# Huntsville Utilities Interconnection, Metering and Parallel Operation Agreement for On-site Generation

This Interconnection, Metering and Parallel Operation Agreement ("Agreement") is made and entered into this \_\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the Huntsville Electric Utility Board ("HU"), a municipal public utility board created by the City of Huntsville, Alabama, and \_\_\_\_\_\_, who is hereinafter referred to as Interconnection

Customer. HU and Interconnection Customer may be collectively referred to as "Parties" or individually as a "Party."

**WHEREAS**, the Interconnection Customer has requested interconnection services from HU in order to self-generate and/or sell the output of renewable generation that is owned and operated by the Interconnection Customer (see attached Application for Interconnection of Distributed Generation, hereafter called "Application") at the Interconnection Customer's presently metered location, which is \_\_\_\_\_\_.

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

# **1.** Scope of Agreement

**1.1.** HU and the Interconnection Customer agree that one or more generating systems and all related interconnection equipment (described in the attached Application and hereinafter referred to as "Qualifying System") located at Interconnection Customer's presently metered location with gross power rating of \_\_\_\_\_\_ KW and to be interconnected at \_\_\_\_\_\_ Volts may be interconnected to HU's system ("System") in accordance with the terms and conditions of this Agreement. Execution of this Agreement allows the Interconnection Customer to proceed with procurement and installation of the System but Interconnection Customer is not allowed to proceed with parallel operation until HU has received a completed Certificate of Completion, HU has conducted an onsite review and witnessed any required commissioning test or waived such test, and has given Interconnection Customer written authorization to proceed with parallel operation.

# **2.** Establishment of Point of Interconnection

**2.1.** The point where the electric energy first leaves the wires or facilities owned by HU and enters the wires or facilities provided by Interconnection Customer is the "Point of Interconnection." HU and Interconnection Customer agree to interconnect the Qualifying System at the Point of Interconnection in accordance with this Agreement, HU's rules, regulations, bylaws, standard terms and conditions,

company policies, and rates (the "Rules"), which are incorporated herein by reference, and the Interconnection Customer and the Qualifying System shall comply with HU's Distributed Generation Interconnection Procedures.

## **3.** General Responsibilities of the Parties

- **3.1.** HU has reviewed the proposed Qualifying System as described in the attached Application for compliance with HU's Distributed Generation Interconnection Procedures and has approved the Qualifying System for interconnection based on one of the following conditions:
  - **3.1.1** The Qualifying System has been reviewed by HU based on the applicable codes and standards and has passed any applicable screening process in HU's Distributed Generation Interconnection Procedures, or
  - **3.1.2** HU, in agreement with Interconnection Customer, has conducted additional engineering evaluations or detailed impact studies at Interconnection Customer's expense, and any necessary System upgrades or changes identified by these additional studies have been implemented and Interconnection Customer has paid for such upgrades or changes where necessary.
- **3.2.** Interconnection Customer shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules, and environmental restrictions, including the latest version of the National Electrical Safety Code, the National Electric Code, and codes issued by Underwriters Laboratories ("UL"), the Institute of Electrical and Electronics Engineers ("IEEE"), and the American National Standards Institute ("ANSI") that are applicable to the design, installation, operation, and maintenance of its Qualifying System.
- **3.3.** HU shall, at Interconnection Customer's expense, provide and install such meters and related facilities ("Metering Installation") as in HU's judgment are needed to measure the electrical output from the Qualifying System. Thereafter, HU shall, at Interconnection Customer's expense, test, calibrate, operate, maintain and, if necessary, replace the meter(s) in the Metering Installation. The Metering Installation shall conform to applicable industry standards and shall be for HU's exclusive use and control unless otherwise agreed by the Parties. If the Interconnection Customer is selling the power output of the Qualifying System to a third party, the Interconnection Customer shall notify HU of any metering requirements of the power purchaser, any costs of which shall be borne by the Interconnection Customer.
- **3.4.** The Interconnection Customer shall provide the local building code official inspection and certification of installation forms to HU. The certification shall reflect that the code official has inspected and certified that the installation was permitted, has been approved, and has met all electrical and mechanical qualifications.
- **3.5.** After installation of the Qualifying System, the Interconnection Customer shall return the Certificate of Completion to HU. Prior to parallel operation, HU may, at

Interconnection Customer's expense, review the Qualifying System for compliance with standards which may include testing the Qualifying System in the presence of a witness selected by HU. Interconnection Customer shall not begin parallel operation before HU provides written authorization.

- **3.6.** Interconnection Customer shall operate its Qualifying System in compliance with all aspects of the Rules, this Agreement, and in accordance with industry standard prudent engineering practice, and must comply with the latest version of IEEE 519, UL 1741, IEEE 1547, and any other applicable codes and standards of ANSI, IEEE, and UL.
- **3.7.** The Interconnection Customer shall be responsible for protecting its renewable generation equipment, inverters, protective devices, and other Qualifying System components from damage from the normal and abnormal conditions and operations that occur on HU's System in delivering and restoring power; and Interconnection Customer shall be responsible for ensuring that the Qualifying System is inspected, maintained, and tested on an ongoing basis in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely. HU has the right to request and receive copies of the test results which, if requested, shall be provided to HU within two (2) days following the request. If at any time HU determines, either from tests or any other source of information, that the renewable generation equipment, inverters, protective devices or other Qualifying System components are not operating correctly and safely, HU may isolate and disconnect the Qualifying System from HU's system without prior notice or approval and at Interconnection Customer's expense.

# 4. Inspection and Ongoing Compliance

**4.1.** HU shall provide Interconnection Customer with as much notice as reasonably practicable, either in writing, email, facsimile, or by phone, as to when HU may review the Qualifying System and/or review Interconnection Customer's associated documents. However, HU shall have access to the Interconnection Customer's premises at all times for the purpose of accessing the manual disconnect switch, performing an inspection or disconnection, or, if necessary, to meet HU's legal obligation to provide service to its customers.

# 5. Manual Disconnect Switch

**5.1.** Interconnection Customer must install a manual, lockable, visible load break disconnect switch between the Qualifying System and HU's System that is visibly marked "Interconnection Customer Generation Disconnect." The disconnect switch shall be mounted separate from but adjacent to HU's meter socket. The Interconnection Customer shall ensure that such manual disconnect switch shall remain readily accessible to HU and be capable of being locked in the open position with a single HU utility padlock. A permanent, weatherproof single-line diagram of the facility must be located adjacent to the disconnect switch. Names and current telephone numbers of at least two persons authorized to provide access to the facility that have authority to make decisions regarding the

interconnection and operation of the Qualifying System shall be included with the diagram.

# 6. Disconnection/Reconnection

- **6.1.** HU may open the manual disconnect switch or disconnect the Interconnection Customer's meter, pursuant to the conditions set forth in Section 6.2 below, isolating the Qualifying System, without prior notice to the Interconnection Customer. To the extent practicable, however, prior notice shall be given. If prior notice is not given, HU shall at the time of disconnection leave a door hanger notifying the Interconnection Customer that its Qualifying System has been disconnected, including an explanation of the conditions necessitating such action. As soon as practicable after the conditions necessitating disconnection have been remedied, HU shall unlock the disconnect switch so Interconnection Customer may reenergize the Qualifying System, but, without regard to whether HU has locked the disconnect switch, the Interconnection Customer shall not reenergize the Qualifying System without the prior approval of HU.
- **6.2.** HU has the right to disconnect the Qualifying System at any time. Some examples of situations that may require disconnect are:
  - **6.2.1.** Emergencies or maintenance requirements on HU's System;
  - **6.2.2.** Hazardous conditions existing on HU's System due to the operation of the Interconnection Customer's Qualifying System, including without limitation protective equipment, as determined by HU;
  - **6.2.3.** Adverse electrical effects, such as power quality problems, on the electrical equipment of HU's other electric consumers caused by the Qualifying System as determined by HU; and
  - **6.2.4.** Failure to pay HU for costs associated with the Qualifying System as described in Section 14.
- **6.3.** The Interconnection Customer is responsible for the protection of the Qualifying System by providing the local protection scheme necessary to isolate the Qualifying System from HU's System for system line interruptions and when the power source is lost. Accordingly, the Interconnection Customer must provide and install, at its expense, any necessary protection and control devices for the Qualifying System so that the Qualifying System detects an islanding condition (a condition in which a generator continues to provide power to a location even though power from the electric grid is no longer present) and trips or disconnects the Qualifying System from HU's System in less than four (4) cycles.

# 7. Modifications/Additions to Interconnection Customer-owned Generation

**7.1.** If the Qualifying System is to be modified in order to increase or decrease its gross power rating or any components are changed, the Interconnection Customer must provide HU with written notification that fully describes the proposed modifications

at least thirty (30) calendar days prior to making such modifications. HU shall review such modifications to determine if HU needs to modify its interconnection facilities. Interconnection Customer may, at its own risk, proceed with procurement and installation of such modifications, with approval of the appropriate zoning authority, but Interconnection Customer is not allowed to proceed with parallel operation until HU has conducted an onsite inspection and witnessed any required commissioning test or waived such test, and HU has given Interconnection Customer written authorization to proceed with parallel operation.

# 8. Indemnity and Limitations of Liability

- **8.1.** To the fullest extent permitted by law, Interconnection Customer shall release, indemnify, and save harmless HU, its officers, directors, members, consultants, agents and employees and subcontractors, TVA and their agents, contractors and employees, and the United States of America, from all liability, claims, demands, causes of action, costs, or losses for personal injuries, property damage, or loss of life or property, sustained by Interconnection Customer, Interconnection Customer's agents and family, or third parties arising out of or in any way connected with the installation, testing, operation, maintenance, repair, replacement, removal, defect, or failure of Interconnection Customer's Qualifying System. The obligations of this Section 8.1 shall survive termination of this Agreement.
- **8.2.** IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES WHATSOEVER, ARISING OUT OF, OR IN CONNECTION WITH, THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO, LOST PROFITS, LOST REVENUE, LOSS OF GOODWILL, LOSS OF ANTICIPATED SAVINGS, OR LOSS OF BUSINESS OPPORTUNITY INCURRED OR SUFFERED BY EITHER PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, EVEN IF THE OTHER PARTY OR ANY OTHER PERSON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### 9. Personal Immunities

**9.1.** NO PERSONAL RECOURSE SHALL BE HAD FOR THE CREATION OF THIS AGREEMENT, FOR ANY CLAIM ARISING OUT OF THIS AGREEMENT, NOR FOR ANY REPRESENTATION, OBLIGATION, COVENANT, OR AGREEMENT SET FORTH IN THIS AGREEMENT AGAINST ANY PAST, PRESENT, OR FUTURE OFFICER, MEMBER, EMPLOYEE, OR AGENT OF HU, UNDER ANY RULE OF LAW OR EQUITY, ANY STATUTE OR CONSTITUTION, OR BY THE ENFORCEMENT OF ANY ASSESSMENT OR PENALTY, OR OTHERWISE, AND ANY LIABILITY OF ANY SUCH OFFICER, MEMBER, EMPLOYEE, OR AGENT IS HEREBY EXPRESSLY WAIVED AND RELEASED BY INTERCONNECTION CUSTOMER AS A CONDITION OF AND IN CONSIDERATION FOR THE EXECUTION OF THIS AGREEMENT. FURTHERMORE, INTERCONNECTION CUSTOMER AGREES THAT NO PAST, PRESENT, OR FUTURE OFFICER, MEMBER, OR AGENT OF HU SHALL BE PERSONALLY LIABLE TO INTERCONNECTION CUSTOMER, OR AGENT OF HU SHALL BE PERSONALLY LIABLE TO INTERCONNECTION CUSTOMER, OR AGENT OF HU SHALL BE PERSONALLY LIABLE TO

INTERCONNECTION CUSTOMER, FOR ANY DEFAULT OR BREACH OF THIS AGREEMENT BY HU.

#### 10. Assignment

- **10.1.** Interconnection Customer shall not assign this Agreement without thirty (30) calendar days prior written notice to HU and without HU's written consent, which consent shall not be unreasonably withheld or delayed.
- **10.2.** An assignee to this Agreement shall demonstrate to HU's satisfaction that the assignee has the necessary financial and technical resources to comply with the terms of this Agreement. The assignee shall be required to assume in writing all of the Interconnection Customer's rights, responsibilities, and obligations under this Agreement.

#### **11.** Insurance

- **11.1.** HU requires the following levels of Liability Insurance for Personal Injury and Property damage during the entire term of this Agreement.
- **11.2.** Generation up to 10 kW: No additional insurance is required.
- **11.3.** Generation greater than 10 kW but equal or less than 50 kW: Interconnection Customer shall maintain an amount of not less than <u>\$1,000,000</u>,
- **11.4.** Generation greater than 50kW: Interconnection Customer shall maintain an amount of not less than \$5,000,000.

# **12.** Effective Term and Termination Rights

**12.1.** This Agreement becomes effective when executed by both Parties and shall continue in effect as long as the Qualifying System is capable of operation without frequent failures or problems affecting HU's services, as determined in the sole discretion of HU, and connected to HU's System, notwithstanding any termination of any TVA Dispersed Power Production Power Purchase Agreement or any other power purchase agreement for some or all of the Qualifying System's output. If HU incurs any costs as a result of termination of this Agreement, Interconnection Customer shall reimburse HU for such costs.

# **13.** Entire Agreement and Prior Agreements Superseded

**13.1.** This Agreement, including the Rules, all attached Exhibits expressly made a part hereof for all purposes, constitutes the entire agreement and understanding between the Parties with regard to the interconnection of the Qualifying System at the Point of Interconnection expressly provided for in this Agreement. The Parties are not bound by or liable for any statement, representation, promise, inducement, understanding, or undertaking of any kind or nature (whether written or oral) with regard to the subject matter hereof not set forth or provided for herein, in the

Interconnection Customer's attached Application, Certificate of Completion, or other written information provided by the Interconnection Customer in compliance with the Rules.

#### 14. Notices

**14.1.** Notices given under this Agreement are deemed to have been duly delivered if hand delivered or sent by United States certified mail, return receipt requested, postage prepaid, to:

(A) If to Huntsville Utilities: P.O. Box 2048 Huntsville, AL 35804

(B) If to Interconnection Customer:

The above-listed names, titles, and addresses of either Party may be changed by written notification to the other.

#### **15.** Billing and Payment

- **15.1.** Interconnection Customer is responsible for HU's actual costs, including applicable overhead costs, that HU incurs due to Interconnection Customer's interconnection and parallel operation of the Qualifying System. These costs include, without limitation, the cost of system impact studies, inspections, reviews, associated billing charges, meter reading charges, installation of the Metering Installation, operations and maintenance ("O&M") of the Metering Installation and all other additional facilities required to be installed by HU to interconnect the Qualifying System, and HU System reconfiguration, upgrades, and modifications (including any reconfiguration or restoration of HU's System following termination of this Agreement ("Disconnection Costs")).
- **15.2.** Upon receipt of sufficient information from Interconnection Customer, HU shall provide to Interconnection Customer a good-faith estimate of such interconnection costs, indicating what costs are upfront costs ("Upfront Interconnection Costs") and what costs (if any) are recurring, periodic charges ("Periodic Interconnection Costs"). Notwithstanding the good-faith estimate, however, Interconnection Customer shall pay HU for the actual costs described in Section 14.1 above, including any Disconnection Costs.
- **15.3.** At the same time Interconnection Customer signs this Agreement, Interconnection Customer shall remit to HU the full amount equal to such goodfaith estimate of the Upfront Interconnection Costs, before HU begins incurring costs and before Interconnection Customer interconnects or begins parallel operation of the Qualifying System. If the total actual Upfront Interconnection Costs incurred by HU exceed the good-faith estimate paid by Interconnection Customer, HU shall promptly submit to Interconnection Customer a written

invoice for the excess amount, which amount Interconnection Customer shall promptly pay. If the total actual Upfront Interconnection Costs incurred by HU are less than the good-faith estimate paid by Interconnection Customer, HU shall promptly refund the difference to Interconnection Customer. Once HU has begun incurring any Periodic Interconnection Costs or Disconnection Costs, HU shall bill Interconnection Customer for such costs, which costs Interconnection Customer shall promptly pay. Upon request, HU shall provide to Interconnection Customer documentation explaining the basis for such costs.

#### 16. Miscellaneous

- **16.1.** Neither Party will be liable for delays or any failure to perform under this Agreement due to causes that prevent the Party from performing its obligations under this Agreement by reason of a Force Majeure Event. The other Party will not be required to perform or resume performance of those of its obligations that correspond to the obligations of the Party excused by Force Majeure Event, until the end of such Force Majeure Event.
- **16.2.** The failure of either Party to insist, in any one or more instances, on the performance of any of the terms, covenants, or conditions of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, condition, or right with respect to further performance. A waiver of any provision of this Agreement by a Party must be in writing to be effective and will not be construed as or constitute a waiver of any other provision not expressly stated in the waiver by such party.
- **16.3.** This Agreement may be amended only by a written instrument executed by both Parties.
- **16.4.** This Agreement may be executed in several counterparts, each of which shall be considered an original and all of which shall constitute but one and the same instrument.
- **16.5.** The Parties agree that in any action to enforce the terms of this Agreement each Party will be responsible for its own attorneys' fees and costs.
- **16.6.** The Parties acknowledge that HU is a public entity subject to the Alabama Open Records Act and other public records laws.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be signed by their respective duly authorized representatives.

Huntsville Utilities Rep:	Interconnection Customer:
Title:	Title:
Signed:	Signed:
Date:	Date: