

TOWN OF EATONVILLE

Agenda Staff Report

Agenda Item No.:	_____	Meeting Date:	<u>June 27, 2016</u>
Subject:	<u>Ordinance No. 2016- 11 Adopting a</u>	Prepared by:	<u>Town Attorney</u>
	<u>New Chapter 13.34 “Electric</u>		_____
	<u>Net Metering”</u>	Atty Routing No:	<u>033-15</u>
	_____	Atty Review Date:	<u>June 22, 2016</u>

Summary: Over the past several years, the state of Washington has adopted regulations to encourage private investment in renewable energy resources and to enhance the diversification of the energy resources used in the state. Chapter 80.60 RCW requires an electric utility to make net metering available to eligible customers-generators on a first come, first served basis until the cumulative generating capacity equals 0.5 percent of the utility’s peak demand during 1996.

To promote the statute’s goals, the state is encouraging electric utilities to adopt local regulations that are consistent with Chapter 80.60 RCW. The state’s regulations address two related topics, the first of which, electric net metering, is the subject of this staff report and the attached ordinance. The second topic, renewable energy cost recovery incentive program, is the subject of a separate staff report and ordinance. The town of Steilacoom and Elmhurst Mutual Power and Light are two local utilities that have adopted similar regulations.

The proposed new EMC chapter 13.34 sets forth the rules and procedures for determining the terms and conditions governing the interconnection of electric generating facilities with a maximum generating capacity of not more than 100 kilowatts to the town’s electrical distribution system. It is anticipated that this program will be of most interest to utility customers who have installed or will install solar energy panels.

Recommendation: Staff recommends adoption of Ordinance No. 2016-11 amending Eatonville Municipal Code by adding a new chapter 13.34 “Electric Net Metering.”

Motion for consideration: I move to approve the first reading of Ordinance No. 2016-11 amending Eatonville Municipal Code by adding a new chapter 13.34 “Electric Net Metering.”

Fiscal Impact:

Attachments: Ordinance No. 2016-11

ORDINANCE NO. 2016-11

**AN ORDINANCE OF THE TOWN OF EATONVILLE,
WASHINGTON, AMENDING THE EATONVILLE MUNICIPAL
CODE BY ADOPTING A NEW CHAPTER 13.34 “ELECTRIC NET
METERING”**

WHEREAS, the Town of Eatonville owns and operates an electrical distribution system that provides electrical services within town limits; and

WHEREAS, in recent years, the state of Washington has adopted regulations to encourage private investment in renewable energy resources and to continue the diversification of the energy resources used in the state; and

WHEREAS, the Council of the Town of Eatonville wishes to amend the Eatonville Municipal Code by adding a new chapter 13.34 “Electric Net Metering” to establish rules and procedures for determining the terms and conditions governing the interconnection of electric generating facilities to the Town’s electric distribution system; and

WHEREAS, the Council of the Town of Eatonville having found the new chapter 13.34 to be reasonable and in the public interest; now, therefore,

**BE IT ORDAINED BY THE COUNCIL OF THE TOWN OF EATONVILLE
AS FOLLOWS:**

Section 1. Eatonville Municipal Code Title 13 “Public Services” is amended by adding a new chapter 13.34 “Electric Net Metering,” a copy of which is attached hereto as Exhibit A and incorporated by this reference.

Section 2. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be preempted by state or federal law or regulation, such decision or preemption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 3. This ordinance shall take effect after publication of a summary, consisting of the title, pursuant to RCW 35.27.300.

1ST READING: 06/27/2016

2ND READING: / /2016

PASSED by the Town Council of the Town of Eatonville and attested by the Clerk
in authentication of such passage this ____ day of _____, 2016.

Mike Schaub
Mayor

ATTEST:

Kathy Linnemeyer
Town Clerk

APPROVED AS TO FORM:

Gregory A. Jacoby
Town Attorney

Chapter 13.34

ELECTRIC NET METERING

Sections:

- 13.34.010 Purpose and scope.
- 13.34.020 Definitions.
- 13.34.030 Required filings.
- 13.34.040 Technical requirements and standards for interconnection.
- 13.34.050 Application for interconnection.
- 13.34.060 Interconnection agreement
- 13.34.070 Certificate of completion.
- 13.34.080 General terms and conditions of interconnection.
- 13.34.090 Payment for net energy
- 13.34.100 Adoption by reference.

13.34.010 Purpose and scope.

The purpose of this chapter is to establish, in accordance with Chapter 80.60 RCW, rules and procedures for determining the terms and conditions governing the interconnection of electric generating facilities with a maximum generating capacity of not more than 100 kilowatts to the town of Eatonville electric distribution system.

13.34.020 Definitions.

A. "Applicant" means any person, corporation, partnership, government agency, or other entity applying to interconnect an electric generating facility to the town's electric distribution system pursuant to this chapter.

B. "Application" means the written notice provided by the applicant to the town that initiates the interconnection process.

C. "Electric System" means all electrical wires, equipment, and other facilities owned or provided by the town's electric utility to transmit electricity to customers.

D. "Electric Utility" means the town of Eatonville who owns and operates the electrical distribution system, or the electrical distribution system itself, onto which the applicant seeks to interconnect a generating facility.

E. "Generating Facility" means a source of electricity owned by the applicant or generator that is located on the applicant's side of the point of common coupling, and all facilities

ancillary and appurtenant thereto, including interconnection facilities, which the applicant requests to interconnect to the town's electrical system.

F. "Generator" means the entity that owns and/or operates the generating facility interconnected to the town's electric system.

G. "Interconnection" means the physical connection of a generating facility to the electric system so that parallel operation may occur.

H. "Interconnection Agreement" means the written, executed agreement between the town and the applicant consistent with the purpose, scope and provisions of this chapter, including but not limited to the provisions of EMC 13.34.080.

I. "Interconnection Facilities" means the electrical wires, switches, and other equipment used to interconnect a generating facility to the electric system.

J. "Net Metering" means measuring the difference between the electricity supplied by the town and the electricity generated by a generating facility that is fed back to the town's electric system over the applicable billing period.

K. "Point of Common Coupling (PCC)" means the point where the generating facility's local electric power system connects to the town's electric system, such as the electric power meter or at the location of the equipment designed to interrupt, separate, or disconnect the connection between the generating facility and the town's electric system.

L. "Town" means the town of Eatonville.

13.34.030 Required filings.

Applicants shall be required to submit the following forms and receive approval of each form and the generating facility by the town prior to approval and/or interconnection to the electric system.

- A. Application
- B. Certification of Completion
- C. Interconnection Agreement.

13.34.040 Technical requirements and standards for interconnection.

- A. General Interconnection Requirements.

1. Any generating facility desiring to interconnect with the town's electric system or modify an existing interconnection must meet all minimum technical specifications applicable, in their most current approved version, as set forth in this chapter.

2. The specifications and requirements in this section are intended to mitigate possible adverse impacts caused by the generating facility on the town's electric system, equipment and personnel and on other customers of the town's electric system. They are not intended to address protection of the generating facility itself, generating facility personnel, or its internal load. It is the responsibility of the generating facility to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel and loads. The town accepts no responsibility or liability for any failure of the generating facility or related equipment located anywhere beyond the point of common coupling (PCC) with the town's electric system.

3. The specifications and requirements in this section shall apply generally to the non-utility owned electric generation equipment (or any other facilities or equipment not owned by the town's electric system) to which this standard and agreement(s) apply throughout the period encompassing the generator's installation, testing, commissioning, operation, maintenance, decommissioning and removal of said equipment. The town may verify compliance at any time, with reasonable notice.

4. The Generator shall comply with the requirements in subsections 4.a, 4.b. and 4.c. below. However, at its sole discretion, the town may approve alternatives that satisfy the intent and/or purpose of these requirements, except as to local, state and federal building codes.

a. Codes and standards: Applicant shall conform to all applicable codes and standards for safe and reliable operation of the generator facility, including but not limited to the National Electric Code (NEC), National Electric Safety Code (NESC), the

Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and Underwriters Laboratories (UL) standards, and local, state and federal building codes. The generator is responsible to obtain all applicable permit(s) for the equipment installations on its property.

b. Safety: All safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) Standards, the NEC, Washington Administrative Code (WAC), the Washington Industrial Safety and Health Administration (WISHA) and equipment manufacturer's safety and operating manuals.

c. Power Quality: Installations shall be in compliance with all applicable standards including IEEE Standard 519-1992, Harmonic Limits.

B. Specific Interconnection Requirements.

1. Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the applicant's generating facility from the town's electric system. The disconnect switch shall be located adjacent to the town's electric meter and shall be of the visible break type in a metal enclosure which can be secured by a town of Eatonville padlock. The disconnect switch shall be accessible to town personnel at all times.

2. The requirement in subsection B.1. above may be waived by the Town if: (a) Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of the Town, performs physical disconnection of the generating equipment supply internally; and (b) applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason.

3. The Town shall have the right to disconnect the generating facility at the disconnect switch under the following circumstances: when necessary to maintain safe electrical operating conditions; if the generating facility does not meet required standards or rules; if the generating facility at

any time adversely affects or endangers any person, property of any person, the Town's operation of its electric system or the quality of the Town's service to other customers; or failure of the owner of record to notify the Town of a sale or transfer of the generator, interconnecting facilities or the premises where the generator is located.

4. Nominal voltage and phase configuration of applicant's generating facility must be compatible to the Town's electric system at the point of common coupling.

5. Applicant must provide evidence that its generation will never result in reverse current flow through the Town's network protectors. All instances of interconnection to secondary spot distribution networks shall require review and written pre-approval by the Town. Interconnection to distribution secondary grid networks is not allowed. Closed transition transfer switches are not allowed in secondary network distribution systems.

C. Specifications Applicable to all Inverter-based Interconnections.

Any inverter-based generating facility desiring to interconnect to the Town's electric system or modify an existing interconnection must meet the technical specifications, in their most current approved version, as set forth below. The version of the technical specifications approved by the Town is specified in EMC 13.34.080 and EMC 13.34.100. A more recent approved version may supersede specifications on the list below.

1. IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power systems, for Systems 10MVA or less.

2. UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems. Equipment must be UL listed.

3. IEEE Standard 9929, IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems.

D. Requirements Applicable to all Non Inverter-based Interconnections.

Non-inverter based interconnection requests may require more detailed review, testing, and approval by the Town, at the expense of the applicant, of the equipment proposed to be

installed to ensure compliance with applicable technical specifications, in their most current approved version, including but not limited to:

1. IEEE standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, for systems 10MVA or less.

2. ANSI Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus. Applicants proposing such interconnection may also be required to submit a power factor mitigation plan and/or other studies or plans as appropriate for the Town's review and approval.

13.34.050 Application for interconnection.

A. When an applicant requests interconnection from the Town, the applicant shall be responsible for conforming to the rules and regulations in effect. The applicant seeking to interconnect a generating facility under these rules must complete and submit a written application form. Information must be accurate, complete, and approved by the Town prior to installation of the generating facility.

B. Application Fees. The Town requires a non-refundable interconnection application fee of \$100.00.

Actual expenses in excess of this fee shall be invoiced to the applicant. All fees, including but not limited to inspection fees, shall be paid prior to interconnection.

C. Application Evaluation. All generation interconnection requests pursuant to this chapter will be reviewed by the Town for compliance with these rules. If the Town in its sole discretion finds the application does not comply with these rules and standards, the Town may reject the application. If the Town rejects the application, it shall provide the applicant with written notification stating the reasons for rejecting the application.

13.34.060 Interconnection agreement.

A. Once an application is accepted by the Town as complete, the Town shall determine if any additional information or studies are required. If additional information or studies

are required, the applicant shall be responsible for providing the requested studies and/or information. All expenses related to providing this additional information and/or studies shall be borne by the applicant.

Upon approval of the application for interconnection, the Town will provide an interconnection agreement to the applicant. The interconnection agreement shall be completed and executed by the applicant within 30 days.

13.34.070 Certificate of completion.

All generating facilities must obtain an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the Town's electric system. Generator shall provide written certification to the Town that the generating facility has been installed and inspected in compliance with all local building and/or electrical codes.

13.34.080 General terms and conditions of interconnection.

The general terms and conditions listed in this section shall apply to all generating facilities interconnecting to the Town's electric system.

A. Any electrical generating facility with a maximum electrical generating capacity of 100 kW or less must comply with these rules to be eligible to interconnect and operate in parallel with the Town's electric system. The rules under this chapter shall apply to all interconnecting generating facilities that are intended to operate in parallel with the Town's electric system irrespective of whether the applicant intends to generate electricity to serve all or part of the applicants' load; or to sell the output.

B. In order to ensure system safety and reliability of interconnected operations, all interconnected generating facilities shall be constructed and operated by the generator in accordance with this chapter and all other applicable federal, state and local laws and regulations.

C. Prior to initial operation, all generators must submit a completed certificate of completion to the Town; execute an interconnection agreement, and any other

agreement(s) reasonably required by these rules for the disposition of the generating facility's electric power output. The interconnection agreement between the Town and generator outlines the interconnection standards, cost allocation and billing agreements, and on-going maintenance and operation requirements.

D. Applicant or generator shall promptly furnish the Town with copies of such plans, specifications, records and other information relating to the generating facility or the ownership, operation, use, or maintenance of the generating facility, as may be reasonably requested by the Town from time to time.

E. For the purposes of safety, any non-approved generation interconnection discovered will be immediately disconnected from the Town's electric system.

F. To ensure reliable service to all Town customers and to minimize possible problems for other customers, the Town will review the need for a dedicated-to-single-customer distribution transformer. If the Town requires a dedicated distribution transformer, the applicant or generator shall pay for all costs of the new transformer and related facilities.

G. For all net metering for fuel cells, facilities that produce electricity and used and useful thermal energy from a common fuel source, or facilities that use water, wind, solar energy, or biogas from animal waste as a fuel as set forth in Chapter 80.60 RCW: The Town shall install, own and maintain a kilowatt-hour meter or meters capable of registering bi-directional flow of electricity at the point of common coupling (PCC) at a level of accuracy that meets all applicable standards, regulations and statutes. The meters may measure such parameters as time of delivery, power factor, voltage and such other parameters as the Town shall specify. The applicant shall provide space for metering equipment. It will be the applicant's responsibility to provide the current transformer enclosure (if required), meter socket(s) and junction box after the applicant has submitted drawings and equipment specifications for Town approval. The Town may approve other generating sources for net metering but is not required to do so.

H. Common labeling furnished or approved by the Town and in accordance with NEC requirements must be posted on meter base, disconnects, and transformers informing working personnel that generation is operating at or is located on the premises.

I. No additional insurance will be necessary for a net metered facility that is a qualifying generating facility under Chapter 80.60 RCW. A qualifying facility under Chapter 80.60 RCW is one that is 100 kW or less; and that uses water, wind, solar energy, or biogas from animal waste as a fuel, fuel cells, or that produces electricity and used and useful thermal energy from a common fuel source. For other generating facilities permitted under these standards but not a qualifying facility under Chapter 80.60 RCW, additional insurance, limitations or liability and indemnification may be required by the Town.

J. Prior to any future modification or expansion of the generating facility, the generator will obtain Town review and approval. The Town reserves the right to require the generator, at the generator's expense, to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards.

K. For the overall safety and protection of the Town's electric system, and consistent with RCW 80.60.020, the cumulative generating capacity available to net metering systems will equal 0.5 percent of the utility's peak demand during 1996; provided, not less than 0.25 percent of the utility's peak demand during 1996 shall be reserved for net metering systems that generate renewable energy. Additionally, interconnection of generating facilities to individual distribution feeders will be limited to 10% of the feeder's peak capacity.

L. It is the responsibility of the generator to protect its facilities, loads and equipment and comply with the requirements of all appropriate standards, codes, statutes and authorities.

M. Charges by the Town to the applicant or generator in addition to the application fee, if any, will be cost-based and applied as appropriate. Such costs may include but not

limited to, transformers, production meters, and Town testing, qualification, and approval of non UL 1741 listed equipment. The generator shall be responsible for any costs associated with any future upgrade or modification to its interconnected system required by modifications in the Town's electric system.

N. This chapter governs the terms and conditions under which the applicant's generating facility will interconnect with, and operate in parallel with, the Town's electric system. This chapter does not govern the settlement, purchase, or delivery of any power generated by the applicant's generating facility. The purchase or delivery of power, including net metering of electricity pursuant to Chapter 80.60 RCW, and other services that the applicant may require will be covered by separate agreement or pursuant to the terms, conditions and rates as may be from time to time approved by the Town. Any such agreement shall be completed prior to the initial operation and filed with the Town.

O. Generator may disconnect the generating facility at any time; provided the generator provides reasonable advance notice to the Town.

Generator shall notify the Town prior to the sale or transfer of the generating facility, the interconnection facilities or the premises upon which the facilities are located. The applicant or generator shall not assign its rights or obligations under any agreement entered into pursuant to these rules without the prior written consent of the Town, which consent shall not be unreasonably withheld.

13.34.090 Payment for net energy.

The Town of Eatonville shall measure the electricity produced and consumed by the generator during each billing period, in accordance with normal metering practices.

A. If the electricity supplied by the Town exceeds the electricity generated by the generator during the billing period, or any portion thereof, then the generator shall be billed for the net electricity supplied by the Town together with the appropriate base charge paid by other customers of the Town in the same rate class.

B. If the electricity generated by the generator during the billing period, or any portion thereof, exceeds the generator's electricity usage, then the generator shall be billed for the appropriate base charge as other customers in the same rate class; and credited for the net excess kilowatt-hours generated during the billing period, with the kilowatt-hour credit appearing on the customer's bill for the following period.

C. On April 30th of each calendar year, any remaining unused kilowatt-hour credit accumulated by the generator during the previous year shall be granted to the Town without any compensation to the customer.

Generator shall pay any amount owing for electric service provided by the Town in accordance with applicable rates and policies. Nothing in this section shall limit the rights of the Town under applicable rate schedules, Town ordinances, customer service policies and general provisions of the Eatonville Municipal Code.

13.34.100 Adoption by reference.

The Town adopts by reference all and/or portions of regulations and standards identified below as they now exist or as they are modified in the future.

A. The National Electric Code (NEC), as published by the National Fire Protection Association (NFPA).

B. The National Electric Safety Code, (NESC).

C. The Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems.

D. Institute of Electrical and Electronics Engineers (IEEE) Standard 929, Recommended Practice for Utility Interface with Photovoltaic (PV) Systems.

E. American National Standards Institute (ANSI) Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus.

F. Institute of Electrical and Electronic Engineers (IEEE) Standard 519, Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.

G. Underwriters Laboratories (UL), including UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems.

H. Occupational Safety and Health Administration (OSHA) Standard at 29 CFR 1910.269. Washington Division of Occupational Safety and Health (DOSH) Standard, Chapter 296-155 WAC.