

# Form C

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

For Connection of Micro-DER Facilities of ≤ 10kW

This form is applicable to individual or multiple generating units at the Customer's facility with total nameplate rating of <u>10 kW or less</u>. 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 NT Power..

#### Please return the completed form by mail or email to:

NT Power 590 Steven Court Newmarket Ontario L3Y 6Z2 Attn: Embedded Generation

By Email: DER @ntpower.ca

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

By submitting this Form, the Proponent authorizes the collection by NT Power, of the information set out in the Form C and otherwise collected in accordance with the terms hereof, the terms of NT Power's Conditions of Service, NT Power'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 NT Power's distribution system.



Date of Application:		(dd / mm / yyyy)
IES	SO reference number: (if applicable)	
1.	Project/Customer Name:	
2.	Proposed In-Service Date:	(dd / mm / yyyy)
3.	Project Information:	
	<b>Owner</b> 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 buil	t 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 Mete	ering)
	Are you an HST registrant?	🗌 Yes 🛛 No
	If yes, please provide your HST registrati HST RT	on number and a copy of your HST Registration:



6.	Program Type:		
	Net Metering		
	Load Displacement		
	Emergency Backup		
	Other, please specify:		
7.	Project Type:		
	Solar Photovoltaic (rooftop)	Solar Photovoltaic (ground mount)	
	Wind Turbine	Battery Storage	
	Biomass	Bio-diesel	
	Diesel	Co-generation/Combined Heat and Power	
	Other, please specify:		
8.	Generator Type:		
	Inverter Synchronous	Induction	
9.	Project Size:		
	Is there an existing DER at the project location?	🗌 Yes 🔄 No	
		Proposed Existing (if applicable)	
	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	
	5 _ 5		
10.	Customer Owned Step-up Interface Transform	er (if applicable):	
	<ul> <li>a. Transformer rating kVA</li> <li>b. High voltage winding connection</li> </ul>	🗌 Delta 🛛 Star	
	Grounding method of star connected high	voltage winding neutral	
	Solid Ungrounded Im	pedance grounded: R: X: ohms	
	<b>c.</b> Low voltage winding connection	elta 🗌 Star	
	Grounding method of star connected low v	voltage winding neutral	
	Solid Ungrounded Im	pedance grounded: R: X: ohms	
	Nete: The terms (Link Velters) afore to the conversion		

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



11. Ge	enerator / Inverter Infor	mation:			
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 <sub>inrush</sub> / I <sub>rated</sub> ) 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 NT Power's distribution system.

### Applicant Name (Print):

Date: