



Dear Customer,

Thank you for inquiring about Net Metering through the Middleborough Gas & Electric Department. Our Net Metering policy was adopted by the Board of Commissioner in September, 2009. Net Metering is available to customers who are interested in generating their own electricity and want to be connected to the MG&E distribution system. Net Metering only applies to generating systems of 10 kilowatts (kW) output or less that use one of the following technologies:

- ✓ Solar systems
- ✓ Wind systems

Enclosed are the documents that will help you understand the process of Net Metering. If you choose to install renewable generation technology, you can begin by completing the application and agreement form. You will then work with our Electric Division Manager who will review your proposed system for approval before you install your system, inspect the installation before it begins operation and monitor for compliance throughout its operation. You may also work with our Billing Manager to monitor credits to your account.

We've enclosed:

- Questions and Answers About Net Metering
- MG&E Net Metering Policy
- Net Metering Terms and Conditions
- Net Metering Application/Agreement
- Certificate of Completion (verifying our inspection)

Customers may choose to purchase a qualifying system from a contractor of their choice. MG&E does not make recommendations on any contractors or systems. Whether you are ready to begin or simply have specific questions about your system, contact our Electric Division at **508-947-3023** and ask for the Engineer. Completed application and signed Agreement forms should be delivered to our Electric Division at 37 Wareham Street, Middleborough, MA 02346 addressed to the Electric Division Manager.

Important Points: Customer Questions About Net Metering ...



Middleborough Gas and Electric Department offers Net metering to customers who wish to generate their own electricity with solar or wind powered electric systems of 10 kilowatt or less in generating capacity. Once MG&E Department reviews and approves a customer-owned electric generation system, net metering allows a customer to be connected to the utility's distribution system. Any excess electricity generated by a customer can be credited to the customer's account at the same rate they are charged for electricity.

- **What is Net Metering?**

- For customers who generate their own electricity using small-scale energy systems, net metering measures both the electricity you buy from MG&E and the electricity you produce using your own generating equipment.
- The electric meters let us track the "net" difference as you generate excess electricity and take electricity from the electric grid.

- **How exactly does net metering work?**

- Basically, net metering is a special metering installation and billing arrangement between you and MG&E.
- Normally, your electric meter only measures the amount of electricity that MG&E sends into your home or business. A net-metering arrangement means the meter can also measure the excess electricity your generating system produces that comes back into the MG&E system.
- If your generation system makes more electricity than you need at any given time, net metering allows this electricity to run "backward" through the metering installation and out into the MG&E distribution system. We measure this and then credit you for the full value for the electricity you generate but don't use.
- Net metering can usually be accomplished using a special meter at your home or business. You will be required to install an additional meter to separately measure the out put of your generating system and we will read and record that measurement as well. In this way, you'll see how much your system generated, how much you used from MG&E and how much you sent back to MG&E.

- **How will I be billed?**

- Just as we do now, we will continue to read your meter and you will receive electric bills on your normal billing schedule.
- If you use more energy than you generate in a given billing cycle, you would be a "net consumer," and the net consumption would appear as a charge on the current bill.
- If your system generated more than you used in a given billing cycle, you would be a "net generator" for that billing cycle, and the NEG would appear as a credit on your next bill. This credit will most-likely be used up during months of less wind or sun.

- **What are the benefits of net metering?**
 - By generating your own electricity, you may reduce the amount you use from MG&E and cut your electricity bills.
 - With a net metering arrangement, any excess electricity that you generate and do not use can be fed back to the utility, which will again reduce your electricity bill. Your excess electricity now offsets electricity you would otherwise have to buy at full retail prices, and this makes owning your own generating system more cost-effective.
 - Without net metering, one alternative would be to purchase batteries to store the excess power for later use. Having your own battery storage for electricity is very expensive, and would typically only benefit you during a period when the MG&E's power is off for some reason. We suggest serious consideration be given to this cost/benefit issue before choosing to install a battery back-up system.
 - Net metering allows you to get credit for the energy you generate at the retail rate.

- **Am I eligible net metering?**
 - In Middleborough or Lakeville, any electricity customer of MG&E who generates at least some of their electricity is potentially eligible for net metering.
 - *Solar, wind* or some combination of these resources must power your generating system. Currently, other types of generating systems are not eligible for net metering.
 - The generating system has a capacity of not more than 10 kilowatts.

- **What are the technical requirements?**
 - A net metering system used by a home owner or business must include, at the customer's own expense, all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by the National Electrical Code (NEC), National Electrical Safety Code, the Institute of Electrical and Electronics Engineers (IEEE), and the Underwriters Laboratories (UL), and any applicable state and local agencies.
 - These Interconnection Standards are listed after the Middleborough Gas & Electric Department's Net Metering Application in the information packet.
 - *Middleborough Gas and Electric Department must approve your system before you connect to the electric grid.*

Middleborough Gas & Electric Department

Net Metering Policy

POLICY NUMBER 42

Purpose:

The Middleborough Gas & Electric Department recognizes that some customers are interested in alternative energy options which include on-site generation. In response to this interest, it is the Board's policy to enable customers to install small scale wind, solar and other distributed electric generating facilities by allowing them to connect these facilities, limited to a maximum of 10kw in size and connecting to single phase transforming equipment, through their home or business building to the Town's electrical distribution system.

Net Metering:

A net metered generation facility is an electric generation facility that uses solar, wind or other renewable systems to generate electric power for a building already connected to the distribution system. The rated generating capacity of any one customer-generator's facility may not exceed 10 kilowatts. The net metering facility must be located on property owned by the customer-generator and must operate in parallel with the Department's existing transmission and distribution facilities. The primary intent of the net metering facility must be to offset all or part of the customer-generator's own on-site electric power requirements.

The customer-generator must complete a MG&E Department Net Metering Interconnection Application and sign a Net Metering Service Agreement. The customer-generator will purchase the generation facility and will be required to pay all applicable application fees in addition to Electrical Permit fees.

The customer-generator shall build, operate and maintain the generation equipment so that it meets or exceeds all applicable safety and performance standards established by the Massachusetts State Building Codes, the Massachusetts DPU, the National Electric Code, the Institute of Electrical and Electronics Engineers and the Underwriters Laboratories. The customer-generator shall provide a meter socket, to MG&E specifications, located on an outside wall of the structure, for the purpose of accommodating a Department meter to measure the generator output. This must be accessible and available to Department personnel at all times.

The Department may disconnect the customer-generator's net metering facility from the power system any time it deems that the safety and stability of the Department's system may be compromised. The Department may limit the cumulative generating capacity of all net metering systems to one-half of one percent of its historic single-hour peak load (as of 2008 this limit is thirty-two (32) 10kw systems).

MG&E Department will replace the existing house meter with bi-directional metering equipment that is capable of registering the flow of electricity in each direction at the sole expense of the Department. The MG&E Department will be responsible for the maintenance and service of the bi-directional metering equipment. The MG&E Department will not be responsible for the purchase of the generation facility.

Billing:

All kilowatt hours supplied to the customer-generator by MGE Department shall be billed at the normal rate for that customer-generator's current class of service. All kilowatt hours produced by the customer-generator shall be metered and noted on the bill, acting primarily as a load reducer (used by the house). This means that the power generated and used on site avoids the cost of MGED-provided power and has a real value equivalent to the *full retail value* for the customer-generator. Any kilowatt hours produced by the customer-generator in excess of the house load will be credited at the *full retail value* at the normal rate for that customer-generator's current class of service.

If the Customer-generator is a *net producer* of electricity over a normal billing cycle (produced more than the house used), the excess kilowatt-hours shall be credited at the *full retail value* and the credit shall be carried over to the following billing period. ***The customer shall not receive payment for any credit balance as a result of net metering.***

Indemnification:

The MG&E Department shall not be liable, directly or indirectly, for permitting or continuing to allow the attachment of a net metering facility, or for the acts or omissions of the customer-generator that cause property damage, or loss, or injury, including death, to any party.

Safety & Operation:

Customers must not interconnect their generating facility with the Department's distribution facilities until they receive written authorization from MG&E Department. Unauthorized interconnections may result in injury to persons and damage to equipment or property for which the customer may be liable. MG&E reserves the right to disconnect generation systems when they are determined to interfere with the operation of Department or other customer equipment, in the sole judgment of the Department. Any corrections or modifications to the equipment will be at the sole expense of the customer-generator.

Inspections

The Department's engineering staff will review a project as soon as they receive the final, signed application, and schedule an onsite inspection and bi-directional meter installation. The Department reserves the right to continually inspect the facility including all safety features throughout the operation of this facility. *Systems deemed unsafe will be disconnected at the sole discretion of MG&E Department.* In addition, systems will be required to be inspected every two years and when transfer of ownership occurs.

Adopted by Commission: Tuesday, September 8, 2009

Middleborough Gas & Electric Department (MGED)

32 South Main Street
Middleborough, MA 02346

Tel: 508-947-1371
Fax: 508-946-3706
www.mgandonline.com

**Simplified Interconnection Application (SIA) and Service Agreement
for Facilities with Inverter Capacity of 10kW and under (Residential)**

Contact Information

Legal Name and address of Interconnecting Customer applicant

MGED Customer (print): _____

Address of Interconnection Facility: _____

City: _____ State _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Alternative Contact Information (e.g., system installation contractor or coordinating company)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): (same) _____

Facsimile Number: _____ E-Mail Address: _____

Facility Information

Electric Service Company: Middleborough Gas & Electric Department (MGED)

Account Number (required – on bill) _____ **Meter Number (required – on bill)** _____

Inverter Manufacturer: _____ Model Name & #: _____ Quantity Used: _____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts) Single _____ or Three _____ Phase

System Design Capacity: _____ (kW) _____ (kVA)

Electrical Contractor: Name, address, phone # and contact name

Prime Mover: Photovoltaic Fuel Cell IC Engine Other: _____

Energy Source: Solar Wind Hydro Natural Gas Other: _____

UL1741 Listed? Yes _____ No _____

Estimated Installation Date: _____ Estimated In-Service Date: _____

Customer Signature

I hereby certify that, to the best of my knowledge, all of the information provided in this application is true and I agree to the **MGED Terms and Conditions for Simplified Process Interconnections** on the following page:

Interconnecting Customer Signature _____ Date _____

Please attach manufacturer’s document showing UL1741 listing to this document and mail to above address.

Approval to Install Facility (For MGED use only)

Installation of the Facility is approved contingent upon the terms and conditions of this Agreement, and agreement to any system modifications, if required (Are system modifications required? Yes ___ No ___ To be Determined ___).

MGED Signature: _____ Title: _____ Date: _____

MGED UA Number: _____ MGED waives inspection/witness test? Yes ___ No ___

Middleborough Gas & Electric Department (MGED)

32 South Main Street
Middleborough, MA 02346

Tel: 508-947-1371
Fax: 508-946-3706
www.mgandonline.com

CERTIFICATE OF COMPLETION

Installation Information

Interconnecting Customer (Print): _____

Mailing Address: _____

Location of Facility (if different from above): _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Account # (required – on bill) _____ Meter # (required – on bill) _____

Electrician or Electrical Installation Contractor:

Business Name: _____ Contact Name (Print) _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

License number: _____

MGED Date of Installation Approval: _____ Signature _____

MGED Utility Authorization Number: _____

Inspection:

The system has been installed and inspected in compliance with the local Building/Electrical Code of

(City/County)

Signed (Local Electrical Wiring Inspector), _____

Name (printed): _____

Date: _____

As a condition of interconnection you are required to send by USPS mail or Fax a copy of this form along with a copy of the signed electrical permit to:

MGED
32 South Main Street
Middleborough, MA 02346

MGED Terms and Conditions for Simplified Process Interconnections

1. **Construction of the Facility.** The interconnecting Customer may proceed to construct the Facility once the approval to install the Facility has been signed by the MGED.
2. **Interconnection and Operation.** The interconnecting Customer may operate Facility and interconnect with the MGED's system once the following has occurred:
 - 2.1. **Municipal Inspection.** Upon completing construction, the Interconnecting Customer will cause the Facility to be inspected or otherwise certified by the local electrical wiring inspector with jurisdiction.
 - 2.2. **Certificate of Completion.** The Interconnecting Customer returns the Certificate of Completion appearing as Attachment 2 of the Agreement to the MGED, 32 South Main Street, Middleborough, MA 02346.
 - 2.3. **Company has completed or waived the right to inspection.**
3. **MGED Right to Inspection.** Within ten (10) business days after receipt of the Certificate of Completion, the MGED may, upon reasonable notice, and at a mutually convenient time, conduct an inspection of the Facility to ensure that all equipment has been appropriately installed, and that all electric connections have been made in accordance with the MGED. The MGED has the right to disconnect the Facility in the event of improper installation or failure to return Certificate of Completion.
4. **Safe Operations and Maintenance.** The interconnecting Customer shall be fully responsible to operate, maintain, and repair the Facility.
5. **Access.** The MGED shall have access to the disconnect switch (if required) of the Facility at all times.
6. **Disconnection.** MGED may temporarily disconnect the Facility to facilitate planned or emergency MGED work.
7. **Metering and Billing.** All Facilities approved under this Agreement qualify for net metering, as approved by the MGED from time to time, and the following is necessary to implement the net metering provisions.
 - 7.1. **Interconnecting Customer Provides Meter Sockets.** The Interconnecting Customer shall furnish and have installed, if not already in place, the necessary meter socket and wiring in accordance with accepted electrical standards. The Interconnecting Customer shall have installed a second meter socket and the necessary wiring between the output of the generation source and the customer's main electrical service. This meter socket shall be located outside in an approved location. The second meter socket will be provided by MGED.
 - 7.2. **MGED Installs Net Meter.** MGED shall furnish and install a meter capable of net metering within ten (10) business days after receipt of the Certificate of Completion, or within 10 business days after the inspection if completed, if such meter is not already in place.
 - 7.3. **MGED Installs Check Meter.** The MGED will install a second meter to record the usage of the customer-generated energy. There will be no customer charge associated with this meter.
8. **Indemnification.** The Town of Middleborough, MGED, and all of their respective agents and employees shall be afforded the maximum exemption of limitations of liability available under applicable laws and regulations arising on account of their actions or omissions relating directly or indirectly any provision of electrical service. Without limiting the generality of the foregoing, and except to the extent otherwise expressly provided in M.G.L. Chapter 258: Neither the Town of Middleborough, nor the MGED, nor any of their respective agents or employees shall be liable to any person or agent: all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence of willful misconduct of the party seeking indemnification.
9. **Limitation of Liability.** Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omissions in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever.
10. **Termination.** This Agreement may be terminated under the following conditions.
 - 10.1. **By Interconnecting Customer.** The Interconnecting Customer may terminate this Agreement by providing written notice to MGED.
 - 10.2. **By MGED.** The MGED may terminate this Agreement (1) if the Facility fails to operate for any consecutive 12-month period, or (2) in the event that the Facility impairs the operation of the electric distribution system or service to other customers or material impairs the local circuit and the Interconnecting Customer does not cure the impairment.
11. **Assignment/Transfer of Ownership of the Facility.** This Agreement shall survive the transfer of ownership of the Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the MGED.