#### PARALLEL GENERATION RIDER – Renewable Generation

## SCHEDULE PAREL-GEN-RENEW 2010 Replacing Schedule COG-86

#### **DEFINITIONS:**

## **Customer-generator:**

The owner or operator of a qualified electric energy generation unit which:

- a. Is powered by a Renewable Energy Resource as defined by Kansas state statutes (see definition below);
- b. Has an electrical generating capacity of not more than twenty-five kilowatts or less (for residential customers) or 200 kilowatts or less (for commercial customers);
- c. Is located on a premises owned, operated, leased, or otherwise controlled by the Customer-generator;
- d. Is interconnected and operates in parallel phase and synchronization with the Cooperative;
- e. Is appropriately sized to primarily to offset part or all of the Customer-generator's own electrical energy requirements;
- f. Meets all applicable safety, performance, interconnection, and reliability standards established by the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the Federal Energy Regulatory Commission, and any local governing authorities; and
- g. Contains a mechanism that automatically disables the unit and interrupts the flow of electricity back onto the supplier's electricity lines in the event that service to the Customer-generator is interrupted.

Each meter connected under this Rider defines a Customer-generator. A generator owned or operated by a Customer-generator cannot be connected in common with any other meter or be deemed to be for the purpose of serving the load connected to any other meter. To the extent that the Customer-generator controls the Renewable Energy Resources, and meets the requirements and accepts all of the obligations of this Net Metering Rider, the Customer-generator is not required to own the generating facilities.

## **Renewable Energy Resources:**

Electrical energy produced from an energy resource or technologies defined as renewable in K.S.A. 17-4652, and amendments thereto, and also energy produced from municipal or other solid waste and animal waste.

## Peak Load:

The one-hour maximum annual demand imposed by the Cooperatives retail load in the state.

#### LIMITED AVAILABILITY:

Service is available under this rider at points on the Cooperative's existing electric distribution system, located within its service area, for Customers operating Renewable Energy Resource. The service is available to Customer-generators on a first-come, first-served basis until the total rated generating capability of all interconnections equals or exceeds four percent of the Cooperative's peak load for the previous calendar year. Upon reaching this limit no further service shall be available under this rider. This rider shall not be available for any electric service schedule allowing for resale. A qualifying Customergenerator shall have the alternative option of interconnecting renewable generation under the net metering

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provisions of the Cooperative's rules and regulations. However, renewable Customer-generators may not change between the net metering and parallel generation riders without the prior approval of the Cooperative and the Cooperative's power supplier, and such elections shall not be for periods less than one-year.

#### **APPLICABILITY:**

This rider is applicable to Customer-generators with a Cooperative-approved interconnection agreement. This schedule is not applicable where the nameplate capability of the Customer's electrical generating system exceeds 200 kW.

## **CHARACTER OF SERVICE:**

Alternating current, 60 cycles, at the voltage and phase of the Cooperative's established secondary distribution system immediately adjacent to the service location.

## **BILLING AND PAYMENT:**

The Cooperative shall render a bill for consumption at approximately 30-day intervals during the Cooperative's normal billing interval. Billing by the Cooperative to the Customer shall be in accordance with the applicable rate schedule. For electrical energy delivered by the Customer to the Cooperative from the Renewable Energy Resource, the Cooperative shall pay one-hundred and fifty percent (150%) of the Cooperatives monthly system average cost of energy per kilowatt hour received. Any such amount shall be paid at least annually or when such amount is \$25 or more.

## **TERMS AND CONDITIONS:**

- 1. The Cooperative will supply, own and maintain at its expense all necessary meters and associated equipment utilized for billing. In addition, and for purposes of monitoring Customer generation and load, the Cooperative may install at its expense, load research metering. The Customer shall supply, at no expense to the Cooperative, a suitable location for meters and associated equipment used for billing and for load research. Such equipment shall be accessible at all times to utility personnel. The Customer-generator shall reimburse the Cooperative for the cost of any additional distribution facilities necessary to accommodate the Customer-generators facility.
- 2. The Cooperative shall have the right to require the Customer, at certain times and as electric operating conditions warrant, to limit the production of electrical energy from the generating facility to an amount no greater than the load at the Customer's facility of which the generating facility is a part.
- 3. The Customer shall furnish, install, operate and maintain in good order and repair without cost to the Cooperative such relays, locks and seals, breakers, automatic synchronizers, disconnecting devices, and other control and protective devices as shall be designated by the Cooperative as being required as suitable for the operation of the generator in parallel with the Cooperative's system.
- 4. The Customer shall install and maintain a visible, manual disconnect switch. This manual switch must have the capability to be locked out by Cooperative personnel to isolate the Cooperative's facilities in the event of an electrical outage on the Cooperative' transmission and distribution facilities serving the Customer. This isolating device shall also serve as a means of isolation for the

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Customer's equipment during any Customer maintenance activities, routine outages or emergencies. The Cooperative shall give notice to the customer before a manual switch is locked or an isolating device used, if possible; and otherwise shall give notice as soon as practicable after locking or isolating the Customer's facilities.

- 5. The Customer may be required to reimburse the Cooperative for any equipment, facilities, protective equipment or upgrades required solely as a result of the installation by the Customer of generation in parallel with the Cooperative's system.
- 6. The Customer shall notify the Cooperative prior to the initial energizing and start-up testing of the Customer-owned generator, and the Cooperative shall have the right to have a representative present at said test.
- 7. If harmonics, voltage fluctuations, or other disruptive problems on the utility's system are directly attributable to the operation of the Customer's system, such problem(s) shall be corrected at the Customer's expense.
- 8. No Customer's generating system shall damage the Cooperative's system or equipment or present an undue hazard to Cooperative personnel. The Cooperative shall not be liable directly or indirectly for permitting or continuing to allow an attachment of a net metered facility or for the acts or omissions of a Customer-generator that cause loss or injury, including death, to any third party. The Customer-generator agrees to hold the Cooperative harmless from injury or property damage incurred by any person and arising out of the ownership, operation, maintenance, or use of the parallel generation facility and to indemnify the Cooperative against all liability and expense related thereto.
- 9. Prior to installing and interconnecting a Renewable Energy Resource the Customer shall enter into a standard interconnection contract with the Cooperative setting forth the conditions related to technical and safety aspects of parallel generation.
- 10. Service under this Rider is subject to the Cooperative's Rules and Regulations as adopted by the Board of Trustees and any subsequently approved modifications that may be adopted by said Board during the term of service.
- 11. The Customer-generator shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself and the characteristics of the system to which the interconnection is made. For Renewable Energy Resource systems having a maximum nameplate generating capability of 10 kW or less, a Customer-generator whose system meets the standards specified in (f) above shall not be required to install additional controls, perform or pay for additional tests or distribution equipment or purchase additional liability insurance other than such general liability insurance. For Renewable Energy Resource systems having a maximum nameplate generating capability of greater than 10 kW, the Board of Trustees shall: (1) Set forth safety, performance and reliability standards and insurance requirements; and (2) establish the qualifications for exemption from a requirement to install additional controls, perform or pay for additional test or distribution equipment or purchase additional liability insurance.

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- 12. Applications by a Customer-generator for interconnection of the qualified generation unit to the distribution system shall be accompanied by the plan for the Customer-generator's electrical generating system, including, but not limited to, a wiring diagram and specifications for the generating unit, and shall be reviewed and responded to by the Cooperative within 30 days after receipt for systems of 10 kilowatts or less and within 90 days after receipt for all other systems. Prior to the interconnection of the qualified generation unit to the supplier's system, the Customer-generator shall furnish the Cooperative a certification from a qualified professional electrician or engineer that the installation meets the requirements of paragraph f, above. If the application for interconnection is approved by the Cooperative and the Customer-generator does not complete the interconnection within one year after receipt of notice of the approval, the approval shall expire and the Customer-generator shall be responsible for filing a new application. Upon the change in ownership of a qualified Renewable Energy Resource, the new Customer-generator shall be responsible for filing a new application under this section.
- 13. Ownership of all renewable energy credits, greenhouse gas emission credits and any other renewable energy attributes related to any electricity produced by the eligible renewable energy resource shall be retained by the Customer-generator.

Adopted	October	$30^{th}$	1986
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Amended	January	18 <sup>th</sup>	2010
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