

Mapleton Power Community Engagement Meeting

Prepared By:



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About Mapleton Power Inc.

- Mapleton Power is a 4.99 MW power generation facility that will be fired with Biogas/RNG and located at 8548 Wellington County Road 7, Moorefield ON N0G 2K0, using proven technology to generate and supply electricity to the Ontario electricity grid to increase its capacity and reliability. Connection will be on the Hydro One Network via the M2 Feeder connected to the Palmerston TS.
- The project site will be located on a section of Triangle Farms that is affiliated with an existing Biogas facility that produces electricity for the IESO controlled grid under a FIT contract. Future plans include its expansion to produce Biogas/RNG to power this new Power Generation Facility and satisfy the requirements of the Clean Electricity Regulation.

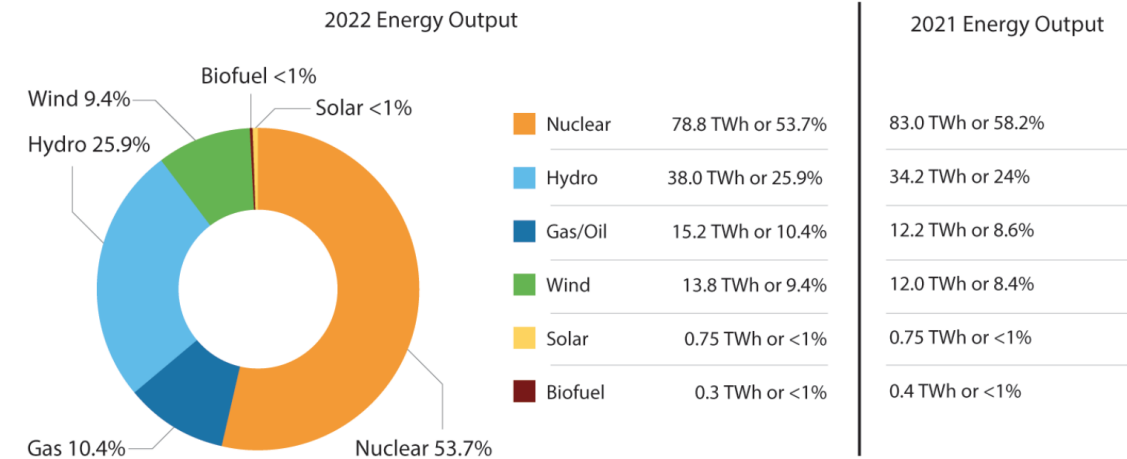
About 2-G Energy

2G Energy is a publicly traded company and a global leader in gas-fired combined heat and power solutions. Since 1995 nearly 9,000 solutions have been deployed in more than 55 countries worldwide. More than 50% of these are run on carbon neutral and renewable fuels such as Digester Gas, Landfill Gas, Flare Gas, Syngas and Hydrogen. 2G Energy Corp. is the Canadian subsidiary of 2G Energy AG that supplies and service combined heat and power solutions throughout all of Canada. Many of the systems deployed in Canada are fired by biogas produced from wastewater treatment plants, dairy farms and landfills.

About the IESO

- The IESO manages the province's power system so that Ontarians receive power when and where they need it. It plans and prepares for future electricity needs.
- A not-for-profit entity established by the Government of Ontario, IESO fees and licences to operate are set by the Ontario Energy Board.

Installed Capacity	38,214 MW (transmission-connected) Source: Reliability Outlook released March 2023
Record Summer Peak	27,005 MW (August 1, 2006)
Record Winter Peak	24,979 MW (December 20, 2004) Ontario's peak energy use is typically in the summer months when people use air conditioners to beat the heat. Peaks also take place in the winter when the weather is especially cold. Weather has the biggest influence on electricity demand.
Consumers Served (2021)	5.3 million



LT1 RFP

- Ontario needs a reliable and affordable grid to remain attractive for business development and ensure future growth and decarbonization. Ongoing competitive procurements are expected to secure up to 4,000 MW of long-term capacity to
 - Provide security against the risk of not having resources to meet North American planning standards
 - Enable emissions reductions in other sectors AND support the transition underway
 - Allow time for sector transformation –a more decentralized system, technological evolution to create new business opportunities and drive down costs.



Procurement Mechanism	Procurement Target	Storage Target	Natural Gas Target	Other (Hybrids, Biofuel, etc.)
Same Technology Upgrades	300 MW	No limit	Up to 300 MW	No limit
Expedited Long Term 1	1,500 MW	~900 MW	Up to 600 MW	No limit
Long Term 1*	2,200 MW	~1,600 MW	Up to 600 MW	No limit
Total by 2027	4,000 MW	~2,500 MW	Up to 1,500 MW	

915 MW

* Exact targets to be confirmed

LT1 RFP Schedule:

- Qualified Applicants selected in 2022
- Deliverability Test: September 2023
- Submit LT1 Bids: December 2023
- Award LT1 Contracts: Q2 2024
- Commercial Operation: By Q2 2028

Gas generation contracts must expire by **April 30, 2040**, to align with the latest expiration date of the IESO current natural gas generation contracts. All other contracts must expire no later than **April 30, 2047**

Mapleton Power Inc. Project

PROJECT NAME

Mapleton Power

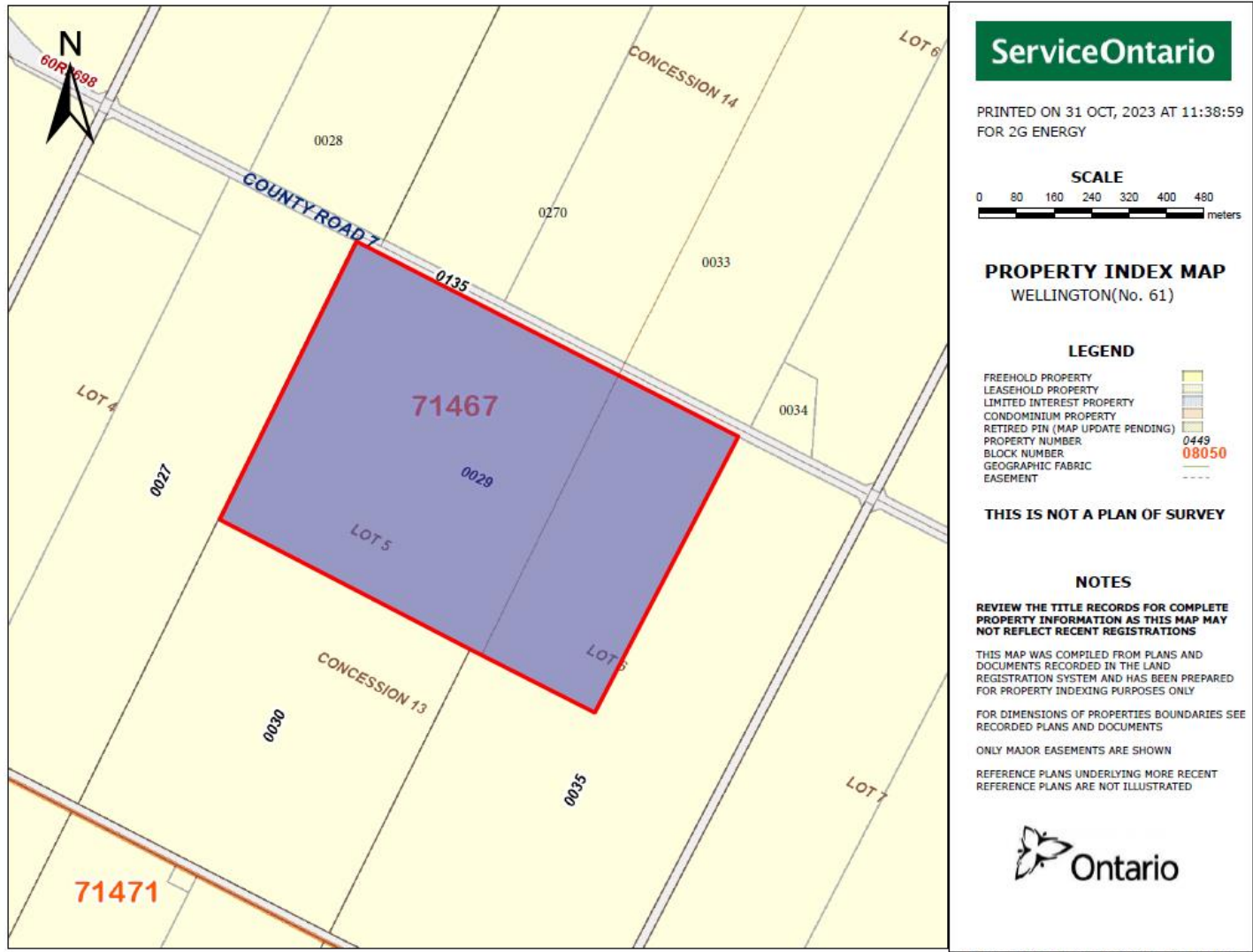
MAXIMUM CONTRACT CAPACITY PROJECT

4.74 MW

TECHNOLOGY

Biogas/RNG Fired, Reciprocating Engine Power Generator

Scale Map of Project Site



Site Plan with Fire Route Connection Points and Connection Line



Project Description

The project will include a Biogas/RNG fired Power Generation Facility with Nameplate Capacity Rating of 4.99 MW using proven reciprocating engine technology. Project Development is as follows:

Pre-feasibility Stage:	Completed	Environmental:	Start 2024
Planning Stage:	Completed	Interconnection Approvals:	Start 2024
Community Engagement:	In-Progress	Construction:	By 2027
Municipal Support Resolution:	2023-24	Commercial Operations Date:	By Q1 2028
Submission into LT1 RFP:	Dec. 2023		

Overall LT1 Schedule

ACTIVITIES	TIME LINE	STATUS
IESO Qualification	Q1-Q2 2022	Completed
Identify Potential Sites	Q3 2022- Q1 2023	Completed
Deliverability Tests	Q3 2023	Completed
Prepare & Submit Proposals to IESO	Q4 2023	In Process
IESO Review & Contract Award	Q1/Q2 2024	
Engineering (Civil, Mech, Elect)	Q3/Q4 2024	
Permitting	2024/2025	
Procurement & Site Delivery	2024/2025	
Pre-Installation Work	2024 2025	
Site Installation & Commissioning	Complete before Q1 2028	

Safety and Operational Considerations



- Generators are expected to operate during peak electricity demand periods in Ontario.
- Generators will be operated based on the needs of the grid and will be dispatched by the IESO.
- Air emissions will be controlled to Ministry of Environment standards.
- Noise emissions will be mitigated by enclosure and exhaust silencers in accordance with Ministry of Environment approval.
- Generators are equipped with automatic fire detection.

Opportunities & Community Engagement

- **Resiliency & Reliability** – The LT1 program and this project specifically will provide increased power quality and reliability to the local Mapleton area.
- **Lower Emissions** – This facility will feature high efficiency engines which will have lower emissions than larger, gas turbine-based generation facilities also participating in the LT1 program. It will also use Biogas/RNG as fuel.
- **Local Job Creation** – The project will require skilled trades during the construction phase of the project and it will deliver additional revenue to the Mapleton Power facility improving its long-term economic viability.

Contact Information

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<https://2gpower.ca/mapleton-power/>

Questions?

The floor is open for questions about the
Mapleton Power Inc. Project

Thank you!

We look forward to working on this project!

