



INTERCONNECTION STANDARDS

For Customer-Owned, Grid-Connected Electric Generating Systems of 25kW DC or Less

A. General

This "Interconnection Standard for Customer-Owned, Grid-Connected Electric Generating Systems of 25 Kw DC or Less" sets forth the requirements and conditions for interconnected non-utility-owned electric generation where such generation may be connected for parallel operation with the electrical system of Wakefield Municipal Gas and Light Department (WMGLD). Generating systems will be permitted to interconnect to WMGLD's electric distribution system only after a determination by WMGLD that such interconnection will not interfere with the operation of the distribution system. If distribution system upgrades are needed due to the Customer's solar installation, the Customer is responsible for the cost of those upgrades.

B. Interconnection Requirements

1. Customer shall sign and submit to WMGLD the Interconnection Application and the Interconnection and Solar Net Metering Agreement. WMGLD will review this application within 5 business days.
2. Customer shall submit to WMGLD an electrical one-line diagram, stamped by a Massachusetts Professional Engineer (Electrical). This must be approved by WMGLD before construction can begin on the customer-owned generating system.
3. Customer shall comply with all the latest applicable National Electric Code (NEC) requirements, building codes, and shall obtain electrical permit(s) for the equipment installation.
4. Customer shall provide space for metering equipment and meter base as per WMGLD requirements. Both WMGLD electric meters and the customer-owned AC disconnect shall be located together and outdoors.
5. Customer's over-current device at the service panel shall be marked to indicate power source and connection to the WMGLD distribution system.
6. Customer shall provide an AC disconnect device located adjacent to the WMGLD metering equipment. Disconnect device must be lockable by means of a padlock in the open position.
7. The Customer shall assume the full responsibility for all maintenance of the solar installation and protective equipment and keeping of records for such maintenance. These records shall be available to the WMGLD for inspection upon request and reasonable notice.
8. Customer shall deliver the excess energy to WMGLD at the customer's premises. WMGLD will install and maintain a revenue meter capable of registering the bi-directional flow of electricity at the customer's premises at a level of accuracy that meets all applicable standards, regulations and statutes. WMGLD will require a separate meter be installed to measure production of the renewable generation source. Customer shall pay for any non-standard meter electrical hook-up requested by the Customer, only if WMGLD has approved.

9. **Customer shall not commence parallel operation of the generation equipment until inspection and written approval of the interconnection facilities has been provided by WMGLD.** Such inspection and testing will be conducted by a representative of the solar installer and witnessed by WMGLD. Upon approval, WMGLD will issue a Permission to Operate letter within 2 business days. WMGLD shall have the right to periodically inspect the facility to ensure that appropriate safety standards continue to be met.
10. Once in operation, Customer shall make no changes or modifications in the equipment, wiring, or the mode of operation without the prior approval of WMGLD and the local authority.
11. All equipment and the installation shall be in compliance with all applicable and current Underwriters Laboratories (UL), IEEE, NEC, and OSHA requirements, such as UL 1741 and 1703, IEEE 1262, 929, and 1547, NEC 690 and 705, and OSHA 1910.269.

C. Safety

All Safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) standard 29 CFR 1910.269, the National Electrical Code (NEC), Massachusetts State Building Code rules, WMGLD standards, and equipment manufacturer's safety and operating manuals.