

PAULDING-PUTNAM RURAL ELECTRIC COOPERATIVE, INC.

SUBJECT:

Rules and Regulations for Qualifying Cogeneration and Small Power Production Facilities

PURPOSE:

To provide for the safety of consumers, Cooperative personnel and the public in general, and to assure reliable electric service consistent with the Public Utility Regulatory Policies Act of 1978, and the Cooperative's Operational Policy relating to qualifying cogeneration and small power production facilities, the following rules and regulations are established for connection and operation of consumer-owned or operated qualifying facilities, as defined in the aforementioned Operational Policy, in parallel with the Cooperative's electric distribution system.

PROCEDURE:

These rules and regulations apply to all qualifying facilities having a capacity of less than 1 megawatt. Qualifying facilities of 1 megawatt or more of capacity will be treated on an individual case by case basis. These rules and regulations apply to both existing and proposed installations, and are subject to change from time to time as may be deemed necessary or desirable by the Cooperative or as may be required by governmental authorities.

POLICY:

- A. The owner or operator of a qualifying facility shall submit for Cooperative review and approval detailed electrical circuit diagrams of the installation, equipment nameplate data for interface devices and control systems and a site plan. Such submittal shall be in sufficient detail to provide reasonable assurance that the qualifying facility can at all times be operated in a safe, reliable and lawful manner. Without limiting the generality of the foregoing, the owner or operator of a qualifying facility shall submit to the Cooperative a completed Application for Interconnection and Parallel Operation in the form attached hereto as Exhibit A. As a part of its review process, the Cooperative may require an opinion as to the safety and reliability of the system from a licensed professional engineer. No qualifying facility shall be connected to the Cooperative's electric system without the Cooperative's advance approval of such facility as being in compliance with these rules and regulations.
- B. The completed installation must meet all applicable local, state and national codes, regulations or other laws, and is subject to inspection by any authorities having jurisdiction before commencement of a parallel operation. The installation must also comply with the Cooperative's Technical Guidelines for Interconnection and Parallel Operation attached hereto as Exhibit B. The Cooperative may inspect or require a test of the facility at any time without advance notice.

- C. The owner or operator shall pay for all costs associated with any addition or alteration to the Cooperative's system required for metering and for the safe and reliable operation of the qualifying facility in parallel with the Cooperative's electric system. Where alterations to the Cooperative's electric system are required due to the collective presence of two or more qualifying facilities operating in parallel with the Cooperative, the cost of such additions or alterations shall be shared by those owners or operators on an equitable basis to be determined by the Cooperative.
- D. An approved disconnecting device operable by the Cooperative and suitable for disconnecting the qualifying facility from the Cooperative's lines may be required. Any such device shall be operated in accordance with the procedures agreed to by the owner or operator and the Cooperative.
- E. After the initial installation and acceptance by the Cooperative of a qualifying facility, the owner or operator shall obtain approval from the Cooperative prior to making any revisions to the qualifying facility, interface equipment, control devices, or protective system.
- F. The control and protective system and site plan of the qualifying facility must be approved by the Cooperative. The control and protective system must operate in accordance with these safety and reliability standards:
 - 1. The system shall provide for the immediate automatic shutdown or separation of the qualifying facility's generator and storage devices from the Cooperative's lines in the event of any of the following conditions, whether emanating from the Cooperative's system or the qualifying facility:
 - a. Momentary or extended interruption of power on the Cooperative's lines serving the qualifying facility.
 - b. Deviation of frequency or voltage on the Cooperative's lines serving the qualifying facility from within the Cooperative's normal standards.
 - c. If the qualifying facility is operating in parallel with three phase service, existence of abnormal rotation of phases or existence on any phase or phases of a condition listed in (a) or (b) above.
 - 2. The shutdown or separation shall continue until the interruption, deviation, or abnormal condition listed in (1) above has been eliminated and all applicable parameters listed in (1) are returned to within the Cooperative's normal standards.
- G. In the event the Cooperative determines in its sole judgment that the qualifying facility poses any safety hazard to any person or property, poses a hazard to the reliability of the Cooperative's electric system or any system with which it is connected, unreasonably interferes with the use and enjoyment of property by any person, or that the qualifying facility's protective equipment is operating improperly, the Cooperative, through its

authorized personnel, shall have the right to enter onto the property where the qualifying facility is located and immediately disconnect the qualifying facility from its lines.

- H. The owner or operator shall pay all costs of changes for safety purposes or repairs or losses due to adverse effects on the equipment or facilities of other consumers or the Cooperative itself caused by the connection or operation of a qualifying facility.
- I. Should parallel operation of a qualifying facility cause interference or adversely affect voltage, frequency, harmonic content, or power factor in the Cooperative's or other consumers' services, the Cooperative may require disconnection of the qualifying facility from the Cooperative's electrical system until the condition has been corrected.
- J. The Cooperative may require such liability insurance coverage by the qualifying facility owner or operator as the Cooperative determines in its sole judgment to be appropriate in the circumstances, and the owner or operator shall provide such proof of insurance coverage as may be required by the Cooperative. Review or testing of the qualifying facility by the Cooperative does not constitute any assumption of liability by the Cooperative for the safe, reliable and lawful operation of the qualifying facility.
- K. If the owner or operator fails to comply with the above rules and regulations or if the qualifying facility at any time constitutes a safety hazard or hazard to the reliability of the Cooperative's electric system or any system with which it is connected or is in violation of any code, regulation or law, the Cooperative may at any time require termination of parallel operation and the owner or operator shall be liable for any loss, damage or injury resulting from such failure, hazard or violation.
- L. Connections between a qualifying facility and the electric system of the Cooperative shall only be made pursuant to a written contract between the Cooperative and the owner or operator of such qualifying facility which shall be in accordance with applicable laws as well as the applicable rules, regulations, policies and rate schedules of the Cooperative.