

## Form C

### Micro- Distributed Energy Resource (DER) Connection Application

*For Connection of Micro-DER Facilities of  $\leq 10kW$*

This form is applicable to individual or multiple generating units at the Customer's facility with total nameplate rating of 10 kW or less. Your generation facility must generate electricity from a renewable energy source that is wind, water, solar radiation, or agricultural biomass.

Inverter-based generating units must not inject DC greater than 0.5% of the full rated output current at the point of connection of the generating units. The generated harmonic levels must not exceed those given in the CAN/CSA-C61000-3-6 Standards.

For generation size up to 10 kW, a Connection Impact Assessment will not be required. There may be a limitation on the number of micro-generation facilities that can be connected to the same distribution feeder.

**IMPORTANT:** All fields below are mandatory, except where noted. Incomplete applications may be returned by Newmarket-Tay Power Distribution Ltd. (NTPDL).

Please return the completed form by mail or email to:

*Newmarket-Tay Power Distribution Ltd.*

*590 Steven Court*

*Newmarket Ontario*

*L3Y 6Z2*

*Attn: Embedded Generation*

**By Email:** *DER@nmhydro.ca*

**NOTE:** Applicants are cautioned NOT to incur major expenses until application has been reviewed and Newmarket-Tay Power Distribution Ltd. approves to connect the proposed generation facility.

By submitting this Form, the Proponent authorizes the collection by Newmarket-Tay Power Distribution Ltd, of the information set out in the Form C and otherwise collected in accordance with the terms hereof, the terms of Newmarket-Tay Power Distribution Ltd.'s Conditions of Service, Newmarket-Tay Power Distribution Ltd.'s Privacy Policy and the requirements of the Distribution System Code and the use of such information for the purposes of the connection of the generation facility to Newmarket-Tay Power Distribution Ltd.'s distribution system.



Date of Application: \_\_\_\_\_ (dd / mm / yyyy)

IESO reference number: (if applicable) \_\_\_\_\_

1. Project/Customer Name: \_\_\_\_\_

2. Proposed In-Service Date: \_\_\_\_\_ (dd / mm / yyyy)

3. Project Information:

Owner

Company/ Person: \_\_\_\_\_

Contact: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Installer - Engineering Consultant

Company/ Person: \_\_\_\_\_

Contact: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Single Point of Contact:  Owner  Installer – Engineering Consultant

4. Project Location: Address \_\_\_\_\_

City/Town \_\_\_\_\_

Postal Code \_\_\_\_\_

5. Customer Status: Is the project being built at an existing customer location?

Existing Customer?  Yes  No

If yes, Account Number: \_\_\_\_\_

Name of Account Holder\*: \_\_\_\_\_

(\*must be the same name as applicant for Net Metering)

Are you an HST registrant?  Yes  No

If yes, please provide your HST registration number and a copy of your HST Registration:

HST \_\_\_\_\_ - \_\_\_\_\_ RT \_\_\_\_\_

**6. Program Type:**

- Net Metering
- Load Displacement
- Emergency Backup
- Other, please specify: \_\_\_\_\_

**7. Project Type:**

- Solar Photovoltaic (rooftop)
- Wind Turbine
- Biomass
- Diesel
- Other, please specify: \_\_\_\_\_
- Solar Photovoltaic (ground mount)
- Battery Storage
- Bio-diesel
- Co-generation/Combined Heat and Power

**8. Generator Type:**

- Inverter
- Synchronous
- Induction

**9. Project Size:**

Is there an existing DER at the project location?  Yes  No

	<b>Proposed</b>	<b>Existing (if applicable)</b>
Number of Units (i.e. solar panels, batteries)	_____	_____
Nameplate Rating of Each Unit	_____ kW	_____ kW
Total	_____ kW	_____ kW
Number of Generators/Inverters	_____	_____
Nameplate Rating of Each Unit	_____ kW	_____ kW
Generator/Inverter Total	_____ kW	_____ kW

Connecting on:  single phase  three phase

**10. Customer Owned Step-up Interface Transformer (if applicable):**

- a. Transformer rating \_\_\_\_\_ kVA
- b. High voltage winding connection  Delta  Star  
 Grounding method of star connected high voltage winding neutral  
 Solid  Ungrounded  Impedance grounded: R: \_\_\_\_\_ X: \_\_\_\_\_ ohms
- c. Low voltage winding connection  Delta  Star  
 Grounding method of star connected low voltage winding neutral  
 Solid  Ungrounded  Impedance grounded: R: \_\_\_\_\_ X: \_\_\_\_\_ ohms

**Note:** The term 'High Voltage' refers to the connection voltage to the distribution system and 'Low Voltage' refers to the generator / inverter output voltage.

**11. Generator / Inverter Information:**

- a. Manufacturer: \_\_\_\_\_
- b. Model No. \_\_\_\_\_
- c. Number of phases     Single Phase         Three Phase
- d. Nameplate rating:    \_\_\_\_\_ kW
- e. Generator / Inverter AC output voltage    \_\_\_\_\_ Volts
- f. Type of inverter:         Self-commutated                     Line- commutated  
 Other, please specify \_\_\_\_\_
- g. Are power factor correction capacitors automatically switched off when generator breaker opens?  
 Yes             No
- h. Is the generator / inverter paralleling equipment and / or design pre-certified and meets anti-islanding test requirements?  
 Yes             No
- i. If answer to the above question is Yes, to which standard(s), e.g. CSA C22.2 No. 107.1-01, UL1741, etc. \_\_\_\_\_
- j. Method of synchronizing the generator / inverter to system  
 Manual         Automatic
- k. Maximum inrush current upon generator or inverter connection ( $I_{inrush} / I_{rated}$ ) \_\_\_\_\_ per unit

**12. Grid Interface Controller (if applicable):**

- a. Manufacturer: \_\_\_\_\_
- b. Model Number: \_\_\_\_\_

**13. Type of Connection:**

Refer to Electrical Safety Authority (ESA) reference document, “*Electrical Guidelines for Inverter-Based Micro Generation Facilities (10 kW and smaller)*”.

- a.  Parallel Meter Connection
- b.  Net Metering / Load Displacement Connection

**14. Single Line Diagram (SLD):**

Provide an SLD of the DER facility including the location of the external disconnect switch and Interface Point to Newmarket-Tay Power Distribution Ltd.'s distribution system.

**Applicant Name (Print):** \_\_\_\_\_

**Date:** \_\_\_\_\_