



**SUBJECT:** Grid-Tied Distributed Generation Application/Installation Procedure

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The City will use this review procedure for all applications to connect inverter-based customer-generating facilities.

1. The customer will be responsible for obtaining **all** information and specifications required by the City.
2. The solar company shall **not** install any equipment until after Step 5.
3. A packet of all information and specifications will need to be submitted in person or by email to Crystal Wright with the City Power Department and Tami Jones with the City Building Department. Please note that all applications must include the following items:
  - Hurricane Power Grid-Tied Policy signed by homeowner.
  - Interconnection Review Form.
  - Building Permit Application.
  - Full plan set including one-line diagram.
  - Data sheets for all parts listed on the plan set.
  - AC Disconnect must clearly state within 5' of the utility meter.
  - Stamped structural letter.
  - Site electric equipment pictures.
  - Utility service meter cannot be located behind a fence/wall/gate.***
4. Customer is required to complete a pre-solar installation orientation with Crystal Wright with Power Department. Orientation information will be emailed to customer using the email provided on the Interconnection Review Form.
5. After equipment approval is received from the Power Department the customer will contact the Building Department to pay for the necessary building permit, solar application review fee, and power connection fee.
6. After the solar installation, the customer will contact the Building Department for inspection. After inspection passes, the Building Department will forward approval to Power Department for bi-directional meter installation.
7. After the bi-directional meter is installed, Hurricane Power Department will email notification to the customer stating their solar system is now connected the grid.

Contact Information

- Crystal Wright, Hurricane City Power Department – 435-635-5536  
[crystal@cityofhurricane.com](mailto:crystal@cityofhurricane.com)
- Tami Jones, Hurricane City Building Department – 435-635-2811 x 122  
[tami@cityofhurricane.com](mailto:tami@cityofhurricane.com)

*Fee Schedule (Current as of April 2022)*

*Solar Application Review Fee is \$200 for initial review plus \$75 for each additional review.*

*\$100 Building Permit Fee plus \$1 state tax fee*

*\$375 Power Connection Fee*



City of Hurricane

*Power Department*  
*Scott Hughes, Director*

## City of Hurricane Solar Interconnection Review Form

### Customer Information:

Customer Name:

Address:

Account Number:

Phone Number:

Email:

Existing Service Size: (AMP)

### Contractor Information

Company Name:

Contact Name:

Contractor License #:

Phone Number:

Email:

### Sale Company Information (if different than above contractor information)

Company Name:

Company Address:

Contact Name:

Contact Phone Number:

Email:

## Equipment Information

1. Solar Electric Module Manufacturer:

Model Number:

Power Rating per Module in DC Watts:                      Number of Modules

2. Total Array Output:    (DC in kW) (# of Modules \* Power Rating)

3. Conductor Type:    Number of Conductors

4. Are you installing a combiner box with fuses?    Yes                      No

Combiner box with fuses size:

5. Inverter Manufacturer:

Inverter Model Number:

6. Inverter Continuous AC Rating:                              (AC in kW)    Number of Inverters

7. Total Inverter Output:                              (AC in kW) (Inverter Continuous AC Rating \* # of Inverters)

8. Inverter's Peak efficiency:                              (Refer to manufacturer's peak efficiency rating)

9. Export Limiter - Energy Meter with Modbus (if applicable)

**\*Installations with a DC output higher than 8.1 kW and a AC output higher than 6 kW**

Manufacturer:

Model Number:

Comments

All data sheets for the proposed equipment (solar panels, inverters, cable, Energy Meter with Modbus, etc...) must be included in the application.



## **Grid-Tied Distribution Generation Policy**

This Grid-Tied Distribution Generation Policy (“Policy”) applies to all grid-tied distribution generation systems (“Systems”) within the City of Hurricane (“City”) operated by customers (“Customers”) of Hurricane City Power (“HCP”) in which the system is located on the Customer’s side of the City’s electric meter.

The City reserves all rights to refuse or deny an application that does not comply with any of the terms and conditions of this policy.

### **Application Procedures:**

Applicants requesting approval of a grid-tied distribution generation facility must obtain an application from HCP and complete all requirements, including the Grid-Tied Distribution Generation Application Checklist.

### **Interconnection Review:**

The City will review an application to interconnect a System after the Customer has met the following criteria:

1. Customer has submitted a complete application and paid the applicable fees.
2. Customer has contacted and listed a prequalified solar installer on the application.

### **System Limits:**

The City will allow a limited number of HCP Customers to install Systems, subject to all requirements and conditions of this Policy. The number of Customers’ Systems allowed will be limited by the capacity of each distribution circuit, as determined by HCP.

The aggregate generation capacity on the distribution circuit to which the System will interconnect, including the capacity of the System, shall not contribute more than 10% to the distribution circuit’s maximum fault current at the point on the high voltage (primary) level that is nearest the proposed point of common coupling as determined by HCP.

A System’s point of common coupling shall not be on a transmission line or a spot network.

If a System is to be connected to a radial distribution circuit, the aggregate generation capacity connected to the circuit, including that of the System, shall not exceed 15% of the circuit’s total annual peak load, as most recently measured at the substation.

If a single-phase System is to be connected to a transformer center tap neutral of a 240-volt service or a three phase transformer, the addition of the System shall not create an imbalance between the two sides of the 240 volt service or an imbalance of the three phase transformer of more than 20% of nameplate rating of the service transformer.

### **Circuit/Distribution System Study:**

A circuit/distribution system study may be needed to ensure any System installation is not detrimental to the City’s power grid. Whether a circuit/distribution system study is required shall be determined by HCP at its sole discretion. The study will be completed by an engineer contracted by HCP, the cost of which shall be paid by Customer prior to the study being authorized by the City and prior to any approval or acceptance of the Customer’s System. System installations that would be detrimental to the City’s power grid are not permitted.

### **Installation, Compliance, Energy Credits, and Meter Reading:**

Systems shall be installed in accordance with all HCP and City codes, rules, regulations, and specification standards. HCP and the City’s Building Department shall inspect the System prior to any power generation to ensure it complies.



The City will be the owner of the renewable attributes also known as Renewable Energy Credits (REC) of the electricity that are generated on or after the Customer-generating facility is installed and working.

HCP shall replace its normal metering equipment with bi-directional metering equipment on the meter base at the cost of the Customer. The bi-directional meter will measure energy that flows from the City’s power grid to the Customer as well as the energy that flows from the Customer to the City’s power grid. HCP will read the Customer’s meter on the City’s normal meter reading schedule.

HCP will apply a credit to the Customer’s monthly bill for energy the customer delivers to the City’s power grid during that billing cycle. The rate at which HCP will credit the energy delivered by the Customer is \$.04/kWh. See HCP Rate Schedule. This rate schedule may be eliminated or adjusted at any time by the Hurricane City Council. Credits accrued each month are not eligible to be applied to the electric base rate or any other utility/City rates or fees. Monthly credits may only be applied to electric kWh usage. Credits may roll over month to month until July 1 of each year, at this time all credits will be reset to zero.

Meters must be accessible to HCP and the City Meter Reader and shall not be hindered by animals, landscape, fences, or other obstacles or potential obstacles. HCP may, at its discretion, regularly inspect the System and shall be given unlimited access by the Customer to all Customer-owned generation and metering equipment.

Ground-Mounted Solar Arrays:

Ground-mounted solar arrays on residential lots shall be located behind the front setback line or behind the front plane of the home, whichever is furthest from the fronting public roadway.

The solar array shall not infringe on any easement or sight distance requirements and shall not violate any City Ordinance. Customers are responsible to ensure that the System is in compliance with any subdivision CC&R’s or similar deed restrictions or covenants.

Maximum height for a solar array, measured from ground level to the highest point on the array, shall not exceed fifteen (15) feet.

Solar arrays shall be limited as set forth below in Chart A in the paragraph labeled “System Size Limitations – Base Rates”.

The following size limits shall also apply:

<b>Lot Size:</b>	<b>Maximum array surface area:</b>
Less than 1 acre	200 square feet
1 - 2.5 acres	400 square feet
Greater than 2.5 acres	1200 square feet

Solar arrays shall be located to maximize unobstructed line of sight.

System Size\* Limitations - Base Rates:

The City limits Systems and charges base rates for Grid-Tied Distribution Generation as described in the following chart:

Chart A

System Type	Photovoltaic (PV) System Size*	Maximum Power Export Setting	Export Credit Rate	Monthly Base Rate
<b>1 Phase System</b>				
1P BASIC System	Up to 8.1 kW DC / 6 kW AC	6 kW AC	\$.04/kWh	\$30
1P LARGE System	Up to 16 kW DC / 12 kW AC	6 kW AC	\$.04/kWh	\$40
<b>3 Phase System</b>				
3P BASIC System (400A and below)	Up to 16 kW DC / 12 kW AC	12 kW AC	\$.04kwh	\$90
3P LARGE System (Over 400A)	Determined by Study	Determined by Study	**PPA	**PPA

\*"System Size" is defined as the largest nameplate rating of any of the components, total panel array, total micro-inverter array, export limiter, or inverter.

\*\*"PPA" is defined as Power Purchase Agreement.

**1P Systems** capable of more than 16 KW DC /12 KW of AC output with a 6 KW AC limiter will be considered by HCP staff on a case-by-case basis. If approved, a monthly incremental base rate increase will replace the 1P BASIC System base rate.

**3P Systems** will be required to conduct a study by an electrical engineer chosen by HCP for the connected circuit. The designs will be reviewed and approved by said electrical engineer. All costs will be at the expense of the applicant. 3 Phase systems under 400A (3P BASIC) means the main service size to the building is 400 amps or less. 3 Phase system over 400A (3P LARGE) means the main service size to the building is 400 amps or larger and is CT metered.

**Export rates, base rates, and fees are subject to change upon approval of Hurricane City Council at any given time.**

Ineligible Properties:

Properties with meters located in back yards are not eligible for a grid-tied System. Properties consisting of multi-unit buildings are not eligible for a grid-tied System.

Standards:

The following standards apply to all Systems:

- (a) IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, as amended and supplemented, which is incorporated by reference herein. IEE Standard 1547 can be obtained through the IEE website at [www.ieee.org](http://www.ieee.org); **and**
- (b) UL 1741, Inverters, Converters, and Controllers for use in Independent Power Systems (January 2001), as amended and supplemented, which is incorporated by reference herein. UL Standards can be obtained through the Underwriters Laboratories website at [www.ul.com](http://www.ul.com).

Certification of customer-generator facilities:

Equipment packages shall be certified for interconnected operation. An equipment package shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards as set forth in IEEE 1547, listed above.



System Operation and Responsibility:

Systems shall be installed, operated, and maintained by the Customer at the Customer's sole expense. The Customer will be responsible for an application review fee for each review and a one-time cost of the bi-directional meter in amounts established by HCP. HCP will install the meter onto the Customer's meter base and read and maintain the meter consistent with Hurricane City's Standard Operating Procedure at the City's expense.

Neither the City nor HCP shall be liable for, and Customer shall indemnify and defend the City and HCP, for all damages, claims, liabilities, losses, injuries, or deaths resulting from or relating to (1) the City permitting or continuing to allow an attachment of a grid-tied System to the City's power grid; (2) the Customer's System; (3) the Customer's generation of power; and (4) the acts or omissions of the Customer in generating power.

Customer and City Requirements

(a) Once a metering interconnection has been approved, the City will not require a Customer to test or perform maintenance on its facility except for the following:

1. An annual test in which the Customer-Generating Facility is disconnected from the City's distribution equipment to ensure that the inverter stops delivering power to the grid.
2. Any manufacturer-recommended testing or maintenance.
3. Any post-installation testing necessary to ensure compliance with IEEE 1547 or to ensure safety.
4. Documentation is required for testing done yearly and needs to be submitted to the City.

(b) The City shall have the right to inspect a Customer-Generating Facility after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the Customer. If the City discovers that the Customer-Generating Facility is not in compliance with the requirements of this subchapter, and the noncompliance adversely affects the safety or reliability of the electric distribution system, the City may require the Customer to disconnect the Customer-Generating Facility until compliance is achieved.

(c) The City shall have the right to disconnect the Customer-Generating Facility in the event it causes system problems. The Customer will have the option to correct the problem, at which time the system will be re-inspected before beginning operation again.

(d) The Customer shall be required to install a manual disconnect located within five feet of the meter.

Signature verifying acceptance of above terms required before start of project:

Customer \_\_\_\_\_

Date \_\_\_\_\_



# City of Hurricane

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## *Electric Rates*

### **Residential**

Base Charge	\$20.00
Analog Meter	\$30.00
Plus <u>Usage</u>	
1-800 kWh	\$0.08946/kWh
801-2000 kWh	\$0.10222/kWh
2001 + kWh	\$0.11485/kWh

### **Electric Production – Solar Refund**      ***(-\$.04)/kWh***

1P Basic Base Charge < 6KW	\$30.00
1P Large Base Charge > 6 KW	\$40.00
Plus <u>Usage</u>	
1-800 kWh	\$0.08946/kWh
801-2000 kWh	\$0.10222/kWh
2001 + kWh	\$0.11485/kWh

3P Basic Base Charge < 12 KW	\$90.00
Plus <u>Usage</u>	
1-800 kWh	\$0.10302/kWh
801+ kWh	\$0.10880/kWh
Plus <u>Demand Charge</u>	
Over 50kW	\$8.50/kW

### **Small Commercial**

Base Charge – Single Phase	\$19.00
Base Charge – Three Phase	\$24.50
Plus <u>Usage</u>	
1-800 kWh	\$0.10302/kWh
801+ kWh	\$0.10880/kWh
Plus <u>Demand Charge</u>	
Over 50kW	\$8.50/kW

### **Large Commercial**

Base Charge	\$320.00
Plus <u>Usage</u>	
All kWh	\$0.6658/kWh
Plus <u>Demand Charge</u>	
All kW	\$9.10/kW