

Section 25. COGENERATION AND SMALL POWER PRODUCTION

Cooperative is a member of Central Iowa Power Cooperative (CIPCO), a generation and transmission cooperative ("G&T") and obtains all of its wholesale power from the G&T. Accordingly, any qualifying facility seeking services pursuant to this tariff should coordinate their efforts with the Cooperative, which will then coordinate with the G&T 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 definitions 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 ("QF" or "qualifying Facility"). A member-consumer with electric generating equipment shall not connect it in parallel with the Cooperative or G&T's system without the prior written consent of the Cooperative or G&T. Failure of the member-consumer to comply with the Cooperative or G&T'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 G&T requirements and general rules for electric service, as well as the specific provisions of this section.

25.2 Definitions

Unless otherwise defined herein, terms used shall have the same meaning as defined in 199 IAC 45.1.

"Avoided Costs" means the incremental costs to the Cooperative/G&T of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, the Cooperative/G&T 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 G&T and G&T shall be responsible for calculating the Cooperative's Avoided Costs.

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. The Cooperative shall assist the applicant in determining the appropriate level of review process required for the interconnection. The Cooperative has developed 4 levels of review process. The appropriate level generally depends upon the size and type of generator and

the type of interconnection requested. The levels of review are described in the Attached Appendix A.

25.31 Application for Interconnection

The applicant shall submit an application to the Cooperative, using either the Application form attached as Appendix B (Level 1 Application) or the Application form attached as Appendix D (Application form for Levels 2, 3, and 4), depending upon the Level of review required.

25.32 Acceptable Standards

Permission to interconnect with the Cooperative or G&T 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 G&T electric system:
 1. Standards for Interconnecting Distributed Resources with Electric Power Systems, ANSI/IEEE Standard 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 meet the standards for interconnection as set forth in the Model Interconnection Agreements and the attachments thereto. Said Model Agreements are attached hereto as Appendices C and E.
- C. The member-consumer shall agree to insure and indemnify the Cooperative and G&T 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 a satisfactory or safe operating condition. The member-consumer will arrange for and maintain liability insurance with limits of not less than those set forth in the attached appendices, with the insurance requirements varying depending upon the level of review required and the size of the interconnecting generator. Failure to maintain required insurance or proof of financial responsibility shall be cause for disconnection. The Cooperative and G&T shall be named as additional insureds, to the extent specified in the attached appendices.

- D. The member-consumer shall reimburse the Cooperative or G&T for costs incurred by the Cooperative or G&T for all costs of connection, switching, metering, transmission, distribution, safety provisions and administrative costs incurred by the Cooperative or G&T 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 G&T 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.
- E. The member-consumer shall agree to discontinue sales to Cooperative/G&T when, due to operational circumstances, purchases from the member-consumer will result in G&T costs greater than those which G&T would incur if it did not make such purchases, but instead generated an equivalent amount of energy, provided, however, that G&T shall notify the member-consumer within a reasonable amount of time to allow the member-consumer to cease the delivery of energy.
- F. The applicant and the Cooperative shall execute the applicable Model Interconnection Agreement prior to interconnection. In the event the applicant desires to sell any excess output from its facility to the Cooperative and/or G&T, a separate power purchase agreement shall be required for all interconnections except Level 1. For Level 1 interconnections, the terms of purchase are set out on Attachment 2 to

the Level 1 Standard Application Form and Interconnection Agreement.

- G. The member-consumer shall permit Cooperative or G&T 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 G&T'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 G&T 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.
- H. 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.
- I. 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 G&T's system or their service to their other members.

25.4 Prices

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

See applicable price schedule.

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/G&T.

25.43 Wheeling Charges

Cooperative/G&T 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/G&T and in accordance with any applicable regulations. In addition, Cooperative/G&T 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 facility agrees, the Cooperative/G&T 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 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.

APPENDIX A - LEVELS OF REVIEW

Level 1

Level 1 procedures shall be used to evaluate all interconnection requests to connect a distributed generation facility when:

- a. The applicant has filed a Level 1 application; and
- b. The distributed generation facility has a nameplate capacity rating of 10 kW or less; and
- c. The distributed generation facility is inverter-based; and
- d. The customer interconnection equipment proposed for the distributed generation facility is lab-certified; and
- e. No construction of facilities by the Cooperative shall be required to accommodate the distributed generation facility.

Level 2

Level 2 procedures shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 2 application; and
- b. The nameplate capacity rating is 150 kW or less; and
- c. The interconnection equipment proposed for the distributed generation facility is lab-certified; and
- d. The proposed interconnection is to a radial distribution circuit or a spot network limited to serving one member-consumer; and
- e. No construction of facilities by the utility shall be required to accommodate the distributed generation facility, other than minor modifications permitted by the Cooperative.

Level 3

Level 3 review procedures shall be used for evaluating interconnection requests to area networks and radial distribution circuits where power will not be exported based on the following criteria.

- a. For interconnection requests to the load side of an area network, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - (1) The applicant has filed a Level 3 application; and
 - (2) The nameplate capacity rating of the distributed generation facility is 50 kW or less; and
 - (3) The proposed distributed generation facility uses a lab-certified inverter-based equipment package; and
 - (4) The distributed generation facility will use reverse power relays or other protection functions that prevent the export of power into the area network; and
 - (5) The aggregate of all generation on the area network does not exceed the lower of 5 percent of an area network's maximum load or 50 kW; and

- (6) No construction of facilities by the Cooperative shall be required to accommodate the distributed generation facility.
- b. For interconnection requests to a radial distribution circuit, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - (1) The applicant has filed a Level 3 application; and
 - (2) The aggregated total of the nameplate capacity ratings of all of the generators on the circuit, including the proposed distributed generation facility, is less than 150 kW; and
 - (3) The distributed generation facility will use reverse power relays or other protection functions that prevent power flow onto the electric distribution system; and
 - (4) The distributed generation facility is not served by a shared transformer; and
 - (5) No construction of facilities by the Cooperative on its own system shall be required to accommodate the distributed generation facility.

Level 4

Level 4 study review procedures shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 4 application; and
- b. The nameplate capacity rating of the small generation facility is 10 MW or less; and
- c. Not all of the interconnection equipment or distributed generation facilities being used for the application are lab-certified.