
Connection of Net Metered Generation Facilities

Connecting generators 500 kW or smaller to Haldimand County Hydro's distribution system is not difficult but you do have to make sure you follow the process.

If you are:

- A Haldimand County Hydro load customer who would like to install a generator at your location*;
- Planning to install generation employing renewable energy technologies; and
- Installing a generation facility with a total nameplate rating of 10 kW or less for a domestic micro, 240 Volt single phase; and up to a maximum of 500 Kilowatts 347/600 Volts three phase, for commercial application. You are strongly advised to contact our office directly for installations 50 Kilowatts and over.

...and you want to connect your generator to our grid, this document will explain our Net Metering program which will be available to you, and outline how to proceed.

What is Net Metering?

- Net metering measures the energy you use against the energy you generate resulting in a "net" energy total from which your bill is calculated
- Net metering is appropriate for customers who wish to reduce their energy costs
- Under Net Metering agreements, excess generation cannot be carried forward beyond a billing period not to exceed twelve months, after which the net metered billing cycle is repeated.

What if I want to sell the power generated?

Haldimand County Hydro will purchase your power but only if you enter into a separate connection process not covered by the Net Metering program. The requirements for this type of installation are:

- You must request a connection from Haldimand County Hydro
- You must obtain a Generator's License from the Ontario Energy Board
- You must purchase and install a distribution transformer
- You must purchase and install a four-quadrant interval meter
- Before the proposed generation facility installation is finalized, you must consult with Haldimand County Hydro

What are Renewable Energy Technologies ("RETs")?

RETs derive energy from resources that are renewable or for all practical purposes cannot be depleted. Examples include: moving water (hydro, tidal and wave power), biomass, geothermal energy, solar energy, and wind energy. If you are uncertain about the classification of other resources, please contact the Ontario Ministry of Energy for clarification.

What does it take to get connected to the Haldimand County Hydro Distribution System?

Approvals

- Haldimand County Hydro recommends that all generator equipment be certified by an accredited Canadian authority such as the Canadian Standards Association. If it isn't, equipment must be site certified by an accredited Canadian agency such as the Electrical Safety Authority (ESA)
- Installation of all generation facilities must be approved by the ESA and proof of this (Connection Authorization) provided to Haldimand County Hydro prior to connection
- To comply with Section 84 of the Ontario Electrical Safety Code, you are required to have an isolation switch (visible, accessible and lockable) located between the meter and your equipment

* Please note that retailer enrolled customers with generation >10 kW do not qualify for the Net Metering Program, nor do retailer enrolled customers who are interval metered.

Agreements

- Enclosed Connection Agreement must be signed and complied with

Technical

- Generator Protective Relay settings must be set as per the attached tables

Metering Requirements

- In order to bill you for the net consumption, and maintain compliance with the requirements of Measurement Canada, meter replacement is required. Haldimand County Hydro will replace the meter, and you must pay for the upgrade

If your generator is less than or equal to 10 kW:

A dual register meter will be installed. It will register, separately, the amount of power consumption from the Haldimand County Hydro system, and the amount of generation supplied to the Haldimand County Hydro system. There will be no change in meter reading method or frequency. Credit for electricity generated in the period between meter reads will be incorporated into your actual meter read bill.

If your generator is above 10 kW and less than or equal to 500 kW:

A four quadrant interval meter will be installed. This meter will be read remotely on a monthly basis. In addition to the cost of this meter replacement, the customer must meet the following requirements:

- Provide a telephone connection up to the meter installation Network Interface Device (NID)
- The telephone connection can be either a dedicated line, or via a telephone line switching device
- If using a switching device, you are required to submit the technical specifications to Haldimand County Hydro to ensure it meets our requirements

Can I supply my own power needs with my generator if Haldimand County Hydro has a power outage?

If you wish to run your generator during a Haldimand County Hydro power outage, your generator must have special transfer and isolating capabilities installed ensuring that your generating facility cannot feed into the Haldimand County Hydro distribution system during this time.

If you wish to be connected under Haldimand County Hydro's Net Metering Program

Call 905-765-5211, ext. 248. Please make sure you give us the following information:

- Your name
- Haldimand County Hydro account number
- Phone number (home/work)
- Service address (location of generator: lot/concession/township/street address)
- Size of generator (kW)
- Type of generator (must be renewable energy technology)
- Planned date for starting to generate

After you give us this information, a local Haldimand County Hydro representative will contact you.

If you require further information about renewable energy technologies, you may wish to contact the following:

Ministry of Energy, 1-877-818-2900 or

www.energy.gov.on.ca

Electrical Safety Authority, 1-877-421-2228 or

www.esainspection.net

Ontario Energy Board, 1-877-632-2727 or

www.oeb.gov.on.ca

Ontario Electrical Safety Code, for info or to order a copy, phone 1-888-361-0003

Canadian Standards Association,

1-800-463-6727 or www.csa.ca

Canadian Wind Energy Association,

www.canwea.ca

Canadian Solar Industries Association,

www.cansia.ca

Alternative Energies,

www.micropower-connect.org

