Borough of Chambersburg, PA



Net Metering Interconnection
Frequently Asked Questions (FAQs)
(For Renewable Inverter-based Customer Generators of
10 kW or Less)

Revised December 23, 2009

(Certified Renewable Inverter-based Units of 10 kW or less)

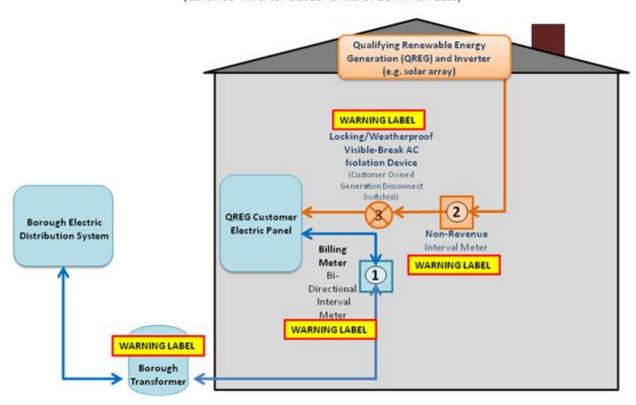
1. What is Net Energy Metering (NEM)?

If you install renewable energy generation, such as solar panels or a wind turbine, an agreement with the Borough to connect your generator to the Borough's Electric System will reduce the amount of electricity you purchase from the Borough by the amount of energy that you generate and facilitate distribution of any surplus electricity output to the Borough's Electric System.

2. What would a typical NEM installation look like?

Borough of Chambersburg Net Metering Interconnection Equipment Diagram

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3. Do all electric rate classes qualify for net metering?

No, though most rate classes are eligible, currently the Domestic Water Heating Rate (211) and the Commercial Water Heating Rate (212) are not eligible for net metering.

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4. Will I be compensated for excess power I produce?

Yes, the Borough's meter(s) will measure any excess electricity you produce, *i.e.*, energy above that which you consume, and deliver to the Borough's Electric System, and you will be compensated in the form of a credit on your monthly electric bill.

NEM means that any kilowatt-hours of electricity you produce will be subtracted from the kilowatt-hours of electricity you receive from the Borough to determine the net number of kilowatt-hours purchased from the Borough. You will be charged (or credited) for the net kilowatt-hours.

Kilowatt- Hours
From the Borough
- Kilowatt- Hours
Self-generated

Net Kilowatt-Hours

5. How much will I be compensated for excess power?

If at the end of the billing month you have produced more kilowatt-hours of electricity than you have consumed, then you will receive a credit for each "net" excess kilowatt-hour received by the Borough at the Qualifying Renewable Energy Generation ("QREG") Power Rate. The QREG Power Rate will be determined by the Borough and may be updated from time to time.

6. Will I still get an electric bill if I generate my own power?

Yes, you will continue to receive billing statements and you will be responsible for the monthly Customer Charge and other non-power charges that apply to your rate class (see the Borough's Electric Standards Chapter 135 within the Borough of Chambersburg Code of Ordinances for the charges that would apply). To find out if other charges apply contact the Borough Electric Superintendant at (717) 261-3238.

7. Why won't my electric bill necessarily be reduced to zero or less?

The Borough needs to provide the same power lines, metering equipment and facilities in place to serve you — whether needed as a back-up source of supply or needed to distribute excess power that you produce. The Customer Charge and other non-energy charges cover a portion of the Borough's costs to provide services and maintain this equipment. Though the Borough intention is to facilitate QREG installations, other customers cannot be expected to subsidize these costs for QREG customers.

8. May I sell power to my neighbor?

No, under state laws and regulations, such sales are not permitted.

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9. May I connect renewable generation anywhere in the Borough?

No, Customers may connect with the Borough's Electric System only in certain areas and only in compliance with applicable safety and reliability standards. Consequently, there are some locations within the Borough where an interconnection would jeopardize the safety and reliability of the Borough's Electric System. For example, you cannot interconnect to the Borough's Electric System in areas served by the Borough's underground secondary network system. The Borough will guide you through the process to ensure you get interconnected safely and efficiently. If you have any question about this issue it is recommended that you call the Borough Electric Superintendant at (717) 261-3238 early in the evaluation process.

10. Does the Borough provide generation equipment or installation services?

The Borough supplies the meter required for billing purposes, and at its option, an additional non-billing meter to measure and monitor the electricity produced by your renewable generation. Borough approved meter bases are available at the Borough service center. You are responsible for the renewable energy generation equipment and installation. Please be aware that the electrical installation of the QREG must be performed by a Borough licensed electrician.

11. Will the Borough charge me anything to connect?

Yes. Residential and small commercial customers with a certified electrical inverter of 10 KW or less may only need to pay a non-refundable application fee of \$200. If the interconnection requires changes to the Borough's equipment or facilities, you will also be responsible for the Borough's costs to design the changes, purchase, and install the necessary equipment. Such additional costs to complete the interconnection are your responsibility. It is recommended that you contact the Borough early in your planning process.

12. How do I begin the interconnection process?

For renewable generation of 10 kilowatts or less, residential and small commercial customers who take single phase electric service from the Borough must apply for approval to construct and interconnect, enter into an agreement for net metering interconnection with the Borough, and submit the non-refundable application fee.

Please contact the Borough Business Office at (717) 261-3221, (even if your generation will be installed at residential property). We will describe the process in detail, answer your questions, and provide the appropriate materials. Forms can also be found on the Borough's "Interconnection of Customer Owned Generation" page online at www.borough.chambersburg.pa.us/.

13. How does the process work?

You initiate the process with submission of a Land Use Permit Application. The Borough's approval of the Land Use Permit Application for a QREG facility requires the submission and Borough approval of a "Net Metering Interconnection Application/Agreement for Qualifying Renewable Energy Generation (Certified Inverter-Based Units of 10 Kilowatts or Less)" ("Application/Agreement") and payment of the non-refundable application fee.

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In order for the Application/Agreement to be approved the electrical installation of the QREG must be performed by a Borough licensed electrician, and you will be required to obtain an inspection by a Borough-approved electrical inspector to certify that your generation, once installed, meets all the necessary electrical safety standards. Any additional costs for Borough facilities necessary to complete the interconnection are your responsibility as well.

In addition to Borough approval to install renewable generation, you must obtain any required zoning and/or building permits. It is recommended that you contact the Borough early in your planning process.

14. Must I sign a contract for interconnection?

Yes, in applying for interconnection, you must sign an Application/Agreement for net metering and interconnection with the Borough.

15. Are there technical requirements or guidelines for interconnection?

Yes. To ensure system safety and reliability, all interconnections will be subject to the National Electric Code ("NEC") and the Borough's "Technical Requirements Covering Renewable Inverter-Based Customer Generators of Ten (10) Kilowatts or Less Interconnected with the Chambersburg Electric System" (Technical Requirements). For projects with inverter-based technology which has been certified compliant by the manufacturer with Institute of Electrical and Electronic Engineers ("IEEE") 929, Underwriters Laboratories ("UL") 1741(or subsequent approved revisions thereof), the technology will be deemed compliant with the Technical Requirements. However, such preliminary technical compliance does not limit, eliminate, or affect in any way, your obligation to comply with all other requirements of the Borough. You are responsible to operate, maintain, and repair the generation system to ensure that your renewable generation complies at all times with all applicable electric codes and interconnection requirements.

16. Why are these technical requirements necessary?

These requirements are necessary to ensure the safety of all those who may come in contact with the Borough's Electric System. If your renewable generation produces electricity that back-feeds power into an electric line or building that utility crews, emergency personnel or the public think is deenergized, people can be seriously injured or even killed. The interconnection review and approval also helps assure that you and other customers continue to receive safe, reliable service and good power quality, avoiding potentially disruptive swings in voltage levels that could damage your equipment and that of other customers.

17. What happens if my request to interconnect is denied?

The Borough will work with you to make reasonable efforts to approve your Application/Agreement, however, in the event your application is denied, the reason(s) for denial will be provided in a written notice to you. You must then submit a new application which remedies such reason(s) for rejection and pay another application fee.

If your installation has failed Borough or code inspections, or otherwise been deemed by the Borough a potential threat to the safety and reliability of the Borough's Electric System if connected,

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you will be notified of identified deficiencies. Once such deficiencies have been corrected, you may then request further inspections and approvals.

18. Under what conditions can the Borough disconnect my QREG?

The Borough has the right, in its sole discretion, to disconnect your generation from the Borough's Electric System for safety, maintenance, operational or for reliability reasons. In an emergency or outage situation where the disconnect switch(s) are inoperable or inaccessible, the Borough may disconnect the electric service to your premises until such time as the emergency or outage situation is rectified to the Borough's satisfaction.

19. Are there additional risks with the installation and operation of renewable generation?

Yes, with interconnection you are liable for the amount of any direct damage to the Borough's Electric System. It is recommended that you contact your insurance advisor early in the process to be certain you have adequate liability insurance.

20. Will the installation of renewable generation require additional insurance coverage or change my insurance premiums?

The Borough cannot answer that question. The Borough does not have any insurance requirements for QREG facilities. It is recommended that you contact your insurance advisor early in the process to be certain you will have adequate insurance coverage and understand what impact renewable generation may have on your insurance premiums.

21. Is my interconnection transferable?

Yes, provided you have the new Borough electric customer sign the Succession/Assignment Notice, as required in Section 10 of your Application/Agreement with the Borough and there has been no modification to approved renewable generation. That Notice will transfer the current interconnection Application/Agreement to the new customer with all its terms and conditions.

22. Are grants available from the Borough or other sources?

The Borough does not currently provide any grants or additional incentives. Though not the only source of additional information, one resource for an overview of current state, local, utility, and federal incentives is the Database of State Incentives for Renewables & Efficiency ("DSIRE") at http://www.dsireusa.org/. Established in 1995, DSIRE is an ongoing project of the North Carolina Solar Center and the Interstate Renewable Energy Council ("IREC") and is funded by the U.S. Department of Energy.

23. What is Pennsylvania Act 213?

On Nov. 30, 2004, Governor Edward Rendell signed the Alternative Energy Portfolio Standards ("AEPS") Act 213 into law. The provisions of Act 213 require electric distribution companies and electric generation suppliers under the Pennsylvania Public Utility Commission ("PA PUC") regulating authority to include a specific percentage of electricity from alternative resources in the

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generation sold to Pennsylvania customers. Alternative energy sources include hydro, wind, solar, waste coal, landfill methane, and fuel cells among others.

The regulations also establish the net metering and compensation provisions that allow utilities to reimburse customer-generators for surplus energy supplied to the electric grid. Additionally, the act provides for regulations governing interconnection for customer-generators. This includes rules regarding the application and evaluation process and interconnection standards.

24. Is the Borough subject to Pennsylvania Act 213 and associated regulations?

No. As a Pennsylvania municipal electric utility, the Borough is not subject to the AEPS. However, the Borough supports the goals of Act 213 and is developing programs, such as net metering, to encourage the use of renewable energy resources in the Borough.

25. What are alternative energy credits?

An Alternative Energy Credit ("AEC") may be created for each megawatt-hour of electricity produced by a QREG facility. AECs were created within Pennsylvania legislation promoting renewable and alternative energy production and are administered by the PA PUC. These credits may be purchased by electric generation suppliers and others to meet certain minimum alternative energy requirements. As a result, AECs may have economic value.

Your renewable generation may qualify for AECs, however, in order to monetize AECs, you may be required to meet certain standards or incur additional costs for metering and/or fees associated with recording and transferring AECs. Please contact the Pennsylvania AEPS Program Administrator to determine what requirements or costs apply to your renewable generation.

The PA PUC provides more information about AECs and their potential value on their website at http://paaeps.com/credit/faqs.do.

26. Additional Resources

The following non-exhaustive list of Web resources may be helpful in finding additional information on renewable energy technologies and equipment suppliers. The Borough can not endorse or validate the accuracy of the information on these sites.

http://www.gosolarcalifornia.ca.gov/equipment/inverter.php (a list of approved inverters)

http://paaeps.com/credit/ (PA PUC Alternative Energy Portfolio Standard Program website)

http://www.eere.energy.gov/(DOE Office of Energy Efficiency & Renewable Energy)

<u>http://www.homepower.com/home/</u>(Good e-publication source for home owners)

http://energy.sourceguides.com/businesses/byGeo/US/byS/PA/byB/serv/install/byN/byName.shtml (Renewable Energy Installation Businesses in Pennsylvania by Business Name)

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<u>http://www.phillysolar.org/(Eastern-Central PA Solar Contractors)</u>

http://www.awea.org/(American Wind Energy Association)

http://www.pasolar.org/(Solar Energy in Pennsylvania)

<u>http://www.depweb.state.pa.us/energindependent/site/default.asp</u>(PA Department of Environmental Protection – Energy Independence Strategy)

Annex A, Title 52. Public Utilities, Part 1. Public Utility Commission, Subpart C. Fixed Service Utilities, Chapter 75: Alternative Energy Portfolio Standards, Subchapter C: Interconnection Standards (PA PUC Interconnection Standards)