

# **GAINESVILLE REGIONAL UTILITIES (GRU)**

## **AGREEMENT**

### **FOR INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED RESOURCES**

This interconnection agreement ("Agreement") is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between \_\_\_\_\_ (hereinafter called the Owner/Operator) located at \_\_\_\_\_ in \_\_\_\_\_, Florida and the City of Gainesville ("City"), a Florida municipal corporation doing business as Gainesville Regional Utilities ("GRU"). The Owner/Operator Account subject to this Agreement is GRU Account Number \_\_\_\_\_.

#### **WITNESSETH**

**Whereas**, GRU pursuant to authority of its Charter, Ch. 90-394, Laws of Florida, as amended, operates an electric distribution system serving the City of Gainesville and certain unincorporated areas of Alachua County, Florida; and

**Whereas**, a Distributed Resource (DR) is defined as any source of electrical energy that is not connected directly to the high voltage electrical transmission system, but typically connected to the medium voltage electrical distribution system. For the purpose of this Agreement, any reference to the "distribution system" will mean GRU's electrical distribution system. A DR includes both rotating generation (i.e., induction and synchronous machines) and static power conversion technologies (i.e., solar, fuel cells, etc.); and

**Whereas**, the Owner/Operator has made a written Application to GRU, a copy being attached hereto, to allow connection of an Owner/Operator's Distributed Resources (DR) for any length of time to the distribution system at the location listed above; and

**Whereas**, GRU desires to provide interconnection of Owner/Operator's DR under conditions which will insure the safety of GRU 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:

#### **1. SCOPE OF AGREEMENT**

This Agreement defines the terms and conditions under which GRU and the Owner/Operator agree to interconnect one or more Owner/Operator generating facilities of \_\_\_ kW or less (as described in Exhibit A) at a standard GRU primary or secondary voltage to the distribution system.

#### **2. ESTABLISHMENT OF POINT OF INTERCONNECTION**

The "Point of Interconnection" is defined as the point at which ownership of electric facilities and/or equipment transitions from GRU to the Owner/Operator. GRU and Owner/Operator agree to interconnect the DR at the Point of Interconnection in accordance with GRU's [rules, regulations, rates, and tariffs](#) (the "Rules") [which are incorporated herein by reference](#). The interconnection equipment installed by the Owner/Operator ("Interconnection Facilities") shall be in accordance with the Rules as well.

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

### 3. STANDARDS FOR DR EQUIPMENT AND INSTALLATION

- 3.1. The Owner/Operator must provide written documentation satisfactory to GRU that the design specifications of the DR, associated inverter, all connecting wiring and disconnect means, control and protective circuits, meters and any other related equipment adhere to the prevailing versions of the following applicable standards in effect at the time of this Agreement:
  - 3.1.1. IEEE Standard 1547, entitled “Interconnecting Distributed Resources with Electric Power Systems”
  - 3.1.2. UL Standard 1741, entitled “Standard for Safety for Static Inverters and Charge Controllers for use in Distributed Resources
  - 3.1.3. UL Standard 1703 entitled “Standard for Safety: Flat Plate Photovoltaic Modules and Panels
  - 3.1.4. IEEE Standard 1262-1995, entitled “Recommended Practice for Qualification of Photovoltaic Modules” or IEC Standard 61646
  - 3.1.5. IEEE Standard 929 “Recommended Practice for Utility Interface of Photovoltaic (PV) Systems
  - 3.1.6. and the National Electrical Code.
- 3.2. The Owner/Operator agrees that this Agreement shall be in effect prior to interconnection of any DR equipment. GRU, code enforcement personnel, and qualified contractor will make an effort to inform the Owner/Operator of the requirement to have a DR interconnection agreement in effect prior to installation, but it is the responsibility of the Owner/Operator to do so. If a DR system (or elements thereof) is found to be interconnected to the distribution system without a fully executed interconnection agreement, GRU reserves the right to isolate, secure, and lock out of service the DR system. If such efforts are not practical or effective, GRU may operate or configure its equipment as necessary to isolate the DR system from the distribution system.
- 3.3. Owner/Operator agrees that the DR system, which is the subject of this Agreement, has been or will be installed only by a contractor licensed by the State of Florida to install such systems.
- 3.4. Owner/Operator shall provide written certification that the installation of the DR was permitted and inspected by all Local Building Code officials having jurisdiction over the above Location. Owner/Operator shall also provide written certification that the equipment and installation have met all applicable mechanical and electrical code requirements and has been approved by local code officials for operation. Owner/Operator may meet this requirement by either (1) having the installation contractor sign the installation certification on the Application or (2) attaching a letter from the installation contractor certifying compliance with all equipment and installation standards. A copy of the construction permit and the inspection report shall be forwarded to the GRU representative identified in Section 12 so that it can be attached to the Application.
- 3.5. In accordance with GRU’s Energy Delivery Service Guide, the Owner/Operator shall install, at Owner/Operator expense, within ten (10) feet of the GRU meter, a manual disconnect means of the visible load break type to provide a separation point between the AC power output of the DR and any Owner/Operator wiring connected to GRU’s electrical system.
  - 3.5.1. The manual disconnect means shall be mounted on the same wall, if practical, but shall be separate from the meter socket, readily accessible to GRU personnel, and capable of being locked in the open position with a GRU padlock.

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

- 3.5.2. The disconnect means must be clearly labeled "Auxiliary Generation Disconnect" and have a clearly legible sign reading "Warning: electric shock hazard. Do not touch terminals. Terminals on both the line and load sides may be energized in the open position The labels shall be permanent, weatherproof, colored red with white block lettering (see Exhibit B) and readily visible to GRU personnel.
- 3.5.3. The disconnect means shall have an interrupting rating sufficient for the nominal circuit voltage and the current that is available at the line terminals of this equipment.
- 3.5.4. GRU shall have the right to open the disconnect means isolating the DR without prior notice to Owner/Operator. To the extent practicable, GRU will make reasonable attempts to provide prior notice to Owner/Operator but assumes no liability if such notice is not given.
- 3.5.5. When the size of the DR system precludes the use of the Owner/Operator's service entrance equipment as the connection point, an alternate disconnect means must be designed and provided by Owner/Operator and approved by GRU before installation.

#### **4. OWNER/OPERATOR INSURANCE REQUIREMENTS**

- 4.1. The Owner/Operator shall maintain in full force and effect, general liability insurance for personal injury and property damage of at least \$100,000 per occurrence. An owner's policy that provides at least this level of coverage is acceptable for meeting the insurance requirement of this Agreement.
- 4.2. The Owner/Operator shall provide a Certificate of Insurance to GRU and the certificate shall become a part of the Application. Automatic notification to GRU must be established for both annual renewals and if appropriate any termination of such insurance. In the event that the Owner/Operator fails to maintain the insurance coverage required by this Agreement, GRU has the right to immediately terminate this Agreement, immediately terminate the DR interconnection and require the Owner/Operator to permanently disconnect the DR from the distribution system.

#### **5. INITIAL TESTING ,STARTUP AND OPERATION OF OWNER/OPERATOR DR**

- 5.1. After receipt of a completed Application with processing fee payment and all required DR documentation, including local building code personnel inspection, and upon request by the Owner/Operator, an authorized representative of GRU shall inspect the DR installation and test the DR for proper operation within five (5) business days. A successful inspection and test may result in an immediate interconnection if so requested followed by written confirmation of the action taken.
- 5.2. In the event that GRU determines, in the exercise of its sole discretion as a result of the DR inspection, test, and documentation review, that the DR is unacceptable for interconnection, GRU shall provide Owner/Operator written notice of DR deficiencies. Such notice shall include a list of all noted DR equipment or documentation issues that must be remedied. Owner/Operator shall be solely responsible for correcting all deficiencies and notifying GRU of readiness for re-inspection and possible interconnection.

#### **6. METERING AND COMPENSATION FOR EXCESS ELECTRIC ENERGY SUPPLIED TO THE GRU ELECTRICAL DISTRIBUTION SYSTEM BY OWNER/OPERATOR DR**

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

- 6.1. GRU shall solely determine the metering equipment required at the Owner/Operator location to measure any excess generation produced by the DR that is delivered into the distribution system if the Owner/Operator desires. For the purposes of this Agreement, excess generation is defined as any kWh of electrical energy produced by the DR which is not consumed by the Owner/Operator's electrical requirements and is delivered to the distribution system. The cost of 120/240V non-instrument rated metering equipment, installation, maintenance, and any recurring or non-recurring costs for reading and billing shall be borne by GRU.
- 6.2. If the Owner/Operator desires, they shall receive a monthly credit for all excess kilowatt-hours delivered into the distribution system at the current applicable tariff. If the credit exceeds the total GRU billed amount in any corresponding month, the excess credit can be applied to the subsequent month's billings, paid by check, or electronically transferred directly to Owner/Operator as solely deemed appropriate by GRU. GRU reserves the right to modify its tariff at any time without prior notice to the Owner/Operator.
- 6.3. In the event that GRU opens the DR manual disconnect means for any reason for any time period, Owner/Operator agrees that GRU shall have no liability for and shall not pay Owner/Operator for any actual or potential generation that may or could have occurred while the DR was disconnected from the distribution system.

## **7. GRU RIGHT TO DISCONNECT THE DR FOR CAUSE**

- 7.1. GRU may disconnect the Owner/Operator DR without notice if GRU, in the exercise of its sole discretion determines any of the following conditions have occurred, or are occurring:
  - 7.1.1. Adverse electrical effects (such as power quality problems) imposed the distribution system and/or the electrical equipment of GRU's electrical customers attributed to the DR as determined by GRU.
  - 7.1.2. Utility system emergencies or maintenance requirements.
  - 7.1.3. Hazardous conditions existing on the utility system due to the operation of the Owner/Operator's DR generating or protective equipment.
  - 7.1.4. Failure of the Owner/Operator to maintain the required insurance and to provide GRU with annual insurance renewal notification.
  - 7.1.5. GRU identification of un-inspected and unapproved equipment or modifications to the DR after initial approval.
  - 7.1.6. Recurring abnormal operation, substandard operation or inadequate maintenance of DR.
- 7.2. In the event that GRU opens the manual disconnect means for normal maintenance, system emergencies, or any other operating consideration, other than events or conditions arising out of Owner/Operator operation of the DR, GRU shall make reasonable efforts to reconnect Owner/Operator generation equipment. This Agreement shall not entitle Owner/Operator to any restoration priority over any other GRU customer.

## **8. OWNER/OPERATOR ONGOING OPERATION AND MAINTENANCE OF THE DR**

- 8.1. The Owner/Operator shall be solely responsible for protecting its generating equipment, inverters, protection devices, and other system components from damage from the normal and abnormal conditions and operations that may occur on the distribution system in delivering or restoring power including temporarily grounding of said system as required for safe work practices. The Owner/Operator shall operate and maintain the DR and all associated equipment in accordance with the manufacturer's requirements and all applicable state or local building codes.

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

- 8.2. The Owner/Operator shall promptly notify GRU if any modifications, repairs, or component replacements result in a change to the current configuration of the DR. GRU shall have right to inspect the DR prior to its reconnection to the distribution system.
- 8.3. GRU shall have the right to enter the Owner/Operator location specified above to inspect the Owner/Operator DR, read and test meters or disconnect the DR for cause.

## **9. ASSIGNMENT OF RENEWABLE ENERGY CREDITS**

- 9.1. GRU is committed to supporting renewable energy. A Renewable Energy Credit (REC) represents the environmental attributes of one thousand kWhs (1 MWh) of electricity produced by a renewable resource (i.e., solar, wind, or biomass). A REC is the commodity used by electric providers to account for their participation in renewal energy programs.
- 9.2. As part of this Agreement and subject to applicable laws, the Owner/Operator hereby assigns any future REC's generated by this DR facility to GRU as part of compensation for GRU's involvement in establishing and maintaining this interconnection, and further agrees to execute such documents as GRU may request to effect such arrangement.

## **10. OWNER/OPERATOR INDEMNIFICATION OF GRU FOR OPERATION OF DR**

The Owner/Operator shall indemnify, hold harmless and defend GRU its officers and employees from and against any and all liability, proceedings, suits, cost or expense for loss, damage or injury to persons or property, including the DR system, in any manner directly or indirectly connected with, or growing out of operation of the Owner/Operator DR, except in those cases where loss occurs due solely to the negligent actions of GRU.

## **11. TERMINATION OF AGREEMENT**

- 11.1. In the event that Owner/Operator fails to maintain the insurance coverage required by this Agreement, GRU shall have the right to immediately terminate this Agreement.
- 11.2. GRU may perform periodic inspections and testing of the DR at such intervals as it may deem proper. In the event that GRU, in the exercise of its sole discretion, determines that the DR is performing in an abnormal or unsafe manner on a recurring basis, GRU shall have the right to immediately disconnect the DR and shall provide written notice to the Owner/Operator of the issue or deficiency. If after a reasonable time as determined by GRU the issue which caused the disconnection is not remedied to GRU's satisfaction, GRU will terminate this Agreement and provide written notification to the Owner/Operator to that effect. Once this Agreement has been terminated, the Owner/Operator will be required to submit a new Application and adhere to the then current process for DR interconnection.
- 11.3. This Agreement is not transferable or assignable without the prior, written consent of GRU. In the event that the above location is sold, leased, or ownership transferred in any form without such consent to another person or entity other than this Owner/Operator, this Agreement may be terminated.
- 11.4. Upon termination of this Agreement for any reason, GRU may padlock the manual disconnect means in the open position and may modify or remove any GRU installed metering equipment.
- 11.5. The rights described in this section are supplementary to any rights GRU may have in law or equity arising out of any violation of the terms of this Agreement.

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

**12. POWER SALES THROUGH GRU**

Interconnection of DR facilities with GRU's distribution system does not grant the Owner/Operator any right to export power to others nor does it constitute an agreement by GRU to wheel excess power.

**13. OFFICIAL NOTIFICATION**

For the purpose of making emergency or other communication relating to the operation of the DR under the provisions of this Agreement, the parties designate the following for said notification:

**For Owner/Operator:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**For Gainesville Regional Utilities:** Rachel D. Meek  
Commercial Analyst  
Gainesville Regional Utilities  
(352) 393-1484  
(352) 334-3480 (Fax)  
[meekrd@gru.com](mailto:meekrd@gru.com)

IN WITNESS WHEREOF, the Owner/Operator and GRU execute this Agreement this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

_____	<b>GAINESVILLE REGIONAL UTILITIES</b>
Owner/Operator: Name or Organization	
By: _____	By: _____
Authorized Representative	David Beaulieu or designee
Title: _____	Title: Assistant General Manager Energy Delivery
Date _____	Date: _____

Approved as to Form and Legality:  
Raymond O. Manasco, Jr. on June 21, 2007  
Utilities Attorney

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

**For Commercial Use Only**

**EXHIBIT A**  
**LIST OF FACILITIES SCHEDULES AND POINTS OF INTERCONNECTION**

Facility Schedule No.

Name of Point of Interconnection

[Insert Facilities Schedule number and name for each 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.*

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_

**FACILITIES SCHEDULE NO. \_\_\_\_\_**

[The following information is to be specified for each Point of Interconnection,if applicable]

1. Owner's Name:  
Operator's Name (If Different):
  
2. Facilities location:
  
3. Delivery voltage:
  
4. Metering (voltage, location, losses adjustment due to metering location, and other:
  
5. Normal Operation of Interconnection:
  
6. One line diagram attached (check one):/\_\_\_\_\_ Yes /\_\_\_\_\_ No
  
7. Facilities to be furnished by GRU:
  
8. Facilities to be furnished by DR Owner/Operator:
  
9. Cost Responsibility:
  
10. Supplemental terms and conditions attached (check one): /\_\_\_\_\_ Yes  
/\_\_\_\_\_ No

GRU \_\_\_\_\_ [DR OWNER/OPERATOR NAME]

BY: \_\_\_\_\_ BY: \_\_\_\_\_

TITLE: \_\_\_\_\_ TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_ DATE: \_\_\_\_\_

Owner/Operator Initial \_\_\_\_\_  
GRU Rep Initial \_\_\_\_\_