

Section 25. COGENERATION AND SMALL POWER PRODUCTION

Cooperative is a member of Central Iowa Power Cooperative ("CIPCO") and obtains all of its wholesale power from CIPCO. Accordingly, any qualifying facility seeking services pursuant to this tariff should coordinate their efforts with the Cooperative, which will then coordinate with CIPCO if necessary.

25.1 Availability

This section shall apply to any member-consumer within the Cooperative's assigned service area with a qualifying facility who meets the definition under the rules of the Public Utility Regulatory Policies Act of 1978, as a qualifying alternate energy production facility, or a qualifying small hydro facility. A member-consumer with electric generating equipment shall not connect it in parallel with the Cooperative or CIPCO's system without the prior written consent of the Cooperative or CIPCO. Failure of the member-consumer to comply with the Cooperative or CIPCO's requirements for parallel generation shall be justification for discontinuance of such parallel operation in such a manner as to least inconvenience the member-consumer until such time as full compliance has been accomplished. Each of these types of facilities shall comply with all of the Cooperative or CIPCO requirements of general rules for electric service as well as the specific provisions of this section.

25.2 Definitions

Avoided Costs means the incremental costs to the Cooperative/CIPCO of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, the Cooperative/CIPCO would generate itself or purchase from another source. The Cooperative purchases all of its power requirements from its wholesale power supplier, CIPCO. Cooperative's avoided costs shall equal those of CIPCO and CIPCO shall be responsible for calculating the Cooperative's Avoided Costs.

Qualifying Alternate Energy Production Facility (QAEPF) means any of the following:

- ❑ An electric production facility which derives 75% or more of its energy input from solar energy, wind, waste management, resource recovery, refuse-derived fuel, agricultural crops or residues, or wood burning;
- ❑ Land, systems, buildings, or improvements that are located at the project site and are necessary or

- convenient to the construction, completion, or operation of the facility; or
- Transmission or distribution facilities necessary to conduct the energy produced by the facility to the purchasing utility.

A facility which is a qualifying facility under 18 CFR Part 292, Subpart B, is not precluded from being an alternate energy production facility.

Qualifying Facility (QF) means a cogeneration facility or a small power production facility which is a qualifying facility under 18 CFR Part 292, Subpart B.

Qualifying Small Hydro Facility (QSHF) means any of the following:

- A hydroelectric facility at a dam;
- Land, systems, buildings, or improvements that are located at the project site and are necessary or convenient to the construction, completion or operation of the facility; or
- Transmission or distribution facilities necessary to conduct the energy produced by the facility to the purchasing utility.

A facility which is a qualifying facility under 18 CFR Part 292, Subpart B, is not precluded from being a small hydro facility.

25.3 Requirements for Interconnection

All facilities shall meet certain requirements to be eligible for interconnection pursuant to the terms and conditions of this section.

25.31 Acceptable Standards

Permission to interconnect with the Cooperative or CIPCO electric system is contingent upon the following conditions:

- A. The member-consumer shall comply with acceptable standards for interconnection, safety, and operating reliability. Acceptable standards include the most current revisions of the following, as adopted in the Iowa Administrative Code section 199.15.10(1) in order to be eligible for interconnection to the Cooperative or CIPCO electric system:

1. Standard for Interconnecting Distributed Resources with Electric Power Systems, ANSI/IEEE 1547-2003. For

guidance in applying IEEE Standard 1547, the cooperative may refer to:

- 1) IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems – IEEE Standard 519-1992; and,
- 2) IEC/TR3 61000-3-7 Assessment of emission limits for fluctuating loads in MV and HV power systems.
2. Iowa Electrical Safety Code, as defined in 199 – Chapter 25.
3. National Electrical Code, ANSI / NFPA 70-2008

- B. The member-consumer facility shall automatically and effectively disconnect from the area electric power system upon loss of electric voltage supplied by the Cooperative/CIPCO.
- C. The member-consumer shall furnish and install an overcurrent device on the facility to automatically disconnect the facility at all currents that exceed the full-load current rating of the facility. A fuse shall not be used to satisfy this requirement because its condition and performance cannot be determined through testing without destroying the fuse.
- D. The member-consumer shall furnish the Cooperative or CIPCO with sufficient data in order to verify that all conditions in Parts A, B and C above are met. Cooperative or CIPCO approval is required before interconnection is permitted.
- E. The interconnection shall be provided with a switch that provides a visible break or opening. The switch shall be capable of being padlocked in the open position. Both the operator of the qualifying facility (or qualifying alternate energy production facility, or qualifying small hydro facility) and the Cooperative or CIPCO shall have access to the interconnection switch at all times.
- F. Those facilities that produce a terminal voltage prior to the closure of the interconnection shall be provided with synchronism-check devices to prevent closure of the interconnection under conditions other than a reasonable degree of synchronization between the voltages on each side of the interconnection switch.
- G. The member-consumer facility shall be subject to disconnection without notice by the Cooperative/CIPCO in the event the facility causes a hazard to the public or to property or unacceptable safety,

voltage, voltage wave form, frequency conditions, service interruption, or communications interference.

- H. The member-consumer will regularly inspect, maintain, and service the facility for safe and reliable operation and maintain a record or log, available for inspection by the Cooperative or CIPCO, showing when the facility is shut down for repairs or maintenance, the maintenance or repair completed, and when the facility is placed back in service. If requested by the Cooperative or CIPCO, the member-consumer shall submit to the Cooperative or CIPCO a maintenance schedule, prior to October 1, of each year, for the following calendar year.
- I. The member-consumer shall agree to insure and indemnify the Cooperative and CIPCO and their representatives against liability for any injuries or damages caused by the operation of the member-consumer's equipment or by any failure of the member-consumer to maintain such equipment in satisfactory or safe operating condition. The member-consumer will arrange for and maintain liability insurance in the amount of \$1,000,000 or other proof of financial responsibility will be required by Cooperative/ and shall be approved by the Cooperative/ prior to interconnection. Failure to maintain required insurance or proof of financial responsibility shall be cause for disconnection. The Cooperative and CIPCO shall be named as additional insureds.
- J. The member-consumer shall reimburse the Cooperative or CIPCO for costs incurred by the Cooperative or CIPCO for all costs of connection, switching, metering, transmission, distribution, safety provisions and administrative costs incurred by the Cooperative or CIPCO directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a qualifying facility (or qualifying alternate energy production facilities, or qualifying small hydro facilities), to the extent the costs are in excess of the corresponding costs which the Cooperative or CIPCO would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection costs do not include any costs included in the calculation of avoided costs.
- K. The member-consumer shall agree to discontinue sales to Cooperative/CIPCO when, due to operational circumstances, purchases from the member-consumer will result in CIPCO costs greater than those which CIPCO would incur if it did not make such

purchases, but instead generated an equivalent amount of energy, provided, however, that CIPCO shall notify the member-consumer within a reasonable amount of time to allow the member-consumer to cease the delivery of energy.

- L. A contract reflecting the conditions of this tariff shall be required between the Cooperative/CIPCO and the member-consumer.
- M. The member-consumer shall permit Cooperative or CIPCO representatives to enter upon member-consumer's property at any reasonable time for the purpose of inspecting or testing member-consumer's equipment, facilities or apparatus and the accuracy of the Cooperative or CIPCO's metering equipment, but such inspections shall not relieve the member-consumer of the obligation to maintain the member-consumer's facilities in satisfactory operating conditions. The Cooperative or CIPCO may charge the direct expense of such inspecting or testing of the member-consumer's equipment, facilities or apparatus to the member-consumer, unless the member-consumer can demonstrate the inspecting and testing was not necessary.
- N. The member-consumer shall be responsible for the costs of installation and maintenance of power factor correction capacitors required to maintain the equivalent of an average power factor of 90% (lagging) at the interconnection.
- O. The member-consumer's electric generating equipment shall be designed, operated and maintained in such a manner that it does not adversely affect the Cooperative's or CIPCO's voltage wave form.

25.4 Prices

25.41 Prices for purchases by the member-consumer from the Cooperative

The member-consumer shall purchase electric power and energy from the Cooperative at the Cooperative's applicable price or rate, depending upon the member-consumer's operations and requirements. The Cooperative does not currently have a separate price or rate schedule for co-generators, but reserves the right to create a separate price or rate based upon the unique characteristics of such member-consumers.

25.42 Prices for purchases from member-consumer

QFs with design capacity of 100 kW or less

Payment for purchases from the member-consumer pursuant to this tariff provision shall be as follows:

The price(s) for purchases from qualifying facility (as defined above) and with a design capacity of 100 kilowatts or less are available by contacting the Cooperative. These prices will be consistent with 18 CFR 292.304.

QFs greater than 100 kW

The price(s) for purchases from qualifying facilities (as defined above) and with a design capacity above 100 kilowatts are available on a negotiated case-by-case basis with the Cooperative/CIPCO.

25.43 Wheeling Charges

Cooperative/CIPCO may provide a wheeling service to a facility interconnected to its electric delivery system. Any charges for the wheeling of power will be determined by the Cooperative/CIPCO and in accordance with any applicable regulations. In addition, Cooperative/CIPCO reserve(s) the right to refuse to wheel power where its existing facilities do not have adequate capacity and the member-consumer refuses to pay the costs to upgrade those facilities. If a qualifying alternate energy production or small hydro facility agrees, the Cooperative/CIPCO which would otherwise be obligated to purchase electricity from such facility may transmit the electricity to any other electric utility,. Any electric utility to which such electricity is transmitted shall purchase such electricity under this section as if the facility were supplying electricity directly to such electric utility. The price for purchase by the electric utility to which such electricity is transmitted shall be adjusted downward according to the mutual agreement of the transmitting and receiving utilities, to reflect any wheeling line losses and shall not include any charges for transmission.

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