Spring City Distributed Power-Generation Policy July 7, 2016

SUBJECT

Distributed Power-Generation (DPG) Policy for Renewable-Energy Systems

Effective Date: July 7, 2016

SCOPE

This policy sets forth the requirements for the interconnection of a customer's renewable electric-generating facilities, within the city of Spring City's electric distribution-service area.

AVAILABILITY

At any approved point on Spring City's interconnected distribution system.

APPLICATION GUIDELINES

On a preapproved basis to any customer that owns or leases a customer-operated renewable generating facility with a capacity of not more than ten (10) 5KW kilowatts, and is for a residential facility that is located on, or adjacent to the customers' premises, which is interconnected and operates in parallel within Spring City's existing distribution facilities, is intended primarily to offset part or all of the customer's own electrical requirements, is controlled by an inverter or switchgear capable of enabling safe and efficient synchronous coupling with Spring City's electrical system, and has executed an Interconnected Agreement for Distributed Power Generation with Spring City. CITY WILL ONLY ALLOW A MAXIMUIN 50 KW ON ITS SYSTEM AT THAT TIME WHEN FULL PRODUCTION IS MET THE CITY HAS A RIGHT TO NOT ALLOW ANYMORE {DPG] AND WILL EVALUATE FEEDERS TO MAKE SURE PROPER VOLTAGE AND POWER FACTOR IS MAINTAINED

It is recognized that additional definitions and regulations may need to be implemented in the future in relationship to DPG systems.

DEFINITIONS

Distributed Power Generation, also **distributed energy** or **on-site generation** (**OSG**), is generated or stored by a variety of small, grid-connected devices referred to as Distributed Energy Resource (DER) systems.

Conventional power stations, such as coal-fired, gas and nuclear powered plants, as well as hydroelectric dams and large-scale solar-power stations, are centralized and often require electricity to be transmitted over long distances. By contrast, DER systems are decentralized, modular, and more flexible technologies that are located close to the load they serve.

DER systems typically use renewable energy sources, including small hydro, biomass, biogas, solar power, wind power, and geothermal power.

An Inverter means a device that coverts direct current power into alternating current power that is compatible with power used by the City.

Residential Customer means any customer that receives electric service to a single family residence. WHAT ABOUT COMMERCIAL ,?

Renewable Generating Facility means a facility that uses energy derived from one of the following:

Solar Photovoltaic Solar Thermal Energy Wind Energy Organic Waste Waste Gas Waste Heat Capture or Recovery Biomass.

MONTHLY BILLS

The base electric service charge shall be applied to each monthly bill according to the standard monthly billing rate, regardless of kilowatt hours generated by the customer. If in a given monthly billing period a customer/generator supplies more electricity to Spring City's electric distribution system than Spring City delivers to the customer/generator, Spring City will <u>not</u> credit the customer for the excess generation. THE CITY WILL GIVE HOMEOWNER 3.7CENTS CREDIT OFF THEIR DELIVERED POWER METER READING

DISTRIBUTED POWER GENERATION

A customer-generating facility tied to the Spring City power system shall be equipped with metering equipment that can measure the flow of electricity in both directions at the same rate. This is typically accomplished through the use of a single bidirectional meter. A single phrase bidirectional meter shall be provided by Spring City at the customers expense, so as not to cost the city, as well as the cost of metering. ON THIS METER WILL HAVE 3 DIFERENT READING #1 DELIVERED POWER THAT WAS USED IN THE RESIDENCE #2 RECEIVED POWER THAT WAS EXCESS TO RESIDENCE AND PUT BACK ON THE CITY POWER GRID #3 NET THE DIFERENCE BETWEEN THE DELIVERDE AND

RECEIVED AND IN THE FUTURE THE CITY MAY REQUIRE A PRODUCTION METER TO BE BETWEEN THE POWER PRODUCING UNIT AND RESIDANCE

SPECIAL CONDITIONS

- The customer/generator shall provide at the customer's expense all equipment necessary to meet applicable local and national standards regarding electrical, fire safety, power quality, and interconnection requirements established by the National Electric Code, the Institute of Electrical -and Electronics Engineers, and Underwriters Laboratories. IEEE 1547 and can be accessed through the IEEE web site <u>www.ieee.org</u>; and UL 1741 for inverters, converters, and controllers for use in independent power systems.
- 2. Spring City shall not be liable directly or indirectly for permitting or continuing to allow an attachment of a net metering facility, or for the acts or omissions of the customer/generator that cause loss or injury, including death, to any third party.
- 3. Spring City may test, inspect, or shut down an interconnection at any time that the electrical department considers it necessary to ensure the safety of electrical workers, and to preserve the integrity of Spring City's electric power.
- 4. Spring City has the option to require an annual inverter test (verified by Spring City's Electric Department) to verify when the incoming power from Spring City's distribution system is shut off, that the customer's inverter automatically shuts down all inverted power being delivered back to Spring City's distribution system.

ELECTRIC-SERVICE REGULATIONS

Service under this schedule will be in accordance with the terms of the Electric Service Agreement between the customer/generator and Spring City. The Electric Service Ordinance of Spring City is on file at City Hall. The ordinance including future applicable amendments will be considered as forming a part of and incorporated in said agreement.

To complete the process for a DPG interconnection, please follow the steps below:

1. RESIDENT MUST GO TO PLANNING AND ZONING FOR APPROVAL AND OBTAIN A ZONING APPLICATION FEE IS 100 DOLLARS

Complete and submit the following to Spring City:

- a. A plot plan showing purposed power-generating equipment, buildings, setbacks and easements recorded on the lot.
- b. Interconnection Agreement and the Application for DPG Interconnection.
- c. The inverter specification sheet.
- d. A simple one-line diagram including, the location of the customers power meter and the location of the customers disconnect switch. (This must be within ten (10) feet of the meter service panel's main breaker).

- 2. Spring City Power will review your interconnection agreement and application; final approval will be in writing.
- 3. Install the DPG system only after you have received the written approval of the Interconnection Agreement and Application for DPG from Spring City.
- 4. Obtain inspections for your DPG system by the county building department and approval of the physical interconnection by Spring City Power Department.
- 5. Turn on your net metering system only *after Spring City_*provides you written notification that the interconnection work has been completed, inspected, and a DPG system has been installed.

Amendments approved in Council by the motion of **Council Member Neil Sorensen**, and seconded by **Council Member Whitney Allred** on this, the 7th day of July, 2016 by vote as follows:

Council Member Kimberly Stewart	Against
Council Member Keith Coltharp	In Favor
Council Member Neil Sorensen	In Favor
Council Member Cody Harmer	In Favor
Council Member Whitney Allred	In Favor

Mayor Jack Monnett

Attest:

Michelle Chandler, Recorder

System Information

System Type: Solar Wind Hydro Other (specify):
Generation Nameplate Capacity: KW (Combine DC total of wind turbines, solar panels, etc.)
Inverter Controlled: Yes No
Inverter Manufacture: Model Number of Inverters: Rating: KW
Number of Panels:
Panel Name Plate Wattage Rating Total watts
Manufacturer Nameplate Inverter Total AC Capacity Rating: KW
Type of Service: Single Phase 120 volt240 volt3 Phase Other
Meets IEEE Standard 1547 & UL Subject 1741 requirements: Yes No
Please Note: A disconnect switch is required for an inverter-based facility Manuel Disconnect: YesNo
The net metering facility must not impact the customer/generator's service conductors by more than 10 KW. A disconnect switch must be within the same proximity of the meter, customer/generator to provide a simple one-line diagram that shows the location of the disconnect switch and Spring City's power meter.
Any necessary costs to upgrade the customers meter panel or the Spring City's electrical service will be borne by the customer.

It is expected that future definitions and additions to these requirements for Spring City power system personnel and equipment may be implemented as necessary.

Customer

Date