

ASHBURNHAM MUNICIPAL LIGHT PLANT
Net Metering Policy
As Adopted _____
By the Ashburnham Municipal Light Board

Policy Description: In an effort to ensure fair treatment of all of its customers, this policy specifies the treatment of distributed generation (“DG”) installations based on the size of the facility. This policy has been designed to reduce the effect of cost-shifting that can occur as a result of net metering these resources. Although AMLP encourages the installation of small scale renewable energy projects, it also understands the burden that these installations can have on other customers. AMLP may charge customers for costs associated with installing additional meter requirements and incidental administration costs. All potential DG customers must have an approved interconnection agreement with AMLP prior to the installation of a DG system. The customer must meet all requirements in the interconnection agreement prior to commercial operation. (See Table 1 for fee schedule.)

Net Metering: Net metering allows the customer to use the output of its generating equipment to exceed its own electric usage in some hours, and to have the wholesale value of those excess kilowatt-hours credited to its usage during hours when the output of the generating equipment is less than the customer’s load.

Third party Purchase Power Agreements (PPA’s) are not allowed under the net metering rules. State Law exempts municipal electric utilities from offering retail wheeling. Customers must own all equipment installed at the customer site in order to qualify for Net Metering.

The net metering facility must be owned by and located on property owned by the customer-generator and must operate in parallel with the Department’s existing distribution facilities. The primary intent of the net metering facility must be to offset some of the customer-generator’s own on-site electric power requirements. AMLP does not allow the use of neighborhood, network, or virtual net metering. Net metered customers are responsible for payment to the AMLP for all other charges including distribution, transition, renewable energy fund contributions, etc. for all kw hours consumed by customer.

Based on a 2014 system peak load of 7.3 mW, AMLP limits the cumulative generating capacity of all net metered generators according the following schedule;

1. **Residential Customer DG Installations** to two percent (2%) of its annual peak demand, which equals a cap of 146 kW.
2. **Medium Commerical Customer DG Installations** will be limited to one and a half percent (1.5%) of the annual peak demand, which equals a cap of 110 kw.
3. **Large Installations** (Solar, Wind, & Hydro) limited to eighty five percent (85%) of the annual peak demand, which equals a cap of 6,200 kW (6.2 mW) by PPA only.
4. **Customer Hydro & Wind Installations** (up to 30 kw) will be limited to one percent (1%), which equals a cap of 73 kw.

In order to provide reasonable protection to all customers but provide incentive for small scale DG projects, AMLP offers net metering for the classes described below:

Residential DG Installations (Less than 10 kW): In order to receive net metering benefits, the installed DG system shall be smaller than 10 kW, and shall not have a rated capacity that exceeds fifty percent (50%) of the average annual customer peak load for the metered service it is connected to. Any kilowatt hours produced by the customer-generator will be credited at a rate equal to the average monthly wholesale Locational Marginal Price (LMP) for the New England hub or the applicable customer rate, whichever is less. If the customer produces more energy than it uses for the month, the customer will be credited on its bill for the excess generation at the wholesale LMP energy rate and the credit will be carried over to the following billing period. The customer shall not receive payment for any credit balance as a result of net metering, and credits that continue for more than twelve (12) months will be deleted from the customer's account. AMLP reserves the right to purchase the DG REC's associated with this generator. For systems larger than 10 kW, the Medium Customer DG Installation terms and conditions, as defined below, will apply.

Medium Commercial Generator DG Installations (10 to 30 kW): Any interconnected DG system greater than 10 kW will be included in this category and shall be on a General Service or Industrial Rate. Commercial installations for net metering purposes will be limited to 50% of the customer's annual peak demand. If the customer does not have a demand meter at the premise, the installation will be limited to 40% of the annual energy usage based on a capacity factor of 15%. Installations will be limited to a maximum size of 30 kW, and must be owned by a properly registered commercial, industrial, agricultural, or governmental entity with a place of business at the site of the generator.

Any kilowatt hours produced by the customer-generator will be credited at a rate equal to the average monthly Locational Marginal Price (LMP) per kw for the New England hub or the applicable Commercial or Industrial rate, whichever is less. If the customer has produced more energy than it has used for the month, the customer will be credited on its bill for the excess generation at the wholesale LMP energy rate and the credit will be carried over to the following billing period. The customer shall not receive payment for any credit balance as a result of net metering. Customer credits that continue for more than twelve (12) months will be deleted from the customer's account.

Large Generator DG Installations (Greater than 60 kW): Large installations will be permitted only with the execution of a multi-year Power Purchase Agreement whereby the AMLP purchases the entirety of the output of the generator.

AMLP reserves the right to change this policy at any time to reflect changes in its Electric Rate Schedules or to bill the customer-generator for any costs that occur as a result of charges directly related to the customer-generator. If a customer generates more electricity than they consume in a twelve (12) month period, the AMLP reserves the right to institute a customer charge equal to the proportional customer share of

Indemnification: AMLP shall not be liable, directly or indirectly, for permitting or continuing to allow the attachment of DG facility, or for the acts or omissions of the customer-generator that cause property damage, or loss, or injury, including death, to any party. AMLP will not be held liable for any financial harm that this policy or modifications to this policy cause the customer-generator.

Safety & Operation: Customers must not interconnect their generating facility with the Department's distribution facilities until they receive written authorization from AMLP and approval from the Wiring and Building Inspector. Unauthorized interconnections may result in injury to persons and damage to equipment or property for which the customer may be liable. *AMLP 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.*

Policy Approved: _____

Signed _____
Richard Ahlin, AMLP Commissioner

Signed _____
Mark Carlisle, AMLP Commissioner

Signed _____
Kevin Lashua, AMLP Commissioner

Table 1 – Net Metering Fee Schedules

	Less than 10 kW	10 kW to 30 kW	Greater than 30 kW
	Residential	Medium	Large
Application & Meter Fee	\$250	\$5/kW Minimum \$250 Maximum \$500	\$5/kW Minimum \$500 Maximum \$3,000
Monthly Customer Fee	\$5 or current fee in approved rate plan filed with DPU	\$5 or current fee in approved rate plan filed with DPU	Per PPA
Meter Cost	Included in Application Fee	Actual Cost	Actual Cost
Standard Interconnection Initial Review	Included in Application Fee	Included in Application Fee	Actual Cost
Impact Study, or Supplemental Review (if required)	N/A	Actual Cost	Actual Cost
Facility Upgrades	N/A	Actual Cost	Actual Cost
O&M		TBD	TBD
Witness Test	Included in Application Fee	Included in Application Fee	Actual Cost

Application Process and Forms

Interconnection policy for 10 kW or less residential solar, wind, combined heat and power, or hybrid system.

Customers must not interconnect their generating facility with the Utility's distribution facilities until they receive written authorization from Ashburnham Municipal Light Plant. Unauthorized interconnections may result in injury to persons and damage to equipment or property for which the customer may be liable.

Application Process and Forms

You must provide information about your specific installation, such as manufacturer, model number and rating. You will be required to pay the installation cost for a new bi-directional meter.

Single-Line Diagram

The Single-Line Diagram must show all devices for the system equipment ratings, wire sizes and a visible, accessible and lockable disconnect switch ("safety switch"). Please note that the disconnect switch must be installed in a readily accessible location normally within **10 feet** of the customer's service panel, where Utility personnel can operate the switch at any time.

Requirements

In order for AMLP to approve your project, you must meet the following regulatory and safety requirements:

- **Certified Inverters.** You must choose an inverter that meets AMLP certification requirements.
- **Approved Disconnect Switches.** Your disconnect switch must be a blade-type switch ("knife switch"). Circuit breakers or the pullout switches commonly used in air-conditioning units and spas are not acceptable and will not be approved. Additionally, the customer is solely responsible for the maintenance of all fuses in fused blade-type disconnect switches.
- **Protection Equipment.** It may be necessary for Ashburnham Municipal Light Plant to install, possibly at your expense, protection equipment necessary to ensure safe and reliable operation of the Utility's facilities. The need for protective equipment will vary, depending on a number of factors, including the location of your facility within the AMLP distribution system.

Pre-Parallel Inspections

Upon notification of the generator's readiness for the pre-parallel inspection, scheduling an inspection can take up to 10 days for certified generators with no external relays and up to 30 days for all other generators due to the availability resources. The following items must be completed prior to the scheduling of the inspection:

1. Execute all required agreements.
2. Install net generation electric output meter (Utility owned).
3. Provide a copy of the final signed building permit.
4. Completion of all electric work by Ashburnham Municipal Light Plant.

Once you have submitted the below documents, the Utility's engineering staff will begin review of your project. As soon as the Utility receives the final, signed application, we will contact you to schedule an onsite inspection and bi-directional meter installation. After passing the inspection, you

will receive written approval from the Utility to operate your system in parallel with the Utility's distribution system.

To ensure that the application package is complete, refer to the following table:

Item	General Comments
Application	Make sure that ALL applicable sections for your generator are completed.
Application Fee	Electronic applications will not be deemed complete until the check is received (unless exempt).
Site Plan	Show generator location with respect to building, transformer, main switchboard, Utility disconnect switch and other pertinent electrical equipment.
Single-Line Drawing	Must include net generation meter (if required) and Utility disconnect switch with manufacturer and model number.
Three-Line Drawing	Required if the generator is not certified or an external relay is used.
Proposed Relay Settings	Required if the generator if not certified or an external relay is used.
Protection Operating Direction	Required if the generator is not certified or an external relay is used.

AMLP Standard Form Interconnection Application and Agreement

Section 1. Customer Information

Name _____ email: _____

System Address: _____

City: _____ State: _____ Zip Code: _____

Street Address (if different from above): _____

Daytime Phone: _____ Evening Phone: _____

Utility Customer Account Number (from Utility Bill): _____

Section 2. Generating Facility Information

System Type: Solar Wind Hydro Fuel Cell Generator

Size (kW AC): _____

Inverter Manufacturer: _____ Inverter Model: _____

Inverter Serial Number: _____ Inverter Power Rating: _____

Inverter Location: _____

Disconnect Type: Separate Manual Disconnect – Location: _____

Section 3. Planned Installation Information

Licensed Electrician: _____ Contractor #: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone #: _____ Planned Installation Date: _____

Section 4. Certifications

The generating facility meets the requirements of AMLP and applicable IEEE standards and is listed by Underwriters Laboratories (UL) or other nationally recognized testing laboratory

Signed (Equipment Vendor): _____ Date: _____

Name (Printed): _____ Company: _____

Listing: _____ (UL or other NRTL)

Property & System Owner 1 _____
Sign, Date, and print name

Property & System Owner 1 _____
Sign, Date, and print name

Section 5. Utility and Building Division Inspection and Approval (to be completed by Utility after installation)

1. Application Approved: _____ Date: _____

2. System Inspection by town: _____ Insp Date: _____

3. System Inspection by AMLP: _____ Insp Date: _____