

Net Metering Connection Agreement

In consideration of Haldimand County Hydro Inc. (“Haldimand County Hydro”) agreeing to allow you to connect your 500 kW or smaller generation facility to Haldimand County Hydro’s distribution system, Haldimand County Hydro requests that you understand and accept the following terms and conditions:

1.0 Eligibility

1.1 Your generation facility must employ a renewable energy technology (“RET”), as RET is defined by Ontario’s Ministry of Energy.

1.2 You agree that your generation connection shall also be bound by the terms and conditions of Haldimand County Hydro’s Conditions of Service, which have been filed with the Ontario Energy Board (“OEB”).

2.0 Technical Requirements

2.1 You agree to have special transfer and isolating capabilities installed on your generation facility if you wish to run it during a Haldimand County Hydro power outage. You also agree that your generating facility must be disconnected from Haldimand County Hydro’s distribution system during such an outage.

2.3 You have installed an isolation device satisfying Section 84 of the Ontario Electrical Safety Code and agree to Haldimand County Hydro’s staff operation of this as required for the maintenance and repair of the electrical system.

2.4 You agree to regular scheduled maintenance to your generation facility in order to assure that connection devices, protection systems, and control systems are maintained in good working order and in compliance with all applicable laws, statutes, codes, licensing requirements, directives, rules, regulations, protocols, policies, orders, injunctions, rulings, awards, judgments or decrees or any requirement or decision or agreement with or by any government or government department, commission, board, court authority or agency.

3.0 Liabilities

3.1 You covenant and agree that the design, installation, maintenance, and operation of your generation facility are conducted in a manner that ensures the safety and security of both the generation facility and Haldimand County Hydro’s distribution system. This includes, but is not limited to, automatic disconnection of the generation facility from Haldimand County Hydro’s distribution system, as per Haldimand County Hydro’s generator protective relay settings, in the event there is a Haldimand County Hydro power outage or any abnormal operation of Haldimand County Hydro’s distribution system. You acknowledge and agree that the protective relay settings of your generator are as specified in the attached brochure, which you have received together with this Agreement.

3.2 You acknowledge and agree that in the event Haldimand County Hydro, in its sole discretion, determines that your generation facility damages and/or is producing adverse effects on other Haldimand County Hydro customers or on Haldimand County Hydro assets, you will disconnect your generation facility immediately from Haldimand County Hydro’s distribution system and correct the problem at your own expense and you will indemnify and save harmless Haldimand County Hydro for all of the damages and/or adverse effects caused by the connection of your generation facility to Haldimand County Hydro’s distribution system.

4.0 Compensation and Billing

4.1 You agree that Haldimand County Hydro will not pay you for any excess generation that results in a net delivery of energy to Haldimand County Hydro over a one year period.

4.2 You acknowledge and agree that there will be no carryover of excess generation, after a credit has been established and maintained for a twelve month period. For example, a credit is established in month one, and is maintained for the next ten months, in the twelfth month the credit is reconciled and for the next months billing the cycle is repeated.

4.3 You agree to compensate Haldimand County Hydro for cost of net metering installation, and you also agree that Haldimand County Hydro may use your phone line to access your meter for billing purposes.

5.0 Future Charges

5.1 You agree to pay, if required, any current or future charges or tariffs with respect to your connection to Haldimand County Hydro’s distribution system, as approved by the OEB.

6.0 Termination

6.1 You acknowledge that Haldimand County Hydro reserves the right to terminate this Agreement and to disconnect your generation facility at any time if Haldimand County Hydro discontinues the Net Metering program.

Net Metering Connection Agreement

I understand, accept and agree to comply with and be bound by the above terms and conditions governing the connection of my generation facility to Haldimand County Hydro's distribution system.

Customer Signature: _____ Date: _____

Print name and Haldimand County Hydro account number: _____

I confirm that the following information is true and accurate:

Nameplate rating of Generator: _____ kW Total installed generation _____ kW
 Type: Wind Turbine Photovoltaic (Solar) Hydraulic Turbine Fuel Cell
 Inverter Utilized: Yes No
 Inverter Certification: CSA C22.2 # 107.1 UL 1741 Site Certified by the ESA

For Office use: Station _____ Feeder _____ Date Connected _____

Generator Protective Relay Settings

Table 1 – Inverter Based Generation

The following relay settings shall be used for inverters built to the CSA standard:

Source: CSA C22.2 No. 107.1-01 Table 16

System Voltage Vn = V nominal V (Volts)	Frequency F (Hertz)	Maximum number of cycles to disconnect	
		Seconds	Cycle
$V < 0.5 V_n$	60	0.1	6
$0.5 V_n \leq V < 0.88 V_n$	60	2	120
$1.10 V_n \leq V < 1.37 V_n$	60	2	120
$V \geq 1.37 V_n$	60	0.033	2
Vn	$F < 59.5^*$	0.1	6
Vn	$F > 60.5$	0.1	6

* The UL1741 & IEEE P1547 Standards use $F < \text{rated} - 0.7$ i.e. 59.3 Hz.
 To update if CSA C22.2 No. 107.1-01 is changed.

Table 2 – Generation Other Than That Covered by Table 1

Haldimand County Hydro's minimum requirements for other generation are as follows:

System Voltage Vn = V nominal V (Volts)	Frequency F (Hertz)	Maximum clearing time *	
		Seconds	Cycle
$V < 0.5 V_n$	60	0.16	9.6
$0.5 V_n \leq V < 0.88 V_n$	60	2	120
$1.10 V_n \leq V < 1.20 V_n$	60	1	60
$V \geq 1.20 V_n$	60	0.16	9.6
Vn	$F < 59.3$	0.16	9.6
Vn	$F > 60.5$	0.16	9.6

*Clearing time is the time between the start of the abnormal condition and the generation ceasing to energize the Haldimand County Hydro's distribution system

- If you are uncertain about your generation equipment's protective relay settings, please check with your generating equipments supplier.
- Automatic reconnect setting time for your generator is after 5 minutes of normal voltage and frequency on the Haldimand County Hydro's distribution system.
- Above specifications are intended for micro-embedded (<10kw) generation facilities. For facilities >10kw other Technical Requirements will apply.