

Interconnection Policy For Small Generators

Rules and Regulations for Small Power Generation and Cogeneration

A. Applicability

This policy shall apply to the interconnection and parallel operation of all qualifying power generating installations having a design capacity of 20 kilowatts or less as well as to electric utility service to such generating installations. If any part of these sections shall be in conflict with any other provision of the Cooperative's Business Rules, these sections shall control. Purchases of electricity from the Member shall be covered by a separate agreement.

B. Obtaining Interconnection

The following are conditions precedent to any obligation of the Cooperative to interconnect or provide any form of electric utility service. Any person owning or operating a qualifying power generating installation (hereafter "Member") and desiring to interconnect with the Cooperative's system shall:

1. Comply with Policy

Apply for interconnection, provide an easement satisfactory to the Cooperative, and otherwise comply with the policy of the Cooperative.

2. Interconnection Study

An interconnection study will be required from all generating equipment greater than 20 KW. The Cooperative shall perform the study under reasonable terms and conditions agreed upon by both the customer and the Cooperative and at the customer's sole expense. These installations shall be done in accordance with its specific agreement.

3. Provide Information

At least 60 days in advance of interconnection, Member shall submit a plan showing the electrical design of the generating installation including equipment for interconnection with the Cooperative's system. Member shall also provide such additional information as may be required by the Cooperative. In the event Member's plan involves the use of non-standard equipment or design techniques, the Cooperative may require such plan to be approved by a registered professional engineer. Any review or acceptance of such plan by the Cooperative does not guarantee the adequacy of Member's equipment to perform its intended function. The Cooperative disclaims any expertise or special knowledge relating to the design or performance of generating installations and does not warrant the efficiency, cost effectiveness, safety, durability, or reliability of generating installations.

4. Pay for Extension of Cooperative's Facilities

Comply with conditions for extension of the Cooperative's distribution system as may be determined by the Cooperative in accordance with the following extension policy:

If an extension of Cooperative's distribution system is required for delivery or receipt of electric energy to or from a generating installation, whether or not in conjunction with another use, the Cooperative shall exercise prudent judgment in determining the conditions under which such extension will be made. Each case shall be viewed individually considering (1) cost to provide service, (2) longevity of the load, (3) annual load factor, (4) possibility of other loads developing along the proposed line extension, (5) longevity, capacity, and dependability of the installation, and (6) compatibility with planned system improvements.

The Cooperative may require Member to pay a contribution in aid-of-construction, advance for construction, or increased annual or monthly minimums, and may require a contract term of up to five years.

5. Provide Liability Insurance

Member shall carry satisfactory liability insurance including contractual liability insurance covering indemnity agreements which insures Member against all claims for property damage and for personal injury or death arising out of, resulting from or in any manner connected with the installation, operation, and maintenance of the Member's generating equipment. The Member shall continue to maintain insurance as required by the Cooperative for the interconnection and shall provide proof of such insurance to the Cooperative at its request.

6. Sign Contract

Sign and deliver to the Cooperative an Agreement for Interconnection and Parallel Operation of Cogeneration or Small Power Production Installation: 20 kW or Less.

7. Complete Construction

Construct the power generating installation and install a disconnect switch and other protective equipment as may be required by the Cooperative to protect its personnel, facilities, and operations.

8. Comply with Laws

Comply with applicable Federal, State, and Local laws, ordinances, and regulations applicable to power generating installations.

9. Notify Cooperative

Notify the Cooperative in writing at least thirty (30) days in advance of energizing the small power generating installation and permit the Cooperative to inspect and test protective equipment.

10. Eliminate Conditions Preventing Interconnection

In the event that it comes to the attention of the Cooperative that there are conditions preventing safe interconnection and proper parallel operation, it shall notify Member and Member shall not interconnect and/or initiate parallel operation until such conditions are corrected and Member has provided at least ten (10) days written notice to the Cooperative.

In the event, following interconnection, that conditions arise that would preclude operation, the Cooperative shall request disconnection or disconnect the Member until the conditions preventing interconnection are corrected.

C. Parallel Operation

1. Installation

With the exception of only the Cooperative's meter(s), the Member shall own and be solely responsible for all expense, installation, maintenance, and operation of the power generating installation at and beyond the point where Member's conductors contact Cooperative's conductors. The Member's generating installation shall be designed and installed in accordance with applicable codes, regulations, and prudent engineering practices.

2. Self Protected Generating Installation

The Member will furnish, install, operate, and maintain in good order and repair all equipment necessary for the safe operation of the power generating installation in parallel with the Cooperative's electric distribution system. The equipment will have the capability to both establish and maintain synchronism with the Cooperative's system and to automatically disconnect and isolate the generating installation from the Cooperative's system due to either a malfunction of the power generating installation or loss of power on the Cooperative's system.

The Member's power generating installation will also be designed, installed, and maintained to be self-protected from normal and abnormal conditions in the Cooperative's electric distribution system. The conditions for which the power generating installation shall be self-protected shall include, but not be limited to, overvoltage, undervoltage, overcurrent, frequency deviation, and faults. The self protection will be compatible with the Cooperative's system protection arrangements and operating policies.

Specialized protective functions may be required by the Cooperative when, in the sole judgment of the Cooperative, the particular generating installation characteristics and/or distribution system characteristics so warrant.

3. Quality of Service

Member's generating installation will generate power at the nominal voltage of the Cooperative's electric distribution system at the Member's delivery point plus or minus five percent (5%) at the nominal system frequency of 60 Hz or minus one half (1/2) Hz. Member shall generate at a power factor that is as near one hundred percent (100%) as is practicable. In the event that the power factor is less than ninety percent (90%) lagging or leading, the Member will provide proper power factor correction (within ten percent (10%) of unity) or reimburse the Cooperative for the cost of any necessary correction.

The overall quality of the power provided by Member including, but not

limited to, the effects of harmonic distortion, voltage regulation, voltage flicker, switching surges, and power factor, will be such that the Cooperative's electric distribution system is not adversely affected in any manner. In the event that adverse effects are caused in whole or in part by Member's power generating installation, the Member will correct the cause of such effects or reimburse the Cooperative for the cost of any required correction.

4. Safety Disconnect

The Member shall provide and install, at the Member's expense, a visible break disconnect switch. The disconnect switch will be located so as to be readily accessible to Cooperative personnel in a location acceptable to both the Member and the Cooperative. It shall be the type of switch which can be secured in an open position by a Cooperative padlock. The Cooperative shall have the right to lock the switch open whenever, in the judgment of the Cooperative, (1) it is necessary to maintain safe electrical operating or maintenance conditions, (2) the Member's power generating installation adversely affects the Cooperative's electric distribution system, or (3) there is a system emergency or other abnormal operating condition which warrants disconnection.

The Cooperative reserves the right to operate the disconnect for the protection of the Cooperative's system even if it affects Member's power generating installation. In the event the Cooperative opens and closes the disconnect switch, it shall not be responsible for energization or restoration of parallel operation of the generating installation. The Cooperative will make reasonable efforts to notify the Member in the event the disconnect switch has been opened. The Member will not bypass the disconnect switch at any time for any reason.

5. Access

Persons authorized by the Cooperative will have the right to enter the Member's property for the purpose of operating or inspecting the automatic disconnect switch, the manual disconnect switch, or the metering. Such entry onto the Member's property may be without notice. If the Member erects or maintains locked gates or other barriers, the Member will furnish the Cooperative with convenient means to circumvent the barrier for access to the disconnect switch and meter(s).

6. Modifications of Cooperative System

In the event that it is necessary at the time of initial interconnection or at some future time for the Cooperative to modify its electric distribution system in order to accommodate the Member's output, the Member will reimburse the Cooperative for all just and reasonable costs of modifications which are allocable to the Member's small power generating installation. The modifications may include, but are not limited to, special interconnection equipment, protective devices, control devices, or upgrading of distribution system components.

7. Liability for Injury and Damages

Member assumes full responsibility for electric energy furnished to him or her at and past the point of interconnection and will indemnify the

Cooperative against and hold the Cooperative harmless from all claims for both injuries to persons, including death resulting therefrom, and damages to property occurring upon the premises owned or operated by Member arising from electric power and energy delivered by Cooperative or in any way arising directly or indirectly from Member's generating installation except (i) when the negligence of Cooperative or its agent or agents was the sole proximate cause of injuries, including death therefrom, to Member or to employees of Member or in the case of a residential Member, to all members of the household; and (ii) as to all other injuries and damages, to the extent that injuries or damages are proximately caused by or result in whole or in part from (a) any negligence of Cooperative or its agent(s) independent of and unrelated to the maintenance of Cooperative's facilities or any condition on Member's premises or (b) the breach by Cooperative of any provision of any contract regarding purchase and/or sale of electrical energy or service between Cooperative and Member.

The Cooperative shall not be liable for either direct or consequential damages resulting from failures, interruptions, or voltage and wave form fluctuations occasioned by causes reasonably beyond the control of the Cooperative, including, but not limited to, acts of God or public enemy, sabotage and/or vandalism, accidents, fire, explosion, labor troubles, strikes, order of any court or judge granted in any bona fide adverse legal proceeding or action, or any order of any commission, tribunal or governmental authority having jurisdiction.

For claims resulting from failures, interruptions, or voltage and wave form fluctuations occasioned in whole or in part by the negligence of the Cooperative or its agent(s), the Cooperative shall be liable only for that portion of the damages arising from personal injury, death of persons, or costs of necessary repairs to or reasonable replacement of electrical equipment proximately caused by the negligent acts of the Cooperative or its agent(s). The Cooperative shall not be liable in any event for consequential damages.

8. Metering

One standard service meter will be installed, maintained and operated by the Cooperative. A connection will be provided for the meter in a location that is acceptable to both the Cooperative and the Member. The Cooperative may, at its own expense, supply, install, and maintain load research metering for the purpose of monitoring and evaluating the Member's generating installation. The meter(s) will, by comparison with accurate standards, be tested and calibrated as often as necessary. The Member or the Cooperative may reasonably request such tests, and shall be given notice of not less than five (5) working days when such tests are to be made. Both the Member and the Cooperative will have the right to be present at such tests. If a meter is found to be inaccurate, it shall be restored to an accurate condition or replaced. If the tests disclose that no unacceptable inaccuracies exist in the meter(s), then the party requesting the tests shall bear the expense of the tests. A report of the results of any tests shall be furnished promptly by the party making such tests to the other party. Any meter(s) registering a deviation of not more than two percent (2%) from normal shall be deemed accurate. The readings of any meter(s) which have been inaccurate shall be corrected according to the percentage of inaccuracy as determined by the tests for

a period of no more than ninety (90) days prior to the tests. If any meter fails to register for any period, the facility output during such period shall be estimated in the best manner possible as agreed upon by the Cooperative and the Member.

9. Notice of Change in Installation

Member will notify the Cooperative in writing sixteen (16) days in advance of making any change affecting the characteristics, performance, or protection of the generating installation. If it comes to the Cooperative's attention that the modification will create or had created conditions which may be unsafe or adversely affect the Cooperative's system, then it shall notify Member and Member shall immediately correct such conditions.

10. Sales to Member

Sales to Member shall be in accordance with the Cooperative's Service Policy and Interconnection Backup rate.

11. Purchases of Electricity from Member

Production in excess of consumption by Member during a monthly billing cycle will be purchased by Cooperative at the avoided cost (fuel cost only, no capacity component).

D. Definitions

1. Power Generating Installation, Generating Installation shall mean a small power production or cogeneration facility which is a "qualifying facility" under Subpart B of the Federal Energy Regulatory Commission's Regulations under Section 201 of the Public Utility Regulatory Policies Act of 1978 including any generator and associated equipment, wiring, protective devices, or switches owned or operated by Member.
2. Member means any person, firm, corporation, partnership, or other entity that is currently receiving service from the Cooperative and owning or operating a power generation installation.