

**NAVARRO COUNTY ELECTRIC
COOPERATIVE, INC.**

**Distributed Generation
Short Form Contract &
DG Rider**

September 28, 2009

**COOPERATIVE AGREEMENT
FOR INTERCONNECTION OF DISTRIBUTED GENERATION**

SHORT FORM CONTRACT

This Interconnection Agreement ("Agreement") is made and entered into this ____ day of _____, 20____, by Navarro County Electric Cooperative, Inc., ("Cooperative"), a corporation organized under the laws of the State of Texas, and _____ ("DG Owner/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 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.

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. **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.

14. **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 DG and/or service requirements. Such entry onto the Member's property may be without prior 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.

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.

- b) 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 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 installation.

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 facilities except:

- (1) When the negligence of the 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 people of the household, and
- (2) 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 the Cooperative or its agent or agents independent of and unrelated to the maintenance of Cooperative facilities or any condition on Member's premises, or
 - (b) The breach by the Cooperative of any provision of any contract regarding purchase and/or sale of electrical energy or service between the Member and the Cooperative.

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 FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED, IN WHOLE OR PART, TO THIS AGREEMENT.**

9) Liability Insurance

a) Facilities 50 kW and smaller

(1) For residential installations 50kW and smaller the member is not required to provide a certificate of insurance coverage to the Cooperative. It is recommended, however, that the member carry liability insurance coverage 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.

b) Facilities larger than 50 kW

(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 \$2,000,000 per occurrence. This amount may be increased at the sole discretion of the Cooperative if the nature of the project so requires.

(3) The 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.

10) Metering/Monitoring

a) The Cooperative shall specify, install and own all metering equipment.

b) DG facilities \leq 50 kW

The DG facility will be net metered by installing a meter which measures the flow of energy in each direction.

c) DG facilities > 50 kW

(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.

d) DG facilities > 4 MW (Not covered by this Manual)

e) The Cooperative may, at its sole discretion, require the Member to reimburse the Cooperative for metering and monitoring equipment and installation expense.

f) Meter testing shall follow the Cooperative's standard policy on metering testing and accuracy.

g) At its sole discretion, the Cooperative may meter the DG facility at primary or secondary level.

11) 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.

b) 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.

12) 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.

13) Disconnection of Service

The Cooperative may, at its sole discretion, discontinue 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.

1) 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, Electric Reliability Council of Texas (ERCOT) Independent System Operator (ISO) directives and ERCOT guidelines, and in accordance with the industry standard prudent engineering practices.

15. **Term:** This document is intended to be valid for a period of two (2) years and thereafter until cancelled by either party with 30 days written notice to the other party.

AGREED TO BY

DG Owner/Operator

Cooperative

Name

Name

Title

Title

Date

Date

EXHIBIT A
DESCRIPTION OF FACILITIES AND POINT OF INTERCONNECTION

DG Owner/Operator will, at its own cost and expense, operate, maintain, repair, and inspect, and shall be fully responsible for its Facilities, unless otherwise specified on Exhibit A.

DISTRIBUTED GENERATION RIDER

Application.

Applicable to Distributed Generation smaller than 4 MW of connected generation connected in parallel operation to the Cooperative's electric distribution 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 and measured through one meter.

Sales to Customer

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

Purchases from a Customer – Facility 50 kW of connected generation and smaller

For power produced in excess of on-site requirements, the Customer will be compensated by the retail purchase meter running in reverse (Net metering). The Cooperative shall bill the Customer for the excess of energy supplied by the Cooperative over and above the energy supplied by the Customer during each billing period according to the Cooperative's applicable retail rate schedule.

Net metering is defined as measuring the difference between the electricity supplied by the Cooperative and the electricity generated by the Customer's Distributed Generation facility and delivered to the Cooperative's electric distribution system over the operable time period.

When the energy supplied by the Customer exceeds the energy supplied by the Cooperative during a billing period, the monthly charge and/or minimum bill of the retail rate schedule shall be billed by the Cooperative in addition to the monthly metering charge, and the excess energy shall be provided at no charge to the Cooperative.

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, elect to purchase power from the Customer under the terms of this section.

Monthly Rate.

Each billing period the Customer shall be obligated to pay the following charges in addition to all charges indicated on his/her base rate:

Customer Charge

50 kW and smaller @ \$ 13.50 per meter/month
Over 50 kW and under 4 MW @ \$ 25.00 per meter/month

Additional Charge for meter reading by Cooperative personnel where remote access to meter reading is not feasible.

@ \$ 50.00 per meter/month

Facilities Charge

As determined at the sole discretion of the Cooperative on a non-discriminatory case-by-case basis, unless prohibited by the Substantive Rules of the Public Utility Commission of Texas, to recover any additional operation and maintenance expense caused by the Customer's facility.

Data Access – Communications Link

In addition to all other charges in the Customer's tariff and this rider, the Customer will provide the Cooperative at his/her own expense a communications link as approved at the sole discretion of the Cooperative for remotely obtaining meter readings at a time or times of the month as determined at the Cooperative's sole discretion.

AGREED TO BY

DG Owner/Operator

Cooperative

Name

Name

Title

Title

Date

Date