



Application for Interconnection of Distributed Generation

TIER 2 (GREATER THAN 10 KW DC)

The document is considered complete when it provides all applicable and correct information required below. Inaccurate information will delay approval and could result in higher interconnection costs. The required Application for Interconnection fee must be paid by check, payable to MLGW, before the application can be reviewed.

PART 1

INTERCONNECTION OPTION

- TVA Green Power Providers/**GPP** (0.5 kW-50 kW, dual metered, selling 100% of output to TVA)
- TVA Distributed Solar Solutions/**DSS** (51 kW-5 MW, dual metered, selling 100% of output to TVA)
- TVA Dispersed Power Production/**DPP** (dual metered, selling 100% of output to TVA)
- Self-Generation/**SG** (dual metered; using output onsite and providing any excess without compensation)
- Self-Generation with TVA Dispersed Power Production/**SGDPP** (dual metered; using output onsite and selling any excess output to TVA)

PARTICIPANT

Name (if GPP, must match name on MLGW account): _____

Service Address of System: _____ City: _____, TN Zip: _____

Mailing Address (if different from service address): _____

Telephone (Day): _____ Fax: _____

Email Address: _____

MLGW Account Number (with electric service, required unless DPP): _____

Owner of Building (if different than customer/participant): _____

PROJECT CONTACT (IF DIFFERENT FROM PARTICIPANT)

Name: _____

Address: _____ City: _____ State: ___ Zip: _____

Telephone (Day): _____ Fax: _____

Email Address: _____

OWNER OF SYSTEM (IF DIFFERENT FROM PARTICIPANT)

Name: _____

Address: _____ City: _____ State: ___ Zip: _____

Telephone (Day): _____ Fax: _____

Email Address: _____

PROJECT DESIGN/ENGINEERING CONTRACTOR

Company: _____

Mailing Address: _____ City: _____ State: ___ Zip: _____

Representative: _____

Telephone: _____ Fax: _____

Email Address: _____

PE License: _____ State: _____

DISTRIBUTED GENERATION INSTALLATION CONTRACTOR

Company: _____

Mailing Address: _____ City: _____ State: ___ Zip: _____

Representative: _____

Telephone: _____ Fax: _____

Email Address: _____
Contractor's License #: _____ City/County/State: _____
NABCEP* Entry Level Candidate #: _____ or Level 1 Certificate #: _____
** required only for GPP solar projects*

ELECTRICAL CONTRACTOR

Company: _____
Mailing Address: _____ City: _____ State: _____ Zip: _____
Representative: _____ Telephone: _____
Email Address: _____ Fax: _____
Contractor's License #: _____ City/County/State: _____

PROPOSED GENERATION SYSTEM

Renewable Energy Source: Solar, Wind, Hydro, Other (describe) _____
Estimated Installation Date: _____ Estimated In-Service Date: _____

ESTIMATED LOAD AND GENERATION RATING INFORMATION

Customer Type: Residential Commercial, Industrial or Organization
Single Meter Site Load: _____ (highest kW demand last 12 months)
Annual Electricity Consumption at Single Billing Meter: _____ kWh *
Proposed System Nameplate Rating: _____ (kW DC) *
Annual Estimated Generation: _____ (kWh) *
** for GPP, system cannot generate more than 100% of annual consumption of single billing meter*
Annual Estimated Excess Generation to Flow to Grid _____ (kWh) for SGDPP and SG projects only
Electric Service Type: Overhead Underground
Connection Voltage: _____

PART 2

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

PHOTOVOLTAIC GENERATOR DATA

Manufacturer of panels: _____
Model: _____ Number to be installed: _____
Voltage: _____ kW (AC): _____ kW (DC): _____
From AC disconnect, Number of Wires: _____ and Wire Size: _____
Phone number for jack at generation meter* _____
** phone line required if system capacity is 50 kW or greater and cellular modem is not applicable*

SYNCHRONOUS GENERATOR DATA

Identification per Single Line Drawing: _____
Total Number of Units With Listed Specifications on Site: _____
Manufacturer: _____
Type: _____ Date of Manufacture: _____
Serial Number (list each): _____
Phases: Single Three R.P.M.: _____ Frequency (Hz): _____
Rated Output (for each unit): _____ Kilowatt and _____ 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 (Xd): _____ % 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 (degrees Celsius): _____
Reactive Power Required: _____ Vars (no load) and _____ 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: Solar Wind Hydro Other (describe) _____

INVERTER DATA (IF APPLICABLE)

Manufacturer: _____ Model: _____
Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____
Inverter Type (ferroresonant, step, pulse-width modulation, etc): _____
Phases: Single Three
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: _____
Bushings Current Transformers: _____ (Max. ratio) Relay Accuracy Class: _____
Multi Ratio? No Yes, available taps: _____
Description of Control System: _____

ADDITIONAL INFORMATION – SINGLE LINE DIAGRAM

Provide manufacturer's specification sheets for the proposed system components to show testing and listing by a Nationally Recognized Laboratory for compliance with the interconnection codes and standards outlined in the MLGW Distributed Generation Interconnection Procedures. In addition, attach a detailed one-line diagram of the

proposed facility, all applicable elementary diagrams and major equipment including: number and location of PV panels, wind turbines, generators, transformers, inverters, external lockable AC disconnect switch, circuit breakers, protective relays, batteries and any other components that represent the balance of the system, plus location of existing MLGW electric billing meter (unless DPP or Self-Generation where site does not have electric service) and proposed point of interconnection. Include manufacturer's specifications, test reports and any other applicable drawings or documents necessary for the proper design of the interconnection.

PERMISSION TO INTERCONNECT

Installer must leave AC disconnect in the "off" position to prevent unauthorized generation prior to MLGW's system acceptance test. Customer must not operate their generating facility until they receive written authorization from MLGW (via an executed Distributed Generation System Acceptance Form or, if Green Power Providers, the electronic System Acceptance Form) after all Code inspections, MLGW meter installation and MLGW system acceptance test have been completed. 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 CUSTOMER SIGNATURE

I hereby certify that, to the best of my knowledge, the information provided in this application is true. I understand that the generation system cannot be operated in parallel with MLGW's system until I have received written approval from MLGW. I understand this project cannot begin technical review until I have paid the application fee. I understand that I will incur MLGW interconnection costs, which will be calculated and quoted to me based on this application and which must be paid before MLGW interconnection work can begin. I understand that MLGW may determine that this project requires an engineering study, for which MLGW will charge a fee. I understand that submitting this document does not obligate me to proceed with the project.

Signed: _____

Printed Name: _____ Date: _____

If Business or Organization, Representative's Title: _____

A complete submittal package includes the following:

1. Application for Interconnection of Distributed Generation, signed
2. Technical one-line diagrams
3. Manufacturer's specification sheets
4. **Payment of Application fee** (check only, payable to MLGW, and mailed or delivered to the address shown below. Please write "Application for Interconnection" and project address, if different from address on check, in the note field.)
 - a. Residential applicant: \$250 plus \$5 per kW proposed (partial kW will be rounded up or down)
 - b. Non-residential applicant: \$500 plus \$5 per kW proposed (partial kW will be rounded up or down)

Materials should be submitted as separate documents or electronic files (PDF) to MLGW

via email: Becky Williamson, bwilliamson@mlgw.org
via mail: Becky Williamson, MLGW Energy Services & Marketing, P O Box 430, Memphis, TN 38101
via delivery: Becky Williamson, MLGW, 220 South Main Street, Memphis, TN 38103

FOR OFFICE USE ONLY: Application for Interconnection Payment

Date Received: _____

Check #: _____

Amount: \$ _____