



MLGW Distributed Generation Interconnection Procedures

To participate in any distributed generation program offered by TVA and/or to interconnect to MLGW's electric grid, the proposed generator/participant must submit to MLGW an Application for Interconnection of Distributed Generation outlining the proposed project, along with the application fee. For residential projects, the fee is \$250 plus \$5 per kW. For non-residential projects, the fee is \$500 plus \$5 per kW. See MLGW Service Policy Manual and Schedule of Charges for specific details.

The proposed distributed generation system must meet the following minimum requirements.

1. The system must comply with all requirements established by MLGW for interconnecting to its distribution system including, without limitation, the MLGW Service Policy Manual, Interconnection and Parallel Operation Agreement and Distributed Generation Interconnection Procedures. In case of discrepancies, the MLGW Service Policy Manual prevails.
2. The system components must have been tested and listed by a Nationally Recognized Testing Laboratory for continuous interactive operation with an electric distribution system in compliance with the Institute for Electrical and Electronics Engineers (IEEE) and Underwriters Laboratories (UL) standards:
 - a. IEEE 1547 (Standard for Interconnecting Distributed Resources with Electric Power System),
 - b. IEEE 1547.2 (Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems), and
 - c. UL 1741 (Inverters, Converters and Controllers for Use in Independent Power Systems),prior to MLGW approving the Application for Interconnection of Distributed Generation. MLGW recommends that applicants not order or purchase equipment until MLGW has approved the proposal.
3. The Application for Interconnection of Distributed Generation must include a detailed one-line electrical diagram. The diagram must show all applicable elementary diagrams, major equipment (including number and location of PV panels, wind turbines, generators, transformers, inverters, 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 project is Dispersed Power Production or Self-Generation where site does not have electric service) and proposed point of interconnection. Application package must include manufacturer's specifications, test reports and any other applicable drawings or documents necessary for the proper design of the interconnection.
4. Proposed projects must use three-phases of generation if MLGW provides three-phase service to the site. MLGW requires that an IEEE 1547 compliant three-phase inverter be

used on all three-phase installations. The inverter(s) must function such that any abnormal power system event, as defined by IEEE 1547, affecting any phase voltage or voltages results in generation ceasing on all three phases per IEEE 1547. A five-minute minimum delay time is required before the renewable generation equipment may reconnect to MLGW's grid after disconnecting as a result of any outage on MLGW's system, or other IEEE 1547 reasons.

5. Wire size #6 AWG or larger wire is required for interconnection at the electric meter.
6. The system must be manufactured (if a packaged system) and installed in compliance with all requirements of the latest edition of the National Electric Code prior to MLGW signing the Distributed Generation System Acceptance Form.
7. All installations must be permitted as required by law, be certified by a licensed electrician and pass any applicable code inspections prior to MLGW installing the generation meter.
8. For safe operation, the qualifying system and its associated facilities must have an exterior, manual, lockable, visible load break AC disconnect switch easily accessible by MLGW. For systems utilizing micro-inverters, a fused AC disconnect switch is required.
9. A permanent, weatherproof single line diagram of the renewable generation facility must be located adjacent to the AC disconnect switch. Names and current telephone numbers of at least two persons authorized to provide access to the facility and who have authority to make decisions about the Qualifying System must be posted.
10. The installer, Participant or Participant's Representative must be present during the scheduled MLGW System Acceptance Test.
11. All qualifying systems shall be maintained and tested on an ongoing basis in accordance with manufacturer's instructions and MLGW shall have the right to obtain copies of the test results.
12. Distributed generation systems cannot be interconnected to MLGW's downtown-medical center underground network system. Applicants with facilities served by the network who wish to install distributed generation must interconnect to above-ground standard distribution lines in the area.