JEA Distributed Renewable Generation Interconnection Agreement (System Less Than or Equal to 2 MW)



This Agreement is made and entered into this	day of	, 20	, by and between	
	, (hereinafter called "Customer"), located at			
in		,	Florida, Zip Code:	
and JEA, a body politic and corporate, with a business address of 21 W. Church St., Jacksonville, FL 32202. Customer and JEA shall				
collectively be called the "Parties". The physical location/premises where the interconnection is taking place is:				

WITNESSETH:

Whereas, JEA, operates an electric distribution system serving Duval County and surrounding areas;

Whereas, Customer has made a written Application to JEA, a copy being attached hereto, to allow connection of a Customer-Owned Distributed Renewable Generation System for any length of time to the distribution system at the location listed above; and

Whereas, JEA desires to provide interconnection of Customer-Owned Distributed Renewable Generation System under conditions which will ensure the safety of JEA 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:

Section 1. Definitions

"Customer-owned distributed renewable generation" means an electric generating system located on a customer's premises that is primarily intended to offset part or all of the Customer's electricity requirements with renewable energy that is generated using one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power.

"DER" means Distributed Energy Resources, which include all forms of distributed generation and energy storage.

"Gross power rating" or GPR means the total manufacturer's AC nameplate generating capacity of one (1) or multiple on-site customerowned distributed renewable generation and/or DER system(s) that will be interconnected to and operate in parallel with JEA distribution facilities. For inverter-based systems, the GPR shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC.

"Renewable Energy" means electrical, mechanical, or thermal energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power.

"Renewable Energy Credits" shall mean any and all renewable energy credits (RECs), renewable energy certificates (RECs), benefits, environmental attributes, emissions reductions, offsets, and allowances, however entitled, attributable to the generation of electricity from the customer-owned distributed renewable generation system and its displacement of conventional energy generation.

"DG-1" means electric generating system less than or equal to 2 MW_{AC}.

Section 2. Scope of Agreement

2.01. This Agreement defines the terms and conditions under which JEA and the Customer agree to interconnect Customer-Owned Distributed Renewable Generation System(s) and/or DER of less than or equal to 2 MW_{AC} to JEA's electric system.

Section 3. Interconnection Application and Fees

- 3.01. In order to commence the process for interconnection of the customer-owned distributed renewable generation system, Customer shall complete and submit to JEA a JEA application form for interconnection.
- 3.02. Customer with distributed renewable generation **greater than 100 kW**_{AC} and **less than or equal to 2 MW**_{AC} shall be required to pay an application fee of \$1,000.00 for the DG-1 Customer-owned distributed renewable generation system interconnection request. This application fee shall cover the cost for processing the Customer's application and the cost of an initial screening of the proposed interconnection's impact on the JEA's electric system, as such process is described in Section 10, hereto.
- 3.03. In the event the Customer-owned distributed renewable generation system greater than 100 kW_{AC} and less than or equal to 2 MW_{AC} does not pass the Initial Screen and the Customer elects to proceed with an Interconnection Study, as described in Section 10, hereto, the Customer shall be required to pay in advance the estimated cost of an interconnection study.

March 19, 2018 Page 1 of 5

Section 4. Applicable Codes and Standards

4.01. Prior to operating in parallel with JEA's electric system, Customer shall certify that the customer-owned distributed renewable generation system equipment, its installation, its operation and its maintenance are in compliance with the latest versions/revisions of the standards listed below. Customer with distributed renewable generation greater than 100 kWac and less than or equal to 2 MWac must provide the certification of compliance with the latest version and/or revision of the standards listed below in a form of engineering certification, signed by an engineer licensed in Florida.

- (a) IEEE-1547 IEEE Standard for Interconnecting Distributed Resources with Electric Power System;
- (b) IEEE-1547.1 IEEE Standard Conformance Test Procedures for Equipment Interconnection Distributed Resources with Electric Power Systems;
- (c) UL-1741 and UL-1741 SA UL Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources;
- (d) The most recent version of the National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes;
- (e) The latest revision JEA Electric Systems Procedure ES 20202 902 DER Facilities; and
- (f) The manufacturer's installation, operation and maintenance instructions.
- 4.02. Customer may be requested to provide a copy of the documents listed in section 4.01(f) to JEA.

Section 5. Inspection Requirements

- 5.01. Prior to commencing parallel operation with JEA's electric system, Customer shall have the customer-owned distributed renewable generation system inspected and approved by the appropriate code authorities having jurisdiction. Customer shall provide a copy of this inspection and approval to JEA.
- 5.02. Prior to and after operation of the customer-owned distributed renewable generation system in parallel with JEA's electric system, authorized JEA representatives may inspect the customer-owned distributed renewable generation system to verify that it is and continues to be in compliance with the standards and codes contained in this Agreement.
- 5.03. JEA shall provide Customer with as much notice as is reasonably practicable; either in writing, email, facsimile or by phone as to when JEA may conduct inspection and/or documentation review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, JEA shall have access to Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed by this Agreement, or, if necessary, to meet JEA's obligations to provide service to its customers.
- 5.04. In no event shall any statement, representation, or lack thereof, either express or implied, by JEA, relieve the Customer of exclusive responsibility for the Customer's system. Specifically, any JEA inspection of the customer-owned distributed renewable generation system shall not be construed as confirming or endorsing the system design or its operating or maintenance procedures nor as a warranty or guarantee as to the safety, reliability, or durability of the customer-owned distributed renewable generation system equipment. JEA's inspection, acceptance, or its failure to inspect shall not be deemed an endorsement of any customer-owned distributed renewable generation system equipment or procedure.

Section 6. Distributed Generation

6.01. JEA will allow customer-owned distributed renewable generation systems less than or equal to 2 MW_{AC} under the JEA Distributed Generation Policy.

Section 7. Modifications and/or Additions to the Customer-Owned Distributed Renewable Generation System

7.01. It is the Customer's responsibility to notify JEA of any change to the GPR of the customer-owned distributed renewable generation system by submitting a new application for interconnection specifying the modifications at least 60 days prior to beginning the modifications.

- 7.02. If Customer adds another customer-owned distributed renewable generation system which
 - (a) utilizes the same JEA-interactive inverter for both systems; or
 - (b) utilizes a separate JEA interactive inverter for each system,

then Customer shall provide JEA with 60 days written notice of the addition.

Section 8. Power Delivered to JEA

8.01. The customer-owned distributed renewable generation system(s) and DER systems(s) total maximum power exporting capability shall not exceed 90% of JEA distribution service rating at the Customer's electric service point.

March 19, 2018 Page 2 of 5

Section 9. Administrative Requirements and Installation of Meter

9.01. Customer must execute this Agreement and return it to JEA prior to beginning parallel operations with JEA's electric system. Subject to an approved inspection, including installation of acceptable disconnect switch, this Agreement shall be executed by JEA within 60 calendar days of receipt of completed required documentation and returned to the customer.

9.02. Once JEA has received Customer's written documentation that the requirements of this Agreement have been met and the correct operation of the manual switch has been demonstrated to a JEA representative, JEA will install the required meter. JEA must have access to this meter at all times.

Section 10. Interconnection Study Process (for distributed renewable generation and/or DER greater than 100 kWAC and less than or equal to 2 MWAC)

10.01. Initial Screen

- 10.01.1. JEA will perform an Initial Screening of Customer's request for interconnection which evaluates the potential impacts to the JEA electric system, consistent with prudent utility practice.
- 10.01.2. In order to pass the Initial Screen, Customer's interconnection shall not exceed established industry standards, as set forth in the Interconnection Study Process and shall not require construction of Interconnection Facilities and Distribution Upgrades on JEA's electric system.
- 10.01.3. If the Customer's interconnection request passes the Initial Screen, the Customer's request shall be approved and Customer will be provided an executable Interconnection Agreement.
- 10.02. In those instances in which the Customer-owned distributed renewable generation and/or DER system does not pass the Initial Screen, the Customer may elect to proceed with an Interconnection Study. In general, the purpose of the Interconnection Study will be to better determine what adverse impacts the Customer-owned distributed renewable generation and/or DER system has on the JEA system and what facilities will be required to resolve such impacts.
- 10.03. Interconnection Study
 - 10.03.1. The Interconnection Study Process shall be used by a Customer proposing to interconnect its certified Customer-owned distributed renewable generation and/or DER system, in those instances in which such system did not pass the Initial Screen.
 - 10.03.2. Upon Customer execution of the Interconnection Agreement; the Customer shall be obligated to pay for any and all costs for Interconnection Facilities and Distribution Upgrades identified in the Interconnection Study in order to interconnect the proposed Customer-owned distributed renewable generation and/or DER system.

Section 11. Cost Responsibility for Interconnection Facilities and Distribution Upgrades (for distributed renewable generation greater than 100 kWac and less than or equal to 2 MWac)

- 11.01. The Customer shall pay JEA for the actual cost of any and all JEA Interconnection Facilities and Distribution Upgrades required to implement this Interconnection Agreement. JEA shall provide a best estimate cost, including overheads, for the purchase and construction of JEA's Interconnection Facilities and Distribution Upgrades required and shall provide a detailed itemization of such costs.
- 11.02. The Customer shall be responsible for all reasonable expenses, including overheads, associated with:
 - (a) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities and other equipment; and
 - (b) operating, maintaining, repairing, and replacing JEA's Interconnection Facilities and Distribution Upgrades.
- 11.03. JEA shall design, procure, construct, install and own the Interconnection Facilities and Distribution Upgrades, required for JEA to implement this Interconnection Agreement. If JEA and the Customer agree, the Customer may construct Interconnection Facilities and Distribution Upgrades that are located on land owned by the Customer. The actual cost of Interconnection Facilities and Distribution Upgrades, including overheads, shall be directly assigned to and paid by the Customer.

Section 12. Customer Insurance Requirements (for distributed renewable generation greater than 100 kW_{AC} and less than or equal to 2 MW_{AC})

12.01. The Customer agrees to provide and maintain general liability insurance for personal and property damage, or sufficient guarantee and proof of self-insurance, in the amount of not less than \$2 million during the entire period of this Interconnection Agreement. Initial proof of insurance shall be in the form of a copy of the policy attached to this Interconnection Agreement evidencing the owner's property insurance or other insurance policy in effect at the time of interconnection.

Section 13. Customer Equipment

13.01. Customer is responsible for the protection of its generation equipment, inverters, protection devices, and other system components from damage due to normal and abnormal operations that occur on JEA's electric system in delivering and restoring system power. Customer is also responsible for ensuring that the customer-owned distributed renewable generation system equipment is

March 19, 2018 Page 3 of 5

inspected, maintained, and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely. Such inspection should occur after large storms have traversed Customer's location and after connection with JEA's system has been restored.

13.02. If the customer's DER system(s) contains an energy storage system, the charging operation of the energy storage system shall not cause the current peak demand for the service to increase. Any changes or modifications performed to the DER system that may result in increased load demand the customer shall contact JEA.

Section 14. AC Disconnect Switch

14.01. Customer shall install, at customer's sole expense, a AC disconnect switch of the visible load break type to provide a separation point between the AC power output of the customer-owned distributed renewable generation system and any Customer wiring connected to JEA's electric system such that back feed from the customer-owned distributed renewable generation system to JEA's electric system cannot occur when the switch is in the open position. The AC disconnect switch shall be mounted separate from the meter socket on an exterior surface adjacent to the meter. The switch must be readily accessible to JEA at all time and capable of being locked in the open position with a JEA padlock. When locked and tagged in the open position by JEA, this switch will be under the control of JEA. The switch shall meet all applicable local and national electrical codes for the installed distributed renewable generation systems. The switch shall be permanently labeled with three inch high letters clearly stating "JEA (name of distributed renewable generation) DISCONNECT". If the switch is mounted out of sight of the meter, permanently mounted instructions must be posted at the meter clearly stating the location of the disconnect switch.

14.02. JEA may open the switch and lock it, isolating the customer-owned distributed renewable generation system, without prior notice to Customer. To the extent practical, however, prior notice shall be given. If prior notice is not given, JEA shall at the time of disconnection leave a door hanger notifying the Customer that the distributed renewable generation has been disconnected, including an explanation of the condition necessitating such action. The switch will be unlocked by JEA as soon as practical once the conditions causing the disconnection cease to exist. Customer may have to close the switch to re-energize the distributed renewable generation. Typical conditions which may require the switch to be opened include, but are not limited to:

- (a) JEA electric system emergencies or maintenance requirements.
- (b) Hazardous conditions existing on JEA's electric system due to the operation of the Customer's distributed renewable generation or protective equipment as determined by JEA.
- (c) Adverse electrical effects (such as power quality problems) on the electrical equipment of JEA's other electric consumers caused by the distributed renewable generation system as determined by JEA.

14.03. On termination of services pursuant to this Agreement, JEA shall open and padlock the AC disconnect switch and remove any additional metering equipment related to this Agreement. At the Customer's expense, within 10 working days following the termination, the Customer shall permanently isolate the customer-owned distributed renewable generation system and any associated equipment from JEA's electric supply system, notify JEA that the isolation is complete, and coordinate with JEA for return of JEA's lock.

Section 15. Metering Equipment

15.01. JEA will furnish, install, own and maintain metering equipment capable of measuring the flow of kilowatt-hours (kWh) of energy. The Customer's service associated with the customer-owned distributed renewable generation system will be metered at a single metering point and the metering equipment will measure energy delivered by JEA to Customer, and also measure energy delivered by Customer to JEA. Customer agrees to provide safe and reasonable access to the premises for installation of this equipment and its future maintenance or removal.

Section 16. Renewable Energy Credits

16.01. Pursuant to the JEA Distributed Generation Policy:

For customer-owned distributed renewable generation systems less than or equal to 2 MW_{AC}, the customer shall retain the Renewable Energy Certificates associated with customer-utilized renewable generation. For any kWh purchased by JEA, the renewable energy attributes will be transferred to JEA.

Section 17. Indemnification

17.01. Customer agrees to indemnify, defend and hold harmless JEA, its subsidiaries or affiliates, and their respective employees, officers and directors, governing boards, successors, and assigns against any and all liability, loss, damage, cost or expense, including attorney's fees, which JEA, its subsidiaries, affiliates, and their respective employees, officers and directors, governing boards, successors, and assigns may hereafter incur, suffer or be required to pay by reason of negligence on the part of the Customer under the obligation of this Agreement. This indemnification shall survive the term of this Agreement for events that occurred during the Agreement term.

Section 18. Assignment

18.01. Customer shall not have the right to assign its benefits or obligations under this Agreement without JEA's prior written consent and such consent shall not be unreasonably withheld. If there is a change in ownership of the customer-owned distributed renewable

March 19, 2018 Page 4 of 5

generation system, Customer shall provide written notice to JEA at least 30 days prior to the change in ownership. The new owner will be required to assume in writing Customer's rights and duties under this Agreement, or execute a new Standard Interconnection Agreement. The new owner shall not be permitted to deliver energy to JEA's electric grid or begin parallel operations until the new owner assumes this Agreement, or executes a new Agreement, and submits an IRS Form W-9.

Section 19. Lease Agreements and Retail Purchase of Electricity

19.01. Customer may contract with a third party for the purchase, lease, operation, or maintenance of an on-site distributed renewable generation system under terms and conditions that do not include the retail purchase of electricity from the third party. Customer shall provide JEA a copy of the lease agreement for any leased interconnection or generation equipment. Customer shall not enter into any lease agreement that results in the retail purchase of electricity; or the retail sale of electricity from the customer-owned distributed renewable generation system. Notwithstanding this restriction, in the event that Customer is determined to have engaged in the retail purchase of electricity from a party other than JEA, then Customer shall be in breach of this Agreement and may be subject to the jurisdiction of the Florida Public Service Commission and to fines/penalties.

Section 20. Entire Agreement

20.01. This Agreement supersedes all previous agreements and representations either written or verbal heretofore made between JEA and Customer with respect to matters herein contained. This Agreement, when duly executed, constitutes the only Agreement between parties hereto relative to the matters herein described.

Section 21. Governing Law & Tariff

- 21.01. This Agreement shall be governed by and construed and enforced in accordance with the laws, rules and regulations of the State of Florida and JEA's Tariff as it may be modified, changed, or amended from time to time.
- 21.02. This Agreement incorporates by reference the terms of the JEA Electric Documentation Volume 1 filed with the Florida Public Service Commission by JEA, including associated technical terms and abbreviations, general rules and regulations and standard electric service requirements (as may be applicable) as amended from time to time. To the extent of any conflict between this Agreement and such Electric Documentation Volume 1, the Electric Documentation Volume 1 shall control.
- 21.03. JEA and Customer recognize that the Florida Statutes and/or the Florida Public Service Commission Rules, including those Rules directly addressing the subject of this Agreement, may be amended from time to time. In the event that such statutes and/or rules are amended that affect the terms and conditions of this Agreement, JEA and Customer agree to supersede and replace this Agreement with a new Interconnection Agreement which complies with the amended statutes/rules.
- 21.04. Customer agrees to furnish JEA with an IRS Form W-9 at the time that the contract is executed. Customer understands that JEA is required to, and will report the dollar value of, the kWh credits for the electricity that the customer sells to JEA on IRS Form 1099-MISC. Customer further understands that these credits may be subject to U. S. Federal Income Tax.
- 21.05. Customer also understands that JEA will bill, and that the customer is liable for, all applicable State and local Utility Taxes on the net amount of electric power that the customer purchases from JEA. Gross Utility Taxes are reduced by the credits that the customer receives for selling power back to JEA. If the amount of power sold back to JEA is greater than the amount of power purchased from JEA for any given month then taxes will be based only on the Customer Charge. Customer cannot receive a net credit for state or local taxes.

IN WITNESS WHEREOF, Customer and JEA have executed this Agreement the day and year first above written.

JEA	Approved as to Form	
By:		
Title:		
Date:	Office of General Counsel	
CUSTOMER		
Ву:		
(Signature)	(Print Name)	
(Title, if Corporation)	(Customer Account Number)	
Date:		

March 19, 2018 Page 5 of 5