

FIRELANDS ELECTRIC COOPERATIVE, INC.
NEW LONDON, OHIO

POLICY BULLETIN NO: 8-32

SUBJECT: COGENERATION AND SMALL POWER PRODUCTION FACILITIES

I. OBJECTIVE

To establish an operational policy for qualifying cogeneration and small power production facilities

II. PURPOSE

- A. To provide compliance by the Cooperative with the requirements of Sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978, as amended, and all governmental regulations lawfully promulgated thereunder (PURPA).
- B. To encourage the development of cogeneration and small power production facilities which will conserve oil, gas, coal and other nonrenewable resources in accordance with the requirements of PURPA.
- C. To offer a fair, reasonable and nondiscriminatory procedure through which the Cooperative may interconnect with qualifying cogeneration and small power production facilities in accordance with the requirements of PURPA.

III. PROCEDURE

The provisions of this policy will extend to all facilities as defined by the Federal Energy Regulatory Commission as qualifying cogeneration facilities or small power production facilities located within the service territory of the Cooperative.

A. Qualifying Cogeneration Facility:

Cogeneration is the combined production of electric energy and useful heat by the sequential use of energy from one fuel source. A qualifying cogeneration facility is one which meets the ownership test as well as the operating and efficiency standards and all other definitional requirements of PURPA.

B. Qualifying Small Power Production Facility:

A small power production facility is a facility generating not more than 80 megawatts of electric power through the employment of renewable resources such as water power, solar energy, wind energy, geothermal energy, biomass or waste, as a primary fuel and meeting all other definitional requirements of PURPA.

C. Qualifying Facility:

A qualifying facility means any qualifying cogeneration facility or qualifying small power production facility.

IV. POLICY

- A. The Cooperative will interconnect with and operate in parallel with any qualifying facility which meets all of the Cooperative's rules and regulations.
- B. The Cooperative will net meter the energy of each qualifying facility having a design capacity of 25 kilowatts or less in circumstances where the output of such facility is not reasonably anticipated to exceed the annual electric energy requirements of the consumer and provided that the total aggregate electric generating capacity of all qualifying facilities interconnected to the electric distribution systems of the members of Buckeye Power, Inc. (Buckeye) and net metered does not exceed 1% of Buckeye's aggregate peak electric demand of all of the Buckeye members, at rates and upon terms and conditions as set forth in the rules, regulations, policies and applicable rate schedules of the Cooperative.
- C. Buckeye will purchase the energy and associated capacity of each qualifying facility, at rates and upon terms and conditions as set forth in the rules, regulations, policies and applicable rate schedules of Buckeye, in the following circumstances:
- (1) When the output of the qualifying facility is greater than 25 kilowatts but less 1 megawatt; or
 - (2) When the output of the qualifying facility up to 25 KW is reasonably anticipated to exceed the annual electric energy requirements of the consumer; or
 - (3) When the total aggregate electric generating capacity of all qualifying facilities interconnected to the electric distribution systems of the Buckeye members and net metered exceeds 1% of Buckeye's aggregate peak electric demand of all of the Buckeye members; or
 - (4) When the output of the qualifying facility is equal to or greater than 1 megawatt and Buckeye, the Cooperative, and the consumer have agreed on the terms and conditions for service;
- D. Purchases of electric energy and the associated capacity from a qualifying facility having a design capacity of 1 megawatt or greater shall be at rates and upon terms and conditions to be determined on a case by case basis and provided by contract between Buckeye and the qualifying facility owner. The

purchase of electric energy and the associated capacity from such a qualifying facility will be at a rate which reflects at least Buckeye's actual avoided costs, taking into account all relevant factors.

- E. The Cooperative will sell electric energy and the associated capacity to any net metered qualifying facility at rates and upon terms and conditions as specified in the Cooperative's applicable rules, regulations, policies and rate schedules.
- F. The Cooperative will sell back-up and supplementary energy and the associated capacity to any qualifying facility whose output is purchased directly by Buckeye, at rates and upon terms and conditions as specified in the Cooperative's applicable rules, regulations, policies and rate schedules.
- G. The owner or operator of a qualifying facility who desires to interconnect the facility with the electric system of the Cooperative shall pay all costs associated with the interconnection.
- H. The Cooperative shall develop and administer rules, regulations and one or more rate schedules in cooperation with Buckeye covering interconnections with and purchases from qualifying facilities which have a design capacity of less than 1 megawatt.
- I. The Cooperative shall cooperate with Buckeye in developing on a case by case basis, agreements covering interconnection with any qualifying facility having a design capacity of 1 megawatt or more.

V. RESPONSIBILITY

It shall be the responsibility of the General Manager of the Cooperative to administer the provisions of this policy.

Approved by: Don McNeill, President 4/25/06 Date

Co-Signed by: John W. Ross, Manager 4/25/06 Date

FIRELANDS ELECTRIC COOPERATIVE, INC.
NEW LONDON, OHIO

POLICY BULLETIN NO: 8-33

SUBJECT: RULES AND REGULATIONS FOR COGENERATION AND SMALL POWER
PRODUCTION FACILITIES

I. OBJECTIVE

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.

III. 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.

IV. 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.

V. RESPONSIBILITY

The General Manager of the Cooperative shall be responsible for the administration of this policy.

Approved by: Don McGraw, President 4/25/06 Date

Co-Signed by: John H. Russo, Manager 4/25/06 Date