



MARIETTA POWER & WATER AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF SMALL DISTRIBUTED GENERATION EQUIPMENT/FACILITES 10 kW or LESS

THIS AGREEMENT made and entered into this ____ day of _____, _____, by and between

Name _____

Address _____

(hereafter Owner), and The Marietta Board of Lights and Water Works (hereafter BLW), whose principal place of business is at 675 North Marietta Parkway, Marietta, GA 30060-1528.

Owner Information

System Installer Information

Name: _____

Company name: _____

Address: _____

Installer name: _____

Telephone: _____

Address: _____

Utility Account #: _____

Telephone: _____

Owner Application No. _____

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. Scope and Purpose of Agreement

This Agreement describes only the conditions under which BLW and the Owner agree that the distributed generating facility or facilities described in Exhibit A may be interconnected to and operated in parallel with the BLW electric distribution system. Other services the Owner may require from BLW are covered under separate agreements.

The following exhibits are incorporated and made a part of this Agreement:

Exhibit A: Description of Owner’s Distributed Generation Equipment/Facility

Exhibit B: Section A -Authorization to Connect OR

Section B -Non-Authorization.

2. Term and Termination

2.1 The term of this Agreement begins on the date first set forth above (regardless of the date that the Owner is authorized to interconnect the System pursuant to Section 5 below) and continues until terminated by either party pursuant to the provisions of this Agreement.

2.2 Either party may terminate this Agreement at any time by providing 90 days written notice to the other party. In the event of a sale of the Owner’s premises, then this Agreement will terminate upon that sale.

2.3 BLW may terminate this Agreement at any time for violation of this Agreement upon written notice to the Owner.

2.4 At the time of termination of this Agreement for any reason, BLW will perform lock out procedures to disconnect the Owner’s System from BLW’s electric system.

3. **Summary and Description of Owner's Distributed Generation Equipment/Facility to be Included in Exhibit A.**

3.1 The Owner's eligible Distributed Generation System is a self-contained electric generation system including direct current disconnect apparatus, if applicable, alternating current disconnect/lockout, over-current protective device, and all related electrical equipment upstream of the over-current protective device, as set forth on Exhibit A (the "System"). The System begins and continues up-stream towards the distributed generation from the over-current protective device on the Owner's premises. However, the meter socket and related electrical connects are part of the System and are the responsibility of the Owner [i.e. all equipment from the main disconnect except the meter is Owner equipment].

3.2 Capacity of the Distributed Generation equipment is: _____kW.

3.3 The expected annual energy production of the Distributed Generation equipment is _____kWh.

3.4 The expected date of initial operation of the Distributed Generation equipment is: _____.

4. **Installation and Permitting**

4.1 Without limiting the provisions of paragraph 22, the Owner and the System must comply with all applicable National Electric Code (NEC), UL and IEEE requirements, including, but not limited to:

UL 1741-Standard for Static Inverters and Charge Controllers for Use with Photovoltaic Systems.

IEEE Standard 1547 (2003): Standard for Interconnecting Distributed Resources with Electric Power Systems. [NOTE: UL 1741 will soon be incorporated into IEEE 1547].

Other organizations, such as the Canadian Standards Association (CSA), test to UL 1741. If the inverter is tested by an organization other than Underwriters Laboratories, the test data must be submitted to BLW.

The Owner at the Owner's expense must: 1) obtain all necessary electrical permits for installation of the System and 2) obtain and maintain any government authorizations or permits required for the operation of the System. The Owner must reimburse BLW for any and all losses, damages, claims, penalties, or liability BLW incurs as a result of Owner's failure to obtain or to maintain any governmental authorizations and permits required for construction and operation of the Owner's System.

4.2 The Owner or its contractor must construct the System as specified in the attached Exhibit A.

4.3 A manual, lockable, load-break disconnect switch that provides a clear indication of the switch position must be available with the System at or near the Owner's main point of service from BLW's electric system to provide a point of electrical separation between the Owner's System and BLW's electric system. BLW will approve the location of the disconnect switch. The disconnect switch must be easily visible, mounted separately from the metering equipment, readily accessible to BLW personnel at all times, and capable of being locked in the open position with BLW's lock. BLW may open the disconnect switch thereby isolating the Owner's System from the BLW electric system for any reason that BLW deems necessary including, but not limited to, maintenance or emergency work, the System adversely affecting other customers of BLW, failure of the System to comply with codes/regulations, the System creating hazardous or unsafe conditions, the Owner's failure to pay utility bills when due, and failure to comply with the UL Standards in Section 4.1 above.

4.4 Power Quality Requirements. All power quality parameters (i.e., voltage, flicker, frequency, distortion) are specified at the point of common coupling (PCC) unless otherwise stated. The following requirements must be met:

4.4.1. Voltage – the System must be capable of operating within normal voltage operating limits of 106-132 volts (88 -110% nominal 120V). This range results in trip points at 105 volts and 133 volts. Response to abnormal voltages should be as follows:

<u>Voltage (at PCC)</u>	<u>Maximum Trip Time</u>
V<50%	10 cycles
50%≤ V<88%	120 cycles
88%<V<110%	normal operation
110%<V<120%	60 cycles
V≥ 120%	10 cycles

4.4.2 Flicker – The System shall not create objectionable flicker for other BLW customers. Flicker is considered objectionable when it either causes a modulation of the light level of lamps sufficient to be irritating to humans or causes equipment malfunction. See IEEE 519-1992.

4.4.3 Frequency – The System must have a fixed frequency range of 59.3 to 60.5 Hz. When the interconnected system frequency is outside this range, the System shall cease to energize the BLW connection within 1-cycle.

4.4.4 Waveform Distortion (Harmonics) - The System must have low current-distortion levels to ensure that no adverse effects are caused to other equipment connected to BLW’s electric system. When the System is serving balanced linear loads, harmonic current injection into BLW’s network shall not exceed when measured in accordance with IEEE Std 1547:

harmonics	h<11	11≤ h<17	17≤ h<23	23≤ h<35	35≤ h
per cent	4.0	2.0	1.5	0.6	0.3

Maximum Total Demand Distortion (TDD) 5.0%

Even harmonics are to be limited to 25% of the odd harmonics shown above.

4.4.5 Power Factor – The System must operate at a power factor >0.85 (leading or lagging) when output is greater than 10% of full load.

4.4.6 Islanding Protection – The System must cease to energize the utility line when the inverter is subjected to islanding conditions. The System must immediately, completely and automatically disconnect from BLW’s electric system in the event of a fault on the Owner’s System or loss of source on BLW’s electric system. BLW, at its own discretion and expense, may conduct periodic testing of anti-islanding. Anti-islanding is a means by which the Owner’s System will cease to generate when it is still connected to the isolated (due to fault clearing or other switching) section of the BLW electric system.

4.5 The Owner’s over-current protective device (Breaker) at the service panel must be dedicated and must be capable of interrupting the maximum available fault current. The Breaker shall be clearly marked to indicate power source and connection to BLW’s electric system. BLW will provide and attach an additional label to the manual load-break disconnect switch, which is described in Subsection 4.3 above.

4.6 The Owner, at the Owner’s expense, must pay for any additional equipment required to connect the System to BLW’s electric system.

5. Written Authorization Required to Connect System

The Owner may not connect the System to BLW's electric system until: 1) this Agreement has been fully executed by the parties, 2) the System has been tested, and 3) written authorization to connect the System, in a form substantially similar to Attachment B, has been given to the Owner by BLW. BLW may have representatives present at the initial testing of the Owner's System and may perform (at its own expense) whatever testing of the Owner's System that BLW deems necessary.

After written authorization to connect the System to BLW's electric system has been given, the Owner shall make no changes or modifications in the System or of its mode of operation without the prior written approval of BLW.

6. Warranty is Neither Expressed nor Implied

BLW's inspection and approval, if any, of the System is solely for BLW's benefit and does not constitute a warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Owner or leased by the Owner from third parties, including without limitation the System and any structures, wires, appliances or devices appurtenant thereto.

7. Indemnity and Liability

7.1 The Owner releases and agrees to indemnify, defend and hold harmless BLW, its agents, officers, employees and volunteers from and against all damages, claims, actions, causes of action, demands, judgments, costs, expenses of every kind and nature, predicated upon injury to or death of any person or loss of or damage to any property, arising, in any manner, from the Owner's activities, actions or omissions under this Agreement.

7.2 Nothing in this Agreement shall be construed as a waiver by the City of Marietta or BLW of any rights, immunities, privileges, monetary limitations to judgments, and defenses available to the City or BLW under law.

8. Location of System

The System will be installed at the Owner's premises located at _____ in the physical location specified or depicted in the attached Exhibit A. The Owner cannot relocate and connect the System at another premises or physical location without filing a new interconnection application with BLW or requesting modifications to this Agreement allowing for connection at the alternate location. In the event that such approval is given, any relocation and installation of the System will be at the Owner's sole expense.

9. Access to Premises

The Owner will provide BLW access to the Owner's premises to (i) inspect the Owner's System, (ii) to read and to replace meters, (iii) to open the load-break disconnect switch, and (iv) to disconnect the interconnection facilities at BLW's meter or transformer.

10. Maintenance of Equipment

The Owner, at the Owner's sole cost and expense, will maintain the System including, but not limited to, all over-current protective equipment, in a safe and prudent manner and in conformance with all applicable laws, codes and regulation, including, but not limited to, the requirements of Section 4 above. The Owner must retain all records for such maintenance. These records must be available to BLW for inspection at all reasonable times.

11. Safety

The Owner agrees to install, operate and maintain the System in a safe and prudent manner and in conformance with all applicable laws, codes and regulations including, but not limited to, those contained in Section 4 above.

12. Assignment

This Agreement may not be assigned by the Owner without the prior written consent of BLW, which may be withheld in its sole discretion. In the event of a sale of the Owner's premises, then this Agreement will terminate upon

that sale. If the new owner desires to continue receiving Service, the new owner must enter into a new, separate agreement with BLW.

13. Force Majeure

Neither party will be liable for delays in performing its obligations to the extent that the delay is caused by an unforeseeable condition beyond its reasonable control without fault or negligence, including but not limited to, riots, wars, floods, fires, explosions, acts of nature, acts of government, or labor disturbances.

14. Severability

If any provision of this Agreement is found to be illegal or unenforceable, then the remaining provisions of this Agreement will remain in full force and effect, and such term or provision will be deemed stricken for as long as it remains illegal or unenforceable.

15. Governing Law and Venue

16.1 Any tribunal enforcing this Agreement shall apply and construe it according to the laws of the State of Georgia.

16.2 In the event of any dispute over the Agreement's terms and conditions, the exclusive venue and jurisdiction for any litigation, arising there under will be in the Superior Court of Cobb County, Georgia, and, if necessary for exclusive federal questions, the United States District Court for the Northern District of Georgia. The Owner waives any objection to jurisdiction or venue of any action instituted pursuant to this section and may not assert any defense in any such action based on lack of jurisdiction or venue or based *upon forum non conveniens*. The Owner waives any bond or surety or security upon such bond or surety which, but for this waiver, might be required by BLW.

16. Survival

The provisions of this Agreement with respect to indemnification and liability will survive the termination of this Agreement.

17. Notices and Other Communications

Except as otherwise provided in this Agreement or as may be specified by the parties in writing, any notice or other communication required under this Agreement must be in writing and must be sent by registered or certified United States mail, or by messenger, or by facsimile, or by other electronic means. Any such notice or other communication must be addressed as follows and, if so addressed, will be effective upon actual receipt.

If to Owner:

Name: _____
Title: _____
Address: _____

Phone: _____
Fax: _____
Email: _____

If to BLW:

Name: _____
Title: _____
Address: _____

Phone: _____
Fax: _____
Email: _____

18. Entire Agreement

This Agreement, together with its attachments, constitutes the entire agreement between the parties and supersedes all previous written or oral communications, understandings and agreements between the parties unless specifically stated otherwise within this Agreement. This Agreement may only be amended by a written agreement signed by both parties. Email and all other electronic (including voice) communications from BLW in connection with this Agreement are for informational purposes only. No such communications is intended by BLW to constitute either an electronic record or an electronic signature or to constitute any agreement by BLW to conduct a transaction by electronic means. Any such intention or agreement is expressly disclaimed.

19. Acknowledgements Regarding Agreement

By signing below, the Owner acknowledges understanding of the terms of this Agreement and that the Owner may not connect the System to BLW’s electric system until the Owner has received written authorization to connect from BLW. Within 60 days after notice from the Owner that the System is ready for interconnection to BLW’s electric system, BLW will inspect the System and will provide a written authorization to connect the System or a statement that the System may not be connected because of non-compliance with this Agreement.

20. Compliance With Ordinances And Regulations

The Owner shall perform all obligations under this Agreement in strict compliance with all applicable federal, state, and City laws, rules, statutes, charter provisions, ordinances and regulations.

21. Beneficiaries

This Agreement is for the sole benefit of and binds the parties, their successors and assigns. This Agreement affords no claim, benefit or right of action to any third party. Any party besides BLW or the Owner receiving services or benefits under this Agreement is only an incidental beneficiary.

22. Status of Owner

The Owner shall perform all operations under this Agreement as an independent Contractor, and not as an agent or employee of BLW. No BLW official or employee shall supervise the Owner. The Owner will exercise no supervision over any employee or official of BLW. The Owner shall not represent that Owner is an employee or agent of BLW in any capacity. **The Owner has no right to Worker's Compensation benefits from BLW or its insurance carriers or funds.**

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year set forth below.

Marietta Board of Lights and Water
Marietta, Ga. 30060-1528

Owner

General Manager

Signature

Date: _____

Print Name

Date: _____

Exhibit A

To the Agreement for Interconnection and Parallel Operation of Small Distributed Generation Resources 10 kW or less between BLW and _____ dated _____

Insert description of System

Exhibit B

The Agreement for Interconnection and Parallel Operation of Small Distributed Generation Resources 10 kW or less between BLW and _____ dated _____

Section A: Authorization. The System may be connected to the Marietta Power electric system.

The System has been inspected and tested and the Owner is authorized to connect the System to the Marietta Power electric system.

Signed by:

Printed Name

Printed Title:

Date:

OR

Section B: Non-Authorization. The System cannot be connected to the Marietta Power electric system.

The System does not comply with the Interconnection Agreement for Parallel Operation of Small Distributed Resources between BLW and _____, dated _____. Accordingly, the Interconnection Owner **cannot connect** the System to the Marietta Power electric system.

Signed by:

Printed Name

Printed Title:

DEFINITIONS

Point of Common Coupling (PCC): The point where the Owner's local electric power system connects to the BLW distribution system, such as the electric power revenue meter or at the location of the equipment designated to interrupt, separate or disconnect the connection between the Owner and the BLW.