



**INTERCONNECTION AGREEMENT  
FOR NET ENERGY METERING**

**PHOTOVOLTAIC/SOLAR OR WIND ELECTRIC GENERATING  
FACILITIES RATED 1000 KILOWATTS OR LESS**

**Truckee Donner  
Public Utility District**

11570 Donner Pass Road  
P.O. Box 309  
Truckee, Ca. 96160  
(530) 587-3896

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# INTERCONNECTION AGREEMENT FOR NET ENERGY METERING

## Photovoltaic/Solar Or Wind Electric Generating Facilities Rated 1000 Kilowatts Or Less

\_\_\_\_\_ (Customer or Customer-Generator) and Truckee Donner Public Utility District (District) referred to collectively as "Parties" and individually as "Party," agree as follows:

### 1. SERVICE ELIGIBILITY

At all times during the term of this Interconnection Agreement, Customer shall qualify as an "eligible customer-generator", as such term is defined in Section 2827(b)(4) of the California Public Utilities Code. Customer also shall comply with the District's Rate Schedules, as applicable, and all other applicable Codes and Ordinances of the District, now or hereafter in effect.

### 2. GENERATING FACILITY

The photovoltaic/solar or wind electric generating facility ("Equipment", "Facility" or "Facilities"), with which the Customer will interconnect and operate in parallel with the District's electric utility distribution system, is described below:

2.1. Equipment Manufacturer and Model Number:

Solar Array or Wind Generator: \_\_\_\_\_

Inverter: \_\_\_\_\_

The Customer may also attach generating Facility drawings or manufacturer's literature documenting the requirements of Sections 2.1 and 2.2

2.2. Photovoltaic/Solar (PV) Array or Wind Generator Rating:

\_\_\_\_\_ kw

2.3. Location of Equipment:

Street Address \_\_\_\_\_

APN \_\_\_\_\_

2.4. Facility will be ready for operation on or about:

\_\_\_\_\_ (date)

2.5. Substation and Circuit No. Information ( District will supply information):

\_\_\_\_\_

### **3. PAYMENT FOR NET ENERGY**

- 3.1. In the event the energy generated by the Facility exceeds the energy consumed on the Customer-Generator's premise during any billing period, payment for net as-available energy delivered to District shall be in accordance with Electric Rate Schedule NM.
- 3.2. District reserves the right to apply the value of District's purchase of energy toward any bill to Customer-Generator for electric service by District to Customer-Generator at the location specified in Section 2.3. Customer-Generator shall pay any amount owing for electric service provided by the District in accordance with Electric Rate Schedule NM. Nothing in this Section 3.2 shall limit District's rights under applicable rate schedules.
- 3.3. On and after the date District gives its written approval for parallel operation pursuant to Section 7, District shall pay Customer-Generator for net as-available energy at prices authorized from time to time by the District and which are derived from District's monthly average non-firm electric energy price the District pays during the applicable month.

### **4. RENEWABLE ENERGY CREDITS**

- 4.1. In exchange for the District's Solar Program Rebate and/or payments to net producers of energy under Electric Rate Schedule NM, the Customer-Generator agrees that the Renewable Energy Credits (RECs) generated by the Facilities belong completely to the District. The District may use or sell the RECs at the sole discretion of the District.
- 4.2. The Customer-Generator agrees to cooperate with the District, including signing any appropriate forms, in all ways necessary to transfer the RECs to the District.

### **5. INTERRUPTION OR REDUCTION OF DELIVERIES**

- 5.1. District shall not be obligated to accept or pay for deliveries of as-available energy, and may require Customer-Generator to interrupt or reduce deliveries of as-available energy when: (a) necessary in order to construct, install, maintain, repair, replace, remove, investigate or inspect any of its equipment or part of its system; or (b) if the District determines that curtailment, interruption or reduction is necessary because of emergencies, forced outages, force majeure or compliance with prudent electrical utility practices.
- 5.2. Whenever possible, District shall give Customer-Generator reasonable notice of the possibility that interruption or reduction of deliveries may be required.
- 5.3. Notwithstanding any other provision of this Agreement, if at any time District determines that either (a) the Facility may endanger District personnel, the general public or (b) the continued operation of Customer-Generator's Facility may endanger the integrity of District's electric system, District shall have the right to disconnect Customer-Generator's Facility from District's electric system. Customer-Generator's Facility shall remain disconnected until such time as District is satisfied that the condition(s) referenced in (a) or (b) of this Section 5.3 have been corrected.

### **6. DESIGN REQUIREMENT**

- 6.1. Customer shall or shall cause the design, installation, operation, maintenance and repair of the Equipment, and shall obtain and maintain the required governmental

authorizations, permits, and any policy or policies of insurance, as may be required by applicable laws, and this Agreement.

- 6.2. Customer shall comply with all applicable photovoltaic/solar or wind electrical generating system safety and performance standards established by or under the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE) and accredited testing laboratories, including, without limitation, Underwriters Laboratories (UL), and in accordance with other applicable rules and regulations. The Customer shall comply with the Town of Truckee pertaining to the safety and reliability of electrical generating systems and applicable building codes.
- 6.3. When references are made to published specifications, codes, standards, or other requirements, it shall be understood that where no date is specified, only the latest specifications, codes, standards, or requirements of the respective issuing agencies which have been published as of the date that the Agreement is signed, shall apply.

## **7. INTERCONNECTION**

- 7.1. Customer-Generator shall deliver the as-available energy to the District at the electric meter.
- 7.2. Customer-Generator shall pay for designing, installing, operating and maintaining the generating Facility in accordance with all applicable laws, rules and regulations and shall comply with District's Interconnection Standards as may be set forth in this Agreement, applicable Rate Schedule, District Code or Ordinance and as contained in Appendix A "Interconnection Standards", which is attached hereto and incorporated by reference.
- 7.3. The Customer-Generator shall install adequate protective devices to protect its equipment from overcurrent, over or under voltage, switching transients and lightning.
- 7.4. District shall furnish and install a standard watt-hour meter at the Customer's expense. Customer-Generator shall provide and install a meter socket and related equipment in accordance with District standards.
- 7.5. Customer-Generator Facilities greater than 10kW shall require a dedicated transformer which serves only the Customer. The transformer that is part of the existing electrical service connection to a Customer's Facility may meet this requirement if it is of sufficient capacity and no other customers are connected to the same transformer. A Customer-Generator Facility less than 10kW may not require a dedicated transformer; however a larger transformer may be required. The District reserves the right to make the determination for this requirement for each proposed Facility. All costs associated with replacing an existing transformer or the installation of a dedicated transformer shall be at the Customer's expense.
- 7.6. Modifications to the District's electrical distribution system may be required to accommodate Customer-Generator Facilities. All costs associated with required modifications shall be at the Customer's expense.
- 7.7. Customer-Generator shall not commence parallel operation of the generating Facility until written approval of the interconnection Facilities has been given by the District. Such approval shall not be unreasonably withheld. The District shall have the right to have representatives present at the initial testing of Customer-Generator's generating Facility. Customer shall notify the District of the opportunity to attend the inspection no less than two (2) weeks prior to the established date of inspection.

- 7.8. The Customer-Generator shall insure the delivery of only 60 Hz electric power into the District's system and at the designated service voltage.
- 7.9. Upon notification, the Customer-Generator shall eliminate, within ten (10) days from such notification, any radio or television interference and/or any other power quality problems that may arise from the Customer's Facilities.

## **8. MAINTENANCE AND PERMITS**

- 8.1. Customer-Generator shall: (a) maintain the generating Facility and interconnection Facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, District's Appendix A and (b) obtain any governmental authorizations and permits required for the construction and operation of the generating Facility and interconnection Facilities. Customer-Generator shall reimburse District for any and all losses, damages, claims, penalties or liability it incurs as a result of Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer-Generator's generating Facility.

## **9. ACCESS TO PREMISES**

- 9.1. During the term of this Interconnection Agreement, Customer grants to the District, its officers, employees, agents and representatives, the non-exclusive right of ingress and egress on, over and across the Customer's premises during the District's regular business hours and at all other times during outages or other emergencies, without prior notice, for the purpose of the following: (a) to inspect Customer-Generator's protective devices and reading or testing the on-site meters; and (b) to disconnect, without notice, the interconnection Facilities if, in District's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or District's facilities, or property of others from damage or interference caused by Customer-Generator's Facilities, or lack of properly operating protective devices.

## **10. INDEMNITY AND LIABILITY**

- 10.1. Each Party as indemnitor shall defend, save harmless and indemnify the other Party and the directors, officers, employees and agents of such other Party against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect, or consequential loss, liability, damage, claim, cost, charge, demand or expense, including attorneys' fees) for injury or death to persons including employees of either Party and damage to property including property of either Party arising out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of, or (b) the making of replacements, additions, betterments to, or reconstruction of, the indemnitor's facilities; provided, however, Customer-Generator's duty to indemnify District hereunder shall not extend to loss, liability, damage, claim, cost, charge, demand or expense resulting from interruptions in electrical service to District's customers other than Customer-Generator. This indemnity shall apply notwithstanding the active or passive negligence of the indemnitee. However, neither Party shall be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand or expense resulting from its sole negligence or willful misconduct.

- 10.2. Notwithstanding the indemnity of Section 10.1, and except for a Party's willful misconduct or sole negligence, each Party shall be responsible for damage to its facilities resulting from electrical disturbances or faults.
- 10.3. The provisions of this Section shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.
- 10.4. Except as otherwise provided in Section 10.1, neither Party shall be liable to the other Party for consequential damages incurred by that Party.
- 10.5. If Customer-Generator fails to comply with the insurance provisions of this Agreement, if any, Customer-Generator shall, at its own cost, defend, save harmless and indemnify District, its directors, officers, employees, agents, assignees and successors in interest from and against any and all loss, liability, damage, claim, cost, charge, demand or expense of any kind or nature (including attorney's fees and other costs of litigation) resulting from the death or injury to any person or damage to any property, including the personnel and property of District, to the extent that District would have been protected had Customer-Generator complied with all such insurance provisions. The inclusion of this Section 10.5 is not intended to create any express or implied right in Customer-Generator to elect not to provide any such required insurance.

## **11. INSURANCE**

- 11.1. Customer-Generator shall maintain, during the term of this Agreement comprehensive liability insurance with a combined single limit of not less than one-hundred thousand dollars (\$100,000) for each occurrence.
- 11.2. Such insurance required in Section 11.1 shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to District prior to cancellation, termination, alterations, or material change of such insurance.
- 11.3. District shall have the right to inspect or obtain a copy of the original policy or policies of insurance.
- 11.4. Customer-Generator shall furnish the required certificates and endorsements to District prior to commencing operation.
- 11.5. All insurance certificates, endorsements, cancellations, terminations, alterations and material changes of such insurance shall be issued and submitted to the following:

Truckee Donner Public Utility District  
Attn: Deputy District Clerk  
P. O. Box 309  
Truckee, CA 96160

## **12. APPENDIX**

- 12.1. The Agreement includes the following appendix which is attached and incorporated by reference: Appendix A, Interconnection Standards for Photovoltaic/Solar or Wind Electric Generating Facilities Rated 1000 Kilowatts Or Less.

**13. GOVERNING LAW**

- 13.1. This 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.
- 13.2. Any action to enforce or interpret this Agreement shall be commenced and maintained only in the town of Truckee in the courts of the County of Nevada, California.

**14. AMENDMENT, MODIFICATION OR WAIVER**

- 14.1. Any changes or modifications to this Agreement shall be in writing and signed by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same.
- 14.2. Any waiver at any time by either Party of its rights with respect to a default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter.

**15. SUCCESSORS IN INTEREST**

- 15.1. This Agreement shall be binding on, and inure to the benefit of, each Party's successors in interest, including their heirs, legatees, assignees and legal representatives.

**16. ATTORNEY'S FEES**

- 16.1. In any action between the Parties to enforce or interpret this Agreement or arising out of the performance of this Agreement, the prevailing Party shall be entitled to reasonable attorney's fees, costs and expenses, including expert fees, in addition to any other relief to which that Party may be entitled. This provision shall be construed as applicable to the entire Agreement.

**17. NOTICES**

- 17.1. Any notice required to be given under this Agreement shall be delivered, in writing, and mailed at any United States Post Office with postage prepaid and correctly addressed to the Party, or personally delivered to the Party, at the address below. Changes to such designation may be made by notice similarly given. All written notices shall be directed, as follows:

DISTRICT: Truckee Donner Public Utility District Attn: Deputy District Clerk P. O. Box 309 Truckee, CA 96160	CUSTOMER-GENERATOR: Name: _____ Company: _____ Address: _____ Phone: _____
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- 17.2. Customer-Generator's notices to District pursuant to this Section 17 shall refer to the Facility description as set forth in Section 2.

**18. TERM OF AGREEMENT**

- 18.1. This Agreement shall be in effect when signed by the Customer-Generator and District and shall remain in effect thereafter month to month unless terminated by either Party on thirty (30) days prior written notice in accordance with Section 17.
- 18.2. This Agreement shall terminate, without notice, upon: (a) termination of the electric service provided to the Customer-Generator by the District; or (b) changes the to the Customer-Generator's load which cause the Customer-Generator to no longer satisfy all requirements of the definition of an Eligible Customer-Generator set forth in Section 2827 of the California Public Utilities Code.

**19. ENTIRE AGREEMENT**

- 19.1. This Agreement constitutes the complete and final expression of the agreement of the Parties and is intended as a complete and exclusive statement of the terms of their agreements and supersedes all prior and contemporaneous offers, promises, representations, negotiations, discussions, communications and agreements which may have been made in connection with the subject matter hereof.

**20. SIGNATURES**

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-Generator**

By: \_\_\_\_\_

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

Title: \_\_\_\_\_

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

**Truckee Donner Public Utility District**

By: \_\_\_\_\_

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

Title: General Manager

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

bhc-6/17/09  
Agm/ Interconnection Agreement

**APPENDIX A**  
**INTERCONNECTION STANDARDS**  
**FOR**  
**PHOTOVOLTAIC/SOLAR OR WIND ELECTRIC GENERATING FACILITIES**  
**RATED 1000 KILOWATTS OR LESS**

**A. General**

1. This appendix sets forth the requirements and conditions for interconnecting customer-owned photovoltaic/solar or wind electric generation Facilities for parallel operation with the District's electric distribution system. The interconnecting entity shall be designated Customer-Generator.
2. The Customer-Generator and/or their agents or representatives shall not make any substantial modifications to the generating Facility, including but not limited to alterations to the protective functions of the inverter or other protective devices, without prior written notification to the District of any such modifications. Customer shall notify the District of the proposed change no less than two (2) weeks prior to modification of the Facility.

**B. Requirements**

1. The Customer-Generator's Facility shall be installed in compliance with all applicable requirements of local building and electrical codes, and the National Electrical Code (NEC).
  - a. Customer-Generator's Facility shall have a dedicated circuit from the inverter to the service panel with a circuit breaker or fuse per NEC 690-64 (B) (1).
  - b. Customer-Generator's overcurrent device at the service panel shall be marked to indicate photovoltaic/solar or wind power source per NEC 690-64 (B) (4).
2. The Customer-Generator's Facility shall be capable of being manually isolated from the District's system by means of an external, visible load break disconnect switch located between the generating Facility and the customer's meter. The disconnect switch shall be located within 10 feet of the customer's electric meter or service entrance, shall be clearly labeled "Generator Disconnect Switch," shall be capable of being locked in the open position by a pad lock device, and shall be readily accessible to District personnel at all times.
3. The Customer-Generator's static inverter shall comply with the following standards for parallel operation with the District.
  - a. Institute of Electrical and Electronics Engineers (IEEE) Std. 1547, "Standard for Interconnecting Distributed Resources with Electric Power Systems".
  - b. Underwriters Laboratories (UL) Subject 1741, "Inverters, Converters, and Controllers for Use in Independent Power Systems."
  - c. IEEE Std. 519, "Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems".

4. The maximum total and individual harmonic distortion for voltage and current injected by the Customer-Generator's Facility into the District's electrical distribution system shall conform to the requirements of IEEE Std. 519 and IEEE Std. 1547. A Facility causing harmonic interference is subject to being disconnected from the District's electrical distribution system until the condition has been corrected. If the cause of the problem is traceable to the Customer-Generator's Facility, all costs associated with determining and correcting the problems shall be at the Customer's expense.
5. Any voltage flicker on District's electrical distribution system caused by the Customer-Generator's Facility shall not exceed the limits defined by the "Maximum Borderline of Irritation Curve" identified in IEEE Std. 519. Voltage flicker is a sudden change in voltage (occurring in seconds or fractions of a second) that can cause objectionable changes in the visible output of lighting systems. Voltage flicker requirements are necessary to minimize the adverse effects experienced by other customers on the District's electrical distribution system.
6. The Customer-Generator's equipment shall be capable of operating at some point within a power factor range of 0.95 leading to 0.95 lagging. Operation outside this range may be acceptable provided the cumulative power factor of the Customer's entire Facility, measured at the electric meter, is within the noted range. All costs associated with correcting power factor problems shall be at the Customer's expense.

**End of Appendix A**