Application for Interconnection of Distributed Generation

MID- TO LARGE-SCALE, CONNECTED TO MLGW DISTRIBUTION
(PROJECTS ABOVE 1 MW 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.

Section 1: Select Applicable Interconnection Option

Learn more about these options at www.mlgw.com/greenpower

- ☐ **Self-Generation/SG** *(dual metered; using output onsite and providing any instantaneous excess without compensation; monthly charge applies)*
- ☐ **TVA Dispersed Power Production/DPP** *(dual metered, selling 100% of output to TVA under separate 5-year contract)*
- ☐ **Self-Generation with TVA Dispersed Power Production/SGDPP** *(dual metered; using output onsite and selling any instantaneous excess output to TVA under separate 5-year contract; monthly charge applies)*

Section 2: Enter Participant Information (must be MLGW Customer of Record, if installed behind the meter)

Name: _____

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

Mailing Address (if different from service address): _____

Telephone (Day): _____ Fax: _____

Email Address: _____

MLGW Account Number: _____ (check ☐ if no MLGW utility service at site)

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

Section 3: Enter Project Contact Information

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: _____

Email Address: _____ Fax: _____

Contractor's License #: _____ City/County/State: _____

ELECTRICAL CONTRACTOR

Company: _____

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

Representative: _____ Telephone: _____

Email Address: _____ Fax: _____

Contractor's License #: _____ City/County/State: _____

Section 4: Enter Project Technical Details

PROPOSED GENERATION SYSTEM

Renewable Energy Source: ☐ Solar, ☐ Wind, ☐ Hydro, ☐ Other (describe) _____

Proposed Installation Date: _____ Proposed In-Service Date: _____

ESTIMATED LOAD AND GENERATION RATING INFORMATION

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)

Annual Estimated Excess Generation to Flow to Grid _____ (kWh)

Electric Service Type: ☐ Overhead ☐ Underground

Connection Voltage: _____

(Complete all applicable items in the remainder of Section 4, copying as needed for additional generators, then proceed to Section 5.)

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: _____

BATTERY STORAGE DATA: ☐ included ☐ not included

Manufacturer: _____ Model: _____

Quantity: _____, Rated output power ____ kW AC, and _____ kWh AC energy storage capacity per battery

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:_____
Bushing 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 (if any) and separate generation meter socket at 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.

Section 5: Have Customer Acknowledge and Sign

I have reviewed the information in Sections 1 and 2 for accuracy. I understand that the installer must leave AC disconnect in the "off" position to prevent unauthorized generation. I understand the generating system must not be operated (other than briefly for commissioning by the installer) until I have received verbal authorization from the MLGW representative conducting a successful system acceptance test, which is followed a few days later by written authorization via an MLGW-signed Distributed Generation System Acceptance Form. I understand that unauthorized operation could result in injury to persons and/or damage to equipment and/or property for which I may be liable, as well as generation meter readings being billed as consumption.

I hereby certify that, to the best of my knowledge, the information provided in this application is true. I understand this project cannot begin technical review until I or my installer 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 I or the installer must pay before MLGW interconnection work can begin. I understand that submitting this application does not obligate me to proceed with the project.

Signature of MLGW Customer of Record: _____

Printed Name: _____ Date: _____

If Business or Organization, Representative's Title: _____

Section 6: Submit Application, Related Documents and Application Fee

PLEASE FOLLOW INSTRUCTIONS TO AVOID DELAYS

A) Ensure you have a complete application package, containing:

- ☐ Application for Interconnection of Distributed Generation, reviewed and signed by MLGW Customer of Record (if residential) or authorized representative (if business/organization). Ink or electronic signature via DocuSign or similar system is acceptable.
- ☐ Electrical single-line diagram (separate or part of Plan Set created for Electrical Permit)
- ☐ Manufacturers' specification sheets (separate or part of Plan Set created for Electrical Permit)
- ☐ **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 in the note field.)
  a. Residential applicant: $250 **plus** $5 per kW proposed (decimals .5 and above rounded up)
  b. Non-residential applicant: $500 **plus** $5 per kW proposed (decimals .5 and above rounded up)

B) Documents should be emailed as separate electronic files (PDF) to solar@mlgw.org

C) Check for application fee should be submitted:
by mail: Energy Services Department, MLGW, P O Box 430, Memphis, TN 38101
by delivery: Energy Services Department, MLGW, 220 South Main Street, Memphis, TN 38103

Failure to include the department name shown above may result in mis-routed checks, causing delays.