Spring City Power

INTERCONNECTED DISTRIBUTED POWER GENERATION POLICY

Part-3: STANDARDS

A. GENERAL

These STANDARDS for Customer-Owned Grid Connected Electric Generating Systems sets forth the requirements and conditions for interconnected non-utility-owned electric generation where such generation may be connected for parallel synchronous operation with the Spring City electrical system (Spring City Power). Generating systems will be permitted to interconnect to Spring City Power's electric distribution system at service level voltage only after a determination by Spring City Power that such interconnection will not interfere with the operation of the distribution circuit and ensures the safety of Spring City Power employees and customers.

B. INTERCONNECTION REQUIREMENTS

1. Customer shall comply with all the latest applicable National Electric Code (NEC) requirements [NEC Articles 690 and 705], NEC requirements, State of Utah requirements, building codes, and shall obtain building and electrical permit(s) for the equipment installation.

2. Meter and transformer or transformer pole serving the Customer-Generator shall be labeled to indicate potential electric current back feed. Spring City Power will provide and install labels when Customer Generator's electric system is approved for interconnection.

3. The Customer shall provide space for metering equipment and meter base(s) as per Spring City Power requirements.

4. The Customer's over-current device at the service panel shall be marked by the customer and verified by Spring City power to indicate power source(s) and connection to the Spring City Power's distribution system.

5. The Customer shall assume the full responsibility for all maintenance of the generator and protective equipment and keeping of records for such maintenance. These records shall be available to the Spring City Power for inspection at all times. Failure to properly maintain the generation and interconnect equipment along with the records of all such maintenance will result

in the customer's license for connection into the Spring City system being revoked. In such a situation the customer's system shall be disconnected from the Spring City system by Spring City power personnel.

6. Customer's power production control system shall comply with NEC Articles 690 and 705; and applicable and current Institute of Electrical and Electronics Engineers (IEEE) Standards including Standard number 1547 "Interconnecting Distributed Resources with Electric Power Systems" for parallel operation with the Spring City Power; it shall also meet Underwriters Laboratories (UL) standard UL-1741.

7. Power output control system shall automatically disconnect from the Spring City Power's source upon loss of voltage and not reconnect until the Spring City Power's voltage has been restored for at least five (5) minutes continuously.

8. Customer shall furnish and install on customer's side of the meter, a UL approved safety disconnect switch which shall be capable of fully disconnecting the Customer's generating facility from Spring City Power's electric system. The disconnect switch shall be located within ten (10) feet of the Spring City Power's meter and shall be of the visible break type in a metal enclosure, which can be secured by a padlock. The disconnect switch shall be accessible to Spring City Power personnel at all times.

9. There shall be a "production meter" within the system that allows the customer/producer to measure and track the power being generated before any electrical loads are attached to the system allowing the customer to monitor their internal power production/use. If the system does not have an integral production meter, then at the customer's expense, one shall be installed as specified by Spring City Power, with a meter base for it placed adjacent to the utility meter along with a knives disconnect.

10. Solar Photovoltaic Equipment shall be in compliance with Underwriters Laboratories (UL) 1741, Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources; UL 1703, Standard for Flat-Plate Photovoltaic Modules and Panels; and IEEE 1262-1995, Recommended Practice for Qualification of Photovoltaic (PV) Modules; and the solar system shall be installed in compliance with IEEE Standard 929-2000, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems.

C. SAFETY

All Safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) standard 29 CFR 1910.269, the National Electrical Code (NEC), State of Utah rules, City standards, and equipment manufacturer's safety and operating manuals.

D. GUIDELINES FOR SYSTEM DIAGRAMS

The SYSTEM DIAGRAM can be anything from a One-Line, to a Schematic, to a complete Wiring Diagram that shows every wire and every connection throughout. Any of these are acceptable as long as the minimum key information is included. The diagram does not need to be overly complex, however, accuracy and clarity are critical. The attached sample diagram is for a typical PV System and is very simple, but it contains all technical information for Spring City Power. Additional information, such as equipment part numbers and physical locations, should be included on the diagram.

The SYSTEM DIAGRAM will become a permanent record of the system filed with Spring City Power for reference.

Discrepancies between the diagram and the actual installation as built are cause for rejection at the final testing and interconnection.

Note: These guidelines and the sample diagram are applicable for systems using a UL-1741 approved synchronous inverter. Systems not using a UL-1741 inverter have more complex requirements for interconnection and will require more detailed design drawings for review and approval.

The SYSTEM DIAGRAM should provide the information as described below. Refer to the sample diagram on the following page for an example. Include all of the information listed below on the drawing or as directed by Spring City Power.

- Generator (Wind Turbine, Hydro Turbine, Fuel Cell, etc.): Include manufacturer, part number, nameplate maximum capacity (kW), and physical location.
- For modular systems (e.g. PV Modules): Include number of modules, configuration, nameplate maximum capacity of each module, and total nameplate maximum capacity.

- Inverter: Include manufacturer, type or series, part number, serial number, nameplate maximum capacity (kW), output voltage, physical location.

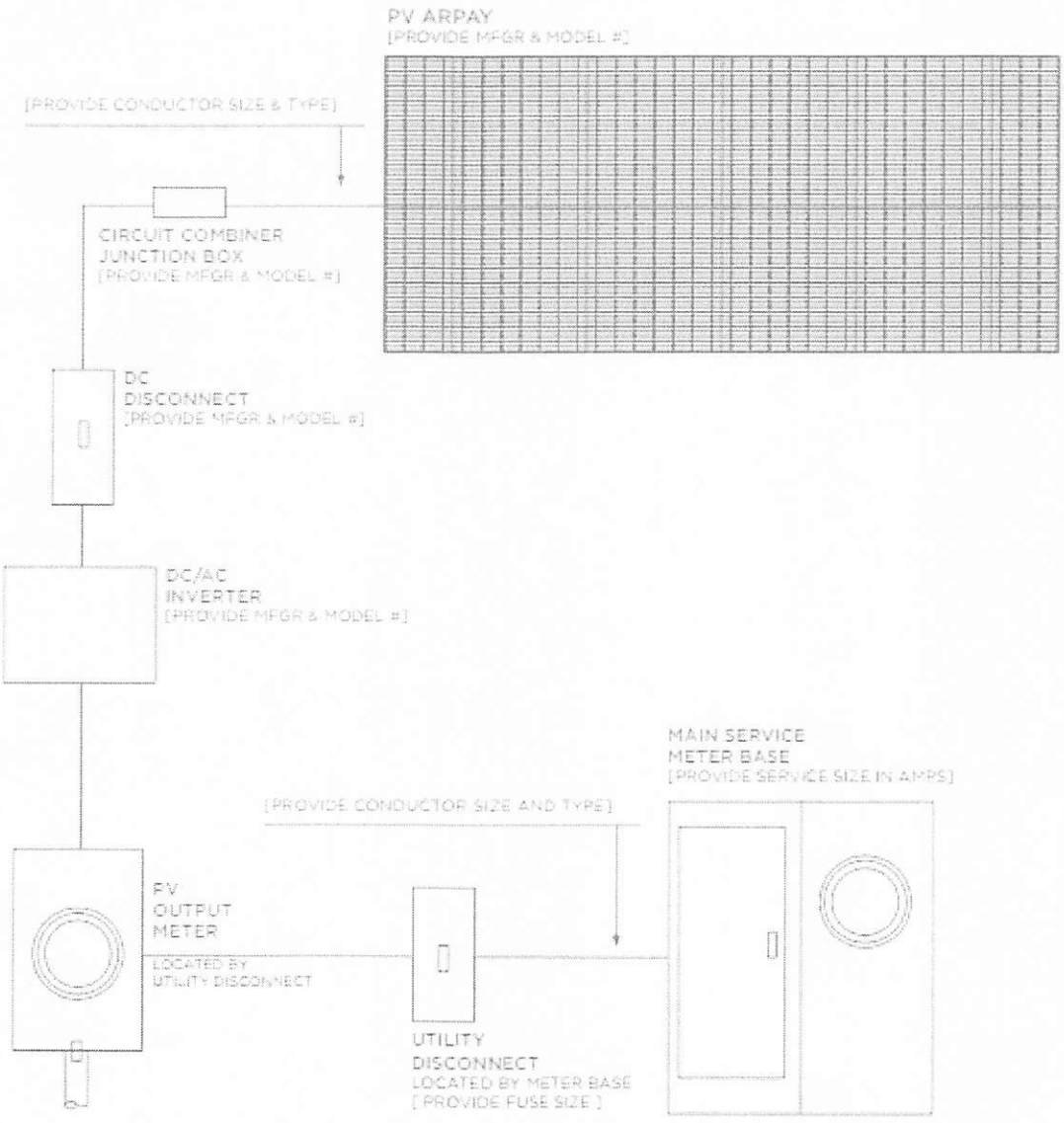
- Disconnect Switch: Include the physical location relative to the Spring City Power Service Meter.

- Electrical Service Panel: Include the panel or main breaker size and the position at which the generation is connected. Show all panels (if there are multiple panels or subpanels) even if not directly connected into the generation system.

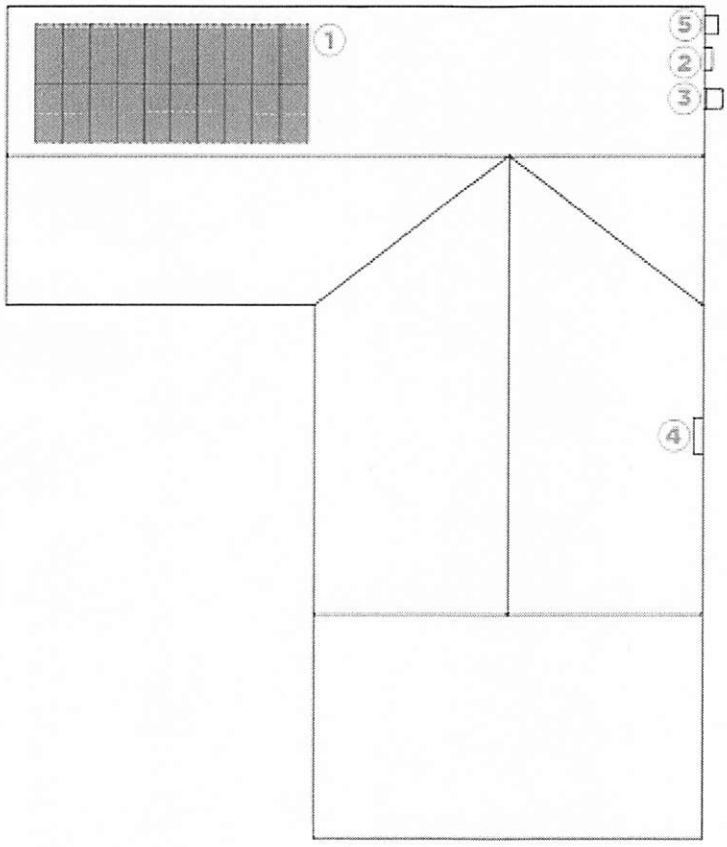
- Other Related Equipment (battery banks, transfer or bypass switches, backup generators, etc.): These items are typically associated with more custom and complex systems. Providing accurate information and connection diagrams is especially important as these systems are not as "routine".

Also provide a SITE DIAGRAM showing the relative location of all major subsystems plus all safety and disconnect components similar to the attached sample drawing or as directed by Spring City Power.

SAMPLE SYSTEM DIAGRAM



SAMPLE SITE DIAGRAM



1. PV ARRAY
   [PROVIDE MFGR & MODEL #]
2. UTILITY DISCONNECT
   LOCATED BY METER BASE
   [PROVIDE FUSE SIZE]
3. MAIN SERVICE METER BASE
   [PROVIDE SERVICE SIZE IN AMPS]
4. DC/AC INVERTER
   [PROVIDE MFGR & MODEL #]
5. PV METER BASE
   LOCATED BY UTILITY DISCONNECT