

BOWLING GREEN MUNICIPAL UTILITIES
INTERCONNECTION AND PARALLEL OPERATION AGREEMENT
FOR RENEWABLE GENERATION SYSTEMS WITH A GROSS OUTPUT NO GREATER THAN 1,000 KW

This Interconnection Agreement ("Agreement") is made and entered into this ____ day of _____, 20____, by Bowling Green Municipal Utilities, ("Distributor"), a corporation located in Bowling Green, Kentucky, and _____, (Participant").

who has elected to participate in the following distributed generation program

- _____ Green Power Providers/GPP (dual metered, selling 100% of output to TVA)
- _____ Dispersed Power Production/DPP (selling 100% of output to TVA)
- _____ Self Generation with Dispersed Power Production/SGDPP (using output onsite and selling any excess to TVA)
- _____ Self Generation/SG (using output onsite and providing any excess to grid without compensation)

WHEREAS, the Participant has requested interconnection services from Distributor in order to self-generate and/or sell the output of renewable generation that is owned by the Participant or a third party (see attached Application For Interconnection) at the Participant'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.** This Agreement is applicable to conditions under which the Distributor and the Participant agree that one or more generating systems and all related interconnection equipment (described in the Application For Interconnection of Distributed Generation and attached to this agreement and hereinafter referred to as "Qualifying System") located at Participant's presently metered location with a nameplate power rating of ____KW (DC for inverter-based systems, AC for non-inverter based systems) and to be interconnected at ____ Volts may, after receiving written parallel operation authorization, be interconnected to the Distributor's electric power distribution system ("System"). Execution of this agreement allows the Participant to proceed with procurement and installation of the system **but Participant is not allowed to proceed with parallel operation** until Distributor has received a completed Certificate of Completion, Distributor has conducted an onsite inspection and witnessed any required commissioning test or waived such test, and has given Participant 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 the Distributor and enters the wires or facilities provided by Participant is the "Point of Interconnection." Distributor and Participant agree to interconnect the Qualifying System at the Point of Interconnection in accordance with the Distributor's rules, regulations, by-laws, and rates (the "Rules") which are incorporated herein by reference and the generator and all related interconnection equipment will comply with the Distributor's Interconnection Procedures, a copy of which has been provided to the Participant.

3. General Responsibilities of the Parties

- 3.1.** Distributor has reviewed the proposed generation and related equipment as described in the Application for compliance with Distributor's Interconnection Procedures and approved the Qualifying System for interconnection based on one of the following conditions:
- 3.1.1.** Qualifying System has been certified as meeting the applicable codes and standards and has passed any applicable screening process in the Distributor's Interconnection Procedures for Renewable Distributed Generation, or
- 3.1.2.** Distributor in agreement with Participant has conducted additional engineering evaluations or detailed impact studies and any necessary System upgrades or changes identified by these additional studies have been implemented and Participant has paid for such changes where necessary;
- 3.2.** Participant shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules and environmental restrictions, including the latest version of the National Electrical Code, National Electrical Safety Code, and codes issued by Underwriters Laboratories, the Institute of Electrical and Electronics Engineers, and the American National Standards Institute that are applicable to the design, installation, operation and maintenance of its Qualifying System.
- 3.3.** Solar and wind installations must be completed by installers who have completed and passed the North American Board of Certified Energy Practitioners (NABCEP) Associate Level examination. The installer's NABCEP certification number or a copy of their training achievement award must be submitted with the interconnection application. These requirements apply to upgrades and system changes as well as initial installations.
- 3.4.** The Participant shall provide Local Building Code Official inspection and certification of installation forms to the Distributor. 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, the Participant shall return the Certificate of Completion to the Distributor. Prior to parallel operation, the Distributor shall inspect the Qualifying System for compliance with standards which may include a witness test. Distributor must provide written authorization before Participant can begin parallel operation.
- 3.6.** The Participant will provide the generation meter base and all associated connections. BGMU will provide, at Participant's expense, the appropriate generation meters and any necessary metering transformers that are necessary to measure the electrical output of the Qualifying System. Any metering expense including on-going generation meter repairs and replacements will be paid by the Participant.
- 3.7.** Participant shall conduct operations of its Qualifying System in compliance with all aspects of the Distributor Service Regulations, The Distributor Interconnection Procedures, and in accordance

with industry standard prudent engineering practice and must comply with the latest versions of IEEE 519 , UL 1741, IEEE 1547, IEEE 1453 and any other applicable codes and standards of ANSI, IEEE, and UL. Participant must comply with future revisions of such applicable standards as required by Distributor.

- 3.8. The Participant shall be responsible for protecting its renewable generation equipment, inverters, protective devices, and other system components from damage from the normal and abnormal conditions and operations that occur on the System in delivering and restoring power; and 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. Distributor will have the right to request and receive copies of the test results.
- 3.9. A five (5) minute minimum delay time is required before the renewable generation equipment may reconnect to the Distributor's grid after disconnecting as result of an outage of the Distributor's system or other IEEE 1547 reasons. The Distributor may also periodically test the anti-islanding and system outage separation capability and times.
- 3.10. Qualifying System is limited to the use of IEEE 1547 compliant three phase inverters when connected to three phase services. Use of single phase inverters on three phase systems is prohibited. Controls must energize all three phases of generation when generating, and open all three phases of generation when disconnecting from the system whether under normal operations or in response to abnormal events.
- 3.11. Should increased penetration of distributed generation, as experienced by the utility system or utility system circuit, over time result in reduced utility system reliability, malfunction of utility system controls and/or mis-operation of protective mechanisms, Distributor reserves the right to require the Qualifying System to halt operation. In such cases, Distributor may require actions on the part of the Participant to perform necessary changes to the Qualifying System prior to allowing generation to resume.

4. Inspection and On-Going Compliance

- 4.1. Distributor will provide Participant with as much notice as reasonably practicable; either in writing, e-mail, facsimile or by phone as to when Distributor may conduct inspection and/or document review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Distributor shall have access to the Participant's premises for the purpose of accessing the manual disconnect switch, performing an inspection or disconnection, or for other reasons, as necessary to meet Distributor's legal obligation to provide service to its customers.

5. Manual Disconnect Switch and Generation Meter

- 5.1. Participant must install a manual, lockable, fused, visible load break disconnect switch between the generation source and the Distributor's system that is visibly marked "**Generation Disconnect**". The disconnect shall be mounted separate from but adjacent to the Distributor's meter socket and on the generation side of the meter. The Participant shall ensure that such manual disconnect switch shall remain readily accessible to Distributor and be capable of being locked in the open position with a single Distributor utility padlock.

If necessary, the generation meter location shall be approved by BGMU. The generation meter shall be located close to the billing meter unless a separate location is approved by BGMU.

6. Disconnection / Reconnection

- 6.1.** Distributor may open the manual disconnect switch or disconnect the Participant's meter, pursuant to the conditions set forth in Section 6.2 below, isolating the Qualifying System, without prior notice to the Participant. To the extent practicable, however, prior notice shall be given. If prior notice is not given, Distributor shall at the time of disconnection leave a door hanger notifying the Participant that its Participant-owned renewable generation has been disconnected, including an explanation of the condition necessitating such action. As soon as practicable after the condition(s) necessitating disconnection has been remedied, Distributor will unlock the disconnect switch so Participant may reenergize the Qualifying System. Distributor will not re-energize the Qualifying System.
- 6.2.** Distributor has the right to disconnect the Participant-owned renewable generation at any time. Some examples of situations that may require disconnect are:
 - 6.2.1.** Emergencies or maintenance requirements on Distributor's system;
 - 6.2.2.** Hazardous conditions existing on Distributor's system due to the operation of the Participant's generating or protective equipment as determined by Distributor; and
 - 6.2.3.** Adverse electrical effects, such as power quality problems, on the electrical equipment of Distributor's other electric consumers caused by the Participant-owned renewable generation as determined by Distributor.

7. Modifications/Additions to Participant-owned Renewable Generation

- 7.1.** The Participant must obtain approval from BGMU and TVA prior to increasing or decreasing the qualifying system's gross power rating or to modifying the system configuration or components. The Participant must provide the Distributor with written notification that fully describes the proposed modifications at least thirty (30) calendar days prior to making the proposed modifications. Changes must not be implemented prior to approval.

8. Indemnity

- 8.1.** Participant agrees to release, indemnify, and save harmless Distributor, TVA, the United States of America, and their respective agents and employees from all liability, claims, demands, causes of action, costs, or losses for personal injuries, property damage, or loss of life or property, sustained by Participant, Participant'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 Participant's Qualifying System. The obligations of this Section 8.1 shall survive termination of this agreement.

9. Assignment

- 9.1.** The Interconnection Agreement shall not be assignable to another Participant or Owner without prior BGMU approval. The Participant must provide at least thirty (30) calendar days- notice of the proposed transfer.
- 9.2.** An assignee to this Interconnection Agreement shall be required to assume in writing the Participant's rights, responsibilities, and obligations under this Interconnection Agreement.

10. Insurance

10.1. Distributor requires the following levels of Liability Insurance for Personal Injury and Property damage during the entire term of this Interconnection Agreement. By executing this agreement, Participant agrees to provide the insurance coverage detailed below for the full time that this agreement is in effect.

10.1.1. Generation up to 10 kW - Participant maintains an amount of not less than \$500,000.

10.1.2. Generation greater than 10 kW - Participant maintains an amount of not less than \$2,000,000.

11. Effective Term and Termination Rights

11.1. This Agreement becomes effective when executed by both Parties and shall continue in effect as long as the Qualifying System is capable of operation and connected to Distributor's System, notwithstanding any termination of any TVA Power Purchase Agreement for some or all of the Qualifying System's output. If Distributor incurs any costs as a result of termination of the AGREEMENT, Participant shall reimburse Distributor for such costs. The Participant may not start a new parallel operation agreement for a system currently participating in another generation program or TVA program. Distributor reserves the right to terminate the agreement if the Participant is non-compliant.

12. Entirety of Agreement and Prior Agreements Superseded

12.1. This Agreement, including the Distributor Service Regulations, the Distributor Interconnection Procedures, any necessary TVA Agreements, executed by Distributor and Participant, and all attached Exhibits, are 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 of the Parties 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 Participant's Application for Interconnection of Distributed Generation, Certificate of Completion or other written information provided by the Participant in compliance with the Rules.

13. Notices

13.1. 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 Distributor:

(b) If to Participant:

14. Billing and Payment

14.1 Participant is responsible for Distributor's actual costs, including applicable overheads that Distributor incurs due to Participant'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 of the Metering Installation and all other additional facilities required to be installed by the Distributor to interconnect the Qualifying System, and Distributor's required upgrades or modifications.

14.2 Upon receipt of sufficient information from Participant, Distributor shall provide to Participant 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 costs ("Periodic Interconnection Costs"). Notwithstanding the good-faith estimate, however, Participant shall pay Distributor for the actual costs described in Section 14.1 above.

14.3 For this agreement, the Upfront Interconnection Costs are _____, and shall be paid prior to the Distributor beginning any work towards the interconnection of the Qualifying System.

For this agreement, the Periodic Interconnection Costs are ____/month, and shall be added to the customer's monthly power bill.

The Periodic Interconnection Costs may, at the determination of the Distributor, be adjusted to accurately reflect the ongoing costs related to the Qualifying System. Upon request, Distributor shall provide Participant documentation explaining the basis of such costs.

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

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

Bowling Green Municipal Utilities

[PARTICIPANT NAME]

BY: _____

BY: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____