# *GAINESVILLE REGIONAL UTILITIES (GRU)*

## 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 municipal corporation organized under the constitution and laws of the State of Florida, authorized pursuant to its State charter to construct and operate local public utilities including public works supplying the City with electric energy and doing business as Gainesville Regional Utilities ("GRU"). The Owner/Operator Account subject to this Agreement is GRU Account Number _____.

**WITNESSETH**

Whereas GRU operates an electrical distribution system serving the City of Gainesville and certain unincorporated areas of Alachua County, Florida; 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 electrical distribution system; and

Whereas a Distributed Resource (DR) is defined as any source of power that is not connected directly to a bulk power transmission system, but typically connected to the electrical distribution system. For the purpose of this agreement the electrical distribution system will be GRU's electrical distribution system. A DR includes both rotating (i.e., induction and synchronous) and static power conversion technologies (i.e.,solar); and

Whereas the Owner/Operator has made a written Application to GRU, a copy being attached hereto, to allow connection of a Owner/Operator Distributed Resources (DR) to GRU's electrical distribution system at the Location listed above; and

Whereas the Owner/Operator has or has not requested compensation for any electric energy produced by the DR which is supplied/connected for any length of time to GRU's electrical 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 is applicable to conditions under which GRU and the Owner/Operator agree that one or more generating facilities (described in Exhibit A) owned by the Owner/Operator of _____ kW or less, to be interconnected at _____ kV or less (DR) may be interconnected to GRU's electric power distribution system.

### 2. ESTABLISHMENT OF POINT OF INTERCONNECTION

The point where the electric energy first leaves the wires or facilities owned by GRU and enters the wires or facilities provided by Owner/Operator is the "Point of Interconnection." GRU and Owner/Operator agree to interconnect the DR at the Point of Interconnection in accordance with GRU's rules, regulations, by-laws, 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.

## 3. STANDARDS FOR DR EQUIPMENT AND INSTALLATION

3.1. The Owner/Operator must provide written documentation that the design specifications of the DR, associated inverter, all connecting wiring and switches, control and protective circuits, meters and any other related equipment adhere to the current versions of the following applicable codes in effect a 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 equipment is found to be in operation without a fully executed interconnection agreement, GRU reserves the right to isolate, secure and lock out of service said DR system. If isolation not practical, GRU will de-energize normal service at a point which isolates the DR 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: i.e.: photovoltaic systems and/or parallel generation equipment.

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 GRU representative identified in Section 12 so that it can be attached to the Application.

3.5. Owner/Operator shall install, at Owner/Operator expense, within ten (10) feet of the GRU meter, a manual disconnect switch 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 switch , if practical, shall be mounted on the same wall 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.

3.5.2. The disconnect switch 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 label shall be permanent, weatherproof, colored red with block lettering (see attached example) and readily visible to GRU personnel.

3.5.3. The disconnect switch 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 switch 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 shall assume no liability if such notice is not given.

3.5.5. When a DR system is large enough not to be able to use the Owner/Operator's service entrance equipment as a connection point, a disconnect means will need to be designed 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. A homeowner's policy that provides at least this level of coverage is acceptable for meeting the insurance requirement of this Agreement with automatic notification for both annual renewals and if appropriate any termination of such insurance.

4.2. The Owner/Operator shall provide a Certificate of Insurance to GRU and the certificate shall become a part of the Application. The Owner/Operator shall provide copies of all renewals to GRU. 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 and require the Owner/Operator to disconnect the DR from the GRU electrical system.

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

5.1. After receipt of a completed Application, all required DR documentation including local building code personnel inspection, and processing fee payment, an authorized representative of GRU within ten (10) business days shall perform a final inspection of the DR **before** the system is provide with written authorization for interconnection and parallel operation with GRU's electrical distribution system. The authorization shall include a specific date and time for interconnection of the DR. GRU shall have the option to have a GRU representative present for initial startup and interconnection of the DR.

5.2. In the event that GRU shall determine, as a result of the final inspection and review of DR documentation, that the DR, as currently configured, is unacceptable for interconnection with the GRU electrical distribution system, GRU shall provide Owner/Operator written notice of DR rejection. Such notice shall include a list of all noted DR equipment or documentation deficiencies that must be corrected to obtain GRU approval. 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

6.1. GRU shall install an additional meter or metering equipment at the Owner/Operator Location specified above capable of measuring any excess generation produced by the DR and delivered back to the GRU electrical 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 delivered to the GRU electrical distribution system. The cost of the meter, installation, maintenance, and any recurring or non-recurring costs for reading and billing for this second meter shall be borne by GRU.

6.2. The value of any excess generation shall be credited to the Owner/Operator's account for the month if Owner/Operator desires. The Owner/Operator shall receive credit for each excess kilowatt-hour delivered at the current rate of the unbundled generation component of GRU's Residential tariff plus the fuel adjustment for the month the energy was delivered to GRU. If the credit exceeds the total billed amount in any corresponding month, the excess credit can be applied to the subsequent month's billing or paid by check or electronic transfer 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 temporarily or permanently opens the DR manual disconnect switch for any reason for any time period, Owner/Operator agrees that GRU shall not pay Owner/Operator for any actual or potential generation that may or could have occurred while the DR was disconnected from the GRU electrical distribution system.

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

7.1. 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 electrical distribution systems in delivering or restoring power including temporarily grounding of said system as required for safe work practices. The Owner/Operator agrees to operate and maintain the DR and all associated equipment in accordance with the manufacturer's requirements and all applicable state or local building codes.

7.2. The Owner/Operator shall 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 GRU electrical system.

7.3. 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.

## 8. GRU RIGHT TO DISCONNECT THE DR FOR CAUSE

8.1. GRU may disconnect the Owner/Operator DR without notice if any of the following conditions occur:

8.1.1. Adverse electrical effects (such as power quality problems) on the electrical equipment of GRU's other electrical customers caused by the DR as determined by GRU.
8.1.2. Utility system emergencies or maintenance requirements.
8.1.3. Hazardous conditions existing on the utility system due to the operation of the Owner/Operator's DR generating or protective equipment as determined by GRU.
8.1.4. Failure of the Owner/Operator to maintain the required insurance.
8.1.5. GRU identification of un-inspected and unapproved equipment or modifications to the DR after initial approval.
8.1.6. Recurring abnormal operation, substandard operation or inadequate maintenance of DR as determined solely by GRU.

8.2. In the event that GRU opens the manual disconnect switch 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.

## 9. ASSIGNMENT OF RENEWABLE ENERGY CREDITS (IF APPLIABLE)

**9.1** GRU is committed to supporting renewable energy. A Renewable Energy Credit (REC) represents the environmental attributes of one thousand kWh (1 MWh) of electricity produced by a renewable resource (such as solar or biomass). A REC is the commodity used by electric providers to account for their participation in renewal energy programs.

**9.2** REC's could be generated by your DR facility. As part of this Agreement, Owner/Operator will assign any future REC's generated by this DR facility to GRU as part of compensation for GRU's involvement in creating and maintaining this interconnection.

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

The Owner/Operator shall indemnify, hold harmless and defend GRU 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 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 of the DR at such intervals as it may deem proper. In the event that GRU, in its sole opinion, 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 with written notice to the Owner/Operator. If after a reasonable time as determined by GRU the issue which caused the disconnection is not repaired to GRU's satisfaction, GRU will terminate this Agreement and provide written notification to the Owner/Operator. After written termination is provided, Owner/Operator will be required to submit a new Application involving the current process for interconnection.

11.3. This Agreement is not transferable or assignable. In the event that the above Location is sold, leased, or ownership transferred in any form to a person or entity other than Owner/Operator, this Agreement shall be terminated.

11.4. Upon termination of this Agreement for any reason, GRU shall padlock the manual disconnect switch in the open position and modify all GRU installed metering equipment including removal. At Owner/Operator's expense, Owner/Operator must permanently isolate the Owner/Operator DR within ten (10) calendar days of GRU opening the disconnect switch that the isolation procedure has been completed.

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.

**12. 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:** _____
_____
_____

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

_____
Owner/Operator: Name or Organization

By:_____
Authorized Representative
Title:_____

Date:_____

GAINESVILLE REGIONAL UTILITIES
By:_____
David Beaulieu or designee

Title: Assistant General Manager Energy Delivery

Date _____

Approved as to Form and Legality:

_____
Raymond O. Manasco, Jr.
Utilities Attorney