

# Summary of Requirements for Proposed Distributed Generation Interconnections with the WMECO Distribution System

The following summary information is provided for customers who are interested in the general requirements for interconnecting distributed generation (DG) with WMECO's distribution system. For more detailed information, please see the Interconnection Tariff, MDPU No. 1039E, which is the first link on the web page: [www.wmeco.com/distributedgeneration](http://www.wmeco.com/distributedgeneration). For information on compensation for excess generation, please refer to WMECO's Net Metering Tariff, MDPU No. 1048A posted at [www.wmeco.com/netmetering](http://www.wmeco.com/netmetering) or WMECO's Power Purchase Schedule, MDTE No. 1014C, which is also posted on the WMECO website: [www.wmeco.com/Residential/UnderstandBill/RatesRules/RatesTariffs.aspx](http://www.wmeco.com/Residential/UnderstandBill/RatesRules/RatesTariffs.aspx)

Please note that if the generation will be interconnected with a WMECO distribution circuit that is FERC jurisdictional and you plan to be a market participant, you will need to apply for interconnection with ISO-New England instead of WMECO. You can contact WMECO for assistance in determining which application to submit. For state jurisdictional circuits, if your generation facility will be 1 MW or larger, there are additional requirements by ISO-New England.

## Interconnection Information:

1. Prior to installing generation, you must submit an application found on the WMECO website: [www.wmeco.com/distributedgeneration](http://www.wmeco.com/distributedgeneration).
  - For single phase inverter-based facilities 10 KW or less and three phase inverter-based facilities 25 KW or less using inverters certified to IEEE 1547.1 and UL 1741, you will need to submit a Simplified Application to WMECO.
  - For all other applications, you will need to submit the Expedited / Standard Application to WMECO.
2. Please submit a completed application well in advance of your anticipated installation date. WMECO will do its best to accommodate your anticipated installation or need date. Delays commonly occur due to incomplete and unsigned applications and incorrect addresses and account numbers. Delays can occasionally occur if WMECO personnel are needed to respond to outage emergencies or other urgent business.
3. The application must be signed by and in the name of the person or company whose name is on the WMECO electric account. For commercial accounts, the application must be signed by the person who has authority to do so.
4. WMECO will communicate with our electric customer and the person designated as the alternate contact on the application. In cases where there is third party ownership of the generation, include the appropriate contact information on the application so we can also correspond with that person. When available, please supply email addresses for all parties.
5. Customers are encouraged to submit their interconnection applications well in advance of their estimated install date.
6. For Simplified Applications, one paper copy or one electronic copy is required.
7. For Expedited and Standard Applications, three paper copies of the application package are required. If electronic copies are available only one paper copy of data is required along with the electronic copy. The application package shall include:
  - A. Completed and signed interconnection application.
  - B. Inverter cut sheet and user manual and inverter settings.

- C. Relay protection scheme, including type of relays and proposed settings, fuse manufacturer, size and fuse curves.
  - D. Facility one-line diagram with Massachusetts PE stamp. (Three hard copies required.) Three-line diagram will be necessary for some projects.
  - E. Physical location map site plan including revenue meter, generation AC disconnect switch and generation equipment location.
  - F. Signed check for the application fee.
8. If there is a change in the design or your project, such as an inverter change, size or number of generation units, from what was submitted on the application, a new application will need to be submitted. If during the Witness Test, it is noticed that the inverters have been changed from what was submitted on the application or the protection is not what was agreed to, you will not have permission to operate until a new application with the correct inverter is submitted and approved.
  9. If the project is for new construction or you are doing any electric upgrades to your existing facility, you must indicate this on the application or a separate sheet of paper when submitting the application.
  10. Where service-related work is involved, your electrician must submit the proper request for electric service. The DG application is only for interconnection of the generation, not service-related work. We will work with the New Service Department, but please keep in mind that service upgrade work can delay interconnection of the distributed generation facility.
  11. WMECO will work with you to install the appropriate revenue meter for your service. The revenue meter must be cold sequenced for services greater than 400 amps. For new construction, service upgrades, and in locations with multiple accounts (such as multi-family houses or commercial facilities) please include a sketch showing the meter, service entrance and how the generation will be interconnected. Please show any metering PT's and CT's for services greater than 400 amps which must be cold sequenced.
  12. For projects that require a disconnect switch, provide an exterior lockable AC disconnect switch with a door that can be opened to view the switch contacts. This disconnect shall be accessible to WMECO 24-hours a day, 7 days a week. This allows WMECO personnel to disconnect the DG from the grid, lock switch in the open position, and to have the visible means of determining status of the switch. The disconnect switch must be clearly and permanently labeled as a generation disconnect switch.
  13. The generation must be equally connected to the legs of the service so as not to cause an unbalance. Three phase generation 30KW and greater must use 3 phase inverters or generators.
  14. The facility's generation and interconnection installation must meet all applicable national, state and local construction codes. The customer must obtain all necessary permits.
  15. A copy of the Certificate of Completion, signed by the local wiring inspector, and an electrical permit are required when construction of the DG project is complete and before the unit is interconnected with the WMECO distribution system. These documents must be dated after the date the customer received approval to install the system from WMECO. WMECO does witness tests for all Expedited and Standard projects and some Simplified projects.
  16. A copy of the certified test results of protection devices are required to be sent to WMECO prior to the Witness Test. This typically pertains to projects in the Standard Process and some in the Expedited Process.
  17. In order to accommodate the scheduling of a Witness Test by year end, **please submit the required documentation no later than December 14.** This is necessary due to holiday schedules and the expected number of witness tests customers will want completed by the end of the calendar year.

18. For Simplified Process applications, the customer must receive a letter of approval from WMECO to install the system prior to installation. For Expedited and Standard Process applications, a signed Interconnection Service Agreement is required prior to installation. Should the customer install or start to install the generation system prior to receiving approval from the utility, they risk needing to make any changes identified during the application review.
19. Where third party ownership is involved, two documents must be signed. An Interconnection Service Agreement between the Company and Interconnection Customer and an Agreement between the Company and the Company's Retail Customer.
20. Insurance is required for most DG facilities over 60 KW. The owner of the facility is required to add WMECO to the insurance certificate and the certificate must be sent to WMECO prior to any required distribution system upgrades (if applicable). If there are no distribution system upgrades, insurance is required before the generating unit is interconnected to the WMECO distribution system. The owner of the facility will be required annually to provide a certificate of continued insurance.
21. If distribution system upgrades are required to accommodate the interconnection of your generation, you will be notified of the cost for work to the electric power system (EPS). For Expedited/Standards projects, the cost will be included in the Interconnection Service Agreement. Please note that the customer is responsible for any costs for associated work by other parties, such as the Phone Company, cable TV, fire alarms and fiber. WMECO is not responsible for the timing of work done by other parties.
22. For Expedited and Standard Process projects, the DG facility shall provide WMECO at least two weeks notice before the initial energizing and start-up testing of the generating equipment. WMECO will review test procedure, certified test results and drawings, schedule and witness the testing of any equipment connected with the interconnection.
23. A Transfer of Ownership form must be signed by the new electric customer prior to the electric account being put in their name.
24. A customer will not be compensated for any excess generation from a generation facility that goes on line prior to receiving approval to operate from WMECO. Operating an interconnected generation facility prior to approval to operate can result in disconnection of your electric service.
25. Customers with installed generation are typically compensated according to WMECO's Net Metering Tariff or Power Purchase Schedule.
26. If you want to apply for net metering compensation, submit a Schedule Z net metering application along with your interconnection application (found on [www.wmeco.com/netmetering](http://www.wmeco.com/netmetering)).
27. Customers compensated under the Net Metering Tariff are required to report their facility's output in kWh twice per year, once in January and once in September. The output information can be found on the inverter or the customer's production meter (NOT the WMECO revenue meter).
28. If you are a Qualified Facility (QF), please supply a copy of the certificate from FERC for compensation under the Power Purchase Schedule.
29. If you are interested in learning more about the distributed generation interconnection process, please contact the WMECO DG team at [wmecodg@nu.com](mailto:wmecodg@nu.com) and we will arrange to meet with you.