

# Attachment 1 -- Application for Interconnection of Distributed Generation

## Tier 1(10 kW or less)

See Your Electric Distributor's Website for DG Application Submission and Contact information.

This Application is considered complete when it provides all applicable and correct information required below.

### **Participant**

Name: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Electric Service Account Number \_\_\_\_\_

Owner of Building if different than customer \_\_\_\_\_

### **Contact (if different from Customer)**

Name: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

### **Owner of System (If different than customer)**

Name: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

### **ELECTRICAL CONTRACTOR (as applicable)**

Company: \_\_\_\_\_

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

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Contractor's License # \_\_\_\_\_ City/County/State \_\_\_\_\_

**Generating Facility Information**

Location (if different from above): \_\_\_\_\_

Vendor: \_\_\_\_\_

Account Number: \_\_\_\_\_

Inverter Manufacturer: \_\_\_\_\_ Model \_\_\_\_\_

Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA) \_\_\_\_\_ (AC Volts)

Single Phase \_\_\_\_\_ Three Phase \_\_\_\_\_

System Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)

Energy Source: Solar  Wind  Hydro  Other (describe) \_\_\_\_\_

Attach support information to show testing and listing by a Nationally Recognized Laboratory for compliance with the codes and standards outlined in 1.4.1 – 1.4.4 for the proposed system.

Estimated Installation Date: \_\_\_\_\_ Estimated In-Service Date: \_\_\_\_\_

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

***ADDITIONAL INFORMATION – Single Line Diagram***

In addition to the items listed above, please attach a detailed one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, batteries, number and location of PV Panels, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the address or grid coordinates of the facility.

***Permission to Interconnect***

**Participant must not operate their generating facility in parallel with Distributor’s system until written authorization for interconnection and parallel operation has been received from Distributor.** Unauthorized parallel operation could result in injury to persons and /or damage to equipment and/or property for which the customer may be liable.

***Interconnection Participant Signature***

I hereby certify that, to the best of my knowledge, the information provided in this Application is true.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Attachment 2 -- Application for Interconnection of Distributed Generation  
Tier 2 (Greater than 10 kW and less than or equal to 100 kW)  
& Tier 3 (Greater than 100 kW and less than or equal to 2 MW)**

**See Your Electric Distributor's Website for DG Application Submission and Contact information.**

This application should be completed and returned to Distributor representative in order to begin processing the request.

**PART 1**

**PARTICIPANT INFORMATION**

Name: \_\_\_\_\_

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

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Electric Service Account Number \_\_\_\_\_

Fax Number: \_\_\_\_\_

**PROJECT DESIGN/ENGINEERING (as applicable)**

Company: \_\_\_\_\_

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

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

PE License \_\_\_\_\_ State \_\_\_\_\_

**ELECTRICAL CONTRACTOR (as applicable)**

Company: \_\_\_\_\_

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

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Contractor's License # \_\_\_\_\_ City/County/State \_\_\_\_\_

**TYPE OF GENERATOR (as applicable)**

Photovoltaic \_\_\_\_\_ Wind \_\_\_\_\_ Other \_\_\_\_\_

## ESTIMATED LOAD AND GENERATOR RATING INFORMATION

The following information is necessary to help properly design Participant interconnection.

Total Site Load \_\_\_\_\_ (Highest kW Demand Last 12 Months)  
Residential \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial \_\_\_\_\_  
System Rating \_\_\_\_\_ (kW) Annual Estimated Generation \_\_\_\_\_ (kWh)

### PART 2

(Complete all applicable items. Copy this page as required for additional generators)

#### **SYNCHRONOUS GENERATOR DATA**

Identification per Single Line Drawing: \_\_\_\_\_  
Total number of units with listed specifications on site: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Date of manufacture: \_\_\_\_\_  
Serial Number (each): \_\_\_\_\_  
Phases: Single \_\_\_\_\_ Three \_\_\_\_\_ R.P.M.: \_\_\_\_\_ Frequency (Hz): \_\_\_\_\_  
Rated Output (for one unit): \_\_\_\_\_ Kilowatt \_\_\_\_\_ Kilovolt-Ampere  
Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_  
Field Volts: \_\_\_\_\_ Field Amps: \_\_\_\_\_ Motoring power (kW): \_\_\_\_\_  
Synchronous Reactance (Xd): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Transient Reactance (X'd): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Negative Sequence Reactance (Xs): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Sequence Reactance (Xo): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Neutral Grounding Resistor Size (if applicable): \_\_\_\_\_  
 $I_2^2t$  or K (heating time constant): \_\_\_\_\_  
Additional information: \_\_\_\_\_

.....

#### **INDUCTION GENERATOR DATA**

Rotor Resistance (Rr): \_\_\_\_\_ ohms Stator Resistance (Rs): \_\_\_\_\_ ohms  
Rotor Reactance (Xr): \_\_\_\_\_ ohms Stator Reactance (Xs): \_\_\_\_\_ ohms  
Magnetizing Reactance (Xm): \_\_\_\_\_ ohms Short Circuit Reactance (Xd''): \_\_\_\_\_ ohms  
Design letter: \_\_\_\_\_ Frame Size: \_\_\_\_\_  
Exciting Current: \_\_\_\_\_ Temp Rise (deg C°): \_\_\_\_\_  
Reactive Power Required: \_\_\_\_\_ Vars (no load), \_\_\_\_\_  
Vars (full load) Additional information: \_\_\_\_\_

**PRIME MOVER (Complete all applicable items)**

Identification per Single Line Diagram \_\_\_\_\_ Unit Number: \_\_\_\_\_

Type: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Date of manufacture: \_\_\_\_\_

H.P. Rated: \_\_\_\_\_ H.P. Max.: \_\_\_\_\_ Inertia Constant: \_\_\_\_\_ lb.-ft.<sup>2</sup>

Energy Source (hydro, wind, etc.) \_\_\_\_\_

\_\_\_\_\_

**INVERTER DATA (if applicable)**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_

Inverter Type (ferroresonant, step, pulse-width modulation, etc.): \_\_\_\_\_

Single or Three Phase \_\_\_\_\_ Type commutation: forced \_\_\_\_\_ line \_\_\_\_\_

Harmonic Distortion: Maximum Single Harmonic (%) \_\_\_\_\_

Maximum Total Harmonic (%) \_\_\_\_\_

.....

**POWER CIRCUIT BREAKER (if applicable)**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Voltage (kilovolts): \_\_\_\_\_ Rated ampacity (Amperes) \_\_\_\_\_

Interrupting rating (Amperes): \_\_\_\_\_ BIL Rating: \_\_\_\_\_

Interrupting medium / insulating medium (ex. Vacuum, gas, oil) \_\_\_\_\_ / \_\_\_\_\_

Control Voltage (Closing): \_\_\_\_\_ (Volts) AC DC

Control Voltage (Tripping): \_\_\_\_\_ (Volts) AC DC Battery Charged Capacitor

Close energy: Spring Motor Hydraulic Pneumatic Other: \_\_\_\_\_

Trip energy: Spring Motor Hydraulic Pneumatic Other: \_\_\_\_\_

Bushing Current Transformers: \_\_\_\_\_ (Max. ratio) Relay Accuracy Class: \_\_\_\_\_

Multi ratio? No Yes: (Available taps) \_\_\_\_\_

Description of Control System \_\_\_\_\_

\_\_\_\_\_

.....

**ADDITIONAL INFORMATION – Single Line Diagram**

In addition to the items listed above, please attach a detailed one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, batteries, number and location of PV Panels, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the address or grid coordinates of the facility.

***Permission to Interconnect***

**Participant must not operate their generating facility in parallel with Distributor's system until written authorization for interconnection and parallel operation has been received from Distributor.** Unauthorized parallel operation could result in injury to persons and /or damage to equipment and/or property for which the customer may be liable.

**END OF PART 2**



**SIGN OFF AREA**

The Participant agrees to provide Distributor with any additional information required to complete the interconnection.

\_\_\_\_\_ Date \_\_\_\_\_  
Participant



**DISTRIBUTOR CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:**

Distributor: \_\_\_\_\_  
Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

