



## Application for Interconnection of Distributed Generation

TIER 2 (GREATER THAN 10 KW DC AND LESS THAN OR EQUAL TO 50 KW DC)

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

### PART 1

#### CUSTOMER INFORMATION

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_ Electric Service Account Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_

#### PROJECT DESIGN/ENGINEERING (AS APPLICABLE)

Company: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
PE License: \_\_\_\_\_ State: \_\_\_\_\_

#### ELECTRICAL CONTRACTOR (AS APPLICABLE)

Company: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_  
E-mail 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 the Distributor customer 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): \_\_\_\_\_  
I22t 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 Co): \_\_\_\_\_  
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.2  
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

**Customer must not operate their generating facility in parallel with the CORED's system until they receive written authorization for parallel operation 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

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SIGN OFF AREA

The customer agrees to provide the CORED with any additional information required to complete the interconnection.

\_\_\_\_\_  
Applicant

\_\_\_\_\_  
Date

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CORED CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:

Distributor: City of Oak Ridge Electric Dept.

Name: Ardo Ba

Address: 100 WOODBURY LANE, OAK RIDGE, TN 37830

Phone: 865-425-1803 Fax: \_\_\_\_\_

E-mail: [ABA@CORTN.ORG](mailto:ABA@CORTN.ORG); [MELGIN@CORTN.ORG](mailto:MELGIN@CORTN.ORG)