

**Standard Interconnection Agreement for  
Customer-Owned Renewable Generation System  
<Size>**

This Agreement is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_, (hereinafter called "Customer"), located at \_\_\_\_\_ in \_\_\_\_\_, South Carolina, and <Name of Utility> (hereafter called "Utility"), a <describe utility>. Customer and Utility shall collectively be called the "Parties". The physical location/premise where the interconnection is taking place is: \_\_\_\_\_.

**WITNESSETH**

**Whereas**, Utility, operates an electric distribution system serving [describe Utility service area];

**Whereas**, Customer has made a written Application to Utility, a copy being attached hereto, to allow connection of Customer-Owned Renewable Generation ("CRG") system for any length of time to the distribution system at the location listed above; and

**Whereas**, Utility desires to provide interconnection of CRG under conditions which will insure the safety of Utility customers and employees, reliability and integrity of its distribution system;

**NOW, THEREFORE**, for and in consideration of the mutual covenants and agreements herein set forth, the parties hereto covenant and agree as follows:

**Section 1. Definitions**

1.01 "Customer-owned renewable generation system" or "CRG system" means an electric generating system located on Customer's premises that is primarily intended to offset part or all of the Customer's electricity requirements with renewable energy that is generated using one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, waste heat, or hydroelectric power.

1.02 "Gross power rating" or "GPR" means the total manufacturer's AC nameplate generating capacity of an on-site CRG system that will be interconnected to and operate in parallel with Utility distribution facilities. For inverter-based systems, the GPR shall be calculated by multiplying the total installed DC nameplate generating capacity by .85 in order to account for losses during the conversion from DC to AC.

## **Section 2. Scope of Agreement**

2.01. This Agreement defines the terms and conditions under which Utility and Customer agree to interconnect CRG of \_\_\_ kW or less (as described in Exhibit A) at a standard Utility primary voltage.

## **Section 3. Interconnection Application**

3.01. In order to commence the process for interconnection of the CRG system, Customer shall complete and submit to Utility a Standard Interconnection Application (a copy of which is attached hereto as Exhibit A, and incorporated in this Agreement by this reference).

## **Section 4. Applicable Codes and Standards**

4.01. Prior to operating in parallel with Utility's electric system, Customer shall certify that the CRG equipment, its installation, its operation and its maintenance shall be in compliance with the following standards:

- a. IEEE-1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power System;
- b. IEEE-1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnection Distributed Resources with Electric Power Systems;
- c. UL-1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources;
- d. The National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes; and
- e. The manufacturer's installation, operation and maintenance instructions.

4.02. Customer shall provide a copy of the manufacturer's installation, operation and maintenance instructions for the CRG equipment to Utility.

## **Section 5. Inspection Requirements**

5.01. Prior to commencing parallel operation with Utility's electric system, Customer shall have the CRG system inspected and approved by the appropriate code authorities having jurisdiction. Customer shall provide documentation of such inspection and approval to Utility.

5.02. Prior to and after operation of the CRG in parallel with Utility's electric system, authorized Utility representatives may inspect the CRG system to verify that it is, and continues to be, in compliance with the standards and codes contained in this Agreement. At least ten (10) business days prior to initially placing the CRG system in service, Customer shall provide written notification to Utility advising Utility of the date and time at which Customer intends to place the

system in service, and Utility shall have the right to have personnel present on the in-service date in order to ensure compliance with the requirements of this Agreement.

5.03. Utility shall provide Customer with as much notice as is reasonably practicable; either in writing, email, facsimile or by phone as to when Utility may conduct inspection and/or documentation review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Utility shall have access to Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed by this Agreement, or if necessary, to meet Utility's obligations to provide service to its customers.

5.04. In no event shall any statement, representation, or lack thereof, either express or implied, by Utility, relieve the Customer of exclusive responsibility for the Customer's system. Specifically, any Utility inspection of the CRG system shall not be construed as confirming or endorsing the system design or its operating or maintenance procedures nor as a warranty or guarantee as to the safety, reliability, or durability of the CRG equipment. Utility's inspection, acceptance, or its failure to inspect shall not be deemed an endorsement of any CRG equipment or procedure.

## **Section 6. Electric System Protection Requirements**

6.01. Customer certifies that the CRG equipment includes a utility-interactive inverter or interconnection system equipment that ceases to interconnect with the Utility upon a loss of utility power. The inverter shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing laboratory ("NRTL") to comply with UL 1741. The NRTL shall be approved by the Occupational Safety & Health Administration ("OSHA").

## **Section 7. Modifications and/or Additions to the Customer-Owned Renewable Generation System**

7.01. It is Customer's responsibility to notify Utility of any change to the GPR of the CRG by submitting a new application for interconnection specifying the modifications at least thirty (30) days prior to making the modifications.

7.02. If Customer adds another CRG system which (i) utilizes the same utility-interactive inverter for both systems or (ii) utilizes a separate utility-interactive inverter for each system, then Customer shall provide Utility with sixty (60) days written notice of the addition.

## **Section 8. Gross Power Rating**

8.01. The CRG must have a GPR that does not exceed 90% of the Customer's utility distribution service rating at the Customer's location. If the GPR does exceed that 90% limit, the Customer shall be responsible to pay the cost of upgrades for that distribution service to accommodate the GPR capacity and ensure the 90% threshold is not breached.

## **Section 9. Administrative Requirements**

9.01. Subject to an approved inspection, including installation of acceptable disconnect switch, this Agreement shall be executed by Utility within ##### (##) calendar days of receipt of a completed application. Customer must execute this Agreement and return it to Utility at least ##### (##) calendar days prior to beginning parallel operations with Utility's electric system and within one (1) year after Utility executes this Agreement.

9.02. Once Utility has received Customer's written documentation that the requirements of this Agreement have been met and the correct operation of the manual switch has been demonstrated to a Utility representative, Utility will, within##### (##) business days, send written notice that parallel operation of the CRG system may commence.

## **Section 10. Customer Insurance Requirements**

10.01. Customer shall obtain and retain, for as long as the CRG is interconnected with the Utility's electric system, liability insurance which protects the Customer from claims for bodily injury and/or property damage. For a residential Customer, the minimum coverage shall be a standard homeowner's insurance policy with liability coverage in the amount of at least \$100,000 per occurrence. For a non-residential Customer, the minimum coverage shall be comprehensive general liability insurance with coverage of at least \$300,000 per occurrence. This insurance shall be primary for all purposes.

10.02. The Customer shall provide certificates to Utility evidencing the required coverage on a form suitable to the Utility. The Utility reserves the right to refuse to establish, or continue the interconnection to the CRG if such insurance is not in effect.

## **Section 11. Customer Equipment**

11.01. Customer is responsible for the protection of its generation equipment, inverters, protection devices, and other system components from damage from the normal and abnormal operations that occur on Utility's electric system in delivering and restoring system power. Customer is also responsible for ensuring that the CRG equipment is inspected, maintained, and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely. Such inspection shall be made after large storms have traversed Customer's location and after connection with Utility's system has been restored.

## **Section 12. Manual Disconnect Switch**

12.01. Customer shall install a manual disconnect switch of the visible load break type to provide a separation point between the AC power output of the CRG system and any Customer wiring connected to Utility's electric system such that back feed from the CRG system to Utility's electric system cannot occur when the switch is in the open position. The manual disconnect switch shall be mounted separate from the meter socket on an exterior surface adjacent to the meter. The switch shall be readily accessible to Utility and capable of being locked in the open

position with a Utility padlock. When locked and tagged in the open position by Utility, this switch will be under the control of Utility.

12.02. Utility may open the switch, isolating the CRG system, without prior notice to Customer. To the extent practical, however, prior notice shall be given. If prior notice is not given, Utility shall leave a door hanger at the time of disconnection notifying the Customer that the CRG has been disconnected, including an explanation of the condition necessitating such action. The switch will be re-closed by Utility as soon as practical once the conditions causing the disconnection cease to exist. Typical conditions which may require the switch to be opened include, but are not limited to:

- Utility electric system emergencies or maintenance requirements.
- Hazardous conditions existing on Utility's electric system due to the operation of the CRG or protective equipment as determined by Utility.
- Adverse electrical effects (such as power quality problems) on the electrical equipment of Utility's other electric consumers caused by the CRG as determined by Utility.
- Failure of Customer to pay amounts owed to Utility.

12.03. On termination of services pursuant to this Agreement, Utility shall open and padlock the manual disconnect switch and remove any additional metering equipment related to this Agreement. At the Customer's expense, within ##### (##) working days following the termination, the Customer shall permanently isolate the CRG and any associated equipment from Utility's electric supply system, notify Utility that the isolation is complete, and coordinate with Utility for return of Utility's lock.

### **Section 13. Metering Equipment**

13.01. Utility will furnish, install, own and maintain metering equipment capable of measuring the flow of kilowatt-hours (kWh) of energy. The Customer's service associated with the CRG will be metered at a single metering point. The metering equipment will measure energy delivered by Utility to Customer and also measure energy delivered by Customer to Utility. Customer agrees to provide safe and reasonable access to the premises for installation of this equipment and its future maintenance or removal.

### **Section 14. Indemnification**

14.01. Customer agrees to indemnify, defend and hold harmless Utility, its subsidiaries or affiliates, Piedmont Municipal Power Agency, and their respective employees, officers and directors, against any and all liability, loss, damage, cost or expense, including attorneys' fees, which Utility, its subsidiaries, affiliates, and their respective employees, officers and directors may hereafter incur, suffer or be required to pay by reason of negligence on the part of the Customer in fulfilling its obligations under this Agreement.

## **Section 15. Assignment**

15.01. Customer shall not have the right to assign its benefits or obligations under this Agreement without Utility's prior written consent and such consent shall not be unreasonably withheld. If there is a change in ownership of the CRG, Customer shall provide written notice to Utility at least ##### (##) days prior to the change in ownership. The new owner will be required to assume in writing Customer's rights and duties under this Agreement or to execute a new Standard Interconnection Agreement. The new owner shall not be permitted to net meter or begin parallel operations until the new owner assumes this Agreement or executes a new Agreement.

## **Section 16. Lease Agreements and Retail Purchase of Electricity**

16.01. Customer may contract with a third party for the purchase, lease, operation, or maintenance of an on-site CRG under terms and conditions that do not include the retail purchase of electricity from the third party. Customer shall provide Utility a copy of the lease agreement for any leased interconnection or generation equipment. Customer shall not enter into any lease agreement that results in the retail purchase of electricity or the retail sale of electricity from the CRG. Notwithstanding such restriction, in the event that Customer is determined to have engaged in the retail purchase of electricity from a party other than Utility, then Customer shall be in breach of this Agreement.

## **Section 17. Entire Agreement**

17.01. This Agreement supersedes all previous agreements and representations either written or verbal heretofore made between Utility and Customer with respect to matters herein contained. This Agreement, when duly executed, constitutes the only Agreement between the Parties relative to the matters herein described.

## **Section 18. Governing Law & Tariff**

18.01. This Agreement shall be governed by, and construed and enforced in accordance with, the laws, rules and regulations of the State of South Carolina and Utility's rate schedules as they may be modified, changed, or amended from time to time.

18.02. This Agreement incorporates by reference the terms of the Utility's applicable retail rate schedule, in particular Rate Schedule <##>, and such associated technical terms and abbreviations, general rules and regulations and standard electric service requirements as may be applicable, and , as may be amended from time to time, are incorporated by reference. To the extent of any conflict between this Agreement and such rate schedule, the schedule shall control.

18.03. Utility and Customer recognize that the South Carolina law and/or the South Carolina Public Service Commission's rules, including those rules directly addressing the subject of this Agreement, may be amended from time to time. In the event that such statutes and/or rules are amended and such amendments affect the terms and conditions of this Agreement, Utility and Customer agree to supersede and replace this Agreement with a new Interconnection Agreement which complies with the amended statutes/rules.

IN WITNESS WHEREOF, Customer and Utility have executed this Agreement the day and year first above written.

**UTILITY**

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

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

Date: \_\_\_\_\_

**CUSTOMER**

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Customer Account Number)

Date: \_\_\_\_\_

## Exhibit A

# APPLICATION INTERCONNECTION OF CUSTOMER-OWNED RENEWABLE GENERATION SYSTEMS

TIER 1 - 20 KW or Less (Residential)  
TIER 2 - 100 KW or Less (Non-residential)

<Utility> customers who install customer-owned renewable generation systems and desire to interconnect those facilities with Utility's electrical system are required to complete this application. This application can be obtained from the local Utility office or can be downloaded from Utility's website at: [www.xxxxxxxxxxxx.com](http://www.xxxxxxxxxxxx.com). When the completed application and fees are returned to Utility, the process of completing the appropriate Tier 1 or Tier 2 Interconnection Agreement can begin. The Interconnection Agreements may be obtained at the local Utility office.

### 1. Customer Information

Name: \_\_\_\_\_

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

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

Phone Number: \_\_\_\_\_ Alternate Phone Number: \_\_\_\_\_

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

### 2. Facility Information

Facility Location: \_\_\_\_\_

<Utility> Account Number: \_\_\_\_\_

Manufacturers Name/Address: \_\_\_\_\_

Reference or Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

### 3. Facility Rating Information

Gross Power Rating: \_\_\_\_\_ (“Gross power rating” means the total manufacturer’s AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the utility’s distribution facilities. For inverter-based systems, the AC nameplate generating capacity shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC.

Fuel or Energy Source: \_\_\_\_\_

Anticipated In- Service Date: \_\_\_\_\_

### 4. Application Fee

The application fee is based on the Gross Power Rating and must be submitted with this application. The non-refundable application fee is \$#### for Tier 2 installations. There is no application fee for Tier 1 installations.

### 5. Required Documentation

Prior to completion of the Interconnection Agreement, the following information must be provided to the Company by the Customer.

A. Documentation demonstrating that the installation complies with:

1. IEEE 1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power Systems;
2. IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems;
3. UL 1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources;
4. The National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes; and
5. The manufacturer’s installation, operation and maintenance instructions.

B. Documentation that the customer-owned renewable generation has been inspected and approved by local code officials prior to its operation in parallel with Utility’s system to ensure compliance with applicable local codes.

C. Proof of general liability insurance for Tier 1 generators (\$100,000) or Tier 2 generators (\$300,000).