



**City of Redding Electric Utility  
Solar Photovoltaic (PV) Interconnection Agreement  
(Updated 6/8/10)**

**1. Solar Electric Generating Facility:**

Customer-Generator (C-G) and the City of Redding, through the Redding Electric Utility (REU) referred to collectively as “Parties” and individually as “C-G” and “REU” respectively agree as follows:

C-G Name \_\_\_\_\_

C-G COR Utility Account # \_\_\_\_\_

C-G Service Address \_\_\_\_\_

C-G Billing Address (if different) \_\_\_\_\_

C-G Generator Number \_\_\_\_\_

C-G Phone Number work \_\_\_\_\_ home \_\_\_\_\_ cell \_\_\_\_\_

C-G PV Rating (Qty. of Modules x CEC AC Rating x CEC Inverter Rating)= \_\_\_\_\_ kW

The facility will be ready for operation on or about (mm/dd/yy) \_\_\_\_\_

The Facility consists of electricity-generating modules, electrical controls, inverter(s), automatic disconnect, and wiring to connect all of the above to REU’s electricity distribution system at REU’s meter (collectively referred to hereafter as the Facility). All equipment must be included on California Energy Commission’s (CEC) Eligible Equipment list.

**2. Operating Option**

C-G has elected to construct, design, install, operate, and maintain the Facility in a manner consistent with the normal and safe operation of the electrical distribution system owned and operated by REU. The Facility is intended primarily to provide part or all of the C-G’s own electrical energy requirements.

By signing this Interconnection Agreement, C-G understands, accepts, and agrees that connection and operation of the Facility shall be subject to the terms and conditions set forth in this Interconnection Agreement.

**Customer-Generator (C-G)**

**REU**

**Signature:** \_\_\_\_\_

\_\_\_\_\_  
**Paul Hauser, Electric Utility Director**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

\_\_\_\_\_  
**Richard A. Duvernay, City Attorney  
(Approved As to Form)**

\_\_\_\_\_  
**Pamela Mize, City Clerk (Attest)**

### **3. Credits for Net Energy**

Customer is eligible to receive credits for energy if C-G's monthly energy generated by the Facility exceeds C-G's monthly energy requirements, calculated by "Net Metering". Net Metering uses one or more meters to measure the difference between the electricity supplied by REU and the energy generated by the CG Facility and supplied to REU. All applicable REU rates take effect at the time of C-G's signature on this Interconnection Agreement initially, and as revised thereafter. (Same rate is charged and credited for electricity used and generated by C-G respectively.) Payment for electric rate charges may be made monthly or annually depending on the C-G's preference. No cash value will be earned for surplus of electricity generated over electricity consumed in any 12-month period.

### **4. Interruption or Reduction of Deliveries**

REU shall not be obligated to accept, and REU may require C-G to interrupt or reduce, deliveries of energy to REU (a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of REU's equipment or part of REU's system; or (b) if REU determines that curtailment, interruption, or reduction of receipt of energy from C-G's Facility is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

Notwithstanding any other provision of this Interconnection Agreement, if at any time REU, in its sole discretion, determines that either (a) the C-G's Facility may endanger REU personnel or members of the general public, or (b) the continued operation of C-G's Facility may impair the integrity of REU's electric distribution system. REU shall have the right to disconnect C-G's Facility from REU's electric distribution system. C-G's Facility shall remain disconnected until such time as REU is satisfied that the condition(s) referenced in (a) or (b) of this paragraph have been corrected, and REU shall not be obligated to compensate CG for any loss or use of generation of energy during any and all periods of such disconnection.

### **5. Conditions of Facility Operations**

C-G shall deliver energy from the Facility to REU at REU's meter.

C-G and not REU shall be solely responsible for all legal and financial obligations arising from the construction, installation, design, operation, and maintenance of the Facility in accordance with all applicable laws and regulations.

C-G at CG's sole expense shall obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation and maintenance of the Facility.

REU shall furnish and install one or more standard watt-hour meters to read energy generated by C-G's Facility. CG shall provide and install a meter socket in accordance with REU's metering standards. REU reserves the right to install additional metering equipment.

REU may meter, at its expense, the C-G's energy usage by using one or more meters.

C-G shall not connect the Facility, or any portion of it, to REU's distribution system until written approval of Facility has been given to CG by REU. Such approval shall not be unreasonably withheld. REU shall have the right to have representatives present at the initial testing of C-G's Facility.

C-G may reconnect its Facility to the REU system following normal operational outages and interruptions without notifying REU unless REU has disconnected service, or REU notifies customer that a reasonable possibility exists that reconnection would pose a safety hazard.

If REU has disconnected Service to the Facility, or REU has notified CG that a reasonable possibility exists that reconnection would pose a safety hazard, CG may call REU at 530-339-7200 to request authorization to reconnect the Facility.

### **6. Photovoltaic Interconnection Design Standards**

C-G's Facility and all portions of it used to provide or distribute electrical power and parallel interconnection with REU's distribution system shall be designed, installed, constructed, operated, and maintained in compliance with this Interconnection Agreement. Compliance with this section is mandatory unless prior written REU approval is provided for those specific items not in compliance. Exemptions shall be in writing, signed by REU, and shall be attached to and become a part of this agreement.

C-G shall conform to applicable National Electric Code (NEC) standards and applicable building codes.

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CG shall have a dedicated circuit from the inverter to electrical service panel with a circuit breaker or fuse.

C-G's over current device at the service panel shall be marked to indicate photovoltaic power source.

C-G's inverter shall have the following minimum specifications for parallel operation with REU: Inverter output shall automatically disconnect from REU source upon loss of REU voltage and not reconnect until REU voltage has been restored by REU.

**7. Maintenance and Permits**

C-G shall: (a) maintain the Facility and Interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to requirements of section 6 above, and (b) to the extent that future requirements may require, obtain any governmental authorizations or permits required for the operation of the Facility. C-G shall reimburse REU for any and all losses, damages, claims, penalties, or liability REU incurs as a result of C-G's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the C-G's Facility.

**8. Access to Premises**

REU may enter C-G's premises without prior notice (a) to inspect at all reasonable hours C-G's protective devices and read or test any meter for the Facility and (b) to disconnect, at any time, without notice, the Facility if, in REU's sole opinion, a hazardous condition exists and that immediate action is necessary to protect persons, or REU's facilities, or property of others from damage or interference caused by (1) C-G's Facility or (2) C-G's failure to comply with the requirements of the Interconnection Agreement; and (c) monthly to read the bi-directional digital meter for billing purposes. Self-reads and reads from adjacent properties are not permitted.

**9. Indemnity and Liability by Customer**

C-G shall indemnify and hold REU, its directors, officers, agents and employees harmless against all loss, damages, expense and liability to third persons for injury to or death of persons or injury to property caused by the C-G's engineering, design, construction, installation, ownership, maintenance or operations of, or the making of replacements, additions or betterment to, or by failure of, the Facility in connection with this Interconnection Agreement by reason of omission or negligence, whether active or passive. C-G shall, on REU's request, defend any suit asserting a claim covered by this indemnity. C-G shall pay all costs that may be incurred by REU in enforcing this indemnity.

Nothing in this agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to, any agents or employees shall be liable for any claims, demands, costs, losses, causes of action, or any other liability of any nature or kind, arising out of the engineering, design, construction, ownership, maintenance or operation of, or making of replacements, additions or betterment to, C-G's Facility except to the extent actually caused by the sole and gross negligence of REU.

Neither REU, its officers, agents or employees shall be liable for damages of any kind to the Facility caused by any electrical disturbance of the REU system or on the system of another, whether or not the electrical disturbance results from the negligence of REU.

**10. Governing Law**

This Interconnect Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California.

**11. Amendments, Modifications or Waiver**

Any amendments or modifications to this Interconnection Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time(s) to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Interconnection Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or a waiver of the breach of any other term or covenant unless such waiver is in writing.

**REU Solar PV Interconnection Agreement**

**12. Notices**

All written notices shall be directed as follows:

City of Redding  
Electric Utility Director  
777 Cypress Ave.  
P.O. Box 496071, Redding, CA 96049-6071

**13. Term of Agreement**

This Interconnection Agreement shall be in effect when signed by the C-G and REU. This Interconnection Agreement shall remain in effect for 30 years from original signature date and thereafter on a year-to-year basis. REU may terminate this Interconnection Agreement for any violation of this Interconnection Agreement. Without cause this Interconnection Agreement may be terminated by either party providing thirty (30) days prior written notice to the other party. This Interconnection Agreement may be terminated prior to thirty (30) days by agreement of both parties.

**14. Successors and Assigns**

This Interconnection Agreement is and shall be binding on all successors and assigns of each of the Parties hereto without the necessity of any further documentation.

**15. Insurance Verification**

C-G's property insurance verification (declaration page) is required before Interconnection Agreement will be approved.

**16. Installation Specifications and REU Rebates (PV systems <10kW)**

All REU customers wishing to install a solar PV system, regardless of system size must execute REU's Interconnection Agreement. Customers installing larger systems (>10kW – 1MW) must also complete REU's Performance Based Incentive (PBI) Letter of Agreement (LOA). See PBI LOA for guidelines and rebate levels for larger system installations. Customers installing small PV systems (<10kW), REU provides an additional incentive for PV systems that are installed in specific manner to optimize the operation of the PV system for both the customer and the utility's benefit. The specifications for PV system requirements shall be as defined by REU, other sanctioned regulatory bodies or any Federal, State, or local legislation.

**REU Solar PV Rebate Amounts – Effective Jan 1, 2010 (Small Systems <10kW)**

\$2.42/watt for PV systems that meet REU's specifications for interconnection to the REU electrical system and are installed with an orientation ranging from 160° (South-Southeast to 270° (due West) with the panels set with an incline of a 5° to 45° tilt.

\$3.07/watt for PV systems that are installed on a single or dual tracking system that automatically adjusts the panel(s) inclination (tilt) and its orientation from east to west -or-

\$3.07/watt for PV systems that are installed with an orientation ranging from 225° (Southwest) to 270° (due West) with the panels set with an incline of a 45° to 55° tilt.

***For rebate purposes:***

The orientation of all small PV systems (<10kW), ranging from 160° to 270°, will be determined using and is based on "true" north - which is approximately 15° east of magnetic north when in Redding.

***The wattage for all PV systems will be calculated as follows:***

For each respective PV system, the PVUSA Test Condition (PTC) watt rating will be multiplied by the system inverter's peak efficiency to obtain the wattage that REU will use to calculate the customer's rebate. The PTC and peak inverter efficiency rating figure can be obtained from the California Energy Commission (CEC) website [www.energy.ca.gov](http://www.energy.ca.gov). The REU rebate amounts for small PV systems (<10kW) referenced above will be effective for 180 days from the date that time stamped technical drawings are submitted to the City of Redding Building Department. If a customer has not proceeded with the project specified in these technical drawings after 180 days of this date stamp, REU will assume the customer has abandoned said project. Thereafter, REU may ask for the application to be resubmitted at its sole discretion. Any incentive or rebate paid by REU would be based on the rebate amount that is published and applicable at the time and date of the most current application's submittal.

**REU Solar PV Interconnection Agreement**

**17. Renewable Energy Credits (RECs)**

REU shall retain all Renewable Energy Credits associated with each watt of excess photovoltaic generation beyond what the C-G consumes from the grid on an annual basis. REU reserves the right to read the PV inverter meter as often as it deems necessary to accurately account for all renewable energy credits. REU reserves the right to register this renewable energy resource with the Western Renewable Energy Generation Information System (WREGIS), which may include aggregation of this resource with other resources of similar characteristics to minimize administrative cost and oversight. REU reserves the right to sell, or trade these RECs under REU's discretion.

**18. Environmental Attributes**

"Environmental Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its displacement of conventional energy generation. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4) and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

REU shall retain all Environmental Attributes associated with each watt of photovoltaic solar energy the Customer-Generator generates on an annual basis. REU reserves the right to read the PV inverter meter as often as it deems necessary to accurately account for all environmental attributes. REU reserves the right to aggregate this resource with other resources of similar characteristics to minimize administrative cost and oversight. REU reserves the right to sell, or trade these environmental attributes under REU's discretion.

