

## Application for Interconnection of Distributed Generation

**Tier 2 Generation Proposal (Greater than 10 kW and less than or equal to 100 kW)**  
and

**Tier 3 Generation Proposal (Greater than 100 kW and less than 1 MW)**

*This application should be completed and returned to MLGW in order to begin processing the request. MLGW will make an initial review and notify you of any need for additional study or information within 10 business days.*

### PART 1

#### MLGW Customer Information

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

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

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

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

Email Address: \_\_\_\_\_ MLGW Account #: \_\_\_\_\_

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

#### Project Design/Engineering (as applicable)

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

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

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

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

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

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

#### Electrical Contractor (as applicable)

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

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

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

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

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

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

#### Type of Generation Proposed

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

Estimated Installation Start Date: \_\_\_\_\_ Estimated Completion Date: \_\_\_\_\_

#### Estimated Load and Generation Rating Information

Facility Type: Residential: \_\_\_\_\_ Commercial: \_\_\_\_\_ Industrial: \_\_\_\_\_

System Rating: \_\_\_\_\_ (kW) Annual Estimated Generation: \_\_\_\_\_ (kWh)

Total Site Load: \_\_\_\_\_ (highest kW demand last 12 months)

**PART 2**

*(Complete all applicable items. Copy this page as required for additional generation units)*

**PHOTOVOLTAIC GENERATOR DATA**

Manufacturer of panels: \_\_\_\_\_  
Model: \_\_\_\_\_ Number to be installed: \_\_\_\_\_  
Voltage: \_\_\_\_\_ kW (AC): \_\_\_\_\_ kW (DC): \_\_\_\_\_  
From AC disconnect: \_\_\_\_\_ # of wires \_\_\_\_\_ wire size  
Phone number for connection at generation meter (non-residential only): \_\_\_\_\_

**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 each 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 C°): \_\_\_\_\_  
Reactive Power Required: \_\_\_\_\_ Vars (no load), \_\_\_\_\_ Vars (full load)  
Additional information: \_\_\_\_\_

**PRIME MOVER**

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 (solar, hydro, wind, etc.) \_\_\_\_\_

**INVERTER DATA**

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**

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, including all applicable elementary diagrams, major equipment (PV panels, wind turbines, generators, transformers, inverters, AC disconnect switch, optional DC disconnect switch, circuit breakers, protective relays, batteries and any other components that represent the balance of the system). Include manufacturer’s specifications, test reports 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 Distributor’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.

**Customer Signature**

I hereby certify that, to the best of my knowledge, the information provided herein is complete and accurate. I understand that the generation system cannot be operated in parallel with MLGW’s system until I have received written approval from MLGW (in the form of the executed Distributor’s Acceptance of Qualifying System, Attachment B), after all inspections and reviews are completed. I understand that I may incur MLGW metering costs beyond the amount that TVA reimburses, as well as other costs for other interconnection components, and that I will be notified of any such costs as the project detail is confirmed.

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

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

Submit this completed form along with the following attachments:

- One-line diagram of proposed generation (as described in the Additional Information section above)
- Manufacturer’s specification sheets for solar panels, wind turbines, inverters, AC disconnect switch and optional DC disconnect switch to MLGW:

via email: Becky Williamson, [bwilliamson@mlgw.org](mailto:bwilliamson@mlgw.org)  
via mail: Becky Williamson, MLGW, P O Box 430, Memphis, TN 38101  
via delivery: Becky Williamson, MLGW, 220 South Main Street, Memphis, TN 38103