

FIRST READING: 07/16/07
SECOND READING: 08/06/07
THIRD READING: 09/04/07
ORD. NO.: 010-07
SPONSOR: _____
REFERRED TO: Utility Committee

AN ORDINANCE TO AMEND CHAPTER 70, ARTICLE III, ELECTRIC DEPARTMENT RULES AND REGULATIONS

BE IT HEREBY RESOLVED by the Mayor and Council of the Town of Smyrna, a majority thereof concurring in Council duly met that Chapter 70, Utilities, Article III, Electric Department Rules & Regulations, be and hereby is amended as follows:

I. Background and Purpose

a. Background

There is an interest by some Town of Smyrna Electric consumers in sources of on-site generation of electricity as a means to reduce pollution (environmentally friendly production of electricity such as solar or wind) and/or to reduce the ever increasing cost of retail electricity.

Recent increases in the cost of wholesale and retail electricity have provided an increased incentive for consumers to further research alternatives to retail electric supply from their electric utility. Alternatives often sought by consumers include customer-owned renewable resources such as; photovoltaic, wind-power, micro-generators, fuel cells powered by renewable fuels, or gas from the anaerobic digestion of organic materials and other on-site generation or cogeneration. The increase in interest in on-site generation has caused a renewed interest in Net-Metering. As a customer-owned electric utility the Town of Smyrna is interested in supporting renewable energy and cost reduction for its customer-owners. To facilitate the option of customer owned generation in a safe and reliable fashion, the Town has promulgated an interconnection policy; Technical Consideration Covering Parallel Operations of Customer Owned Generation Of Less than One (1) Megawatt And Interconnected with the Smyrna Electric System (herein, Technical Considerations). This Net Metering Policy is intended to work in harmony with, and support, the Technical Considerations, and to provide the administrative and financial terms of this interconnection.

b. Purpose

II. This Net Metering Policy is primarily intended for customers with renewable-fuel electric generating facilities used to primarily offset all or part of the customer's electricity requirement. Further it is intended to encourage private investment in renewable energy resources, stimulate the economic growth of the State, encourage energy independence and security, and enhance the continued diversification of Delaware's energy resources.

Definitions, applicability, and terms of applicability

a. Definitions

- i. **Customer** - Any adult person, partnership, association, corporation or other entity: (a) in whose name a service account is listed, (b) who occupies or is the ratepayer for a premise, building, structure, etc., and (c) who is primarily responsible for payment of bills. A customer includes anyone taking electric service from the Town under one service classification for one account, premises or site. Multiple premises or sites under the same name are considered to be multiple Customers.
- ii. **Distributed Generation or On-Site Distributed Generation (for purposes of this Net Metering Policy)** - An electrical generating unit of less than 500 kw which may be connected in parallel operation to the Town's system.
- iii. **Generator Owner** - The owner of the generating system that is interconnected to the Town's electric Distribution System.
- iv. **Distribution System** - The interconnected arrangement of lines and transformers that make up the Town's electric power system.
- v. **IEEE Standard 929** - IEEE Standard entitled *Recommended Practice for Utility Interface of Photovoltaic (PV) Systems*, P929 Draft 11, dated July 1999, or subsequent approved revision thereof
- vi. **Interconnection** - The physical connection of Distributed Generation to the Town's system in accordance with these guidelines so that parallel operation can occur.
- vii. **Interconnection Application or Application Form**- The standard form of application which must be submitted by the Generation Owner to the Town for permission to interconnect with the Town system. The approved Interconnection Application sets forth the contractual conditions under which the Town and

Generator Owner agree that one or more generating units whose aggregate generation at the Point of Common Coupling is less than 500 kw may be interconnected at 25kV or less with the Town's Distribution System.

- viii. **Technical Considerations-** Refers to the Town of Smyrna policy on interconnection requirements titled; Technical Considerations Covering Parallel Operations of Customer Owned Generation of Less than One (1) Megawatt And Interconnected with the Smyrna Electric System.
- ix. **Net Metering Policy-** Refers to this document, the Net Metering Policy For Parallel Operations of Customer Owned Generation.
- x. **Parallel Operation** - Any electrical connection between the Town's Distribution System and the Generator Owner's generating source.
- xi. **Point of Common Coupling** - The point where the electrical conductors of the Town's Distribution System are connected to the Customer's conductors and where any transfer of electric power between the Generator Owner and the Town's Distribution System takes place (such as switchgear near the meter).
- xii. **Pre-Approved Equipment** - Specific generating and protective equipment system or systems that have previously been approved by the Town as meeting the applicable parts of this document.
- xiii. **Pre-interconnection Study** - A study or studies which may be undertaken by the Town in response to its receipt of a completed application for parallel operation with the Town's system. Pre-Interconnection Studies may include, but are not limited to service studies, coordination studies and facilities impact studies.
- xiv. **Town** - Town of Smyrna

b. Applicability

Unless otherwise provided, this policy applies to all customer generation of 500 kw or less which is interconnected at 25kV or below and operated in parallel with the Town's power delivery System.

c. Terms of Applicability

- i. A proposed Generator Owner will make a formal application to the Town for the interconnection of a generator to the Town system. All applications are to be sent to the Town's Business Office. The application will be prepared on an Application Form provided by the Town. Two Application Forms are

available. Generators 25kw or less will use the shorter Application Form as less technical data is needed for generating units within this size range. Application Forms can be found in the Technical Considerations

- ii. Upon approval by the Town that the customers generator meet the standards set out in the Technical Considerations, such approval shall be made available to the appropriate manufacturer upon written request. For subsequent applications using some or all of the identical generating unit's protective devices and/or systems, the manufacturer may submit a copy of the approval with the application as proof that its equipment has already been approved for use on the Town's system. Use of pre-approved equipment will not eliminate any applicable requirement for a pre-interconnection study to determine the suitability of the equipment for each application, given the unique arrangements and characteristics of both the Generator Owner and Town systems at the Point of Common Coupling.
- iii. The Generator Owner may connect their generation to the Town system only after the Interconnection Application has been approved and the Generation Owner has received approval notification. The Town will make every effort to provide notification in a timely manner following the receipt of the Interconnection Application and all required data.
- iv. The Town will install a warning label in a conspicuous place on their electric meter or meter box (and transformer) to notify the Town personnel that there is a generator source installed on the load side of the meter. Further, this warning label should not be used in lieu of any additional warnings, notices, or safety devices, to be installed by the customer, or the customer's installing electrician, to protect the customer (or customer's electrician), from dangerous conditions on the customer's side of the meter, due to the customer's installation of on-site generation. The warning label shall not be placed in a location that would interfere with the ability of Town personnel to read the electric meter. The Town will provide the warning label. The warning label must be in place before the generation can be interconnected.

III. General Overview of Net Metering Options

a. Residential customers with renewable energy generation of 25 kw or less

Full offset (Netting) of renewable energy kwh produced by the customer's renewable energy generation will occur at the then current retail rate of the Town of Smyrna. Excess kwh produced by the customer's renewable energy generation is to be credited to the customer for up to twelve months.

b. Non-Residential customers with renewable energy generation of 500 kw or less.

Full offset (Netting) of renewable energy kwh produced by the customer's renewable energy generation will occur at the then current retail rate of the Town of Smyrna. Excess kwh produced by the customer's renewable energy generation is to be credited to the customer for up to twelve months.

c. Non-Residential customers with renewable energy generation of over 500 kw

For large scale generation of greater than 500 kw the technical and financial implications for both the customer and the Town are significantly more complex. In the case where a customer desires to install a large scale generation resource of >500 kw, the parties will separately negotiate and mutually agree on the technical, administrative and financial terms of this interconnection. The Net-Metering Policy, as set forth in this document, does not necessarily include the types of, or sophistication of, the metering that may be necessary for customer owned generation of this magnitude.

IV. Technical Reference

- For technical data and specifications regarding generator information, interconnection specifications, and technical guidelines for parallel operation of on-site distributed generation units, please consult the Town's policy; Technical Considerations Covering Parallel Operations of Customer Owned Generation Of Less than One (1) Megawatt and Interconnected with the Town of Smyrna Delivery System, pages 1-17
- For the Generator Interconnection Application - Short Form and Long Form, please consult the previously mentioned Technical Considerations on pages 21-24 and 25-30.
- For Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, please

consult the IEEE St. 549-1992, or the previously mentioned Technical Considerations on pages 18-20

The Town of Smyrna Net-Metering Policy for renewable energy generation will comply with Title 26 Section 1014 (d) of the Delaware Code relating to Net-Metering as related to any and all requirements that are applicable to municipal electric utilities.

This ordinance shall become effective

SYNOPSIS

This amending ordinance adopts the Technical Considerations Covering Parallel Operation of Customer Owned Generation Of Less than One (1) Megawatt And Interconnected with the Smyrna Electric System and Net Metering Policy For Parallel Operations of Customer Owned Generation regarding customer owned generation.

This will certify that this is a true and correct copy of the Ordinance duly adopted by the Town Council of the Town of Smyrna at its regular Council meeting on September 4, 2007.

ATTEST:

Council Secretary

Mayor

This shall certify that the title and synopsis of this ordinance were published in the Smyrna/Clayton Sun Times on July 25, 2007 and posted at the Town Hall on July 17, 2007.

So Certifies:

Town Clerk

This shall certify that the title, effective date and synopsis of this Ordinance was published in the Smyrna/Clayton Sun

Times on September 12, 2007 and posted at the Town
Hall on September 6, 2007.

So Certifies:

Town Clerk