



**SOLAR ENERGY PROGRAM
COMMERCIAL DISTRIBUTION INTERCONNECTION AGREEMENT FOR
INVERTER BASED GENERATORS GREATER THAN 100KW**

Name of Customer

Reference:

Location Number:

Customer Number:

Service Address:

Mailing Address: Same As Above **OR** Add Mailing address

Type of Generating Facility:

Model:

Maximum Generating Capacity: _____ kW Inverter

Point of Interconnection: Service Entrance (see Three-Line Drawing of Points of Delivery to Customer and Point of Separation of the Generator attached as Exhibit A and included as part of this Agreement)

Electrical Characteristics at the Point of Interconnection: Where SRP's _____ volt service conductors connect to Customer's _____ volt service entrance section.

The interconnection must be at 60 hertz _____-phase alternating current.

Point of Buyback: At the meter.

This SRP EarthWise Solar Energy Program Commercial Distribution Interconnection Agreement ("Agreement") is entered into by and between Customer **OR** _____, an _____ corporation/municipality/limited liability (hereinafter "Customer") and Salt River Project Agricultural Improvement and Power District, an agricultural improvement district organized and existing pursuant to the laws of the State of Arizona ("SRP").

RECITALS

- A. Customer desires to install a generating facility and related equipment ("Generating Facility") on property located within SRP's electrical distribution service area and to participate in SRP's EarthWise Solar Energy Program.
- B. Customer may elect to have a separate entity ("Third Party") design, install, own or operate the Generating Facility and satisfy some or all of the terms of this Agreement via separate agreement.
- C. SRP requires that all customers operating Generating Facilities in parallel with SRP's electrical distribution system sign a Distribution Interconnection Agreement prior to interconnection.

In consideration of the parties' mutual promises, undertakings, and agreements, the parties agree as follows:

AGREEMENT

- I. **Term.** This Agreement shall become effective as of the Effective Date (as defined below). Except as otherwise provided below, it shall continue in effect from year to year until either party gives the other party sixty (60) days written notice of its intent to terminate the Agreement.
- II. **Sale of Property—Notice to Subsequent Purchaser.** If Customer intends to sell the property upon which the Generating Facility is located, prior to the closing, Customer will notify the prospective purchaser that:
 - a. As a condition of receiving electric service from SRP, and in order to interconnect with the SRP electrical distribution system and to receive any buyback service benefits, the new customer must sign SRP's then-current version of the Commercial Distribution Interconnection Agreement; and
 - b. SRP is the owner of all Environmental Attributes and Reporting Rights (defined below) associated with the first twenty years of energy generated by the Generating Facility.
- III. **Customer General Obligations.** Customer, and not SRP, shall be responsible for the following at its own expense:
 - a. Customer shall submit the plans for design and installation of the Generating Facility to SRP for review of the compatibility of the Generating Facility with the operation, reliability, integrity and safety of the SRP electrical distribution system and personnel.
 - b. Customer shall fully comply with SRP's Rules and Regulations, Electric Service Specifications, Interconnection Guidelines for Distributed Generators, Technical Interconnection Requirements, and applicable Standard Electric Price Plans and Riders, as those documents may be amended or revised by SRP from time-to-time. All those documents are adopted and incorporated as part of this Agreement and are available at SRP's principal office, as well as at SRP's website, www.srpnet.com. The current version of the Technical Interconnection Requirements is attached as Exhibit B.
 - c. Customer shall be solely responsible for all legal and financial obligations arising from design, construction, installation, operation, and maintenance of the Generating Facility.
 - d. Customer must obtain all permits, inspections and approvals required by applicable jurisdictions with respect to the Generating Facility and must use a licensed, bonded and insured contractor to design and install the Generating Facility. Unless otherwise approved in writing by SRP, Customer shall install only Underwriters Laboratories Inc. certified equipment and devices as part of the Generating Facility.
 - e. Customer shall operate and maintain the Generating Facility and all other Customer-owned Generating Facility equipment on the Customer's side of the Point of Interconnection in good repair and shall be solely responsible for protection of the Generating Facility from electrical events originating on either side of the Point of Interconnection.
 - f. Customer may elect to have a Third Party design, install, own or operate the Generating Facility. However, Customer shall still be responsible for ensuring that all its obligations under this Agreement are fulfilled.
- IV. **SRP General Obligations.** SRP, and not Customer, shall be responsible for the following at its own expense:
 - a. SRP shall witness testing of the Generating Facility and Customer's electrical system and confirm in writing that test results are satisfactory before Customer shall be permitted to operate the Generating Facility in parallel with the SRP electrical distribution system. SRP'S WITNESS TESTING AND ANY REVIEW OF CUSTOMER'S PLANS, SPECIFICATIONS, DESIGNS, AND TEST RESULTS SHALL NOT BE CONSTRUED AS CONFIRMING OR ENDORSING THE DESIGN OF, OR AS ANY WARRANTY OF SAFETY, DURABILITY OR RELIABILITY OF, THE GENERATING FACILITY, CUSTOMER'S EQUIPMENT OR PROTECTIVE DEVICES, OR THE TECHNICAL OR ECONOMIC FEASIBILITY OF THE GENERATING FACILITY. THE SOLE PURPOSE OF

SRP'S REVIEW IS TO EVALUATE WHETHER SRP'S ELECTRICAL DISTRIBUTION SYSTEM WILL BE ADVERSELY AFFECTED BY THE GENERATING FACILITY. CUSTOMER SHALL NOT COMMENCE PARALLEL OPERATION OF THE GENERATING FACILITY UNTIL CUSTOMER RECEIVES FINAL WRITTEN APPROVAL FROM SRP.

- b. SRP shall pay for energy delivered to it in accordance with any applicable buyback service rider or applicable successor pricing document for which Customer may be eligible.

V. **SRP Right of Access and Inspection of Documents and Generating Facility.**

- a. SRP reserves the right in its sole and absolute discretion to review all information, specifications, designs, and test results relating to the Generating Facility. SRP may require modifications to the Customer's specifications and designs based on current industry standards to enable SRP to operate its electrical distribution system as safely and reliably as possible.
- b. Customer hereby grants SRP's employees and agents the right of access to the premises of Customer at all times for emergency operation or repair of SRP's equipment and related facilities, and at all other reasonable times for such purposes as installing, constructing, modifying, testing and maintaining SRP's equipment and related facilities. SRP reserves the right to inspect the Generating Facility at any time, in its sole and absolute discretion, upon reasonable notice (if practical) to Customer. If SRP has reason to believe that Customer may be operating in a manner unsafe or harmful to SRP's electrical distribution system, SRP personnel, or the general public, SRP may also request that Customer test the Generating Facility and provide SRP the results in writing irrespective of periodic testing of equipment that may be required or has been completed pursuant to Exhibit B.

VI. **SRP Right to Require Customer to Disconnect Generating Facility from SRP Electrical Distribution System.** SRP shall not be obligated to be interconnected with Customer's Generating Facility nor to accept energy from Customer, and SRP, in its sole and absolute discretion, may require Customer to disconnect from the SRP electrical distribution system or interrupt or reduce deliveries of energy to SRP: (a) when necessary to investigate, inspect, construct, install, maintain, repair, replace or remove any SRP equipment, any part of SRP's electrical distribution system, or Customer's Generating Facility; (b) because of emergencies, forced outages, uncontrollable forces or compliance with prudent electrical practice; or (c) when Customer is in breach of any of its obligations under this Agreement.

VII. **SRP Right to Disconnect Generating Facility from SRP Electrical Distribution System.** Notwithstanding any other provision of this Agreement, if SRP, in its sole and absolute discretion, determines that continued operation of the Generating Facility may: (a) endanger SRP personnel or the general public; or (b) impair the integrity of the SRP electrical distribution system, SRP may disconnect Customer's Generating Facility from the SRP electrical distribution system. In such event, Customer's Generating Facility shall remain disconnected until SRP is satisfied that the preceding conditions (a) and/or (b) have/has been corrected. SRP shall have no obligation to compensate Customer for any loss of energy during any and all periods when Customer's Generating Facility is operating at reduced capacity or is disconnected from the SRP electrical distribution system pursuant to this Agreement.

VIII. **Liability and Damages.** To the fullest extent permitted by law, SRP, the members of its governing bodies, its officers, agents and its employees (collectively the "Related Parties" for purposes of this Section 8) shall not be liable to Customer or its Related Parties or its successors or assigns, or their respective insurers, for any incidental, indirect, consequential, punitive or other special damages whatsoever, including, without limitation, lost profits, production losses, production delays, or any and all other non-direct damages or losses, for performance or nonperformance of its obligations under this Agreement, even if SRP is advised of the possibility thereof, and irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of Customer, SRP or others), strict liability, contracts, operation of law, or otherwise.

IX. **Insurance.** Customer, at its own expense, shall secure and maintain in effect during the term of this Agreement the following insurance:

- a. General liability insurance with a combined single limit for bodily injury and property damage of not less than \$2,000,000 for each occurrence. Such general liability insurance shall include coverage for premises, operations and contractual liability.
- b. The general liability insurance specified in this Section 10 shall name SRP as an additional insured and shall contain a severability of interest clause.
- c. Certificates of Insurance evidencing the coverages and provisions required in this Section 10 shall be furnished to SRP prior to interconnection and Customer shall provide written notice to SRP at least thirty (30) days prior to cancellation or reduction of any coverage. SRP shall have the right to request the original policies of such insurance in the event of a claim. Customer shall be responsible for payment of any deductible that may apply for coverage provided under this Section 10. Customer shall not be allowed to interconnect with SRP unless evidence of satisfactory insurance has been provided to SRP in a timely manner.

X. **Customer Indemnification.** To the fullest extent permitted by law, Customer shall indemnify, defend and hold harmless SRP and its Related Parties, for, from and against any and all claims, demands, suits, costs of defense, attorneys' fees, witness fees of any type, losses, damages, expenses, and liabilities, whether direct, indirect or consequential, related to, arising from, or in any way connected with: (a) Customer's or any non-SRP party's design, construction, installation, inspection, maintenance, testing or operation of Customer's Generating Facility or equipment used in connection with this Agreement; (b) the interconnection of Customer's Generating Facility with, and delivery of energy from the Generating Facility to, SRP's electrical distribution system; or (c) the performance or nonperformance of Customer's obligations under this Agreement or the obligations of any and all of the members of Customer's governing bodies and its officers, agents and employees. Customer's obligations under this Section shall extend to indemnify, defend, and hold harmless the SRP Indemnifieds when SRP or any of the SRP Indemnifieds is allegedly concurrently negligent in causing or contributing to the liability-causing event, but shall not extend to any liability caused by the sole negligence of SRP or the SRP Indemnifieds. It is the intent of SRP and Customer that SRP shall, in all instances except for loss or damage resulting from the sole negligence of SRP, be indemnified against all liability, loss, or damage of any nature whatsoever for or on account of any injuries or death of person(s) or damages to or destruction of property belonging to any person arising out of, or in any way connected with, Customer's performance of this Agreement and the interconnection of Customer's Generating Facility. Customer shall be responsible for primary loss investigation, defense, and judgment costs when this contract of indemnity applies. Customer's obligations under this Section shall survive the termination of this Agreement.

XI. **Environmental Attributes and Reporting Rights.** For purposes of this Agreement, "Environmental Attributes and Reporting Rights" means any and all fuel, emissions, air quality, or other environmental characteristics, including green energy tags, renewable energy credits, or certificates attributable to the metered output generated by the Generating Facility and all rights to report ownership of such items to any person or entity under Section 1605(b) of the Energy Policy Act of 1992, any successor or replacement statutes, or otherwise.

XII. **General Terms and Conditions.** This Agreement shall be interpreted, governed by, and construed in accordance with the substantive and procedural laws of the State of Arizona, without regard to conflicts of law principles. SRP and Customer agree that any action, suit, or proceeding arising out of or relating to this Agreement shall be initiated and prosecuted in a state or federal court of competent jurisdiction located in Maricopa County, Arizona, and the parties irrevocably submit to the jurisdiction and venue of such court. To the fullest extent permitted by law, each party hereby irrevocably waives any and all rights to a trial by jury and covenants and agrees that it will not request a trial by jury with respect to any legal proceeding arising out of or relating to this Agreement. None of the provisions of this Agreement shall be considered waived by either party except when such waiver is given in writing. No waiver by either party of any one or more defaults in the performance of the provisions of this Agreement shall operate or be construed as a waiver of any other existing or future default or defaults. If any one or more of the provisions of this

Agreement or the applicability of any provision to a specific situation is held invalid or unenforceable, the provision shall be modified to the minimum extent necessary to make it or its application valid and enforceable, and the validity and enforceability of all other provisions of this Agreement and all other applications of such provisions shall not be affected by any such invalidity or unenforceability. Upon its Effective Date, this Agreement supersedes all prior agreements or commitments for interconnection and/or buyback service between the parties for the point of interconnection(s) herein specified. This Agreement does not govern the terms and conditions for the delivery of power and energy to Customer from the SRP electrical distribution system or Customer’s participation in the EarthWise Solar Energy Program.

This Agreement is dated and effective as of the last signing date below ("Effective Date").

“CUSTOMER”	“SRP”
By: _____ (Signature)	By: _____ (Signature)
_____	Robert J. Trzepakowski
(Print Name)	
Its: _____	Manager, Project Facilitation
(Title)	
Date: _____	Date: _____

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Exhibit A

THREE-LINE DRAWING OF POINTS OF DELIVERY TO CUSTOMER
AND POINT OF SEPARATION FROM THE GENERATOR

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Exhibit B

TECHNICAL INTERCONNECTION REQUIREMENTS

SRP or Customer may from time to time require changes in Customer's connection, protective, or control equipment to meet changing conditions and requirements for the Generating Facility or SRP's electrical distribution system.

1.0 GENERAL OBLIGATIONS:

- 1.1 Customer shall ensure that the electrical characteristics of its load and generating equipment shall conform to SRP's normal power quality requirements. Any deviation from sine wave form or unusual interval fluctuations in power demand or production shall not result in impairment of electrical service to others. Power factor and quality issues are defined in SRP's Electric Service Specifications and its Rules and Regulations.
- 1.2 Customer shall design, own, operate and maintain the Generating Facility in good repair in accordance with manufacturer's guidelines and prudent electrical practices, and provide written evidence to SRP of such compliance upon request of SRP.
- 1.3 The Generating Facility at this installation must be off line before the SRP electric service is restored (reclosed) following a trip of the SRP feeder breaker. Relaying and protection requirements stated herein shall take into consideration whether Customer has more than one generator, and whether such generator(s) can be switched by Customer among multiple Points of Interconnection.
- 1.4 During SRP Hold Tag (the method used as an aid in protection of personnel working on or near energized equipment, whereby Reclosing of a line is disabled) conditions, Exhibit B-1, there could be times when a second 12 kV feeder is not available to serve Customer's load, or there could be a need to do live line work. During these times, Customer will either provide a means to physically disconnect the interconnected generators at their site, or will disconnect their site load from SRP, and will operate solely from their generator sources.
- 1.5 Customer must notify SRP when connecting to the grid if limitations, defined previously in this Agreement are exceeded.

2.0 CUSTOMER EQUIPMENT REQUIREMENTS:

Although the Generating Facility is equipped with its own protective and control circuitry, additional protective equipment (as outlined below) is required to permit parallel operation. Also, SRP may specify other equipment requirements in the future depending on the effects operation of the Generating Facility will have on the SRP electrical distribution system.

2.1 LOAD-BREAK DISCONNECT:

Customer shall install a load-break disconnect device with a visible break for use by SRP as a means of electrically isolating the SRP electrical distribution system from the Generating Facility and to establish working clearance for maintenance and repair work in accordance with SRP safety rules and practices, subject to the following requirements:

- 2.1.1 The disconnect device or circuit breaker must be accessible at all times to SRP personnel. It cannot be located inside a gated yard or inside an enclosed space, and should be easily accessible.
- 2.1.2 The disconnect device or circuit breaker must be lockable only in the open position with a standard SRP padlock. Only SRP personnel shall remove this padlock. **UNAUTHORIZED REMOVAL SHALL BE DEEMED A MATERIAL BREACH OF THE INTERCONNECTION AGREEMENT.**

- 2.1.3 Customer is responsible for all labor and material costs to maintain, repair, or replace the disconnect device or circuit breaker.
- 2.1.4 The disconnect device or circuit breaker and its location must be approved by SRP prior to installation.
- 2.1.5 The disconnect device or circuit breaker may be opened at any time by SRP without notice
- 2.1.6 Customer shall label the disconnect switch as shown below:
 - 2.1.6.1 DISTRIBUTED GENERATION DISCONNECT SWITCH
 - 2.1.6.2 WARNING – ELECTRICAL SHOCK HAZARD
 - 2.1.6.3 DO NOT TOUCH TERMINALS –
 - 2.1.6.4 TERMINALS ON BOTH THE LINE AND LOAD SIDES
 - 2.1.6.5 MAY BE ENERGIZED IN THE OPEN POSITION
- 2.1.7 For inverter based Generating Facilities greater than 100kW, Customer shall install a Remote Disconnect Device that allows SRP Distribution Operations Center the ability to remotely disconnect the Generating Facility.
- 2.2 **CIRCUIT BREAKER OR CONTACTOR:** A circuit breaker or contactor at the point of interconnection or at the generator must be used for isolating the Generating Facility from SRP during system over/under frequency, over/under voltage and ground fault conditions.
- 2.3 **RELAYING:**
 - 2.3.1 **PROTECTIVE FUNCTIONS:**

Protection functions for over voltage, under voltage, over frequency, under frequency, ground faults and islanding at the Point of Interconnection Point, shall be provided by an undervoltage contactor. The contactor provided in the inverter performs these functions. The inverter must be listed as meeting the requirements of UL 1741 and IEEE 1547.
 - 2.3.2 **GROUND FAULT PROTECTION:**

Additional requirements for detecting ground faults in the SRP electrical distribution system will be evaluated on a per site basis.
 - 2.3.3 **RELAY SETTINGS:**

Relay settings and protection schemes specific to this installation, and any proposed modifications thereof, must be made available by the Customer to SRP's System Protection division for review and final approval prior to their implementation.
- 3.0 **SYSTEM METERING:**
 - 3.1 Customer shall install a meter socket and associated wiring to allow measurement of energy production from the Generating Facility. The meter socket shall meet SRP's Electric Service Specifications available at SRP's website www.srpnet.com. If the Generating Facility includes battery back-up, the Customer is not required to install a meter socket for measurement of the energy production. SRP shall estimate the energy production from Generating Facilities with battery back-up.
 - 3.2 The meter socket shall be wired such that the meter runs forward while measuring generation from the Generating Facility
 - 3.3 There shall be no load connected between the dedicated meter and the panel breaker feeding the solar electric system.

- 3.4 The meter socket shall be located next to the Customer's existing SRP meter.
- 3.5 SRP shall provide and install a meter to measure energy production from the Generating Facility. For Generating Facilities with battery back-up, SRP will not supply or install a meter to measure energy production.

4.0 RIGHT OF ACCESS:

Customer hereby grants SRP's employees and agents the right of immediate access to the premises of Customer 24/7, 365 days of the year, for emergency operation, maintenance or repair of SRP's equipment and related facilities, and at all other reasonable times for such purposes as installing, constructing, modifying, testing and maintaining SRP's equipment and related facilities. SRP shall notify Customer in advance of needing access when reasonable to do so.

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Exhibit B-1SRP HOLD TAG AND CLEARANCE PROCEDURE FOR DISTRIBUTED GENERATIONDefinition

A SRP hold tag is defined as: “*THE DISABLING OF A RECLOSING OPERATION OF A BREAKER OR line RECLOSER.*” The Hold Tag is used to aid in protection of personnel working on or near energized equipment, whereby *REENERGIZING* of a line is disabled. When a Hold Tag for a circuit is in effect, if the circuit *BREAKER OR LINE RECLOSER* trips open, it prevents *RECLOSING OF A BREAKER OR RECLOSER* until it is verified that all personnel are in the clear *AND THE CREW CANCELS THE HOLD TAG.*

Distributed Generators

As it relates to Distributed Generators, circuits with hold tags shall have all potential sources of back-feed removed by opening, locking and tagging the appropriate disconnect switch. Interconnected Sources, also known as Distributed Generation (and formerly called “Co-Gens”), are those generating sources that connect in parallel with SRP’s distribution system. Each interconnected source customer must follow the SRP Interconnected Guidelines for Distribution Generators.

Issuing Hold Tag

When a hold tag is issued on the circuit connected to one of these sources, the crew will be notified of the location and size of the source.

Source Size

- a) 1-10kw Photovoltaic Distributed Generation it will be at the discretion of the crew weather to lock out or ignore the generation.
- b) 10-30kw Distributed Generation it will be at the discretion of the crew weather to lock out or ignore the generation.
- c) Above 30kw will be locked out locally (by a Trouble shooter or the crew), separating the generation from SRP electrical system before a hold tag can be issued.

Issuing Clearances

Safety guidelines require that ALL interconnected sources be visibly disconnected from the system during clearance conditions, by opening, locking and tagging the appropriate disconnect switch(s) or break(s).

Personnel

Hold Tags are only issued to SRP personnel and their authorized contractors that are working in the vicinity of SRP’s equipment.

Release of Hold Tag

Following the release of an SRP clearance or Hold Tag, where it was necessary for SRP to open the Disconnect Switch, SRP personnel will not close the Customers switch. It will be the Customer’s responsibility to close the switch after ensuring that all generation sources that could potentially be energizing the Customer’s side of the switch are off, so as to eliminate any possibility of closing the SRP grid onto an out-of-sync generator.

SRP Employee Access

Customer hereby grants SRP’s employees and agents the right of immediate access to the premises of Customer 24/7, 365 days of the year, for emergency operation, maintenance or repair of SRP’s equipment and related facilities, and at all other reasonable times for such purposes as installing, constructing, modifying, testing and maintaining SRP’s equipment and related facilities. SRP shall notify Customer in advance of needing access when reasonable to do so.

Note: These Guidelines are subject to change from time-to-time at the sole discretion of SRP.