

**This portion of the site is currently  
UNDER CONSTRUCTION.**

**Please pardon our dust.**



**For questions on distributed generation (solar/wind) please contact our  
Department Specialists at (830) 563-2444 or email [dg@rgec.coop](mailto:dg@rgec.coop).**



## **Consumer Requirements for Distributed Generation Installation and Interconnection**

May 1, 2010

**Rio Grande Electric Cooperative, Inc.**

US 90 & SH 131 • Post Office Box 1509

Brackettville, TX 78832

(830) 563-2444 • (830) 563-9062 fax

[www.riogrande.coop](http://www.riogrande.coop)

**RIO GRANDE ELECTRIC COOPERATIVE, INC.**

*Consumer Requirements for Distributed Generation Installation and Interconnection*

**TABLE OF CONTENTS**

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
I. DETERMINE THE CATEGORY OF DISTRIBUTED GENERATION FACILITY .....	2
A. Power Export Category .....	2
B. Qualifying or Non-Qualifying Facility .....	2
C. Size Category .....	2
II. MEMBER’S INITIAL REQUIREMENTS .....	3
A. Notification .....	3
B. Service Request .....	3
C. Submittal of DG Plan .....	3
III. COOPERATIVE REVIEW PROCESS .....	3
A. Plan Review Process .....	3
IV. SALES TO AND PURCHASES FROM A DG FACILITY .....	4
V. MEMBER'S RESPONSIBILITY PRIOR TO OPERATION .....	5
VI. REFUSAL TO INTERCONNECT SERVICE OR DISCONNECTION OF INTERCONNECTION SERVICE .....	7
VII. OPERATION OF PARALLEL FACILITY .....	8

# **RIO GRANDE ELECTRIC COOPERATIVE, INC.**

## ***Consumer Requirements for Distributed Generation Installation and Interconnection***

Rio Grande Electric Cooperative, Inc. seeks to provide its members with the best electric service possible, and at the lowest cost consistent with sound economy and good management. In some cases, Cooperative members may become interested in installing Distributed Generation. It is the intent of Rio Grande Electric Cooperative, Inc. to install Distributed Generation, provided that the member's facility does not adversely affect the Cooperative.

Distributed Generation facilities larger than 10 MVA are not covered by this Manual and will be considered by the Cooperative on a case-by-case basis. Rio Grande Electric Cooperative, Inc. reserves the right to amend and revise this Manual from time to time.

This Manual is not a complete description or listing of all of the laws, ordinances, or rules and regulations that a Member must or should follow, nor is this Manual intended to be an installation or safety manual. The Member requesting to interconnect a DG facility to Rio Grande Electric Cooperative Inc.'s electric distribution system is responsible for and must follow, in addition to all provisions in this Manual, the Cooperatives Tariff, Line Extension Policy, the current IEEE 1547™ Standard For Interconnecting Distributed Resources with Electric Power Systems and IEEE 1547.1™—Standard Conformance Test Procedures for Equipment Interconnecting with Distributed Resources with Electric Power Systems, and all other applicable governmental and regulatory laws, rules, ordinances or requirements. A copy of the current IEEE 1547™ Standard For Interconnecting Distributed Resources with Electric Power Systems and IEEE 1547.1™—Standard Conformance Test Procedures for Equipment Interconnecting with Distributed Resources with Electric Power Systems can be obtained from IEEE Operations Center, 445 Hoes Lane, Piscataway, NJ 08854-4141, telephone 1-800-678-4333 or online at <http://www.standards.ieee.org>.

## **I. DETERMINE THE CATEGORY OF DISTRIBUTED GENERATION FACILITY**

When installing a generator and planning to interconnect with the distribution system (considered in “parallel” with the distribution system), we must review your plans to ensure that personnel safety and system reliability will not be compromised. There are different categories of interconnection based on the size of the facility, and the ability to export power. For the purposes of this Manual, each DG facility will be categorized in accordance with the following criteria:

### **A. Power Export Category**

- 1) Parallel—no power export: The member operates a DG system connected in any way to the cooperative’s electric distribution system but with no intention to export power to the Cooperative and/or its Power Supplier.
- 2) Parallel—power generated to be both consumed and exported: The member operates a DG system connected in any way to the Cooperative’s electric distribution system designed primarily to serve the Member’s own load but with the intention to export excess power to the Cooperative.
- 3) Parallel—power generated to be exported only: The member operates a DG system connected in any way to the Cooperative’s electric distribution system designed primarily with the intention to export power to the Cooperative.

### **B. Qualifying or Non-Qualifying Facility**

- 1) Qualifying Facilities (“QF”) are defined in Section 370.28 of the Cooperative’s Tariff. Qualifying facilities will always be given consideration by the Cooperative for interconnection. In addition, the Cooperative will negotiate a power purchase agreement with a Member with a DG facility that is a QF, subject to the provisions of this Manual and all other applicable rules and regulations.
- 2) Non-Qualifying Facilities (“NQF”). The Cooperative will provide interconnection for a DG facility under 10 MVA that is not a Qualifying Facility subject to the provisions of this Manual and all other rules and regulations. The Cooperative may, at its sole discretion, negotiate a power purchase agreement with a DG facility that is a Non-Qualifying Facility.

### **C. Size Category**

- 1) Facilities 100 KVA and smaller
- 2) Facilities above 100 KVA and under 10 MVA
- 3) Facilities above 10 MVA (not considered under this Manual).

## II. MEMBER'S INITIAL REQUIREMENTS

### A. Notification

- 1) The Member must meet all the Cooperative's membership and service requirements in addition to the requirements in this manual.
- 2) Anyone owning or operating a DG facility or facilities in parallel with the Cooperative's electric distribution system must notify the Cooperative of the existence, location and category of the DG facility and complete the Application for Operation of Consumer Owned Generation included in this DG Manual.

### B. Service Request

In advance of any request for interconnection, the Member must contact the Cooperative and complete the attached Application for Interconnection and pay the application fee for each DG facility and each location.

<b>DG Size (Connected Generation)</b>	<b>Application Fee</b>	<b>Additional Engineering Fee</b>
100 KVA or less	\$250	As Required
100 KVA or more	\$250 plus \$2.50 per KVA for each KVA over 100	As Required
More than 10 MVA	Not covered by this Manual	

### C. Submittal of DG Plan

- 1) As part of the Application, the Member shall submit a plan detailing the electrical design, interconnection requirements, size, and operational plans for the DG facility (the "DG Plan"). Either at the time of submission or at any time during the review process, the Cooperative may require additional information or may require the DG plans to be prepared by a professional engineer registered in the State of Texas.

## III. COOPERATIVE REVIEW PROCESS

### A. Plan Review Process

- 1) Rio Grande Electric Cooperative, Inc., and its Power Supplier, if required, will review the application and accompanying documents, plans, specifications, and other information

provided and will return an interconnection analysis to the Member within 60 days of receipt of final plans and specifications. Any modification of plans by the Member will reinitialize the 60 day time period for review and may require payment of additional costs by the Member.

- 2) Technical review will be consistent with the guidelines established by the current IEEE 1547<sup>TM</sup> Standard for Interconnecting Distributed Resources with Electric Power Systems and IEEE 1547.1<sup>TM</sup>—Standard Conformance Test Procedures for Equipment Interconnecting with Distributed Resources with Electric Power System.
- 3) Any review or acceptance of a DG Plan by Rio Grande Electric Cooperative, Inc. shall not impose any liability on the Cooperative and does not guarantee the adequacy of the Producer'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 installation.
- 4) In the event it is necessary at the time of initial interconnection or at some future time for the Cooperative and/or its Power Supplier to modify its electric delivery systems in order to serve the Member's DG facilities and/or purchase or continue to purchase the output of the Member's DG facilities, or because the quality of the power provided by the Member's DG facility adversely affects the Cooperative and/or its Power Supplier's delivery system, the Member will be responsible to reimburse the Cooperative and/or its Power Supplier for all costs of modifications required for the interconnection of the Member's DG facilities.

#### **IV. SALES TO AND PURCHASES FROM A DG FACILITY**

- 1) For any QFs or NQF where the Member desires to export power:
  - a. All DG facilities will be connected under one of the Cooperative's existing rate tariffs.
  - b. All sales of electric power and energy by the Cooperative to a Member shall be consistent with the applicable retail rate schedule established by the Cooperative as if there were no DG installation at the Member's premises.
  - c. All applicable rates and charges included in the Cooperative's rate tariffs shall apply to a DG facility in addition to any special charges listed in the tariff.
  - d. The Member shall pay all rates and charges so listed.
  - e. The Cooperative is under no obligation to purchase power from a NQF.
- 2) For QF where the Member desires to export power:
  - a. No net metering shall be used. The type of metering to be used shall be specified at the sole discretion of the Cooperative. The metering shall provide data so the Cooperative can determine each billing period the energy supplied to the Member by the Cooperative and the energy supplied to the Cooperative by the Member.
  - b. An approved load profile meter shall be used which can be remotely read by the

Cooperative and/or its Power Supplier through an approved communications link. If the site selected makes the installation of an approved communications link not feasible, the meter shall be read monthly by Cooperative personnel and the Member shall be billed for the additional cost of reading the meter.

- c. The Cooperative shall bill the Member for the full energy used by the Member during each billing period according to the Cooperative's applicable retail rate schedule.
  - d. In addition to all other charges, the Cooperative may add an additional monthly customer charge for Members with DG facilities to recover any additional billing, meter reading and/or customer service costs.
  - e. The Cooperative shall pay the Member on a monthly basis for the energy supplied by the Member to the Cooperative. The rate paid by the Cooperative to the Member shall be the Cooperative's avoided cost of generation determined as provided in the Cooperative's Tariff. Avoided cost shall be defined as cost avoided by the Cooperative due to purchase of the Member's energy.
  - f. The member shall sign approved contracts for Interconnection of Distributed Generation with the Cooperative as required.
  - g. In addition to all other charges, the Cooperative may bill the Member for any additional facilities charges as determined in the contract for service and the Cooperative's tariffs.
  - h. The Cooperative may, at its sole discretion, purchase power from a NQF under the terms of this section.
- 3) The Cooperative shall not be required to make any purchases that will cause the Cooperative to not be in compliance with any applicable contracts or requirements with its power suppliers.

## **V. MEMBER'S RESPONSIBILITY PRIOR TO OPERATION**

- 1) Line Extension and Modifications to Cooperative's Facilities
  - a. As a part of the interconnection analysis performed by the Cooperative, the Member will be provided with an estimate of any line extension, facility upgrade, or other cost to be incurred in providing electric delivery service to the Member's DG facility.
  - b. Notwithstanding the Cooperative's line extension policy, the Member shall pay in advance the full cost of the construction of any transmission, substation, distribution, transformation, metering, protective, or other facilities or equipment which, at the sole discretion of the Cooperative and/or its Power supplier, is required to serve the Member's DG facility.
  - c. In the event it is necessary at the time of initial interconnection or at some future time for the Cooperative and/or its Power Supplier to modify its electric delivery systems in order to serve the Member's DG facilities and/or purchase or continue to purchase the Member's output from the Member's DG facility, or because the quality of the power provided by the Member's DG facility adversely affects the Cooperative and/or its Power Supplier's delivery system, the Member will be responsible to reimburse the Cooperative and/or its Power Supplier for all costs of modifications required for the interconnection of the Member's DG facilities.

- d. In the event the Cooperative at any time in the future changes primary voltage of distribution facilities serving the DG installation or the Member's premises or location such that metering equipment, transformers and/or any other Member- owned equipment must be changed, the full cost of the change will be borne by the Member.
- e. In all cases, the Member shall pay the full cost of the installation of a visible load break disconnect switch by and to the sole specification of the Cooperative. The switch will be readily accessible to Cooperative personnel and of a type that can be secured in an open position by a Cooperative padlock.
- f. Section VII of this Manual includes additional detail and operational and safety requirements. The Member will follow all requirements of Section VII of these Guidelines prior to and during operation of the Member's DG facility.

2) Applicable Regulations

- a. The Member shall comply with all applicable tariffs, policies and procedures of the Cooperative and/or its Power Supplier. (DG tariffs, policies and procedures included.)
- b. The Member shall comply with all applicable laws, ordinances rules and regulations of any federal, county, state, and/or local authority, including, but not limited to: the most recent *IEEE Standard 1547 Guide for Distributed Generation Interconnection*, applicable ANSI standards, including ANSI C84.1 Range A relating to installation, safety, easements, code restrictions, operation and other matters.
- c. The Member shall be solely responsible for compliance with all applicable environmental laws, requirements and regulations, including but not limited to reporting and permits.

3) Liability Insurance

- a. Facilities 100 KW [KVA] and smaller
  - (1) Prior to interconnection, the Member must provide a certificate of insurance showing satisfactory liability insurance including contractual liability insurance covering indemnity agreements which insures the 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.
  - (2) The amount of such insurance coverage shall be not less than \$500,000 per occurrence. This amount may be increased at the sole discretion of the Cooperative if the nature of the project so requires.
  - (3) The insurance certificate shall state that it may not be changed or canceled during its term without thirty days written notice to the Cooperative.
  - (4) The Member shall provide proof of such insurance to the Cooperative at least annually and at any time upon request.
- b. Facilities larger than 100 KW [KVA]
  - (1) Prior to interconnection, the Member must provide a certificate of insurance showing satisfactory liability insurance including contractual liability insurance covering indemnity agreements which insures the 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.

- (2) The amount of such insurance coverage shall be not less than \$500,000 plus an additional \$100,000 for every 100 KW over 100 KW per occurrence. This amount may be increased at the sole discretion of the Cooperative if the nature of the project so requires.
- (3) The certificate shall provide that the insurance policy will not be changed or canceled during its term without thirty days written notice to the Cooperative. The term of the insurance shall be coincident with the term of the interconnection contract or shall be specified to renew throughout the length of the interconnection contract.
- (4) The Member shall provide proof of such insurance to the Cooperative at least annually and at any time upon request.

4) Contracts

a. Interconnection Contract

(1) The Member must sign and deliver to the Cooperative an Agreement for Interconnection and Parallel Operation of Distributed Generation in substantially the form as included in this DG Manual.

b. Purchase Power Contract (where the Member with a QF desires to deliver power or, in the case of a Member with a NQF, the Cooperative agrees to purchase power)

(1) Less than 10 MVA: The member will sign and deliver a power purchase contract with the Cooperative based on avoided cost data in the Cooperative tariff.

(2) Greater than 10 MVA: DG facilities of this size are not covered by this manual and will be considered by the Cooperative and its Power Supplier on a Case-by-case basis.

5) Initial Interconnection

a. Upon satisfactory completion of the review process and execution of required agreements as outlined in this Manual, the Cooperative will begin the installation of the interconnection for the DG facilities. The interconnection will be completed as soon as practical after completion of the review process and execution of the necessary contracts. After completion of interconnection requirements and prior to initiation of service, the Cooperative will conduct a final inspection of the facilities and interconnection to the Cooperative's system. Upon satisfactory final inspection, the Cooperative will initiate service to the Member.

b. The Cooperative's review process and final inspection is intended as a means to safeguard the Cooperative's facilities and personnel. Any review by the Cooperative and/or its Power Supplier shall not impose any liability on the Cooperative and/or its Power Supplier and does not guarantee the adequacy of the Member's equipment to perform its intended function. The Cooperative and its Power Supplier 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 such DG installations.

## **VI. REFUSAL TO INTERCONNECT SERVICE OR DISCONNECTION OF INTERCONNECTION SERVICE**

The Cooperative may, at its sole discretion, prevent the interconnection, or disconnect the interconnection, of any DG facilities due to reasons such as safety concerns, reliability issues, power

quality issues, breach of interconnection contract or any other reasonable issue. Any disconnection may be without prior notice.

## **VII. OPERATION OF PARALLEL FACILITY**

1) Purpose

The purpose of this section is to outline the Cooperative's operational requirements for DG facilities operated in parallel with the Cooperative's electric distribution system and is not intended to be a complete listing of all operational, regulatory, safety and other requirements.

2) Ownership of facilities

- a. The Member shall own and be solely responsible for all expense, installation, maintenance and operation of all facilities, including all power generating facilities, at and on the Member's side of the point of common coupling as defined by the IEEE.
- b. Exceptions include Cooperative-owned metering equipment and transformers.

3) Self-Protection of DG Facilities

- a. The Member will furnish, install, operate and maintain in good order and repair all equipment necessary for the safe operation of the DG facilities operated in parallel with the Cooperative's electric distribution system.
- b. Member's equipment will have capability to both establish and maintain synchronism with the Cooperative's system and to automatically disconnect and isolate the DG facility from the Cooperative's system.
- c. The Member's DG facility will be designed, installed and maintained to be self-protected from normal and abnormal conditions on the Cooperative's system including, but not limited to, overvoltage, undervoltage, overcurrent, frequency deviation, and faults. Self-protection will be compatible with all applicable Cooperative protection arrangements and operating policies.
- d. Additional protective devices and/or functions may be required by the Cooperative when, in the sole judgment of the Cooperative, the particular DG installation and/or the Cooperative system characteristics so warrant.

4) Quality of service

- a. Member's DG facility will generate power at the nominal voltage of the Cooperative's electrical distribution system at the Member's delivery point as defined by ANSI C84.1 Range A.
- b. Member's DG facility will generate power at a frequency within the tolerances as defined by IEEE 1547.
- c. Member's DG facility shall produce power at a minimum power factor of at least 95% or shall use power factor correction capacitors to ensure at least a 95% power factor.
- d. The overall quality of the power provided by the Member's DG facility 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.

- e. In the event that the adverse effects are caused in whole or in part by the Member's DG facility, the Member will correct the cause of such effects, reimburse the Cooperative for required correction, or be disconnected from the Cooperative's system.

5) Safety disconnect

- a. The Member shall install a visible load break disconnect switch at the Member's expense and to the Cooperative's specifications.
- b. The switch will be located so as to be readily accessible to Cooperative personnel in a location acceptable to both the Member and Cooperative.
- c. The switch shall be a type that can be secured in an open position by a padlock owned by the Cooperative.
- d. The Cooperative shall have the right to lock the switch open when, in the judgment of the Cooperative:
  - (1) It is necessary to maintain safe electrical operating and/or maintenance conditions,
  - (2) The Member's DG facility adversely affects the Cooperative system, or
  - (3) There is a system emergency or other abnormal operating condition warranting disconnection.
- e. The Cooperative reserves the right to operate the disconnect switch for the protection of the Cooperative's system even if it affects the Member's DG facility. In the event the Cooperative opens and/or closes the disconnect switch:
  - (1) The Cooperative shall not be responsible for energization or restoration of parallel operation of the DG facility.
  - (2) The Cooperative will make reasonable efforts to notify the Member.
- f. The Member will not bypass the disconnect switch at any time for any reason.
- g. Signage shall be placed by the Cooperative at the location of the disconnect indicating the purpose of the switch along with contact names and numbers of both the Member and the Cooperative.
- h. Members with DG facilities as defined in this Manual which are solely for the purpose of emergency backup or peak shaving without intent to export power shall not operate their DG facilities unless visibly disconnected from the Cooperative's system.
- i. In the event the Cooperative loses power to the line serving a Member's DG facilities for any reason, any Member with DG facilities which are intended to export power shall not operate its DG facilities unless disconnected from the Cooperative's system.

6) Access

- a. Persons authorized by the Cooperative will have the right to enter the Member's property for purposes of testing, operating the disconnect switch, reading or testing the metering equipment or other service requirements. Such entry onto the Member's property may be without prior notice.
- b. If the Member erects or maintains locked gates a means to permit the use of the cooperative's padlock must be provided. If other barriers are erected, the Member will furnish the Cooperative with convenient means to circumvent the barrier for full access for the above-mentioned reasons.

7) Modification of the Cooperative's System

- a. In the event it is necessary at the time of initial interconnection or at some future time for the Cooperative and/or its Power Supplier to modify its electric delivery systems in order

to serve the Member's DG facilities and/or purchase or continue to purchase the output of the Member's DG facilities, or because the quality of the power provided by the Member's DG facilities adversely affects the Cooperative and/or its Power Supplier's delivery system, the Member will be responsible to reimburse the Cooperative and/or its Power Supplier for all costs of modifications required for the interconnection of the Member's DG facilities.

8) Liability for Injury and Damages

- a. The Member assumes full responsibility for electric energy furnished at and past the point of interconnection and shall indemnify the Cooperative and/or its Power Supplier against and hold the Cooperative and/or its Power Supplier 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 the Cooperative or in any way arising directly or indirectly from the Member's DG
- b. The Cooperative and/or its Power Supplier shall not be liable for either direct or consequential damages resulting from failures, interruptions, or voltage and waveform fluctuations occasioned by causes reasonably beyond the control of the Cooperative and/or its Power Supplier 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 waveform fluctuations occasioned in whole or in part by the negligence of the Cooperative or its agent or agents, 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 or agents. **ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL THE COOPERATIVE BE LIABLE TO THE MEMBER FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUES, EARNINGS, PROFITS, INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF MEMBER'S PREMISES OR FACILITIES OR FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED, IN WHOLE OR PART, TO THIS AGREEMENT.**

9) Metering/Monitoring

- a. The Cooperative shall specify, install and own all metering equipment.
- b. DG facilities greater than 100 KVA
  - (1) Power transfer at the point of interconnection will be measured by metering equipment as installed and specified at the sole discretion of the Cooperative and/or its Power Supplier.
  - (2) There shall be no net metering.
  - (3) The meter shall be read at a time or times of month determined at the Cooperative's sole discretion for remotely acquiring metering data. The Member shall provide the Cooperative an approved communications link at the Member's cost for this purpose if

so requested by the Cooperative.

- c. DG facilities greater than 10 MW (Not covered by this Manual)
- d. The Cooperative shall require the Member to reimburse the Cooperative for metering and monitoring equipment and installation expense.
- e. Meter testing shall follow the Cooperative's standard policy on metering testing and accuracy.
- f. At its sole discretion, the Cooperative may meter the DG facility at primary or secondary level.

10) Notice of Change in Installation

- a. The Member will notify the Cooperative in writing thirty (30) days in advance of making any change affecting the characteristics, performance, or protection of the DG facility.
- b. If any modification undertaken by the Member will create or has created conditions which may be unsafe or adversely affect the Cooperative's system, the Member shall immediately correct such conditions or be subject to immediate disconnection from the Cooperative's system.
- c. Any change in the operating characteristics of the DG facility including, but not limited to, size of generator, total facility capacity, nature of facility, fuel source, site change, hours of operation, or type of generator used, will require a new application process, including, but not limited to, application form, application fee, DG Plan and DG Plan review by the Cooperative.

11) Testing and Record Keeping

- a. The Member will test all aspects of the protection systems up to and including tripping of the generator and interconnection point at start-up and thereafter as required. Testing will verify all protective set points and relay/breaker trip timing and shall include procedures to functionally test all protective elements of the system. The Cooperative may witness the testing.
- b. The Member will maintain records of all maintenance activities, which the Cooperative may review at reasonable times.
- c. For DG facilities greater than 500 KW, a log of generator operations shall be kept. At a minimum, the log shall include the date, generator time on, generator time off, and megawatt and megavar output. The Cooperative may review such logs at reasonable times.

12) Compliance with Laws, Rule and Tariffs

The DG installation owned and installed by the member shall be installed and operated subject to and in accordance with the terms and conditions set forth in the Cooperative's rules, regulations, bylaws, rates and tariffs, as amended from time to time, and if applicable, approved by the Cooperative's board of directors, which are incorporated herein by reference, and in compliance with all applicable federal, state and local laws, regulations, zoning codes, building codes, safety rules, environmental restrictions, ordinances and regulations, including without limitation, the Electric Reliability Council of Texas ("ERCOT") Independent System Operator ("ISO") directives and ERCOT guidelines, the Western Electricity Coordinating Council ("WECC")

Independent System Operator directives and WECC guidelines and in accordance with the industry standard prudent engineering practices.