

LAMAR ELECTRIC COOPERATIVE

**Residential Distributed
Generation Procedures
& Guidelines Manual for
Members**

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GENERAL


In order to receive service from the Cooperative, a customer must join or become a “Member” of the Cooperative. Throughout this Distributed Generation manual, customers will be referred to as “Members.” For more information about the cooperative membership application process, including any applicable membership fees or deposits, see the Cooperative to request new member information.

It is the intent of the Cooperative to allow Members to install Residential Distributed Generation (“DG”), provided the Member’s DG facility does not adversely affect the Cooperative. The Member must conduct his/her own analysis to determine the economic benefit of DG operation.

A DG facility that is not connected to the Cooperative’s system in any way is known as “stand-alone” or “isolated” DG. The Member may operate a DG facility in stand-alone or isolated fashion as long as such DG facility does not adversely affect the Cooperative’s system. A DG facility connected in any way to the Cooperative’s system shall be considered as in “parallel.” For purposes of this DG Manual, a DG facility is considered operating in “parallel” anytime it is connected to the Cooperative’s system in any way, even if the Member does not intend to export power. All provisions of this DG Manual shall apply to parallel operation of DG facilities as so defined.

This DG Manual is not a complete description or listing of all laws, ordinances, rules and regulations, nor is this DG Manual intended to be an installation or safety manual. The Member requesting to interconnect a DG facility to the Cooperative’s system is responsible for and must follow, in addition to all provisions of this DG Manual, the Cooperative’s *Rules and Regulations and Tariffs for Electric Service*, the Cooperative’s *Line Extension Policy*, the *Policies and Procedures* of the Cooperative’s power supplier where applicable, the *Policies and Procedures* of the Cooperative’s transmission service provider where applicable, the current *IEEE 1547 Standard Guide for Distributed Generation Interconnection* (a copy is on file at the Cooperative for inspection along with information so the Member may obtain his/her own copy), other applicable IEEE standards, applicable ANSI standards, including ANSI C84.1 Range A and any other applicable governmental and regulatory laws, rules, ordinances or requirements. All legal, technical, financial, etc. requirements in the following sections of this DG Manual must be met prior to interconnection of the DG facility to the Cooperative’s system.

A Member may serve all load behind the meter at the location serving the DG facility but will not be allowed to serve multiple meters, multiple consuming facilities or multiple Members with a single DG facility or under a single DG application without prior approval by the cooperative.

DG facilities larger than 20kW are not covered by this DG Manual and will be considered by the Cooperative on a case-by-case basis. 

I. DETERMINE THE CATEGORY OF DISTRIBUTED GENERATION FACILITY

1) Connection Level Category

- a) Connected to the Cooperative's system
The Member requests and/or the Member's DG facility requires connection to the Cooperative's system. All provisions of this DG manual cover this category.

2) Power Export Category

- a) Parallel – no power export
The Member operates a DG facility connected in any way to the Cooperative system but with no intention to export power.
- b) Parallel – power generated to be both consumed and exported
The Member operates a DG facility connected in any way to the Cooperative's system designed primarily to serve the Member's own load but with the intention to export excess power.
- c) Parallel – power generated to be exported only
The Member operates a DG facility connected in any way to the Cooperative's system designed primarily with the intention to export power.

3) Size Category

- a) Facilities 20 kW and smaller
Facilities ≤ 20 kW of connected generation will be placed in this size category unless the Member requests connection under the > 20 kW size category.
- b) Facilities 20 kW or larger
Anything 20kW or larger will be considered on a case-by-case basis by the Cooperative.

4) Qualifying or Non-Qualifying Category

- a) Qualifying Facilities (QF) are defined by the Public Utility Regulatory Policies Act of 1978 (PURPA). Refer to CFR Title 26, Volume 4, Sec. 292.204.
- b) The distinction between QF and Non-Qualifying Facilities (NQF) mainly deals with fuel use.
 - (1) A QF is defined as electric generation with a capacity of not more than 1 MW provided by renewable energy technology, as defined by PURPA, installed on a retail electric customer's (Member's) side of the meter. In general, this means that the DG must have as its primary energy source biomass, waste, renewable resources, geothermal resources or any combination. See PURPA for a full description.
 - (2) DG facilities not designated as QF under the provisions of PURPA will be considered NQF by the Cooperative.
- c) The Cooperative will purchase power from a Member with a DG facility that is a QF, subject to the provisions of this policy and other applicable rules and regulations.
- d) The Cooperative may choose to provide interconnection and may choose to purchase power from a Member with a DG facility that is a NQF at the sole discretion of the Cooperative as determined on a case-by-case basis.

II. MEMBER’S INITIAL REQUIREMENTS

1) Notification

- a) The Member must meet all the Cooperative’s membership and service requirements in addition to the requirements in the DG Manual.
- b) Anyone owning or operating a DG facility in parallel with the Cooperative’s system must notify the Cooperative of the existence, location and category of the DG facility.

2) Service Request

- a) In advance of request for an interconnection, the Member must contact the Cooperative and complete the “Cooperative Agreement for Interconnection and Parallel Operation of Distributed Generation.”
- b) DG facilities under 20 kW in size and of standard manufacture and design (as so determined by the Cooperative) may submit the Agreement Short Form.
- c) A separate form must be submitted for each facility.

3) Submit a DG Plan

- a) As a 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 plan to be prepared by a Professional Engineer registered in the state of Texas.
- b) In the case of DG facilities (i) to be operated in parallel with the Cooperative’s system, (ii) with no intention to export power to the Cooperative and (iii) that are of standard design and intended entirely as emergency or back-up power supply for the facility, the Cooperative may, at its sole discretion, waive the application fee.
- c) Prior to review of the application and DG plan by the Cooperative, the Member shall pay an application fee as indicated below. A separate fee must be submitted for each DG facility.

DG Size (Connected Load)	Application Fee	Additional Engineering Fee
< 20kW	\$150.00	None

III. COOPERATIVE AND POWER SUPPLIER REVIEW PROCESS

1) Plan Review Process

- a) The Cooperative and its Power Supplier, if requested by the Cooperative, 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.
- b) Technical review will be consistent with guidelines established by the most recent *IEEE Standard 1547 Guide for Distributed Generation Interconnection*. The Member may be required by the Cooperative to provide proof that their DG Facilities have been tested and certified by applicable IEEE guidelines.
- c) If corrections or changes to the plans, specifications and other information are to be made by the Member, the 60 day period may be reinitialized when such changes or corrections are provided to the Cooperative. In addition, any changes to the site or project requiring new analysis by the Cooperative may require additional cost and a new DG plan. The cost will be determined by the Cooperative and shall be paid by the Member.
- d) The Member acknowledges and agrees that any review or acceptance of such plans, specifications and other information 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 or DG facility to perform its intended function. The Cooperative and its Power Supplier disclaim 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.
- e) 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 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 adversely affects the Cooperative's and/or its Power Supplier's delivery system, the Member will be responsible to pay the Cooperative and/or its Power Supplier in advance 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 all DG facilities where the Member desires to export power

- a) All DG facilities shall be billed 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, including any charges in the Cooperative's DG tariff rider.
- c) The Member shall pay all rates and charges so listed.
- d) Neither the Cooperative nor its Power Supplier is under any obligation to purchase power from a NQF.
- e) The Member shall be subject to any market charges related to the Member's DG facility, including but not limited to Scheduling, Dispatching and Energy imbalance.

For Residential QF \leq 20 kW where the Member desires to export power:

- 2)
 - a) All energy (kWh) supplied by the Cooperative to the Member, during the billing period, shall be billed by the Cooperative in accordance with the rates and charges under the Cooperative's applicable rate schedule for the Member.
 - b) All energy generated by the QF will be purchased by the Cooperative at an avoided cost that will be adjusted when applicable, but no more than every 2 years.
 - c) The Member shall sign an approved Interconnection Agreement, as detailed in this DG manual, for interconnection service with the Cooperative.
 - d) In addition to all other charges, the Cooperative may bill the Member for any additional facilities charges as determined by the Cooperative and appended to the Interconnection Agreement.

- 3) Purchases from the Member
 - a) The Cooperative shall not be required to make any purchases that will cause the Cooperative to no longer be in compliance with any applicable contracts or all-power contract requirements with its power supplier(s).
 - b) Any purchases of energy from the Member shall be made at the Cooperatives avoided cost.

V. MEMBER'S RESPONSIBILITY PRIOR TO OPERATION

1) Line Extension and Modifications to Cooperative 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 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 electric delivery systems in order to serve the Member's DG facilities and/or purchase or continue to purchase the Member's output, or because the quality of the power provided by the Member's DG adversely affects the Cooperative and/or its Power Supplier's delivery system, the Member will 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 facilities serving the DG facility such that metering equipment, transformers and/or any other Member-owned equipment must be changed to continue receiving service at the new primary voltage level, 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 lock.

2) Applicable Regulations

The DG facility 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 most recent IEEE Standard 1547 Guide for Distributed Generation Interconnection, applicable ANSI standards, including ANSI C84.1 Range A, Electric Reliability Council of Texas (ERCOT) Independent System Operator (ISO) directives and ERCOT guidelines, and in accordance with industry standard prudent engineering practices.

3) Liability Insurance

a) Facilities 20 kW and smaller

- (1) Prior to interconnection, the Member must provide proof of adequate insurance.
- (2) The amount of the insurance may be increased at the sole discretion of the Cooperative if the nature of the project so requires.
- (3) The insurance policy will 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 upon request.

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4) Contracts

a) Interconnection Contract

The Member will sign and deliver an Agreement for Interconnection to the Cooperative substantially in the form as shown in the COOPERATIVE AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED GENERATION included in this DG Manual.

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 installation of the interconnection of DG facilities. The interconnection will be completed as soon as practical after completion of the review process and execution of the necessary agreements/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. The Member acknowledges and agrees that any review or acceptance of such plans, specifications and other information 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 or DG facility 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 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

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

1) 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 beyond the point of delivery as defined in the Cooperative's tariffs.
- b) At its sole discretion, the Cooperative may locate cooperative owned metering equipment and transformers past the point of delivery.

2) 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 DG facilities operated in parallel with the Cooperative system.
- b) The Member's equipment will have capability to both establish and maintain synchronism with the Cooperative system and to automatically disconnect and isolate the DG facility from the Cooperative 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 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 facility installation and/or the Cooperative system characteristics so warrant.

3) Quality of service

- a) The Member's DG facility will generate power at the nominal voltage of the Cooperative's system at the Member's delivery point as defined by ANSI C84.1 Range A.
- b) Member's DG installation 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) Member's DG facility shall be in accordance with the power quality limits specified in IEEE 519.
- e) 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 system is not adversely affected in any manner.
- f) 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 within 30 days, reimburse the Cooperative for required correction, or be disconnected from the Cooperative system.

4) 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 lock owned by the Cooperative. If the Cooperative has locked the disconnect switch open, the Member shall not operate or close the disconnect switch.
 - 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 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 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 Member's expense and located at 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 at any time unless visibly disconnected from the Cooperative system. At its sole discretion, the Cooperative may require Member to install at his/her own expense an interlocking switch for the purpose of insuring the Member's facilities do not operate in parallel with the Cooperative's facilities.
 - i) Should the Cooperative lose power serving the Member's DG facilities for any reason, Members with DG facilities shall not operate their DG facilities unless visibly disconnected from the Cooperative system.
- 5) 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, maintaining right-of-way or other DG facility equipment and/or Cooperative service requirement. Such entry onto the Member's property may be without notice.
 - b) 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 full access for the above-mentioned reasons.
- 6) 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 facility.

- (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. ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL THE COOPERATIVE BE LIABLE TO THE MEMBER FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUE, EARNINGS, PROFITS, OR INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF MEMBER'S PREMISES OR FACILITIES FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED, IN WHOLE OR PART, TO THIS AGREEMENT. The Cooperative shall not be liable in any event for consequential damages.
- (c) The Member is solely responsible for ensuring his/her facility complies with all applicable regulations including, but not limited to, laws, regulations, ordinances, Cooperative and Cooperative Power Supplier tariffs, policies and directives, and ERCOT rules, policies and directives.

7) Metering/Monitoring

- a) The Cooperative shall specify, install and own all metering equipment.
- b) Facilities \leq 20 kW

Metering shall be accomplished measuring out-flow from Member's DG while separately measuring the in-flow of all required energy to the Member.

- c) Metering shall be read at a time or times of month determined at the Cooperative's sole discretion for 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. The type of communications link and metering equipment measuring purchase of power by the Cooperative shall be installed and specified at the sole discretion of the Cooperative.
- d) The Cooperative may, at its sole discretion, require the Member to pay the Cooperative in advance 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 facility at primary or secondary level.
- g) The Cooperative requires an additional meter socket to be installed between the utility meter and DG to track DG production. Meter will be provided by the Cooperative.

8) 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 system, the Member shall immediately correct such conditions or be subject to immediate disconnection from the Cooperative 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 used, may require a new application process, including, but not limited to, application form, application fee, DG plan and DG plan review by the Cooperative.

9) 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.

10) Disconnection of Service

The Cooperative may, at its sole discretion, discontinue the interconnection of DG installations due to reasons such as safety concerns, reliability issues, power quality issues, breach of interconnection contract or any other issue, which the Cooperative considers to be a reasonable basis for such action.

11) Compliance With Laws, Rules 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, Electric Reliability Council of Texas (ERCOT) Independent System Operator (ISO) directives and ERCOT guidelines, and in accordance with industry standard prudent engineering practices.

COOPERATIVE AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED GENERATION

SHORT FORM CONTRACT

This Interconnection Agreement ("Agreement") is made and entered into this ____ day of _____, 20____, by Lamar Electric Cooperative Association, ("Cooperative"), a corporation organized under the laws of the State of Texas , and _____ ("DGOwner/Operator"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties". In consideration of the mutual covenants set forth herein, the Parties agree as follows:

The provisions of the Cooperative's Distributed Generation Manual shall be considered to be a part of this contract.

This agreement provides for the safe and orderly operation of the electrical facilities interconnecting the DG Owner/Operator's _____ facility located _____ at _____ and the electrical distribution facility owned by the Cooperative.

This Agreement does not supersede any requirements of any applicable tariffs in place between the DG Owner/Operator and the Cooperative.

1. **Intent of Parties:** It is the intent of the DG Owner/Operator to interconnect an electric power generator to the Cooperative's electrical distribution system.

It is the intent of the Cooperative to operate the distribution system to maintain a high level of service to their customers and to maintain a high level of power quality.

It is the intent of both parties to operate the facilities in a way that ensures the safety of the public and their employees.

2. **Establishment of Point of Interconnection -** The point where the electric energy first leaves the wires or facilities of the system owned by the Cooperative and enters the wires or facilities of the Facility provided by DG Owner/Operator is the "Point of Interconnection." Cooperative and DG Owner/Operator agree to interconnect the Facilities at the Point of Interconnection in accordance with the Cooperative's Rules and Regulations and DG Manual relating to interconnection of Distributed Generation.

3. **Operating authority:** The DG Owner/Operator is responsible for establishing operating procedures and standards within their organization. The operating authority for the DG Owner/Operator shall ensure that the Operator in Charge of the generator is competent in the operation of the electrical generation system and is aware of the provisions of any operating agreements and regulations relating to the safe operation of electrical power systems.

The operating authority for the DG Owner/Operator is:

Name or title of operating authority _____

Address _____

Phone number _____

4. **Operator in Charge:** The operator in charge is the person identified by name or job title responsible for the real time operation of all electrical facilities related to the interconnection and owned by their organization. The operator in charge for the DG Owner/Operator is:

Name or title of operating authority _____

Address _____

Phone number _____

5. Limitation of Liability and Indemnification:

- a. Notwithstanding any other provision in this Agreement, with respect to the Cooperative's provision of electric service to DG Owner/Operator and the services provided by the Cooperative pursuant to this Agreement, Cooperative's liability to DG Owner/Operator shall be limited as set forth in the Cooperative's tariffs and terms and conditions for electric service, which are incorporated herein by reference.
 - b. Neither Cooperative nor DG Owner/Operator shall be liable to the other for damages for any act or omission that is beyond such party's control, including, but not limited to, any event that is a result of an act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, explosion, breakage or accident to any part of the System or to any other machinery or equipment, a curtailment, law, order, or regulation or restriction by governmental, military, or lawfully established civilian authorities.
 - c. Notwithstanding Paragraph 5.b of this Agreement, the DG Owner/Operator shall assume all liability for, and shall indemnify Cooperative for, any claims, losses, costs, and expenses of any kind or character to the extent that they result from DG Owner/Operator's negligence or other wrongful conduct in connection with the design, construction or operation of the Facilities or Interconnection Facilities. Such indemnity shall include, but is not limited to, financial responsibility for (a) monetary losses; (b) reasonable costs and expenses of defending an action or claim; (c) damages related to death or injury; (d) damages to property; and (e) damages for the disruption of business. This paragraph does not create a liability on the part of the DG Owner/Operator to the Cooperative or a third person, but requires indemnification where such liability exists.
 - d. Cooperative and DG Owner/Operator shall each be responsible for the safe installation, maintenance, repair and condition of their respective lines, wires, switches, or other equipment or property on their respective sides of the Point of Interconnection. The Cooperative, while retaining the right to inspect, does not assume any duty of inspecting the DG Owner/Operator's lines, wires, switches, or other equipment or property and will not be responsible therefore. DG Owner/Operator assumes all responsibility for the electric service supplied hereunder and the facilities used in connection therewith at or beyond the Point of Interconnection.
 - e. For the mutual protection of the DG Owner/Operator and the Cooperative, only with Cooperative prior written authorization are the connections between the Cooperative's service wires and the DG Owner/Operator's service entrance conductors to be energized.
6. **Metering:** Metering shall be accomplished as described in the Cooperative's DG Manual.
7. **Insurance:** Insurance shall be required as described in the Cooperative's DG Manual.
8. **Suspension of Interconnection:** It is intended that the interconnection should not compromise the Cooperative's protection or operational requirements. The operation of the DG Owner/Operator's System and the quality of electric energy supplied by the DG Owner/Operator shall meet the standards as specified by the Cooperative. If the operation of the DG Owner/Operator's system or quality of

electric energy supplied (in the case of power export) does not meet the standards as specified, then (the Cooperative) will notify the DG Owner/Operator to take reasonable and expedient corrective action. The Cooperative shall have the right to disconnect the DG Owner/Operator's System, until compliance is reasonably demonstrated. Notwithstanding, the Cooperative may in its sole discretion disconnect the DG Owner/Operator's generating plant from the Distribution Facility without notice if the operating of the Generating Plant may be or may become dangerous to life and property.

9. **Compliance with Laws, Rules and Tariffs:** Both the Cooperative and the DG Owner/Operator shall be responsible for complying with all applicable laws, rules and regulations, including but not limited to the laws of the state of Texas, and the Cooperative's DG Manual, Tariffs, Rules and Regulations, By-Laws and other governing documents. The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the tariff schedules and rules of the Cooperative as applicable to the electric service provided by the Cooperative, which tariffs and rules are hereby incorporated into this Agreement by this reference. The Cooperative shall have the right to publish changes in rates, classification, service or rule, with the proper notification to all DG owners/operators and Cooperative members.
10. **Maintenance Outages:** Maintenance outages will occasionally be required on the Cooperative's system, and the Cooperative will provide as much notice and planning as possible to minimize downtime. It is noted that in some emergency cases such notice may not be possible. Compensation will not be made for unavailability of Cooperative's facilities due to outages.
11. **Access:** Access is required by the Cooperative to the DG Owner/Operator's plant site for maintenance, operating and meter reading. The Cooperative reserves the right, but not the obligation, to inspect the DG Owner/Operator's facilities.
12. **Force Majeure:** For the purposes of this Agreement, a Force Majeure event is any event:
 - (a) that is beyond the reasonable control of the affected party; and
 - (b) that the affected party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent that they satisfy the preceding requirements: acts of war, public disorder, rebellion or insurrection; floods, hurricanes, earthquakes, lightning, storms or other natural calamities; explosions or fires; strikes, work stoppages or labor disputes; embargoes; and sabotage. If a Force Majeure event prevents a party from fulfilling any obligations under this agreement, such party will promptly notify the other party in writing and will keep the other party informed on a continuing basis as to the scope and duration of the Force Majeure event. The affected party will specify the circumstances of the Force Majeure event, its expected duration and the steps that the affected party is taking to mitigate the effect of the event on its performance. The affected party will be entitled to suspend or modify its performance of obligations under this Agreement but will use reasonable efforts to resume its performance as soon as possible.
13. **Assignment** - At any time during the term of this Agreement, the DG Owner/Operator may assign this Agreement to a corporation, an entity with limited liability or an individual (the "Assignee"), provided that the DG Owner/Operator obtains the prior written consent of the Cooperative in advance of the assignment. The Cooperative's consent will be at the Cooperative's discretion based on whether or not the Cooperative determines that the Assignee is financially and technically capable to assume ownership and/or operation of the DG unit. The company or individual to which this Agreement is assigned in accordance with the terms and conditions of this Agreement will be responsible for the proper operation and maintenance of the DG Facilities, and will be a party to all provisions of this Agreement.

14. **Term:** The term of this Agreement is a period of two (2) years from the Effective Date (“Initial Term”). This Agreement shall automatically renew in (1) year increments after the Initial Term unless terminated sooner. This Agreement may be canceled by either party with 30 days prior written notice to the other party during the Initial Term or any renewal period.

AGREED TO BY:

DG Owner/Operator

Lamar Electric Cooperative Association

Name

Name

Title

Title

Date

Date

TARIFF

Distributed Generation Rider – Qualifying Facilities

Application.

Applicable to Distributed Generation Facilities smaller than 20 kW of connected generation connected in parallel operation to the Cooperative's electric system in accordance with the Cooperative's service rules and regulations and the Cooperative's *Distributed Generation Procedures and Guidelines Manual for Members* (available on request).

This rate is not applicable to temporary, shared, or resale service. This rate is applicable to service supplied at one point of delivery.

Sales to Customer

Sales to a Distributed Generation Customer shall be consistent with the applicable retail rate tariff established by the Cooperative and in use by the Customer as if there were no Distributed Generation installation.

Purchases from a Qualifying Facility classified as 20 kW of connected generation and smaller

Determination of billing shall be accomplished measuring out-flow from Member's DG while separately measuring the in-flow of all required energy to the Member.

For energy (kWh) produced by a Qualifying Facility, the Member shall be compensated for all generation by their DG utilizing the avoided cost determined by the Cooperative. Member will then be billed for all required energy supplied by the Cooperative in accordance with the rates and charges under the Cooperative's applicable rate schedule for the Member.

Customer must be a Qualifying Facility (QF) as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA). If Customer is not a QF, the Cooperative may, at its sole discretion, purchase power from the Customer under the terms of this section.

In addition to all other charges, the Cooperative may bill the Member for any additional facilities charges as determined by the Cooperative and appended to the Interconnection Agreement.

Contracts

An Interconnection Agreement and Contract between the Customer and the Cooperative shall be required in all cases.

Distributed Generation Procedures and Guidelines Manual for Members