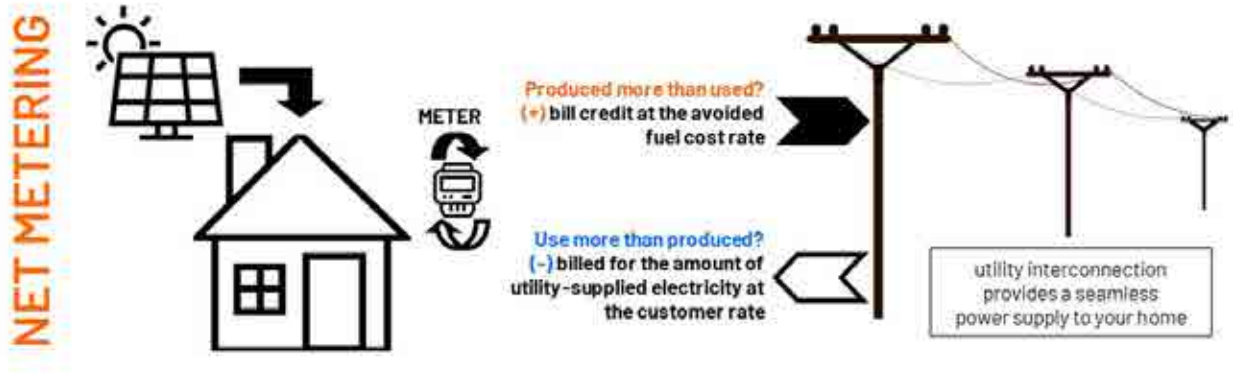
Are Solar Panels For You?

Before installing a solar energy system…

do your research **BEFORE** you commit to make the right decision and get the best possible return on your photovoltaic (PV) investment



How big of a PV system do I need and what will it cost?

Evaluate your energy usage: Review your utility usage. Contact the City Collector's office and request your electric consumption history for the past three years. A multiple year analysis will provide you with a better idea how much of your usage will be covered by your PV system.

Electric production amounts: In Missouri, one kilowatt of solar panels will offset at a maximum around 1,350 kilowatt hours of electricity each year. The location of the panels and shading can drastically reduce the optimal output of electricity. Your annual electric usage (kWh) can help you determine how much you can offset with a PV system. Have realistic expectations as to actual energy cost savings. Research the efficiency experience of solar energy in Southeast Missouri and how system size and specific household energy demands affect the outcome.

Cost: In 2019, the average cost in Missouri, not including tax credits, to install 1kW of solar PV was around $2,500.

- The cost of your PV system will depend on the size, efficiency and complexity of the system and its components. You should check the reputation of the solar installer you are working with by asking for recommendations from people in your community and consult with several different suppliers for more cost estimates.
- If installing rooftop panels, have a professional roofing company evaluate the condition of your roof. You want the roof to be in excellent condition before installing any PV panels. You are REQUIRED to hire an engineer licensed in Missouri to provide certification that the roof structure will support the installation.
- The City of Jackson code also requires a building permit and electrical permit for a PV system installation, regardless of system location. The building permit fee is based on the cost of the installation and the electrical permit is $20.

Payback: When calculating the payback of your solar panel investment, carefully evaluate the City's electric rate and potential rate increases. Many solar installers use examples of national trends that can differ from costs in Missouri. City of Jackson utility rates are available online at http://www.jacksonmo.org/Information-Center/Utility-Rates/.

What is net metering and what laws apply?

- Net Metering: A transaction between a utility and a customer generator where energy is transferred back and forth.

Net metering is where you produce some of the energy used in your home, you buy energy provided by the City's system when your PV system can't provide all you need at a specific time, and you sell excess energy you produce back to the City when your PV system generates more energy than you can use. The 'net' is the ending balance of kWh you bought minus what you sold each billing cycle. The electric charges and credit (if any) on your bill include two kWh amounts. One is the charge for the city-provided electricity you

used in the billing cycle. The credit is for the amount of excess electric you generated and sold back to the city during the billing cycle, For any questions about billing, please call 573-243-4404 or email utilities@jacksonmo.org.

The State of Missouri has a net metering law - Chapter 386 (386.890) known as the "Net Metering & Easy Connection Act" that utilities must follow. Review this statute thoroughly https://revisor.mo.gov/main/OneSection.aspx?section=386.890

Read the City of Jackson Interconnection Standards completely so you know the city's requirements. This document is also available online at http://www.jacksonmo.org/FileStream.aspx?FileID=53.

Invest in energy efficiency BEFORE installing solar

If you are making an expensive investment in a solar energy system, it is recommended to first make energy efficiency improvements. The cheapest way to reduce your electric consumption is to not waste it. Projects like air sealing, insulation, and installation of an efficient heating and cooling system should be completed before you make a more costly solar investment. Taking a whole house approach with the Home Performance with Energy Star program will earn customers the highest savings. For more information on how to conserve the most energy and receive the most savings from your electric bill: consult https://energystar.gov.

What is the best location for a solar system?

PV generates electricity from the sun, so the best locations are consistently sunny throughout the year. In general, the most important factors are clear and unshaded roof space. These conditions simplify the PV installation and will produce the most energy. Which way your roof is facing will determine what part of the day your solar panels will be most exposed to the sun. South-facing solar systems are traditionally the most popular because they have the highest potential to capture solar energy throughout the day. The location of the solar panels and shading issues may decrease production; therefore, they may increase system payback time.

Six steps to installing your solar system

Step 1: Educate yourself then decide. Study solar systems and evaluate your energy consumption history. This will give you an idea of what type of system will work best for your location, and the size and cost of the system.

Step 2: Choose your contractor. Contact several solar installation contractors. It is important to ask the contractors for references, licenses, certifications, and a current Certificate of Insurance. Verify references and talk to others who have used the same contractor. .All contractors and sub-contractors must have a current license with the City of Jackson. City licenses can be verified by calling 573-243-2300 or emailing permits@jacksonmo.org. A city contractor's license does not guarantee the quality of a contractor's work or that adequate liability insurance is maintained by the contractor.

Step 4: Submit a Net Metering Agreement with the City of Jackson. You will be contacted by the electric department on whether your application is approved. If it is not, you will be instructed on what needs to occur for approval.

Step 5: Obtain a building and electrical permit. Upon issuance of the permit, the permit applicant will receive a list of the inspections required for your project. Required inspections must be individually requested by contacting the Building & Planning Department. As the property owner, you are ultimately responsible for your property's compliance with city codes, including permits and inspections.

Step 6: Upon approval of the final inspection, your current electric meter will be replaced with the net meter by the City of Jackson Electric Utilities, who will leave a hang tag on your front door. It is the customer's responsibility to notify your solar installer that the net meter has been installed by the City.

There are serious safety concerns for you and the City of Jackson electric personnel if the PV system is not installed properly. It is VITAL to work with your electric utility to ensure the system is safe for your home and for the community.

Solar panels that are installed without going through the proper procedures with the City of Jackson can cause project delays and can be a serious safety hazard and can result in disconnection of service and/or legal enforcement action by the City.

For all questions regarding permits and permit requirements, please contact Public Works/Building and Planning at 573-243-2300 or permits@jacksonmo.org.

For all monthly utility bill questions, please contact the City Collector's office at 573-243-4404 or utilities@jacksonmo.org.

Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less

City of Jackson, Missouri

February 17, 2016
Rev 2

Contents

PART 1. OVERVIEW

1. PURPOSE:

The purpose of this document is to establish standards for an eligible customer ("Customer") to interconnect and operate a customer-owned Renewable Energy Resource Generation Facility with a rated output of 100 kilowatts (kW) or less in parallel with the City of Jackson ("City") Electric Distribution System in accordance with the Net Metering and Easy Connection Act Missouri Revised Statutes 386.890 and Missouri Public Service Commission Rule 4 CSR 240-20.065.

2. DEFINITIONS:

a. **Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority, including the Ordinances of the City of Jackson and all other City of Jackson Electric Utility Policies.

b. **City** – The City of Jackson, Missouri.

c. **City Electric System Avoided Fuel Cost** – The average cost of fuel per kilowatt-hour (kWh) to the City of all power supply resources during the previous calendar year. The City will review and adjust the City Electric System Avoided Fuel Cost annually.

d. **Commercial Operation Date** – The date on which the Generation Facility is operating and is in compliance with the requirements of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less as determined by City.

e. **Customer** – an electric customer interconnected to the Electric Distribution System for the purpose of receiving retail electric service that also owns and operates an approved Generation Facility.

f. **Electric Distribution System** – The City facilities and equipment used to provide electric service to customers, including the Customer.

g. **Electric Utility** – The City of Jackson municipal electric system.

h. **Force Majeure** – A Force Majeure event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control." A Force Majeure event does not include an act of negligence or intentional wrongdoing.

i. **Generation Facility** – For purposes of these Interconnection Standards, the Customer device for conversion of Renewable Energy Resources to electricity, as identified in the Interconnection Application, that:

    1. is powered by a Renewable Energy Resource.

2. is an electrical generating system with a rated capacity of not more than 100 kW.

3. is located on premises that are owned, operated, leased, or otherwise controlled by the Customer.

4. is interconnected and operates in parallel phase and synchronization with the Electric Distribution System and has been approved for interconnection by the City.

5. is intended primarily to offset part or all of the Customer's electrical energy requirements.

6. meets all applicable safety, performance, interconnection, and reliability standards established by the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the Federal Energy Regulatory Commission, and any local governing authorities.

7. contains a mechanism that automatically disables the unit and interrupts the flow of electricity from the Generation Facility to the Electric Distribution System whenever the flow of electricity from the utility to the Customer is interrupted.

j. **Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Customer or any Affiliate thereof.

k. **Harmonic Distortion** – Continuous distortion of the normal AC sine wave typically caused by non-linear loads or inverters.

l. **Interconnection Application** – The Customer request to interconnect a new Generation Facility, or to increase the capacity of, or make a material modification to the operating characteristics of an existing Generation Facility that is interconnected with the Electric Distribution System.

m. **Interconnection Standards** – Interconnection Standards shall mean all provisions, forms and related documents described in the collective parts of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less, or successor document.

n. **Metering Point** – The electric meter shown on the one-line diagram accompanying the Interconnection Application.

o. **Net Metering** – Using Metering equipment sufficient to measure the difference between the electrical energy supplied to a customer-generator by a retail electric supplier and the electrical energy supplied by the customer-generator to the retail electric supplier over the applicable billing period

p. **Party** – Individually the City and the Customer; collectively the "Parties."

q. **Prudent Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

r. **Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Interconnection Agreement, efforts that are timely and consistent with Prudent Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

s. **Renewable Energy Resources** – Means wind, solar thermal sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen produced by one of the above-named Renewable Energy Resources, and other sources of energy that became available after August 28, 2007, and are certified as renewable by the Missouri Department of Natural Resources.

t. **System Upgrades** – Additions, modifications, and upgrades to the Electric Distribution System or Customer service connection at or beyond the point of interconnection to facilitate interconnection of the Generation Facility. System Upgrades do not include interconnection facilities.

u. **Voltage Flicker** – A variation of voltage sufficient in duration to allow visual observation of a change in electric light source intensity.

3. ELIGIBILITY:

a. Must be a City electric customer with a City-approved customer-owned renewable Generation Facility behind the meter (connected to the customer side of the electric meter) and single-phase or three-phase service at 60 Hertz at a nominal voltage of 120/240, 120/208 volts or 480 volts furnished through a City-approved electric meter or meters.

b. Customer's utility account must be in good standing and in compliance with City electric rate schedules and Rules and Regulations. The Interconnection Agreement shall be between the City and the Customer and will not include third parties.

c. These Interconnection Standards apply to a customer-owned Renewable Energy Resources Generation Facility with a rated output of 100 kW or less. **A Generation Facility that is not powered by a Renewable Energy Resource or one that has a rated output greater than 100 kW is subject to separate negotiation with the City and is not eligible to interconnect with the Electric Distribution System under these Interconnection Standards.**

d. The Generation Facility may not be sized to exceed the Customer's annual electric energy requirements.

e. The Generation Facility must be located on the Customer's premises owned, operated, leased, or otherwise controlled by the customer-generator.

4. INTERCONNECTION APPLICATION:

a. The Customer shall request interconnection for the Generation Facility by completing and submitting the attached document entitled "Interconnection Application" to the City. The City may require additional details or clarification to properly evaluate the Customer Interconnection request. No Customer shall connect or operate a Generation Facility in parallel phase and synchronization with the Electric Distribution System without written approval by the City that all of the requirements of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less have been met. Violation of this provision may result in immediate disconnection of electric facilities without notice and termination of electric service.

b. Customer applications for interconnection of a Generation Facility to the Electric Distribution System shall be accompanied by the plan for the Generation Facility including, but not limited to, a wiring diagram and specifications for the Generation Facility, and shall be reviewed and responded to by the City within 30 days of receipt for Generation Facilities with a rated capacity of 10 kW or less and within 90 days of receipt for all other systems. Prior to the interconnection of the Generation Facility to the Electric Distribution System, the Customer must furnish the City a certification from a qualified professional electrician or engineer that the installation meets the requirements of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less. If the Customer application for interconnection is approved by the City and the Customer does not complete the interconnection within one (1) year after receipt of notice of approval, said approval shall expire and the Customer must submit a new Interconnection Application.

5. ELECTRIC DISTRIBUTION SYSTEM EFFECTS ANALYSIS:

After receiving a properly completed Interconnection Application, the City will analyze the potential impacts of the Generation Facility on the Electric Distribution System and on other Electric Utility customers. Such analyses will be based on Prudent Utility Practice to determine thermal effects, voltage ranges, power quality, system stability, etc. All cost associated with this analysis shall be the responsibility of the customer.

6. SYSTEM UPGRADES:

Where System Upgrades are required as a result of the Electric Distribution System Effects Analysis, the City will provide the Customer with an estimate of the schedule and Customer's cost for said System Upgrades. If the Customer desires to proceed with said System Upgrades, the Parties shall enter into a written agreement for the same. The agreement will contain a construction schedule, including target commencement and completion dates, and an estimate of the Customer's costs for System Upgrades. All cost associated with these upgrades shall be the responsibility of the customer.

Any subsequent meter testing, maintenance or meter equipment change necessitated by the Customer shall be paid for by the Customer.

7. INTERCONNECTION AGREEMENT:

After the Customer and the City have identified and mutually agreed on the project scope including the Generation Facility, System Upgrades and estimated costs, the Customer and the City shall execute the attached document entitled "Interconnection Agreement".

8. CODES AND PERMITS:

a. The Customer shall be responsible for procuring all building, operating and environmental permits for the Generation Facility and for the necessary ancillary structures to be installed that are required by any Governmental Authority having jurisdiction.

b. The Generation Facility and interconnecting equipment shall meet the requirements listed in Part 2. Technical Requirements.

c. The construction and facilities shall meet all applicable building and electrical codes.

9. CERTIFICATE OF COMPLETION:

Upon completion of the Generation Facility and prior to the Commercial Operation Date of said Facility, the Customer shall complete and submit a signed copy of the attached document entitled "Certificate of Completion."

10. COMMERCIAL OPERATION:

The Customer may begin Commercial Operation of the Generation Facility upon completion and submittal of all required documentation and receipt of written approval from the City.

11. TRANSFER OF OWNERSHIP:

Upon a change in ownership of a Generation Facility, the new Customer-owner must submit an Interconnection Application to the City.

12. NET METERING RIDER:

The Customer shall complete and submit the "Net Metering Rider - Application for Service" to apply for electric service under the Net Metering Rider. Net Metering is available to Customers on a first-come, first-served basis until the total rated generating capacity of Net Metering systems equals five percent (5%) of the Electric Utility's single-hour peak demand during the previous year. In a given calendar year, no additional Net Metering Rider – Applications for Service will be approved if the total rated generating capacity of all Net Metering Rider – Applications for Service approved to date by the City in said calendar year equals or exceeds one percent (1%) of the Electric Utility's single-hour peak demand for the previous calendar year.

PART 2. TECHNICAL REQUIREMENTS

1. CHARACTER OF SERVICE:

The electric service shall be 60 cycles per second (60 Hertz) alternating current (AC) at supply voltages and number of phases specified under the Customer's applicable electric rate schedule.

2. CODE REQUIREMENTS:

The Generation Facility shall meet all requirements established by the National Electrical Code (NEC), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), and the Occupational Safety and Health Administration (OSHA). Specific codes are listed in Section 7 of this Part 2 below as "Standards for Interconnection, Safety and Operating Reliability." Prior to interconnection of a Generation Facility to the Electric Distribution System, the Customer must furnish the City a certification from a qualified professional electrician or engineer that the installation meets the requirements of these Interconnection Standards.

3. GENERATION FACILITY CONTROL:

The control system of the Generation Facility shall comply with IEEE and UL specifications and standards for parallel operation with the Electric Distribution System and in particular as follows:

a. Power output control system shall automatically disconnect from the Electric Distribution System upon loss of System voltage and not reconnect until System voltage has been restored by the City.

b. Power output control system shall automatically disconnect from the Electric Distribution System if System voltage fluctuates beyond plus or minus 10% (ten percent).

c. Power output control system shall automatically disconnect from the Electric Distribution System if frequency fluctuates plus or minus two cycles (2 Hertz).

d. Inverter output Harmonic Distortion shall meet IEEE and UL standards.

e. The Generation Facility shall meet applicable IEEE and UL standards concerning impacts to the Electric Distribution System with regard to Harmonic Distortion, Voltage Flicker, power factor, direct current injection and electromagnetic interference.

4. FAULT CURRENT CONTRIBUTION:

The Generation Facility shall be equipped with protective equipment designed to automatically disconnect from the Electric Distribution System during fault current conditions and remain disconnected until System voltage and frequency have stabilized.

5. RECLOSING COORDINATION:

The Generation Facility shall be coordinated with Electric Distribution System reclosing devices by disconnecting from the System during de-energized System operation. The

Generation Facility shall remain disconnected until System voltage and frequency have stabilized.

6. EXTERNAL GENERATOR AC DISCONNECT SWITCH:

The Customer must install an external alternating current (AC) disconnect switch within six (6) feet of the City electric meter that is visible and readily accessible to City personnel. This switch must be labeled as "Generator AC Disconnect Switch". The switch shall be capable of being locked in the open position and shall prevent the generator from supplying power to the Electric Distribution System while in the open position.

7. STANDARDS FOR INTERCONNECTION, SAFETY AND OPERATING RELIABILITY:

The interconnection of a Generation Facility and associated equipment to the Electric Distribution System shall meet the applicable provisions of the following publications or successor standards:

a. ANSI/IEEE1547-2003 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity). The following standards shall be used as guidance in applying IEEE 1574:

   1. IEEE Standard 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

   2. IEC/TR3 61000-3-7 Assessment of emission limits for fluctuating loads in MV and HV power systems

b. UL 1741 Standard for Inverters, Converters and Controllers for Use in Independent Power Systems

c. ANSI/NFPA 70 (2008), National Electrical Code

d. OSHA (29 CFR § 1910.269)

8. ACCESS AND INSPECTION BY CITY:

Customer must provide the City reasonable opportunity to inspect the Generation Facility prior to its interconnection and Commercial Operation Date and to witness the initial testing and commissioning of the Generation Facility. The City may witness any commissioning tests required by IEEE 1547/UL 1741. Following initial testing and inspection of the Generation Facility and upon reasonable advance notice to Customer, the City shall have access at reasonable times to the Generation Facility to perform on-site inspections to verify that the installation, maintenance and operation of the Generation Facility complies with the requirements of these Interconnection Standards. The City's cost of such inspection(s) shall be at the Customer's expense; furthermore, the City shall not be responsible for any other cost Customer may incur as a result of such inspection(s). The City shall at all times have immediate access to the external Generator AC Disconnect Switch to isolate the Generation Facility from the Electric Distribution System.

9. GENERATION FACILITY OPERATION:

1. Customer shall install, operate, and maintain, at Customer's sole cost and expense, the Generation Facility in accordance with the manufacturer's suggested practices for safe, efficient and reliable operation of the Generation Facility in parallel with the Electric Distribution System. Customer shall bear full responsibility for the installation, maintenance and safe operation of the Generation Facility.

2. Customer shall be responsible for protecting, at Customer's sole cost and expense, the Generation Facility from any condition or disturbance on the Electric Distribution System, including, but not limited to, voltage sags or swells, system faults, outages, loss of a single phase of supply, equipment failures, and lightning or switching surges.

3. Customer agrees that, without the prior written permission from the City, no changes shall be made to the configuration of the Generation Facility as approved by the City, and no relay or other control or protection settings shall be set, reset, adjusted or tampered with, except to the extent necessary to verify that the Generation Facility complies with City-approved settings.

4. Customer shall operate the Generation Facility in such a manner as not to cause undue fluctuations in voltage, power quality issues, intermittent load characteristics or otherwise interfere with the operation of the Electric Distribution System. At all times when the Generation Facility is operated in parallel with the Electric Distribution System, Customer shall operate the Generation Facility in such a manner that no disturbance will be produced thereby to the service rendered by the City to any of its other customers or to any electric system interconnected with the Electric Distribution System. Customer understands and agrees that the interconnection and operation of the Generation Facility pursuant to these Interconnection Standards is secondary to, and shall not interfere with, the City's ability to meet its primary responsibility of furnishing reasonably adequate service to its customers.

5. Customer's control equipment for the Generation Facility shall immediately, completely, and automatically disconnect and isolate the Generation Facility from the Electric Distribution System in the event of a fault on the Electric Distribution System, a fault on Customer's electric system, or loss of a source or sources on the Electric Distribution System. The automatic disconnecting device included in such control equipment shall not be capable of reclosing until after service is restored on the Electric Distribution System. Additionally, if the fault is on Customer's electric system, such automatic disconnecting device shall not be reclosed until after the fault is isolated from Customer's electric system. Customer shall provide all necessary equipment and apparatus to protect from damage Customers generation equipment from all types of system anomalies that may occur on the Utility's Distribution System.

10. REQUIRED TESTING:

At least once every year the Customer shall conduct a test to confirm that the Generation Facility automatically ceases to energize the output (interconnection equipment output voltage goes to zero) within two (2) seconds of being disconnected from the Electric Distribution System. Disconnecting the Generation Facility from the Electric Distribution System at the Generator AC Disconnect Switch and measuring the time required for the Generation Facility to cease energizing the output shall satisfy this test. Customers shall maintain a record of the results of these tests and shall provide a copy of the test results to the City. If the Customer is unable to provide a copy of the test results upon request, the City shall notify the Customer by mail that the Customer has thirty (30) days from the date the Customer receives the request to provide the results of a test to the City. If the Generation Facility ever fails this test, the Customer shall immediately disconnect the Generation Facility from the Electric Distribution System. If the Customer fails to provide the results of a test to the City within thirty (30) days of receiving a request from the City or if the results of the test provided to the City show that the Generation Facility is not functioning correctly, the City may immediately disconnect the Generation Facility. The Generation Facility shall not be reconnected to the Electric Distribution System until the Generation Facility is operating in a normal and safe manner.

11. RIGHT TO DISCONNECT GENERATION FACILITY:

The City shall have the right and authority to isolate the Generation Facility at the City's sole discretion if the City believes that any of the following have occurred or are occurring:

a. Adverse electrical effects (such as power quality problems) imposed on the Electric Distribution System and/or the electrical equipment of other Electric Utility customers attributed to the Generation Facility as determined by the City.

b. Electric Distribution System emergencies or maintenance requirements

c. Hazardous conditions existing on the Electric Distribution System as a result of the operation of the Generation Facility or protective equipment

d. Failure of the Customer to maintain required insurance. (filed with the City yearly)

e. City identification of uninspected or unapproved equipment or modifications to the Generation Facility after initial approval.

f. Customer fails to submit yearly testing records as required. (Section 10)

g. Recurring abnormal operation, substandard operation or inadequate maintenance of the Generation Facility.

h. In non-emergency situations, the City shall give Customer notice of noncompliance including a description of the specific noncompliance condition and allow Customer a reasonable time to cure the noncompliance prior to isolating the Generation Facility.

i. In the event that the City isolates the Generation Facility for routine maintenance, the City shall make reasonable efforts to reconnect the Generation Facility within seven (7) business days of isolating the Generation Facility.

j. The Customer retains the option to temporarily disconnect the Generation Facility from the Electric Distribution System at any time. Such temporary disconnection shall not constitute termination of the Interconnection Agreement unless the Customer exercises its termination rights under Section 15.

12. RATES AND OTHER CHARGES:

Any City credits of energy generated by the Generation Facility are subject to the terms and conditions of the Net Metering Rider. (RSMo Section 386.890.5 (1,2,3,4))

13. INSURANCE:

A Generation Facility with a rated capacity greater than 10 kW shall carry no less than one hundred thousand dollars ($100,000) of liability insurance that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the Generation Facility. Insurance may be in the form of an existing policy or an endorsement on an existing policy. A copy of the Customers insurance shall be submitted and placed in the file with the City yearly. A Generation Facility with a rated capacity of 10 kW or less shall not be required to carry liability insurance. **However, a Customer may have legal liabilities not covered under its existing insurance policy in the event the Customer's negligence or other wrongful conduct causes personal injury (including death), damage to property, or other actions and claims.**

14. LIMITATION OF LIABILITY AND INDEMNIFICATION:

Absent clear and convincing evidence of fault on the part of the City, the City cannot be held liable for any action or cause of action relating to any damages to property or persons caused by a Generation Facility or the interconnection thereof pursuant to Section 386.890.11, RSMo Supp. 2008. Customer shall assume all liability for and shall indemnify the City for any claims, losses, costs, and expenses of any kind or character to the extent that they result from the design, construction or operation of a Generation Facility. Such indemnity shall include, but is not limited to, financial responsibility for: (a) the City's monetary losses; (b) reasonable costs and expenses of defending an action or claim made by a third party; (c) damages related to the death or injury of a third party; (d) damages to the property of the City; (e) damages to the property of a third party; (f) damages for the disruption of the business of a third party. This paragraph does not create a liability on the part of the Customer to the City or a third party, but requires indemnification where such liability exists.

15. EFFECTIVE TERM AND TERMINATION RIGHTS:

The Interconnection Agreement shall become effective when executed by both Parties and shall continue in effect until terminated in accordance with the provisions of this Section. The Interconnection Agreement may be terminated for the following reasons:

a. Customer may terminate the Interconnection Agreement at any time by giving the City at least sixty (60) days' prior written notice stating Customer's intent to terminate the Agreement at the expiration of such notice period.

b. The City may terminate the Interconnection Agreement at any time following Customer's failure to complete the interconnection within one (1) year of City approval of the Interconnection Application or Customer's failure to generate energy from the Generation Facility in parallel with the Electric Distribution System within one (1) year from the date of execution of the Interconnection Agreement.

c. Either Party may terminate the Interconnection Agreement at any time by giving the other Party at least sixty (60) days' prior written notice that the other Party is in default of any of the material terms and conditions of the Interconnection Agreement or the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less, so long as the notice specifies the basis for termination and there is reasonable opportunity for the Party in default to cure the default.

d. The City may terminate the Interconnection Agreement at any time by giving Customer at least sixty (60) days' prior written notice in the event that there is a change in an applicable rule or statute affecting the Agreement.

Upon termination of the Interconnection Agreement, Customer's Generation Facility shall be disconnected from the Electric Distribution System.

Termination of the Interconnection Agreement shall not relieve either party of its liabilities and obligations, owed or continuing at the time of the termination.

16. TERMINATION OF ANY APPLICABLE EXISTING AGREEMENT:

From and after the date when service commences under the Interconnection Agreement, the Agreement shall supersede any oral and/or written agreement or understanding between the City and Customer concerning the service covered by the Agreement and any such agreement or understanding shall be deemed to be terminated as of the date service commences under the Interconnection Agreement.

17. FORCE MAJEURE:

For purposes of the Interconnection Agreement, the term "Force Majeure" means any cause or event not reasonably within the control of the Party claiming Force Majeure, including, but not limited to, the following: acts of God, strikes, lockouts, or other industrial disturbances; acts of public enemies; orders or permits or the absence of the necessary orders or permits of any kind which have been properly applied for from the government of the United States, the State of Missouri, any political subdivision or municipal subdivision or any of their departments, agencies or officials, or any civil or military authority; unavailability of a fuel or resource used in connection with the generation of electricity; extraordinary delay in transportation; unforeseen soil conditions; equipment, material, supplies, labor or machinery shortages; epidemics; landslides; lightning; earthquakes; fires;

hurricanes; tornadoes; storms; floods; washouts; drought; arrest; war; civil disturbances; explosions; breakage or accident to machinery, transmission lines, pipes or canals; partial or entire failure of utilities; breach of contract by any supplier, contractor, subcontractor, laborer; sabotage; injunction; blight; famine; blockade; or quarantine.

If either Party is rendered wholly or partly unable to perform its obligations under the Interconnection Agreement because of Force Majeure, both Parties shall be excused from whatever obligations under the Agreement are affected by the Force Majeure (other than the obligation to pay money) and shall not be liable or responsible for any delay in the performance of, or the inability to perform, any such obligations for so long as the Force Majeure continues. The Party suffering an occurrence of Force Majeure shall, as soon as is reasonably possible after such occurrence, give the other Party written notice describing the particulars of the occurrence and shall use reasonable efforts to remedy its inability to perform; provided, however, that the settlement of any strike, walkout, lockout or other labor dispute shall be entirely within the discretion of the Party involved in such labor dispute.

18. AMENDMENTS:

City reserves the right, at any time at its sole discretion, to: modify, edit or amend this agreement.

PART 3. INTERCONNECTION APPLICATION

Application No. _____

City of Jackson
Customer-Owned Renewable Electric Generation Facility 100 kW or Less

This Application for Interconnection of a Customer-Owned Renewable Electric Generation Facility 100 kW or less is considered complete when it provides all applicable and correct information required below. Additional information or clarification to evaluate the Interconnection Application may be requested by the City.

Customer

Name: _____ Utility Account Number: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Contact (if different from Customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Owner of the Generation Facility: _____

Generation Facility Information

Location (if different from above): _____

Inverter Manufacturer: _____

Model _____

Nameplate Rating: (kW) _____ (kVA) _____

System Design Capacity: (kW) _____ (kVA) _____

Energy Source: ❑ Solar ❑ Wind ❑ Other (Describe) _____

Is the equipment IEEE 1547/UL 1741 Certified? ❑ Yes ❑ No

If Yes, attach manufacturer's documentation showing IEEE 1547/UL 1741 certification

City Accessible External Generator AC Disconnect Switch Provided (Required) ❑ Yes ❑ No

Location of City Accessible External Generator AC Disconnect Switch _____

(e.g. Two feet west of electric meter)

Estimated Installation Date: _____ Estimated Commercial Operation Date: _____

List components of the Generation Facility equipment package that are currently certified:

	Equipment Type	Certifying Entity
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

Equipment Installation Contractor: **Indicate by owner if applicable** ❑

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Contact Person (If other than Above): _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Professional Electrician: (If Applicable) **Indicate if not applicable** ❑

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Contact Person (If other than Above): _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Professional Engineer: (If Applicable) **Indicate if not applicable** ❑

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Contact Person (If other than Above): _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Provide a one line diagram of the Generation Facility. The one line diagram is a basic drawing of an electric circuit in which one or more conductors are represented by a single line and each electrical device and major component of the installation, from the generator to the point of interconnection, are noted by symbols. See attached example.

Interconnection Applications shall be reviewed and responded to by the City within thirty (30) days of receipt for Generation Facilities with a rated capacity of 10 kW or less and within ninety (90) days of receipt for all other systems.

Insurance Requirements

A Generation Facility with a rated capacity greater than 10 kW shall carry no less than $100,000 of liability insurance that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the Generation Facility. Insurance may be in the form of an existing policy or an endorsement on an existing policy. A Generation Facility with a rated capacity of 10 kW or less shall not be required to carry liability insurance. **However, Customers may have legal liabilities not covered under their existing insurance policies in the event the Customer's negligence or other wrongful conduct causes personal injury (including death), damage to property, or other actions and claims.**

No Customer shall connect or operate a Generation Facility in parallel phase and synchronization with the Electric Distribution System without written approval by the City that all of the requirements of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less have been met. Violation of this provision may result in immediate disconnection of electric facilities without notice and termination of electric service.

Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Interconnection Application is true. I agree to abide by the terms and conditions of the City's Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less and will return the Certificate of Completion when the Generation Facility has been installed.

Signature: _____ Date: _____

---------- **Utility Use** ----------

Contingent Approval to Interconnect the Generation Facility

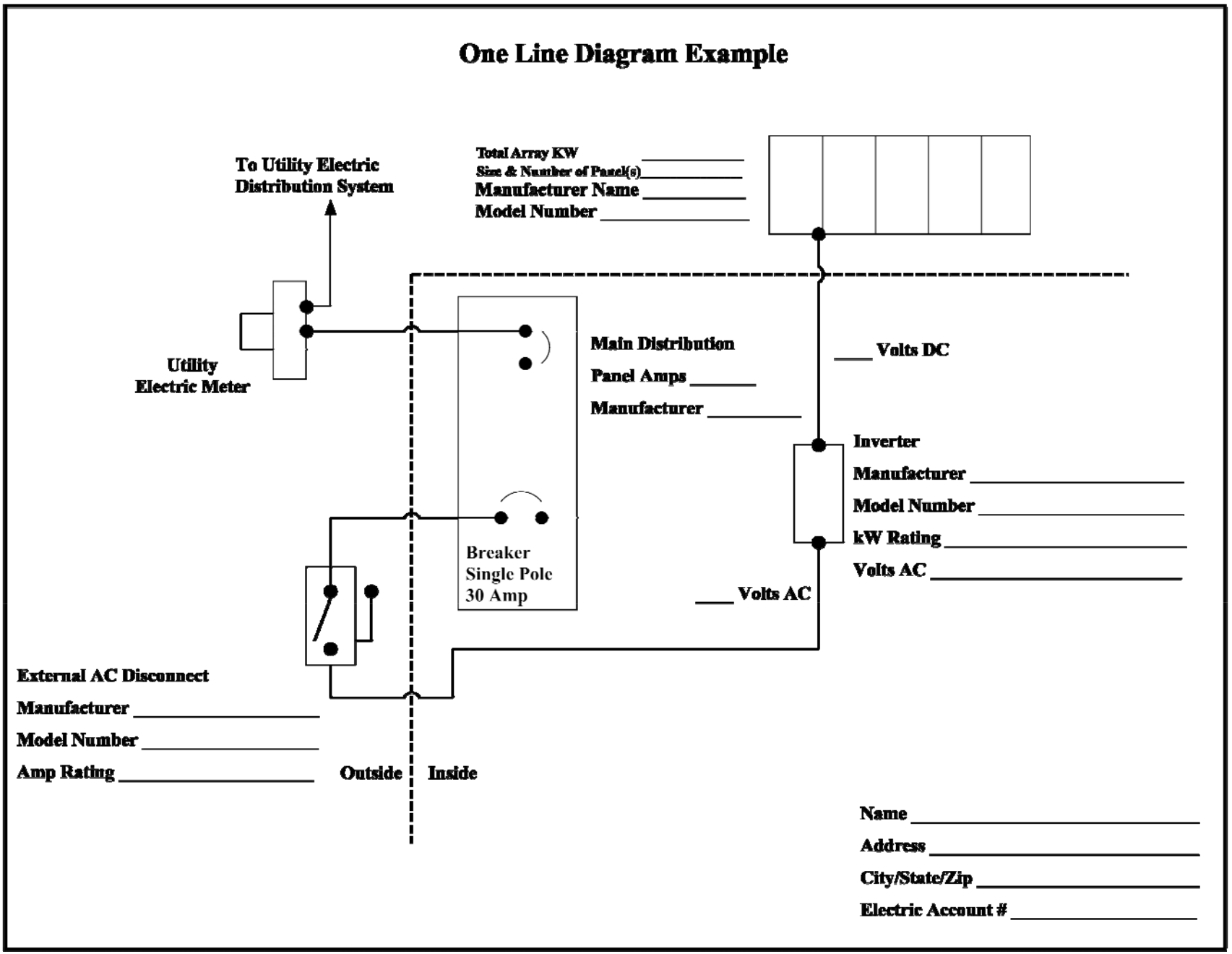
Interconnection of the Generation Facility is approved contingent upon the terms and conditions of the City's Interconnection Standards and upon return of the Certificate of Completion.

City Signature: _____

Title: _____ Date: _____

Application Number: _____

One Line Diagram Example



PART 4. INTERCONNECTION AGREEMENT

Application No. _____

City of Jackson
Customer-Owned Renewable Electric Generation Facility 100 kW or Less

This Agreement, ("**Agreement**") is entered into by and between the City of Jackson, Missouri ("**City)** and _____, ("**Customer**"). The Customer electric account subject to this Agreement is Account Number _____. Customer and City are referenced in this Agreement collectively as "**Parties**" and individually as "**Party**."

Recitals

WHEREAS, City owns and operates an Electric Distribution System serving the City of Jackson, Missouri, and surrounding area;

WHEREAS, Customer owns or desires to install, own and operate a City-approved Renewable Energy Resources Generation Facility with a rated output of 100 kW or less, interconnected with and operating in parallel with the Electric Distribution System;

Agreement

NOW, THEREFORE, in consideration of the covenants and promises herein, the Parties mutually agree as follows:

1. SCOPE OF AGREEMENT:

This Agreement governs the terms and conditions under which the Generation Facility will interconnect with and operate in parallel with the Electric Distribution System.

2. DEFINITIONS:

The definitions used in this Interconnection Agreement are those found in Part 1, Section 2 of the City Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less.

3. PARALLEL OPERATION:

Customer shall not interconnect or commence parallel operation of the Generation Facility until written Approval to Energize the Generation Facility under Part 6 of these Interconnection Standards has been provided by City. City shall have the right to have representatives present at the initial testing of the Generation Facility protective apparatus.

4. INTERCONNECTION COSTS:

The City has estimated the costs, including overheads, for necessary System Upgrades to its Electric Distribution System and Customer service connection, if any, and has provided a detailed itemization of such costs in the attached description of estimated System Upgrade costs. All cost associated with these upgrades shall be the responsibility of the customer.

The Customer agrees to pay the System Upgrade costs within the timeframe indicated on the City invoice upon receipt of said invoice. Any subsequent meter testing, maintenance or meter equipment change necessitated by the Customer shall be paid for by the Customer.

5. INTERRUPTION OR REDUCTION OF DELIVERIES:

The City may require the Customer to interrupt or reduce energy deliveries when the City determines, in its sole discretion, that curtailment, interruption or reduction is necessary because of safety, emergency, Force Majeure or compliance with Prudent Utility Practices. No compensation or credit will be provided to the Customer by the City for such interruptions or reductions in energy deliveries.

6. ADVERSE OPERATING EFFECTS:

The interconnection of the Generation Facility shall not reduce the reliability and quality of Electric Distribution System service. This includes, but is not limited to power quality issues such as Harmonic Distortion, Voltage Flicker and frequency deviations. The City shall notify the Customer as soon as practicable if, based on Prudent Utility Practice, operation of the Generation Facility causes disruption in or deterioration of service to other Electric Utility customers or if operating the Generation Facility could damage the Electric Distribution System. If, after notice, the Customer fails to timely remedy the adverse operating effect, the City may disconnect the Generation Facility with no further notice.

7. LIMITATION OF LIABILITY AND INDEMNIFICATION:

Absent clear and convincing evidence of fault on the part of the City, the City cannot be held liable for any action or cause of action relating to any damages to property or persons caused by a Generation Facility or the interconnection thereof pursuant to Section 386.890.11, RSMo Supp. 2008. Customer shall assume all liability for and shall indemnify the City for any claims, losses, costs, and expenses of any kind or character to the extent that they result from the design, construction or operation of the Generation Facility. Such indemnity shall include, but is not limited to, financial responsibility for: (a) the City's monetary losses; (b) reasonable costs and expenses of defending an action or claim made by a third party; (c) damages related to the death or injury of a third party; (d) damages to the property of the City; (e) damages to the property of a third party; (f) damages for the disruption of the business of a third party. This paragraph does not create a liability on the part of the Customer to the City or a third party, but requires indemnification where such liability exists.

8. ACCESS TO PREMISES:

City shall have access to the Customer premises or property and to the External AC Generator Disconnect Switch as permitted in its policies, and these Interconnection Standards.

9. GOVERNING LAW:

This Agreement shall be interpreted and governed under the laws of the State of Missouri, the Ordinances of the City of Jackson, and the City of Jackson Electric Rules and Regulations.

10. DOCUMENTS:

This Agreement incorporates all other provisions and related documents of these Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less as the same may be amended from time to time.

11. NOTICES:

All written notices shall be directed as follows:

CUSTOMER:	CITY:
Name: _____	Name: _____
Address: _____	Title: _____
City/State/Zip: _____	City/State/Zip: _____

12. TERM OF AGREEMENT:

This Agreement shall be in effect when executed by the Customer and City and shall remain in effect thereafter month to month unless terminated in accordance with the provisions of Section 15 of Part 2 Technical Requirements.

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives.

This Agreement is effective as of the last date set forth below.

CUSTOMER:	CITY:
_____	_____
Signature	Signature
_____	_____
Print Name	Print Name and Title
_____	_____
Date	Date

PART 5. CERTIFICATE OF COMPLETION

Application No. _____

City of Jackson
Customer-Owned Renewable Electric Generation Facility

Is the Generation Facility installed, tested and ready for operation? Yes_____ No _____

Customer: _____ Utility Account Number: _____

Address: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Location of the Generation Facility (if different from above): _____

_____

Certification Requirements

Prior to the interconnection of the Generation Facility with the Electric Distribution System, the Customer must furnish the City a certification from a qualified professional electrician or engineer that the installation meets the requirements of the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less.

A copy of the professional electrician/engineer certification is attached. ❑Yes ❑No

Professional Electrician/Engineer:

Name: _____

Address: _____

City/State/Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

PART 6. APPROVAL TO ENERGIZE GENERATION FACILITY

Application No. ____

City of Jackson
Customer-Owned Renewable Electric Generation Facility

The City, having entered into an Interconnection Agreement for the Generation Facility described in the Application noted by number above and having received a Certificate of Completion with proper certification by a qualified professional electrician/engineer hereby authorizes the Generation Facility to be energized:

City Signature: _____

Title: _____ Date: _____

PART 7. NET METERING RIDER – APPLICATION FOR SERVICE

Application No. ____

City of Jackson

Customer Name: _____

Service Address: _____

City: _____ State: _____ Zip: _____

Utility Account Number: _____

Contact Person: _____

Telephone Number: _____

Address: _____

City: _____ State: _____ Zip: _____

E-Mail Address: _____

This application is for electric service under the City of Jackson ("City") Net Metering Rider for the above customer ("Customer"). The Customer Generation Facility is a qualifying Renewable Energy Resource Generation Facility with a rated output of 100 kW or less that is located on the Customer's premises, operates in parallel with the Electric Distribution System, and is intended primarily to offset part or all of the Customer's requirements for electricity.

The Generation Facility qualifies for service under the Net Metering Rider as it is a qualifying facility as identified in the Rider. Total rated output of the Generation Facility to be used under the Net Metering Rider is _____ kW. The Customer acknowledges that he/she has read the Rider and agrees to all terms and conditions contained therein, including without limitation those specified in the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less. Specifically, the Customer understands and agrees that a City-approved electric meter or meters capable of registering the flow of electricity in each direction must be in service at the facility. If a meter(s) with this capability is not in service, the Customer must submit a written request to the City to acquire and install an approved meter(s) at the Customer's cost. All costs related to installation of this meter(s) shall be borne by the Customer. Any subsequent meter testing, maintenance or meter equipment change necessitated by the Customer shall be paid for by the Customer.

Customer acknowledges and agrees that operation of Generation Facility is intended primarily to offset part or all of Customer's electricity requirements. The Generation Facility is not sized to exceed the annual electric energy requirements of the Customer's premises.

Requested By:

_____

Customer Name

_____

Authorized Signature

_____

Date

Approved By:

_____

Name

_____

City Signature

_____

Date

Rejected:

_____

Name

_____

City Signature

_____

Reason for Rejection

_____

Date

PART 8. NET METERING RIDER

1. AVAILABILITY

Service under the Net Metering Rider is available to City of Jackson Electric Utility customers in good standing with a qualifying Renewable Energy Resource Generation Facility with a rated output of 100 kW or less that wish to sell renewable energy to the City subject to the terms and conditions of the Rider. Customer-owned renewable generation and associated equipment are collectively referred to as a Generation Facility. Customers served under this rider must also receive service under the applicable standard service electric rate schedule.

2. CONDITIONS OF SERVICE

A qualifying Customer is an electric customer connected to the Electric Distribution System for the purpose of receiving retail electric service that also owns and operates a Generation Facility that:

a. is powered by a qualifying Renewable Energy Resource.

b. is an electrical generating system with a capacity of not more than 100 kW.

c. is located on premises that are owned, operated, leased, or otherwise controlled by the Customer.

d. is interconnected and operates in parallel phase and synchronization with the Electric Distribution System and has been approved for interconnection by the City.

e. is intended primarily to offset part or all of the Customer's electrical energy requirements;

f. meets all applicable safety, performance, interconnection, and reliability standards established by the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the Federal Energy Regulatory Commission, and any local governing authorities; and

g. contains a mechanism that automatically disables the unit and interrupts the flow of electricity to the Electric Distribution System whenever the flow of electricity to the Customer is interrupted.

The Generation Facility shall be installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code. All equipment and installations shall comply with all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronic Engineers and Underwriters Laboratories, as well as any additional control and testing requirements adopted by the City. Prior to the interconnection of the Generation Facility with the Electric Distribution System, the Customer must furnish the City a certification from a qualified professional electrician or engineer that the installation meets the requirements of the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less.

3. METERING

Metering shall be accomplished by use of a City-approved meter or meters capable of registering the flow of electricity in each direction. If the existing electric meter installed at the Customer premises is not capable of measuring the bidirectional flow of electricity, the City, upon written request of the Customer, shall install at the Customer's expense an appropriate meter or meters with such capability. Any subsequent meter testing, maintenance or meter equipment change necessitated by the Customer shall be paid for by the Customer.

4. DETERMINATION OF NET ELECTRICAL ENERGY

Net electrical energy measurement shall be calculated in the following manner:

a. The City shall measure the net electrical energy produced or consumed by the Customer during the billing period in accordance with normal metering practices for customers in the same rate class, either by employing a single, bidirectional meter that measures the amount of electrical energy produced and consumed, or by employing multiple meters that separately measure the Customer's consumption and production of electrical energy.

b. If the electric energy supplied to the Customer by the City exceeds the electric energy supplied to the City by the Generating Facility during a billing period, the Customer shall be billed for the net electric energy supplied by the City in accordance with the Customer's applicable rate schedule.

c. If the electric energy supplied to the City by the Generation Facility exceeds the electric energy supplied to the Customer by the City during a billing period, the Customer shall be billed for customer, demand and other charges for that billing period in accordance with the Customer's applicable rate schedule. The Customer's account shall be credited an amount equal to the City Electric System Avoided Fuel Cost for all excess kilowatt-hours supplied to the City during the billing period, with this credit applied to the following billing period.

d. Any such credits provided to the Customer shall expire without any compensation at the earlier of either twelve (12) months after their issuance, or when the Customer disconnects service or terminates service under the Net Metering Rider.

5. ENERGY TO CITY CREDIT VALUE

The credit for renewable energy generated by the Generation Facility and delivered to the City will be set at the City Electric System Avoided Fuel Cost. The City Electric System Avoided Fuel Cost is the average cost of fuel used per kilowatt-hour to the City of all power supply resources during the previous calendar year. The City will review and adjust the City Electric System Avoided Fuel Cost annually.

6. OTHER TERMS AND CONDITIONS

a. The City shall offer the Net Metering Rider to Customers that wish to generate and sell renewable energy to the City.

b. The Net Metering Rider shall only be available to new or existing Customers in good standing under the City's electric rate schedules and Electric Utility Rules and Regulations. All agreements hereunder shall be between the Customer and the City and will not include third parties.

c. The Interconnection Agreement between the City and Customer must remain in effect and be the subject of full compliance with the terms and conditions of the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less.

d. The type of service furnished under this Rider shall be single-phase or three-phase at 60 Hertz at a nominal voltage of 120/240 volts,120/208 or 480 volts furnished through a City-approved electric meter or meters.

e. The charges and payments from service under this Rider are exclusive of and in addition to charges for service rendered to the Customer under the applicable rate schedule.

f. Service under this Rider is subject to all applicable provisions of the Ordinances of the City of Jackson and the City Electric Utility Policies and Regulations.

g. This Rider is intended for qualifying Customer-owned Renewable Energy Resources Generation Facilities with rated outputs not exceeding 100 kW.

h. Net Metering is available to Customers on a first-come, first-served basis until the total rated generating capacity of Net Metering Rider systems equals five percent (5%) of the Electric Utility's single-hour peak demand during the previous year. In a given calendar year, no additional Net Metering Rider – Applications for Service will be approved if the total rated generating capacity of all Net Metering Rider – Applications for Service already approved to date by the City in said calendar year equals or exceeds one percent (1%) of the Electric Utility's single-hour peak demand for the previous calendar year.

i. Nothing in this Rider shall abrogate any Customer's obligation to comply with all applicable Federal and State laws, codes or Ordinances.

j. The Net Metering Rider is subject to the terms and conditions of the applicable electric rate schedule under which the Customer takes service, the City of Jackson Ordinances and Electric Utility Rules and Regulations. This schedule is also subject to the applicable provisions of the Interconnection Standards for Installation and Parallel Operation of Customer-Owned Renewable Electric Generation Facilities 100 kW or Less.