

City of Tallahassee
Your Own UtilitiesSM



**Agreement for parallel connection of a photovoltaic generator
with the City of Tallahassee's Electric Distribution System:
Photovoltaic Generators Up To 100 KW**

This Agreement is made and entered into this ____ day of _____, 200_,
by and between, the City of Tallahassee, Florida, a Florida municipal corporation
(the "City") and _____ (the "Customer"), whose address
is _____ (the "Property").

Whereas, the City endeavors to encourage the development of electric power
generation using renewable fuels; and

Whereas, the Customer desires to construct and/or operate a photovoltaic array
connected in parallel with the City's power distribution or transmission system
(hereafter "System") through the Customer's connection to the meter at or on the
Property; and

Whereas, there are electrical safety, power quality, and other issues with such an
installation.

Now, therefore, for and in consideration of the mutual covenants and agreements
between the parties, the City and Customer hereby agree as follows:

1. The City agrees that the photovoltaic generator, as specified in the
attached "**Application and Compliance Form For Small PV Systems
Up to 100 KW**" may be connected in parallel with the distribution system
once the following condition are met;
 - a. The Customer and the City have signed this agreement.
 - b. The installation is in compliance with all provisions in the attached
Appendix A, hereby made a part of this document.
 - c. The "**Application and Compliance Form For PV Systems Up To
100 KW**" document is completed and signed by the appropriate
Electrical Inspector and the City.
 - d. **Appendix B** has been signed by both parties.
2. This Agreement applies solely to Customer's PV system at or on the
Property.
3. City reserves the right to terminate this Agreement with or without cause
with 30 calendar days written notice.

4. Any material default of this Agreement by the Customer shall allow City to immediately terminate this Agreement and disconnect the Customer's PV system from City's System.

5. The Customer agrees to immediately notify City in writing if the Customer:
- a. Sells the Property.
 - b. Makes a change to the PV system.
 - c. Sells the PV system or a portion thereof.
 - d. Performs maintenance on the PV system that may have an impact on the City's System.

By _____ Date: _____
Customer

By _____ Date: _____
City

APPENDIX A

INTERCONNECTION REQUIREMENTS FOR SMALL PHOTOVOLTAIC SYSTEMS Up To 100 KW

A. Definitions

1. A **small photovoltaic (PV) System** is a solar electric generator with an array rating of up to 100 kW under standard operating conditions (SOC) of 1000 watts/m² solar irradiance, nominal operating cell temperature, air mass 1.5, and ASTM standard solar spectrum.
2. An **inverter**, also referred to as a *power conditioner*, is a dc to ac device that converts PV energy to ac energy for utility interconnection. The inverter contains many control functions, such as voltage and frequency monitoring and protection against islanding. These Interconnection Requirements apply only to static inverters. Rotating devices cannot be used.

B. Standards and Codes

1. **Inverter(s).** The inverter(s) must be listed and in compliance with Underwriters Laboratories (UL) Subject 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems. Utility-interactive inverters that pass the tests of the new UL 1741 standard will be, by definition, “non-islanding” inverters and will comply with all elements of the new IEEE 929-2000 interconnection standard. The 2005 National Electrical Code requires that all utility-interactive photovoltaic systems use listed inverters that pass UL 1741.
2. **PV Modules and Panels**
 - a. PV modules and panels must be listed and be in compliance with Underwriters Laboratories (UL) Standard 1703, Standard for Safety: Flat-Plate Photovoltaic Modules and Panels.
 - b. PV modules must be in compliance with *IEEE Standard 1262-1995, IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules* (or, equivalently, IEC 61215).
3. **System Installation.** The installed system must be in compliance with: a) *IEEE 929-2000, Recommended Practice for Utility Interface of Photovoltaic Systems* and b) all relevant articles of the *2005 National Electrical Code* (or subsequent revisions).

- 4. City's Inspection and Approval.** Prior to operation, the City reserves the right to inspect the PV system installation to ensure compliance with the standards and codes noted in the previous sections. If the City chooses to exercise this option, it agrees to inspect and, if the system is in compliance, provide written approval of the interconnection (using the *Application and Compliance Form*) within ten working days following the request for inspection and approval. Parallel operation of the photovoltaic system with the grid shall not begin without the City's approval.
- 5. Extreme Conditions.** The City reserves the right to refuse to accept electric power from the PV system under extreme conditions as described below. If the City chooses to exercise this option, which may involve physically disconnecting the Grid from the PV system, it agrees to make reasonable efforts to notify the Customer when such conditions exist or are anticipated to exist, and to reconnect when the adverse conditions no longer exist. Examples of conditions that may lead to disconnection include:

 - a. City System emergencies and/or maintenance requirements,
 - b. Hazardous conditions existing on the PV system or its protective equipment,
 - c. Adverse effects of the PV system's operation on the City System, or on other City customers, or
 - d. Failure of the PV system to comply with regulations, rules, orders or decisions of any government or regulatory authority having jurisdiction over the City, generating equipment or operation.
- 6. External Disconnect Switch.** The City requires a manual, lockable, load break utility-interface disconnect switch between the output of the photovoltaic inverter and the Customer's wiring connected to the City of Tallahassee's electric distribution system. The load break device shall be both visible and accessible to Tallahassee's employees. Customer hereby grants a full license to access the Property and the PV system to ensure compliance herewith.
- 7. Testing of Protective Relays.** City reserves the right to test the anti-islanding features and the power output quality of the inverter.
- 8. Insurance and Indemnification.** The Customer shall provide proof of and maintain at all times a general liability insurance policy for personal and property damage in the amount of at least \$100,000. In residential applications a standard homeowner's policy in at least this amount may meet this requirement. Customer shall properly execute the Indemnification Agreement in the exact form as attached as Appendix B and deliver it the City upon submitting the Application set forth below.

- 9. PV System Equipment Protection.** It is the responsibility of the Customer to protect its generating equipment, inverters, protection devices, and other system components from damage by the normal conditions and operations that occur on the part of City in delivering and restoring System power. City hereby disclaims any liability whatsoever for damage to the Customer's equipment.
- 10. Load Balancing.** Single-phase connections with the City are permitted at power levels up to 15 kW. For power levels exceeding 15 kW, a three-phase balanced interconnection will normally be required.
- 11. Metering Arrangements.** The PV Inverter output may be connected, by the Customer, to the Customer side of the normal service meter through an External Disconnect Switch.

The City may install, at its own expense, an additional meter or metering equipment on the Customer's premises capable of measuring any excess kilowatt-hours produced by the PV system and delivered back to the City. The value of such excess generation shall be credited to the Customer's bill based on the average energy rate (cents/kWh) as provided for under the City's residential or commercial tariff approved by the Florida Public Service Commission. The City will retain any applicable Renewable Energy Credits (RECs) for the system's output. If the City does not install such a meter or metering equipment, the City shall permit the Customer to net meter any excess power delivered to the City by us of a single standard watt hour meter capable of reversing directions to offset recorded consumption by the Customer. If the kilowatt hours of energy produced by the PV system exceeds the Customer's kilowatt hour consumption for any billing period, a credit for the net kwh delivered to the City's system shall be carried forward to the next billing cycle. Credits may accumulate and be carried forward for a moving 12 month period. The moving 12 month period is defined as ending in the current billing cycle and starting the same month last year plus one month. In no event shall the Customer be paid for excess energy delivered to the City system at the end of the 12 month moving period.

**APPLICATION AND COMPLIANCE FORM
FOR SMALL PV SYSTEMS UP TO 100 KW**

A. Applicant Information	
Customer Name _____	Telephone # _____
Mailing Address _____	Email _____
City _____, Fl _____	ZIP Code _____
Service address if different from mailing address _____	City _____
City account number _____	
B. Photovoltaic System Information	
System Name/Model: _____	
Array DC Power at SOC in watts _____	
Array manufacturer and model _____	
Inverter manufacturer and model _____	
Batteries (if applicable) _____	
Array location _____	
Inverter location _____	
AC Disconnect Location _____	
C. Installation Contractor Information	
Installation contractor name _____	Fl license # _____
Contractor address _____	City, State, ZIP _____
Contractor phone _____	
Proposed installation date _____	
D. Hardware and Installation Compliance	
1.. The system hardware is in compliance with Underwriters Laboratories (UL) <i>Standard 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems</i> and <i>UL 1703, Standard for Safety: Flat-Plate Photovoltaic Modules and Panels</i> , and <i>IEEE 1262-1995, IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules</i> .	
2. The system has been installed in compliance with <i>IEEE 929, Recommended Practice for Utility Interface of Photovoltaic Systems</i> and the <i>2005 National Electrical Code (NEC)</i> .	
Contractor signature _____	Date _____
Print name _____	

E. Owner Acknowledgment

The system has been installed to my satisfaction and I have been given system warranty information, and an operation manual. Also, I have been instructed in the operation of the system.

Owner signature Print Name Date

F. Utility Approval and Electrical Code Inspection

PV Installation Satisfies THE CITY OF TALLAHASSEE Interconnection Requirements

CITY OF TALLAHASSEE Representative Name (Print):

CITY OF TALLAHASSEE Representative Signature: Date

PV Installation Satisfies Code Requirements

Inspector Name (Print)

Inspector Signature Date

**APPENDIX B
HOLD HARMLESS/INDEMNIFICATION**

To the fullest extent permitted by laws and regulations, Customer shall defend, indemnify, and hold harmless the City, its officers, directors, agents, guests, invitees, and employees from and against all claims, damages, losses, and expenses, direct, indirect, or consequential (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising out of or resulting from any acts of commission, omission, negligence, recklessness or intentional wrongful misconduct of the Customer, or any other person or organization directly or indirectly employed by the Customer to perform or furnish any of the work or anyone for whose acts any of them may be liable.

In any and all claims against the City, or any of its officers, directors, agents, or employees by any employee of the Customer, or any other person or organization directly or indirectly employed by the Customer to perform or furnish any of the work or anyone for whose acts any of them may be liable, this indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Customer or any other person or organization under workers' or workmen's compensation acts, disability benefit acts, or other employee benefit acts, nor shall this indemnification obligation be limited in any way by any limitation on the amount or type of insurance coverage provided by the City, or the Customer.

Applicability: It is the express intent of the Customer that this agreement shall apply for the project indicated below:

Parallel connection of a photovoltaic generator with the City of Tallahassee's Electric Distribution System

Savings Clause: The parties agree that to the extent the written terms of this Indemnification conflict with any provisions of Florida laws or statutes, in particular Sections 725.06 and 725.08 of the Florida Statutes, the written terms of this indemnification shall be deemed by any court of competent jurisdiction to be modified in such a manner as to be in full and complete compliance with all such laws or statutes and to contain such limiting conditions, or limitations of liability, or to not contain any unenforceable, or prohibited term or terms, such that this Indemnification shall be enforceable in accordance with and to the greatest extent permitted by Florida Law.

Name of Organization

BY: _____
Signature of Owner or Officer

ATTEST: _____
Corporate Secretary or Witness

