*micro*FIT Generation Connection Agreement

Reference Number: _____

In consideration of Guelph Hydro Electric Systems Inc. ("Guelph Hydro") agreeing to allow you to connect your *micro*FIT (10 kW name-plate rated capacity or smaller) generation facility to Guelph Hydro's distribution system, you hereby agree to the following terms and conditions.

1.0 Eligibility

1.1 You agree that your generation connection shall be subject to all applicable laws as amended from time to time, and shall be bound by the terms and conditions of Guelph Hydro's Conditions of Service as amended from time-to-time as filed with the Ontario Energy Board and which are available on request.

2.0 Technical Requirements

2.1 You represent and warrant that you have installed, or will install prior to the connection of your generation facility to Guelph Hydro's distribution system, an isolation device satisfying Section 84 of the Ontario Electrical Safety Code and you agree to allow Guelph Hydro's staff access to and operation of this device at all times as required for the maintenance and repair of Guelph Hydro's distribution system.

2.2 You agree to perform regular scheduled maintenance on your generation facility as outlined by the manufacturer 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 as amended from time to time.

2.3 You agree that during a power outage on Guelph Hydro's distribution system, your generation facility will shut down. You agree to the automatic disconnection of your generation facility from Guelph Hydro's distribution system, as per the generator protective relay settings set out in this Agreement, in the event of a power outage on Guelph Hydro's distribution system or any abnormal operation of Guelph Hydro's distribution system.

2.4 You agree that the design, installation, maintenance, and operation of your generation facility are and will be conducted at all times in a manner that ensures the safety and security of both your generation facility and Guelph Hydro's distribution system.

2.5 Due to Guelph Hydro's obligation to maintain the safety and reliability of its distribution system, you acknowledge and agree that in the event Guelph Hydro determines that your generation facility (i) is causing or is likely to cause damage to; and/or (ii) is producing or is likely to produce adverse effects affecting other distribution system customers or Guelph Hydro's assets, you will disconnect your generation facility immediately from the distribution system upon direction from Guelph Hydro and correct the problem at your own expense prior to reconnection.

3.0 Connection Charges

3.1 There is a connection fee of $1,000 plus HST ($1,130) for ***single phase*** generator and $2,000 plus HST ($2,260) for ***three phase*** generator associated with the connection of the new microFIT service. This estimated cost is to be prepaid prior to connection. We will invoice for actual costs associated with the new service. Any credits or debits will be forwarded to whoever prepays the estimated connection charges.

3.2 A couple of items to note, the prepayment must be by cheque or cash. No purchase order or VISA payment will be allowed. Before final connection is made, we must have the following;

- the Prepayment;
- a Signature for the generator account, (must be the same name as on the OPA application form);
- and ESA "Connection Authorization".

4.0 Liabilities

4.1 You will indemnify and save Guelph Hydro harmless for all damages and/or adverse effects resulting from your negligence or willful misconduct in the connection and operation of your generation facility.

4.2 You agree that Guelph Hydro shall not be liable to you under any circumstances whatsoever for any loss of profits or revenues, business interruptions losses, loss of contract or loss of goodwill, or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise.

5.0 Compensation and Billing

5.1. As an embedded retail generator selling output from your embedded generation facility to the Ontario Power Authority under contract, you agree that Guelph Hydro will pay you for generation in accordance with the Retail Settlement Code (RSC).

6.0 Termination

6.1 You understand that you have the right to terminate this Agreement at any time, and that by doing so you are required to disconnect your generation facility and notify Guelph Hydro of such action 90 days in advance.

6.2 You agree that Guelph Hydro may require changes to this Agreement from time to time in order to comply with changes to applicable laws.

6.3 You agree to notify Guelph Hydro 30 days in advance of any alteration to your generation facility, and that Guelph Hydro reserves the right to require a new executed Agreement as a result of any such alteration.

7.0 Assignment

7.1 You may assign your rights and obligations under this Agreement only with the prior written consent of Guelph Hydro, which shall not withhold its consent unreasonably. Guelph Hydro shall have the right to assign its rights and obligations under this Agreement without your consent.

Notes: 1. Guelph Hydro reserves the right to limit the number of micro-generation facilities that can be connected to the same distribution feeder. This will be evaluated from case to case. Applicants should be aware <u>not to incur major expenses</u> prior to Guelph Hydro approving the connection of the facility to the grid.

2. Guelph Hydro deems necessary that a contract owner contacts Guelph Hydro in the event they sell the property on which the micro-generator installation exists, <u>and</u> inform the new owner of their responsibility to contact Guelph Hydro and sign a new Connection Agreement should they continue to be connected to the distribution system. Failure to meet these requirements may result in the disconnection of the facility. These requirements are in place to ensure a seamless transfer of the contractual obligations.

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 Guelph Hydro's distribution system.

Applicant Signature: _____ Date: _____

Print first and last name: _____

Guelph Hydro account number: _____

Address of Generation Facility: _____

I confirm that the following information is true and accurate:

For Solar PV:
Total Nameplate Capacity _____ kW (Panels) _____ kW (Inverters)

For all other Generation:
Nameplate rating of Generator: _____ kW Total installed generation _____kW

Provide OPA *micro*FIT Reference Number: _____

Type:
- ☐ Wind Turbine
- ☐ Hydraulic Turbine
- ☐ Solar / Photovoltaic Cells (Rooftop)
- ☐ Solar / Photovoltaic Cells (Ground Mount)
- ☐ Biomass
- ☐ Bio-diesel
- ☐ Bio-gas
- ☐ Other, please specify _____

Inverter Utilized: ☐ Yes ☐ No

Inverter Certification: ☐ C22.2 #107.1 ☐ UL 1741 ☐ Site Certified by the ESA

To be completed by Guelph Hydro:	Station _____Feeder _____ Address _____ 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: V (Volts) Vn = V nominal	Frequency F (Hertz)	Maximum number of cycles to disconnect	
		Seconds	Cycle
V < 0.5 Vn	60	0.1	6
0.5 Vn ≤ **V** < 0.88 Vn	60	2	120
1.10 Vn ≤ **V** < 1.37 Vn	60	2	120
V > 1.37 Vn	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 < rated-0.7 (i.e. 59.3 Hz). (To be updated if CSA C22.2 No. 107.1-01 is changed).

Table 2 – Non-Inverter Generation
Guelph Hydro's minimum requirements for other generation are as follows:

System Voltage: V (Volts) Vn = V nominal	Frequency F (Hertz)	Maximum clearing time*	
		Seconds	Cycle
V < 0.5 Vn	60	0.16	9.6
0.5 Vn ≤ **V** < 0.88 Vn	60	2	120
1.10 Vn ≤ **V** < 1.20 Vn	60	1	60
V > 1.20 Vn	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 generator ceasing to energize Guelph Hydro's distribution system.

- If you are uncertain about your generation equipment's protective relay settings, please check with your generating equipment supplier.
- Automatic reconnect setting time for your generator is after 5 minutes of normal voltage and frequency on Guelph Hydro's distribution system.