



# Distributed Generation Policy

Approved May 22, 2008



## DISTRIBUTED GENERATION POLICY

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## DISTRIBUTED GENERATION POLICY

### FOREWORD

Diverse Power Inc. (herein after referred to as “Diverse Power” or the “Cooperative”) 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 their own electric power generation equipment. In these cases, Diverse Power stands ready to work with its members to ensure that their generation equipment is installed in a proper and safe manner, and in accordance with all applicable codes, standards, regulations, laws and insurance requirements. In most of these cases, members will need to coordinate the installation and approval of their electric power generator with the local code inspection authority.

### OBJECTIVES

This policy outlines the minimum requirements, from the system protection and operations perspective, for the connection of a member’s generator to Diverse Power’s distribution system. Such generators can be described by several different names such as distribution generator (DG), independent power producer (IPP), co-generator, or peak shaver. Diverse Power will refer to all these as Distributed Generation (DG). DG as described in this policy is a source of electric power that is not directly connected to a bulk power transmission system, but is connected to the distribution system. DG includes rotating generators driven by steam turbine, internal combustion engines, hydro electric, windmills and photovoltaic panels (PV) with DC to AC inverter and energy storage technologies.

This policy is applicable only to distributed generation facilities defined herein. The interconnection of other DG to Diverse Power’s distribution system will be addressed with each member on a case-by-case basis. This policy is not applicable to generation intended strictly for emergency backups, open transfer peak shaving, or any other stand-alone operations where DG is never tied directly with Diverse Power’s distribution system.

This Distributed Generation Policy establishes the terms and conditions for the interconnection of distributed generation facilities and for providing net energy metering services.

### A. Definitions

The following words and terms shall have the following meanings unless the context clearly indicates otherwise:

1. **“Billing period”** means, as to a particular customer, the time period between the dates on which the Cooperative normally reads the retail service meter for billing purposes.
2. **“Bi-directional meter”** is a meter capable of measuring (but not necessarily displaying) electricity flow in both directions.
3. **“Bi-directional metering”** means measuring the amount of electricity supplied by the Cooperative and the amount of electricity fed back to the Cooperative by the customer’s distributed generation facility using a single meter.
4. **“Customer”** means a member of Diverse Power.

5. **“Customer Generator”** means a customer who is the owner and operator of a distributed generation facility.
6. **“Distributed generation facility”** means a facility owned and operated by a customer of the Cooperative for the production of electrical energy that:
  - a. Uses a fuel cell or a renewable energy source;
  - b. Has peak generating capacity of not more than 10 kW for a residential application and 100 kW for a commercial application;
  - c. Is located on the customer’s premises;
  - d. Operates in parallel with the Cooperative’s distribution facilities;
  - e. Is connected to the Cooperative’s distribution system on either side of the Cooperative’s retail service meter; and
  - f. Is intended primarily to offset part or all of the customer generator’s requirements for electricity.
7. **“Excess net energy”** is the positive difference between the electricity generated by the customer’s distributed generation facility and the electricity consumed by the Customer Generator during the billing period.
8. **“Net metering customer”** means a Customer Generator receiving net metering service.
9. **“Net metering”** means measuring the difference, over the billing period, between electricity supplied to a Customer Generator from the electric grid and the electricity generated and fed into the electric grid by the Customer Generator, using a bi-directional meter or an additional single direction meter.
10. **“Renewable energy sources”** means energy supplied from technologies such as a solar photovoltaic system, wind turbine, biomass system, or other technologies approved in the Georgia Green Pricing Accreditation Program.

## **B. Application Process**

A prospective Customer Generator that intends to interconnect with the Cooperative’s distribution system must:

- (1) Submit a completed Application for Interconnection of Distributed Generation Facility (see Appendix A), including all attachments thereto, accompanied by payment of a \$100.00 application fee to the Cooperative at least forty-five (45) days prior to the date the customer intends to interconnect the distributed generation facility to the Cooperative’s electric distribution facilities;
- (2) A representative from Diverse Power will review the Application and notify the prospective customer generator within thirty (30) days if the Application is approved or not approved. Any review or acceptance of the Application by the Cooperative shall not impose any liability on the Cooperative and does not guarantee the adequacy of the customer generator’s equipment to perform its intended function. The Cooperative disclaims any expertise or special knowledge relating to the design or performance of the customer’s distributed generation facility and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of that distributed generation facility.

## **C. Requirements for Initial Interconnection**

1. A Customer Generator may begin operation of his distributed generation facility on an interconnected basis when:
  - a. The Application Process set forth in Section B above has been completed;
  - b. The customer has executed the Distributed Generation Facility Interconnection Agreement with the Cooperative and is in compliance with all requirements set forth therein, including all applicable safety, power quality, and interconnection requirements established by the National Electric Code, National Electric Safety Code, the Institute of Electrical and Electronic Engineers, and Underwriters Laboratories. The Cooperative may adopt additional safety, power quality, and interconnection requirements.
  - c. The Customer Generator has paid to the Cooperative all applicable charges and fees set forth in the Distributed Generation Facility Interconnection Agreement.
  - d. The Customer Generator has made all payments required by and has otherwise complied with the conditions for extension or modification of the Cooperative's distribution system as may be determined herein and as set forth in the Cooperative's service rules and regulations.
  - e. The Customer Generator has submitted to the Cooperative a copy of the final, signed, jurisdictional approval (Permit) for the customer's distributed generation facility from local government entity with jurisdiction over the customer's distributed generation facility (generally the local building and inspection department).
  - f. The Cooperative has provided the Customer Generator with written authorization to begin parallel operation of his distributed generation facility.

#### **D. Net Metering**

The Cooperative will use either a single-directional or bi-directional meter depending upon how the distributed generation facility is connected to the distribution system. If the distributed generation facility is connected to the distribution system on the Customer Generator's side of the retail service meter, the Cooperative will use a bi-directional meter for net metering. If the distributed generation facility is connected to the distribution system on the Cooperative's side of the retail service meter, the Cooperative will install an additional single directional meter for net metering at the member's expense.

#### **E. Obligations to Purchase Excess Net Energy**

When the electricity generated by the Customer Generator's distributed generation facility exceeds the electricity supplied by the Cooperative during the billing period, the Customer Generator shall receive payment for the excess net energy pursuant to the Cooperative's Net Metering Service, Rider NM-1. However, the Cooperative will only be required to purchase such energy from Customer Generators on a first-come, first-served basis until the cumulative generating capacity of all the Customer Generators' renewable energy resources equals 0.2 percent of the Cooperative's annual peak demand in the previous year.

#### **F. Charges for Interconnection And Net Metering**

The Customer Generator shall be responsible for all costs of installing, operating and maintaining protective equipment and/or electrical facilities required to interconnect with the Cooperative's distribution system. The Customer Generator shall be charged for the direct cost incurred by the Cooperative as a result of the interconnection and for providing net metering service. Said charges will be determined in accordance with the Cooperative's Net Metering Service, Rider NM-1.



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# Distributed Generation Policy

Appendix A

## APPLICATION FOR INTERCONNECTION OF DISTRIBUTED GENERATION FACILITY



## Application for Interconnection of Distributed Generation Facility

This application should be completed and returned to the Cooperative Customer Service representative at least forty-five (45) days prior to the customer's proposed interconnection date in order to begin processing the request. **Customers must not operate their distributed generation facilities in parallel with Diverse Power's distribution system until they have received written authorization for parallel operation from Diverse Power. Unauthorized parallel operation of customer's distributed generation facilities could result in injury to persons and/or damage to equipment or property.**

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### **SECTION 1 - CONTACT INFORMATION**

#### **A. CUSTOMER/APPLICANT INFORMATION**

Customer/Applicant Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

#### **B. ELECTRICAL CONTRACTOR**

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

### **SECTION 2 - GENERATING FACILITY INFORMATION**

Generator Type (Check One)      Photovoltaic\_\_\_\_, Wind\_\_\_\_, Fuel Cell\_\_\_\_, Hydro\_\_\_\_,  
Other \_\_\_\_\_

Generator Manufacturer: \_\_\_\_\_

Generator Model Name & Number: \_\_\_\_\_

Generator Power Rating (KW): \_\_\_\_\_

Disconnect Switch Manufacturer / Model Number: \_\_\_\_\_

Disconnect Switch Rating (A): \_\_\_\_\_

#### **INVERTER DATA (if applicable)**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_

Inverter Type (ferroresonant, step, pulse-width modulation, etc): \_\_\_\_\_

Type commutation:    forced            line

Harmonic Distortion: Maximum Single Harmonic (%) \_\_\_\_\_

Maximum Total Harmonic (%) \_\_\_\_\_

Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

**SECTION 3 - ONE-LINE DIAGRAM AND ADDITIONAL INFORMATION**

In addition to the items listed above, please attach **a detailed one-line diagram of the proposed facility**, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the project's planned operating mode (e.g., combined heat and power, peak shaving, etc.).

**SECTION 4 - INSTALLATION INFORMATION**

Installation Date: \_\_\_\_\_ Proposed Interconnection Date \_\_\_\_\_

**AGREE AND ACCEPT**

Customer agrees to provide the Cooperative with any additional information required to complete the interconnection. Customer shall operate his equipment within the guidelines set forth by the Cooperative.

\_\_\_\_\_  
Customer/Applicant \_\_\_\_\_  
Date

\*\*\*\*\*

**ELECTRIC COOPERATIVE CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:**

Cooperative contact: Scott Sawyer  
Title: Residential Marketing Services Coordinator  
Address: 1400 South Davis Rd.  
LaGrange, GA 30240  
Phone: 706-298-0808 Fax: 706-298-0809  
E-mail: [pv\\_program@diversepower.com](mailto:pv_program@diversepower.com)

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# **Distributed Generation Policy**

Appendix B

## **DISTRIBUTED GENERATION FACILITY INTERCONNECTION AGREEMENT**



## DISTRIBUTED GENERATION FACILITY INTERCONNECTION AGREEMENT

This Agreement made \_\_\_\_\_, 20\_\_\_\_, between Diverse Power Inc. (hereinafter \_\_\_\_\_ called "Cooperative"), and \_\_\_\_\_ located at \_\_\_\_\_ (hereinafter called the "Customer Generator"),

### WITNESSETH:

WHEREAS, the Cooperative is an electric membership corporation providing retail electric service; and

WHEREAS, the Customer Generator is a member of the Cooperative; and

WHEREAS, the Customer Generator desires to install, own, operate and maintain a distributed generation facility as defined in the Cooperative's Distributed Generation Policy; and

WHEREAS, the Customer Generator desires to interconnect with the Cooperative's electric distribution system (hereinafter called "System") of the Cooperative and has complied with the provisions for interconnection contained in the Cooperative's Distributed Generation Policy; and

WHEREAS, the Customer Generator desires to operate its generation equipment in parallel with the Cooperative's System.

NOW THEREFORE, it is understood and agreed that the Cooperative shall permit the Customer Generator to connect its generation system to the System and to operate its generation equipment in parallel with the System subject to the following terms and conditions:

1. **COST OF INTERCONNECTION AND PROTECTIVE EQUIPMENT:**

The Customer Generator shall be responsible for all costs of installing, testing, operating and maintaining protective equipment and/or electrical facilities required to interconnect the Customer's generation equipment with the System and for providing net metering service.

2. **OPERATING LIMITS:**

Operation of Customer Generator-owned parallel generating equipment shall not compromise the quality of electric service to other members on the System. The Customer Generator's parallel generating equipment shall meet the following minimum requirements:

a) Voltage

The Customer Generator shall be capable of operating its generating equipment at a voltage level of plus/minus 6% of nominal system voltage. Utility grade negative sequence/under-voltage relaying shall be used to trip the equipment off the line for negative excursions exceeding 8.25% of nominal for a maximum duration of six electrical cycles. Positive excursions exceeding 10% of nominal voltage shall cause the equipment to trip off line. Voltage regulating equipment shall maintain stable excitation levels with negligible hunting (less than 2% of nominal phase current).

b) Flicker

Parallel operation of the generating equipment shall not cause voltage flicker in excess of 2% of nominal line voltage as measured at the primary terminals of the Customer Generator's generator interface transformer.

c) Frequency

While operating in parallel with the System, the Customer Generator must provide a utility grade precision over/under frequency relay calibrated to trip for frequency excursions exceeding plus/minus 0.25 Hz for greater than 10 electrical cycles on a 60 Hz base.

d) Power Factor

Customer Generator-owned generation shall employ automatic means of reactive power regulation while operating in parallel with the System. The Customer Generator's generating equipment shall be capable of operation within the range of 0.8 lagging to 0.8 leading power factor as required by the Cooperative.

e) Harmonics

Total current harmonic distortion shall not exceed 5.0%. Total voltage harmonic distortion shall not exceed 5.0%, with a limit of 3.0% on any individual harmonic. Special consideration will be given to regenerative drive systems and invertors reviewed on an individual case-by-case basis.

f) Stability

While operating in parallel with the System, the Customer Generator's generating equipment shall maintain a stable output level with no noticeable hunting exhibited. In the event a system instability condition arises due to Customer Generator-owned generation, it is the Customer Generator's responsibility to take measures to rectify the source of instability.

3. GENERATOR INTERFACE TRANSFORMER:

The generator interface transformer is intended to provide isolation of the Customer Generator's generating equipment from the System. The inherent impedance of the transformer will minimize the impact on the System due to faults originating at the Customer Generator's generation equipment. This transformer may consist of an existing transformer serving the Customer Generator's loads or a dedicated transformer dictated by generator or prevailing system characteristics. The Cooperative determines interface transformer specifications and the determination of ownership of said transformer shall be at the Cooperative's option.

4. GENERATOR PARALLELING BREAKER:

It is required that a generator-paralleling breaker be of draw-out construction, electrically operated, and rated as a five electrical cycle device for fault clearing or tripping.

5. SYNCHRONIZATION:

It is the Customer Generator's responsibility to provide proper synchronizing of its parallel generating equipment. The Cooperative assumes no liability for any Customer Generator-owned generation and assumes that the Customer Generator operates its equipment at its own risk. Synchronizing equipment shall be capable of matching frequency within plus/minus 0.05 Hz and plus/minus 10 electrical degrees phase angle prior to paralleling breaker closure. Voltage shall be matched within plus/minus 4%.

6. SAFETY:

a) Operation of Customer Generator-owned generation equipment shall not present a safety hazard to the Cooperative employees or other members connected to

the System or the public at large. Under no circumstances shall the Customer Generator-owned generation be used or be capable of energizing a dead System circuit. A positive means of disconnecting and locking out the Customer Generator-owned generation equipment with visible air-gap shall be provided to insure safety of Cooperative operating personnel during line maintenance. This disconnecting means may be via a lockable air-break disconnect or by a lockable drawout circuit breaker. Islanding of the Customer Generator-owned generation (a situation whereby the Customer Generator's loads and generation remains connected to the bus) shall be prevented by protective relaying specified by the Cooperative based on individual review of the Customer Generator's proposed generating system.

- b) It is not the intent of this document to specify protection of the Customer Generator's generator. Protection of the Customer Generator's generating equipment is the responsibility of the Customer Generator and the Cooperative assumes no liability for damage or failure of the Customer Generator's generation equipment.
- c) The Customer Generator must provide verification that a qualified independent electrical engineer licensed to practice in Georgia has certified that the required manual disconnect switch has been installed properly; that the distributed generation facility has been installed in accordance with the manufacturer's specifications; and that the installation meets all applicable safety, power quality, and interconnection requirements established by the National Electrical Code, the National Electrical Safety Code and the Institute of Electrical and Electronics Engineers;
- d) The Customer Generator must provide verification that the vendor has certified that the distributed generation facility which has been installed is in compliance with the requirements established by Underwriters Laboratories or other national testing laboratories;
- e) Prior to the initial interconnection of the Customer Generators' distributed generation facility to the Cooperative's distribution system, the Customer Generator will submit to the Cooperative a copy of the signed jurisdictional approval (PERMIT) for Customer Generator's distributed generation facility from the local government entity with jurisdiction over the Customer Generator's distributed generation facility (generally the local building and inspections department).
- f) In the case of static inverter-connected renewable fuel generators with an alternating current capacity in excess of 10 kilowatts, the Customer Generator must have the inverter settings inspected by the Cooperative. The Cooperative may impose a fee on the Customer Generator of no more than \$50 for such inspection;
- g) In the case of non-static inverter-connected renewable fuel generators, the Customer Generator must interconnect according to the Cooperative's interconnection guidelines and the Cooperative must inspect all protective equipment settings. The Cooperative may impose a fee on the Customer Generator of no more than \$50 for such inspection.

7. **LIMITATION OF LIABILITY AND INDEMNIFICATION:**

Notwithstanding any other provision in this Agreement, with respect to the Cooperative's provision of electric service to Customer Generator and the services provided by the Cooperative pursuant to this Agreement, the Cooperative's liability to Customer Generator shall be limited as set forth in accordance with this paragraph.

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 protection 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, legal cease and desist orders, 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. ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL THE COOPERATIVE BE LIABLE TO THE CUSTOMER GENERATOR FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUE, EARNINGS, PROFITS, OR INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF CUSTOMER GENERATOR'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.

The Customer Generator shall assume all liability for and shall indemnify the Cooperative and its members, trustees, directors, officers, managers, employees, agents, representatives, affiliates, successors and assigns for and shall hold them harmless from and against any claims, losses, costs, and expenses of any kind or character to the extent that they result from the Customer Generator's design, construction, installation, operation or maintenance 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.

The Cooperative and Customer Generator 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 where the electric energy first leaves the wires or facilities owned by the Cooperative and enters the wires or facilities provided by the Customer Generator (the "Point of Interconnection"). The Cooperative does not assume any duty of inspecting the Customer Generator's lines, wires, switches, or other equipment or property. The Customer Generator assumes all responsibility for the electric service supplied hereunder and the facilities used in connection therewith, at or beyond the Point of Interconnection.

#### 8. INSURANCE:

The Customer Generator agrees to take out and maintain throughout the term of this Agreement adequate liability insurance and, if applicable, worker's compensation and employer's liability, as required by law, covering all the Customer Generator's employees or representatives who perform any obligations of the Customer Generator set forth herein.

- a. The Cooperative shall be named as an Additional Insured on all the Customer Generator's policies of insurance.

- b. A current certification of the Customer Generator's insurance policies with the Cooperative being named as an Additional Insured must be on file with the Cooperative at all times. The policies of insurance shall be in such form and issued by such insurer as shall be satisfactory to the Cooperative. The Customer Generator shall furnish the Cooperative a certificate evidencing compliance with the foregoing requirements within the first 30 days of each insurance policy renewal term, and shall provide not less than 30 days prior written notice to the Cooperative of any cancellation or material change in the insurance

9. TESTING:

The Customer Generator shall retain a qualified independent electrical engineer licensed to practice in Georgia to maintain and annually test system protective relaying for the Customer Generator's generating equipment. Upon demand, the Customer Generator shall produce records of testing and relay setting sheets for review by the Cooperative.

The Customer Generator shall verify proper tripping and lockout of the generator system for all defined faults as determined by the Cooperative during final review of system relay requirements. Failure to maintain records will be grounds for refusal of permission to operate parallel generating equipment. Under no circumstances shall parallel generating equipment be operated with inoperative or defective protective relays. The Cooperative at the expense of the Customer Generator will perform testing and maintenance of the inter-tie package.

10. ACCESS:

The Cooperative shall have access at all times to the Customer Generator's premises for the purpose of metering reading and performing operations and maintenance activities. The Cooperative reserves the right, but not the obligation, to inspect the Customer Generator's distributed generation facility.

11. COMPLIANCE PROCEDURE:

The Cooperative reserves the right to automatically or manually disconnect the Customer Generator's distributed generation facility without prior notice whenever, at the Cooperative's sole discretion, the Customer Generator is deemed by the Cooperative to not be in compliance with the minimum interconnection requirements as specified via this Agreement. The interconnection will remain open until corrective action is taken and suitable testing is completed.

12. INTERCONNECTION AND NET METERING CHARGES:

The Cooperative shall install, own and operate metering equipment that it deems necessary to permit an accurate determination of the quantity of energy delivered by the Cooperative to the Customer Generator and the quantity of energy generated and delivered by the Customer Generator to the Cooperative's distribution system. The Customer Generator shall pay the Cooperative for the costs incurred by the Cooperative to provide the interconnection of the Customer Generator's distributed generation facility to the Cooperative's distribution system and to provide net metering service, in accordance with the rates, terms and conditions of the Cooperative's Net Metering Service Rider NM-1 attached to and made a part of this Agreement.

13. TERM:

This Agreement shall become effective on the date first above written and shall remain in effect until terminated by either party giving to the other thirty (30) days' written notice; provided, however, the Cooperative may also terminate this Agreement by giving thirty (30) days' written notice to the Customer Generator upon any breach of this Agreement by the Customer Generator or upon failure of the Customer Generator's

distributed generation facility to generate energy in parallel with the Cooperative's distribution system for six (6) consecutive months.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement all as of the day and year first above written.

ATTEST:

\_\_\_\_\_

\_\_\_\_\_  
Diverse Power, Inc.

By: \_\_\_\_\_  
Title

ATTEST:

\_\_\_\_\_

\_\_\_\_\_  
Customer Generator

By: \_\_\_\_\_  
Title



# Distributed Generation Policy

## Appendix C

# NET METERING SERVICE RIDER NM-1





## **A. PURPOSE**

The purpose of this Rider is to establish the methods and procedures for determining credits, payments, and charges applicable to members of the Cooperative who own and operate a distributed generation facility as defined in the Cooperative's Distributed Generation Policy.

## **B. APPLICABILITY**

This Rider applies to any member of the Cooperative owning and operating a distributed generation facility as defined in the Cooperative's Distributed Generation Policy. The capacity of a distributed generation facilities used by residential customers shall not exceed 10 kW and the capacity of a distributed generation facility used by a commercial customer shall not exceed 100 kW.

## **C. DEFINITIONS**

The following words and terms shall have the following meanings unless the context clearly indicates otherwise:

1. "Billing period" means, as to a particular customer, the time period between the dates on which the Cooperative normally reads the retail service meter for billing purposes.
2. "Bi-directional meter" is a meter capable of measuring (but not necessarily displaying) electricity flow in both directions.
3. "Bi-directional metering" means measuring the amount of electricity supplied by the Cooperative and the amount of electricity fed back to the Cooperative by the customer's distributed generation facility using a single meter.
4. "Customer" means a member of Diverse Power Inc.
5. "Customer Generator" means the owner and operator of a distributed generation facility.
6. "Distributed generation facility" means a facility owned and operated by a customer of the Cooperative for the production of electrical energy that:
  - a. Uses a fuel cell, or a renewable energy source;
  - b. Has peak generating capacity of not more than 10 kW for a residential application and 100 kW for a commercial application;
  - c. Is located on the customer's premises;
  - d. Operates in parallel with the Cooperative's distribution facilities;
  - e. Is connected to the Cooperative's distribution system on either side of the Cooperative's retail service meter; and
  - f. Is intended primarily to offset part or all of the customer generator's requirements for electricity.
7. "Excess net energy" is the positive difference between the electricity generated by the customer's distributed generation facility and the electricity consumed by the Customer Generator during the billing period.

8. "Fixed charge rate" shall be a percentage factor that includes components for the recovery of operations and maintenance expense, administrative and general expense, taxes, depreciation and the cost of capital which are all associated with owning and operating the utility plant necessary for interconnection and for the provision of net Metering pursuant to this Rider. The fixed charge rate may be modified at any time by the Cooperative to reflect prevailing costs.
9. "Net metering customer" means a Customer Generator receiving net metering service.
10. "Net metering" means measuring the difference, over the billing period, between electricity supplied to a Customer Generator from the electric grid and the electricity generated and fed into the electric grid by the Customer Generator, using a single bi-directional meter or an additional single direction meter.
11. "Renewable energy sources" means energy supplied from technologies as a solar photovoltaic system, wind turbine, biomass system, or other technologies approved in the Georgia Green Pricing Accreditation Program.

#### **D. CONDITIONS OF SERVICE**

The Generator Customer must have met all of the conditions of interconnection contained in the Cooperative's Distributed Generation Policy, including submittal of the Application for Interconnection of Distributed Generation Facility and the execution of the Distributed Generation Facility Interconnection Agreement.

#### **E. TYPES OF NET METERING**

Net Metering will be accomplished using bi-directional metering for distributed generation facilities interconnected on the Customer Generator's side of the retail service meter or single directional metering for distributed generation facilities interconnected with the Cooperative's distribution system on the Cooperative's side of the retail service meter.

#### **F. DISPOSITION OF ENERGY**

If the electricity consumed by the Customer Generator during the billing period exceeds the electricity generated by the customer's distributed generation facility during the billing period, then all electricity generated by the customer generation shall be deemed to have been used by the Customer Generator. If the electricity generated by the customer's distributed generation facility during the billing period exceeds the electricity consumed by the Customer Generator, then such excess net energy shall be purchased by the Cooperative as provided under the Purchase Rate section of this Rider.

#### **G. RATES AND CHARGES FOR NET METERING SERVICE**

Each Customer Generator shall be charged for electric service under that rate schedule which would otherwise be applicable if the customer was not a Customer Generator. In addition, each Customer Generator shall pay a monthly service charge based upon the direct costs to the Cooperative associated with interconnecting the customer's distributed generation facility and with the provision of and administration of net metering services. Said monthly service charge shall include the following:

1. A facilities charge based on the total cost of all facilities installed by the Cooperative, including transformers, protective devices, controls and monitoring equipment times the Cooperative's monthly fixed charge rate;
2. A facilities charge based on the total incremental cost of metering equipment times the Cooperative's monthly fixed charge rate; and
3. \$5.00 per month administrative charge.

#### **H. PURCHASE RATE**

The rate used to determine the dollar amount paid for net energy purchased by the Cooperative shall be based upon the Cooperative's avoided average annual cost of purchased power. The purchase rate as of the effective date of this Rider shown below is:

All kWh	\$0.031 per kWh
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The above-stated rate may be adjusted annually at the sole discretion of the Cooperative, to reflect the prevailing avoided average cost of purchased power.

The Cooperative will purchase energy from Customer Generators on a first-come, first served basis only until the cumulative generating capacity of all the Customer Generators' renewable resources equals 0.2 percent of the Cooperative's annual peak demand in the previous year.

**I. TERM OF SERVICE**

The term of service under this Rider shall be the same as that set forth in the Distributed Generation Facility Interconnection Agreement between the Customer Generator and the Cooperative.

Effective: June 1, 2008

## PV Systems Certified by the Florida Solar Energy Center

As of March 2008, the following is a list of PV systems that have been certified by the Florida Solar Energy Center in accordance with their design review process. For extra information about a particular system, click on the company name in table below.

Company	Address	Sales Contact	Technical Contact
<a href="#"><u>AEE Solar</u></a>	P.O. Box 339 Redway, CA 95560	Michael Ashmore (707) 459-4978	Michael Ashmore (707) 459-4978
<a href="#"><u>Affordable Solar Energy, Inc.</u></a>	7588 Ortega Bluff Pkwy Jacksonville, FL 32244	Jerry Ecklor (904) 233-6906	Jerry Ecklor (904) 233-6906
<b>Affordable Solar Group</b>	2501 Yale Boulevard, Suite 105 Albuquerque, NM 87106	Nathaniel Curtis (505) 944-4266	Craig Faw (505) 944-4245
<a href="#"><u>Alpha Energy</u></a>	3767 Alpha Way Bellingham, WA 98226	(360) 392-2100	(360) 392-2100
<b>Compass Solar Energy</b>	1604 Balihai Court Gulf Breeze, FL 32563	Scott Arnold (850) 677-1186	Scott Arnold (850) 677-1186
<a href="#"><u>Complete Electric</u></a>	P.O. Box 2272 Vero Beach, FL 32961	Mike Macleary (772) 388-0533	Mike Mcleary (772) 388-0533
<b>Earth Solar</b>	6315 Canyon Drive Amarillo, TX 79110	Maureen (800) 329-3283	Dave Regel (800) 329-3283x706
<b>Energy Independence Solutions</b>	499 Awin Circle SE Palm Bay, FL 32905	(321) 987-9079	(321) 987-9079
<a href="#"><u>groSolar</u></a>	601 Old River Road, Suite 3 White River Junction, VT 05001	(800) 374-4494	(800) 374-4494
<a href="#"><u>Key Power Services</u></a>	160 Tahiti Street Naples, FL 34113	John McNicholas (239) 290-6040	John McNicholas (239) 290-6040
<a href="#"><u>Lamar Advertising</u></a>	1401 N Tarragona Street Pensacola, FL 32501	(501) 416-4451	Donald Long Jr. (501) 416-4451Back
<a href="#"><u>OneWorld</u></a>	1758 Crawford-Smithonia Rd. Colbert, Georgia 30628	Tim Blackwell (706) 742-7760	Keith Freeman (912) 596-1780
<a href="#"><u>Seaside Endeavors</u></a>	222 Oleander Street Neptune Beach, Florida 32266	Paul Nicholson (904) 534-1155	Paul Nicholson (904) 534-1155
<a href="#"><u>Sharp Electronics</u></a>	5901 Bolsa Avenue Huntington Beach, CA 92647	Sales (714) 514-4790	Edgar Becerra (714) 514-9424
<a href="#"><u>Solar Electric Supply</u></a>	7960-B Soquel Dr. #140 Aptos, CA 95003	Sales (877) 297-0014	Technical (831) 462-8243
<a href="#"><u>Solar Energy Systems</u></a>	160 Smallwood Avenue Fort Pierce, FL 34982	Sales (772) 464-2663	Technical (772) 464-2663
<a href="#"><u>Solar Integrated Technologies</u></a>	1837 E. Martin Luther King Jr. Blvd Los Angeles, California 90058	Tim Kehrli (323) 231-0411	Joel Davidson (323) 231-0411

<b>Company</b>	<b>Address</b>	<b>Sales Contact</b>	<b>Technical Contact</b>
<a href="#"><u>Solar-Ray Inc.</u></a>	2014 Page Ave Orlando, FL 32806	Michael Brown (407) 443-4404	
<a href="#"><u>Solar Source</u></a>	10840 Endeavour Way Largo, FL 33777	Sylvain Mandel (800) 329-1301	John Nettles (800) 329-1301
<a href="#"><u>Sun Electronics</u></a>	511 NE 15th Street Miami, FL 33132	John Kimball (305) 536-9917	Roger Messenger (561) 276-9447
<a href="#"><u>SunWize</u></a>	1155 Flatbush Road Kingston, NY 12401	Joanne Rogers (800) 232-7652	Luc Collin (845) 336-0146x137

**Photovoltaic Installers List - Georgia**  
List Courtesy of Southface

Advanced Energy Systems  
770-979-9293  
Georgia  
[www.advanced-energy.net](http://www.advanced-energy.net)

One World Sustainable Energy Corporation  
Athens/Atlanta area: 706/742-7760  
Savannah: 912/596-1780  
Georgia

Solairgen, Inc.  
706-867-0678  
Georgia

Southern Energy Solutions  
770-973-6298  
Marietta, Georgia  
[www.soenso.com](http://www.soenso.com)  
[info@soenso.com](mailto:info@soenso.com)

TEC Restorations  
770-345-0638  
Georgia  
[www.tecrestorations.com](http://www.tecrestorations.com)

Source: [http://www.southface.org/solar/solar-roadmap/solar\\_how-to/solar-vendors.htm#PVvendors](http://www.southface.org/solar/solar-roadmap/solar_how-to/solar-vendors.htm#PVvendors)  
List as of April 1, 2008.

*Note: Diverse Power Inc. provides this list as a public service to our members. The list is provided for informational purposes only. We do not endorse or promote or recommend any one vendor or installer over another. Diverse Power assumes no responsibility or liability for their use or the quality of the service or product of provided.*

## Photovoltaic Vendors List

List Courtesy of Southface.

List as of May 1, 2008.

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Southern Energy Solutions  
770-973-6298  
Marietta, Georgia  
[www.soenso.com](http://www.soenso.com)  
[info@soenso.com](mailto:info@soenso.com)

Global Solar  
520-546-6313  
TF PV  
[www.globalsolar.com](http://www.globalsolar.com)

Alter Systems, LLC  
886-568-5579  
Retailer  
[www.altersystems.com](http://www.altersystems.com)

Hutton Communications, inc  
877-896-2806  
Retailer  
[www.huttononline.com/HuttonOnline/huttonsolar.aspx](http://www.huttononline.com/HuttonOnline/huttonsolar.aspx)

Atlanta Solar  
423-265-0307  
Retailer  
[www.atlantasolar.com/index.php](http://www.atlantasolar.com/index.php)

KingSolar  
800-589-5560  
Retailer  
[www.kingsolar.com/](http://www.kingsolar.com/)

BP Solar  
301-698-4200  
MonoC, MultiC PV, Retailer  
[www.bpsolar.com/](http://www.bpsolar.com/)

Kyocera Corporation  
800-223-9086  
MultiC PV  
[global.kyocera.com/](http://global.kyocera.com/)

Energy Photovoltaics Inc  
609-587-3000  
TF PV  
[www.epv.net/](http://www.epv.net/)

Mitsubishi Electric Corporation  
81-3-3218-2111  
MultiC PV  
[global.mitsubishielectric.com/bu/solar/index.html](http://global.mitsubishielectric.com/bu/solar/index.html)

Evergreen Solar Inc  
508-357-2221  
Stringribbon PV  
[www.evergreensolar.com/](http://www.evergreensolar.com/)

New England Solar  
800-914-4131  
Retailer  
[www.newenglandsolar.com/](http://www.newenglandsolar.com/)

First Solar LLC  
602-414-9300  
CdTe PV  
[www.firstsolar.com/index.html](http://www.firstsolar.com/index.html)

OutBack Power Systems  
360-435-6030  
Inverters, Controls  
[www.outbackpower.com/](http://www.outbackpower.com/)

GE Energy  
303-451-7500  
MonoC PV  
[www.gepower.com/prod\\_serv/products/solar/en/index.htm](http://www.gepower.com/prod_serv/products/solar/en/index.htm)

PowerFilm  
TF PV  
[www.iowathinfilm.com/](http://www.iowathinfilm.com/)

Real Goods  
800-442-1972  
Retailer  
[www.realgoods.com/](http://www.realgoods.com/)

The Solar BiZ  
888-826-0939  
Retailer  
[www.thesolar.biz/](http://www.thesolar.biz/)

Sharp Solar Division  
81-745-63-3579  
MonoC, MultiC PV  
[solar.sharpusa.com/solar/home/0,2462,,00.html](http://solar.sharpusa.com/solar/home/0,2462,,00.html)

United Solar Ovonic Corp  
248-364-0510  
TF PV  
[www.uni-solar.com/](http://www.uni-solar.com/)

Shell Solar  
805-388-6519  
MonoC, MultiC, TF PV  
[www.shell.com/home/Framework?siteId=shellsolar](http://www.shell.com/home/Framework?siteId=shellsolar)

Sunelco  
Sun Power Corporation  
408-991-0900  
Hi Eff PV  
[www.sunpowercorp.com/html/](http://www.sunpowercorp.com/html/)

Solar Cells Ltd  
385-21-374-510  
TF PV  
[www.solar-cells.net/solar.html](http://www.solar-cells.net/solar.html)

Sun Power Corporation  
408-991-0900  
Hi Eff PV  
[www.sunpowercorp.com/html/](http://www.sunpowercorp.com/html/)

Solar Components Corporation  
603-668-8186  
Retailer  
[www.solar-components.com/default.htm](http://www.solar-components.com/default.htm)

Sunstor  
864-297-6776  
Retailer, Installer  
[www.sunstor.net](http://www.sunstor.net)

Solar Direct  
800-333-WARM  
Retailer  
[www.solardirect.com/index.htm](http://www.solardirect.com/index.htm)

Sunways AG  
49-7531-99677-0  
MultiC PV  
[www.sunways.de/de/](http://www.sunways.de/de/)

Solatron Technologies  
888-647-6527  
Retailer  
[www.partsonsale.com/](http://www.partsonsale.com/)

Solar Power Industries  
724-379-2001  
MultiC PV  
[www.solarpowerindustries.com/](http://www.solarpowerindustries.com/)

Sunlight Products, Inc  
770-300-0030  
Retailer  
[mikemacl@aol.com](mailto:mikemacl@aol.com)

Sunelco  
800-338-6844  
Retailer  
[www.sunelco.com/](http://www.sunelco.com/)



