

RESOLUTION NO. R- 15 - 2010

A RESOLUTION OF THE CITY COUNCIL OF
EAGLE MOUNTAIN CITY, UTAH

RESIDENTIAL SMALL ENERGY NET METERING POLICY

WHEREAS, the City Council (the "Council") of Eagle Mountain City, Utah (the "City"), adopted Ordinance No. 2010-11 to provide for the safe and effective construction and operation of Small Wind and Solar Energy Conversion Systems in Eagle Mountain City; and

WHEREAS, it is necessary to adopt a policy to regulate the interconnection and metering of small residential renewable energy generating facilities;

NOW, THEREFORE, be it resolved by the City Council of Eagle Mountain City, Utah, as follows:

I. DEFINITIONS:

The following words and terms, when used in this policy shall have the following meanings, unless the context clearly indicates otherwise.

1. "Renewable energy" means energy generated by wind or solar power.
2. "Customer" means an Eagle Mountain City residential customer that generates electricity, on the customer's side of the meter and receives an electric utility bill from the Eagle Mountain City.
3. "Customer-generating facility" means the equipment used by a customer generator to generate, manage, and monitor electricity.
4. "Electric distribution system" means that portion of an electric system which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises.
5. "Electric power supplier" means Eagle Mountain City.
6. "Equipment package" means a group of components connecting an electric generator with an electric distribution system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric source.
7. "Fault current" means electrical current that flows through a circuit and is produced by an electrical fault, such as to ground, double -phase to ground, three-phase to ground, phase-to-phase, and three-phase. A fault current is several times larger in magnitude than the current that normally flows through a circuit.

8. "IEEE standards" means the standards published by the Institute of Electrical and Electronic Engineers.
9. "kW" means kilowatts, a unit of power representing 1,000 watts. A kW equals 1/1000 of a MW, as defined herein.
10. "Net energy" means the difference between electrical energy consumed by the Customer from the City's electric distribution system and the electrical energy generated by the Customer and fed back into the City's electric distribution system.
11. "Net metering" means a system of metering electricity in which the City credits a customer-generator for each kilowatt-hour produced by a renewable energy system installed on the customer generator's side of the electric revenue meter.
12. "Net metering agreement" means an application and agreement between a customer generator and the City which governs the connection of the Customer-Generating Facility to the electric distribution system and the ongoing operation of the Customer-Generating Facility after it is connected to the system.
13. "Point of common coupling" has the same meaning as assigned to this term in IEEE Standard 1547 Section 3.0 (published July 2003), as amended and supplemented from time to time, which is incorporated herein by reference. IEEE standard 1547 can be obtained through the IEEE website at www.ieee.org. As of the date of this Resolution, IEEE Standard 1547 Section 3.0 defined this term as "the point designated in the Eagle Mountain Net Metering Policy of June 22, 2010 for the interconnection of a Customer-Generating Facility with an electric distribution system at which the harmonic limits are applied."
14. "Renewable Energy Net Metering Facility" shall mean the approved generating facility located on Customer's property.

II. GENERAL PROVISIONS:

1. The City will offer net metering to its residential customers that generate electricity, on the customer's side of the meter, using renewable energy sources, provided that the generating capacity of the customer-generating facility does not exceed one hundred (100) kilowatts or exceed the customer's peak electric needs or exceed the capacity of the City distribution circuits.
2. The City will make net metering available to eligible customers on a first come, first-served basis.
3. Customer shall pay any amount owing for electric service provided by the City in accordance with applicable rates and policies. Nothing herein shall limit the City's rights under applicable rate schedules or City Ordinances.
4. Applications for renewable energy net metering facilities shall be filed with the Building Department.

III. GENERAL INTERCONNECTION PROVISIONS:

1. Measurement of Net Energy: Bi-direction metering equipment shall be installed to measure the flow of electrical energy in each direction. The bi-directional metering equipment shall be installed by the City at the Customer's expense. The bi-directional metering equipment shall be used to provide information necessary to accurately bill or credit Customer.
2. Purchase of Energy and Payment:
 - a. The City shall measure the net energy produced or consumed by the Customer during each billing period, in accordance with normal metering practices.
 - b. If the energy supplied by the City exceeds the electricity generated by the Customer and fed back to the City during the billing period, or any portion thereof, then the Customer shall be billed for the net energy supplied to Customer by the City's electric distribution system together with the appropriate customer charge paid by other customers of the City.
 - c. If the energy generated by Customer and distributed back to the City's electric distribution system during the billing period, or any portion thereof, exceeds the energy supplied to the Customer by the City's electric distribution system, then the customer shall be:
 - i. Billed for the appropriate customer service charge as other customers of the City; and
 - ii. Credited for the net excess kilowatt hours (kWh) generated during the billing period with this credit appearing on Customer's bill for the following billing period. The credit for the net excess kilowatt hours (kWh) generated by the Customer shall be **4 cents** per kWh. The City reserves the right to amend the credit at any time.
 - d. Customer may accumulate kilowatt hour credits for a maximum period of twelve (12) months during any calendar year period. If there is an unused kilowatt hour credit accumulated by Customer at the end of any calendar year, such amount will be forfeited by the Customer.
3. Interconnection: Customer shall provide the electrical interconnection on its side of the Bi-directional metering equipment. The City may make such modifications to the City's system as are reasonably necessary to accommodate the Facility. The cost for such modifications will be due in advance of construction. Customer shall ensure at its own expense that the Facility includes all equipment necessary to meet applicable safety, power quality and interconnection requirements established herein, as may be amended from time to time by other applicable City policies and ordinances, by applicable state law and by the National Electric Code, National

Electric Safety Code and the Institute of Electrical and Electronic Engineers and Underwriters Laboratories. Customer shall not commence parallel operation of the Facility until the City has inspected the Facility, including all interconnection equipment and issued a written approval, which includes a stipulated start time and following which operations in parallel are permitted.

4. Disconnect Device: Customer shall furnish and install, on its side of the bi-directional metering equipment a safety disconnect device capable of fully disconnecting and isolating the Facility from the City's electric distribution system. The disconnect device shall be located adjacent to the City's bi-directional metering equipment or other location approved by the City and shall be of the visible break type in a metal enclosure that can be secured by a padlock. The disconnect device shall be accessible to the City's personnel at all times and shall conform to National Electric Code Standards. The City shall have the right to disconnect the Facility from the City's electric distribution system when necessary to maintain safe and reliable electrical operating conditions or if in the City's sole judgment, the Facility at any time adversely affects the operation of the City's electric distribution system or the quality and reliability of the City's service to other customers. The City shall have the right to require that the Facility remain disconnected until such time as the City determines, in the sole discretion, that the condition(s) requiring the disconnection have ended or been corrected. The City shall have the option of requiring ongoing testing of disconnection equipment.

5. Operational Standards: Customer shall furnish, install, operate and maintain in good order and repair, all without cost to the City, all equipment required for the safe operation of the Facility in parallel with the City's electric distribution system. This includes, but is not limited to, equipment necessary to:

- a. Establish and maintain automatic synchronism with the City's electric distribution system; and
- b. Automatically disconnect the Facility from the City's electrical distribution system in the event of overload or outage of the City's electrical distribution system.

The Facility must be designed to operate within allowable operating standards for the City's electric distribution system. The Facility must not adversely affect the quality or reliability of service provided to the City's other customers. The City shall have the right to periodically inspect the Facility.

6. Installation and Maintenance: Except for the bi-directional metering equipment owned by the City, all equipment on Customer's side of the delivery point, including the required disconnect device, shall be provided and maintained in satisfactory operating condition by Customer and shall remain the property and responsibility of the Customer. The City will bear no responsibility for the installation or maintenance of Customer's equipment or for any damage to property as a result of any failure or malfunction thereof. The City shall not be liable, directly or indirectly for permitting or continuing to allow the interconnection of the Facility or for the acts or omissions of Customer or the failure or malfunction of any equipment of Customer that causes loss or injury, including death, to any party.

7. Indemnity and Liability: Customer shall defend, hold harmless, and indemnify the City and its directors, officers, employees and agents against any and all loss, liability, damage, claim, cost charge, demand or expense (including any direct, indirect or consequential loss, liability, damage, claim, cost, charge, demand, or expense including attorney's fees) for injury or death to persons, including employees of the City and Customer or damage to property, including property of the City and Customer, arising out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the Facility or (b) the making of placements, additions, betterment to or reconstruction of the Facility. Customer's duty to indemnify the City hereunder shall not extend to loss, liability, damage, claim, cost charge, demand, or expense resulting from interruptions in electrical service to the City's customers other than Customer or resulting from the negligent, willful, or intentional acts of the City.

8. Pre-Operation Inspection: Prior to interconnection, the Facility and associated interconnection equipment must be inspected and approved by the City and by any other governmental authority having jurisdiction.

9. Access: Authorized City employees shall have the right to enter upon Customer's property at any time for the purposes of inspection and/or operating the disconnect device and meters and making additional tests concerning the operation and accuracy of the City's meters.

IV. CERTIFICATION OF CUSTOMER-GENERATOR FACILITIES:

A customer-generating facility must be certified as complying with the following standards, as applicable:

1. IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, as amended and supplemented, which is incorporated by reference herein. IEEE standard 1547 can be obtained through the IEEE website at www.ieee.org; and 2 UL 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems (January 2001), as amended and supplemented, which is incorporated by reference herein. UL standards can be obtained through the Underwriters Laboratories website at www.ul.com.

2. An equipment package shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory, and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards listed in (a) above.

3. If the equipment package has been tested and listed in accordance with this section as an integrated package, which includes a generator or other electric source, the equipment package shall be deemed certified, and the City generally will not require further design review, testing or additional equipment.

4. If the equipment package includes only the interface components (switchgear, inverters, or other interface devices), an interconnection customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and consistent with the testing and listing specified for the package. If the generator or electric source being utilized with the equipment package is consistent with the testing and listing performed by the nationally recognized testing and certification laboratory, the equipment package will be deemed certified, and the City generally will not require further design review, testing or additional equipment.

5. The City will not be responsible for the cost of determining the rating of equipment owned by a customer-generating facility.

6. If the interconnection of a customer-generating facility is subject to interconnection requirements of FERC or WECC, the provisions of this policy that apply to interconnection apply to that facility only to the extent that they do not conflict with the interconnection requirements of FERC or WECC.

V. INTERCONNECTION REVIEW:

1. A Customer shall submit an application for a building permit and interconnection review on a standard form available from the City. Upon receipt, the City shall conduct an initial review of the proposed interconnection to determine whether the interconnection meets the following requirements:

- a. The aggregate generation capacity on the distribution circuit to which the Customer-Generating Facility will interconnect, including the capacity of the Customer-Generating Facility, will not cause any distribution protective equipment (including but not limited to substation breakers, fuse cutouts, and line reclosers), or customer equipment on the electric distribution system, to exceed 90 percent of the short circuit interrupting capability of the equipment. In addition, a Customer-Generating Facility will not be connected to a circuit that already exceeds 90% of the short circuit interrupting capability, prior to interconnection of the facility.
- b. If there are posted transient stability limits to generating units located in the general electrical vicinity of the proposed point of common coupling (e.g., within 3 or 4 transmission voltage level busses), the aggregate generation capacity (including the Customer-Generating Facility) connected to the distribution low voltage side of the substation transformer feeding the distribution circuit containing the point of common coupling shall not exceed 10 kW.
- c. The aggregate generation capacity connected to the distribution circuit, including the Customer-Generating Facility, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.

- d. If a Customer-Generating Facility is to be connected to three-phase, four wire primary City distribution lines, a three-phase or single phase generator shall be connected line to-neutral and shall be effectively grounded.
- e. If a Customer-Generating Facility is to be connected to a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the Customer-Generating Facility, shall not exceed 20 kilovolt-amps (kVA).
- f. If a Customer-Generating Facility is single-phase and is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the Customer-Generating Facility shall not create an imbalance between the two sides of the 240 volt service, which is greater than 20% of the nameplate rating of the service transformer.
- g. A Customer-Generating Facility's point of common coupling shall not be on a transmission line.

2. During this initial review, the City may, at the Customer's expense, conduct any studies or tests it deems necessary to evaluate the proposed interconnection. The initial review will result in one of the following determinations:

- a. The Customer-Generating Facility meets the applicable requirements. The City shall then provide the customer with an executable Net Metering Agreement;
- b. The Customer-Generating Facility has failed to meet one or more of the applicable requirements the City will identify the requirements the Customer-Generating Facility failed to meet.
- c. The Customer may resubmit the application with changes along with any estimated costs for additional reviews.
- d. The City will require a City building inspection and utility verification of a Customer-Generating Facility for compliance with this policy prior to operation, and may require and arrange for witness of commissioning tests as set forth in IEEE standard 1547 (Latest revision), as amended and supplemented, which is incorporated by reference herein. The customer will not begin operating the Customer-Generating Facility until after the inspection and testing is completed.

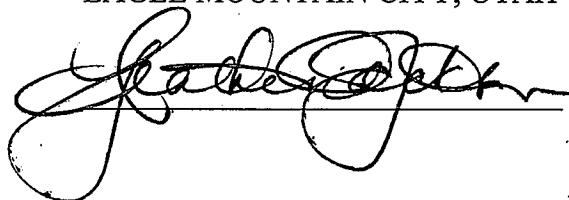
This Resolution shall take effect July 1, 2010.

ADOPTED by the City Council of Eagle Mountain City, Utah, this 22 day of

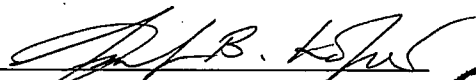
June, 2010.

EAGLE MOUNTAIN CITY, UTAH

ATTEST



Heather Anne Jackson, Mayor


Fionnuala B. Kofoed, City Recorder



CERTIFICATION

The above resolution was adopted by the City Council of Eagle Mountain City on the 22nd day of June, 2010.

Those voting aye:

Donna Burnham

Eric Cieslak

Ryan Ireland

Nathan Ochsenhirt

John Painter

Those voting nay:

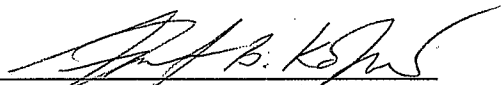
Donna Burnham

Eric Cieslak

Ryan Ireland

Nathan Ochsenhirt

John Painter



Fionnuala B. Kofoed, City Recorder

NET METERING APPLICATION AGREEMENT

This Net Metering Agreement ("Agreement") is for small Energy Projects between Eagle Mountain City, a municipal corporation, of the State of Utah (the "City") and _____ ("Customer") located at _____ (address).

Customer hereby applies for bi-directional net metering of electricity under the terms and conditions herein.

RECITALS

WHEREAS, Customer wishes to establish, operate, and maintain a renewable energy net metering facility interconnected with the City's existing electric distribution system;

WHEREAS, the City intends to credit against customer's total electric energy usage that portion supplied by the Customer's own renewable energy net metering facility.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. Term: This Agreement shall commence on the date established above and shall remain in effect until terminated by either party upon thirty (30) days prior written notice, provided, however, that this Agreement will terminate automatically upon:
 - a. Any change in ownership of the Facility or the premises upon which the Facility is located, or
 - b. Any change in the location of the Facility.
2. Assignment: All net metering credit in the customer's account shall remain as a credit to the account for the benefit of the net metered premises if the customer terminates service. This Agreement may not be assigned by Customer in whole or in part without the prior written consent of the city, which consent may be granted or withheld at the City's sole and absolute discretion.
3. Relationship of the Parties: Nothing in the Agreement shall be construed to imply a joint venture or partnership between the parties.
4. Governing Law and Venue: This Agreement incorporates by reference all of the requirements, terms and conditions of the City Net Metering Policy for small wind and solar energy conversion systems and shall be construed according to the laws of the State

of Utah. The parties agree that venue for all legal actions, unless they involve the cause of action with mandatory federal jurisdiction, shall be the Fourth District Court for the State of Utah. The parties further agree that the Federal District Court for the District of Utah shall be the venue for any cause of action with mandatory federal jurisdiction.

5. Counterparts: This Agreement may be executed in counterparts each of which shall be an original and shall constitute one of the same agreements.

DATED _____, 20____.

CUSTOMER

EAGLE MOUNTAIN CITY

Signature: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

ATTEST:

Fionnuala B. Kofoed, CMC
City Recorder

"EXHIBIT A"

NET METERING AGREEMENT CUSTOMER INFORMATION

Name: _____

Utility Customer Account Number: _____

Mailing Address: _____

Physical Address: _____

Daytime Phone: _____

Evening Phone: _____

Email Address: _____

System Type: _____

Generator Size (kW AC): _____

Inverter Manufacturer: _____

Inverter Model: _____

Inverter Serial Number: Inverter Power Rating: _____

Inverter location: _____

Licensed Electrician: _____

Contractor #: _____

Mailing Address: _____

Daytime Phone: _____

Evening Phone: _____