online while continuing to export power to the US?

- No single energy resource option can meet all system needs at all times. Maintaining a diverse supply mix, where the different resources are complementary to each other, is an effective way to provide the services necessary to balance the supply and demand of electricity and maintain the reliability of Ontario's power system.
- Like all jurisdictions, Ontario imports and exports electricity as part of the regular, day-to-day operation of its electricity system. Both exports and imports support reliability, providing supply when and where it is needed in the system.
- When generators are not utilized to meet Ontario needs, often in the spring and fall when demand for electricity is lower, exports provide additional revenue that contributes towards reducing costs that otherwise would have had to be paid for by Ontario consumers.
 - This includes through the collection of market uplift and transmission charges applied to exports,
 - Off-peak exports also help recover some of the fixed costs associated with baseload assets.
 - **If pressed:** In 2015, it is estimated that exports reduced Ontario's electricity system costs by \$228 million through market uplifts, transmission charges, and off-peak transactions.