



**Pacific Gas and Electric Company**  
**INTERCONNECTION AGREEMENT FOR**  
**NET ENERGY METERING FOR**  
**RESIDENTIAL AND SMALL**  
**COMMERCIAL SOLAR OR WIND**  
**ELECTRIC GENERATING FACILITIES OF**  
**10 KILOWATTS OR LESS**

DISTRIBUTION  
 Billing  
 Customer-Generator  
 Business Customer Center

REFERENCE  
 Current Acct No. \_\_\_\_\_

**DECLARATIONS**

\_\_\_\_\_ ("Customer-Generator") and Pacific Gas and Electric Company, also referred to as "Utility", referred to collectively as "Parties" and individually as "Party," consistent with, and in order to effectuate, the provisions of Sections 2827 and 2827.7 of the California Public Utilities Code and Pacific Gas and Electric Company's electric rate Schedule E-NET ("E-NET"), enter into this "Interconnection Agreement for Net Energy Metering For Residential and Small Commercial Solar or Wind Electric Generating Facilities of 10 Kilowatts or Less" ("Agreement")<sup>1</sup>. This Agreement applies to the Customer-Generator's generating facilities identified below with the specified characteristics and generating capacity, and does not allow interconnection or operation of facilities different than those described. Accordingly, the Parties agree as follows:

1. DESCRIPTION OF CUSTOMER-GENERATOR'S SOLAR OR WIND ELECTRIC GENERATING FACILITY ("Facility")

Project Identification Number: \_\_\_\_\_  
 (Utility Log Number)

Interconnected Equipment:

Table 1. - List of generating equipment interconnecting with Pacific Gas and Electric Company's Distribution System with, or without, an inverter. (For those generators interconnecting without an inverter, write in "N/A" in the right three columns. If an inverter is shared by more than one generator, write "shared" on the same line as that generator under the manufacturer column and do not enter the inverter rating. Attach list of additional equipment if applicable.)

	Type of Generator (Solar / Wind / Hybrid)	Generator Rating (watts)	Manufacturer for Inverter used with Generator	Inverter Model Number	Inverter Rating (watts) <sup>2</sup>
1					
2					

<sup>1</sup> Additional forms are available upon request by telephoning 415-972-5676 or on PG&E's website at <http://www.pge.com/gen>.

<sup>2</sup> The inverter rating equals: (the CEC efficiency for each installed inverter) TIMES (the nameplate rating, in kW, of each inverter). The CEC efficiency is obtained on the CEC website at [http://www.consumerenergycenter.org/erprebate/eligible\\_inverters.html](http://www.consumerenergycenter.org/erprebate/eligible_inverters.html) as listed on the date the application is reviewed. Enter the total of all inverter ratings for multiple inverter installations in the Table above.

**DECLARATIONS (Continued)**

Site Address:

\_\_\_\_\_

(Street)

\_\_\_\_\_

(City)

Facility will be ready for operation on or about: \_\_\_\_\_  
(date)

If the date of the permits allowing the Customer-Generator to commence construction of the Generating Facility is prior to January 1, 2003, please provide the date the permits were issued:

\_\_\_\_\_

Customer-Generator shall not commence Parallel Operation of the Generating Facility until written approval for Parallel Operation is provided by Pacific Gas and Electric Company. See Section 3.3 of Attachment A, PROVISIONS.

2. CUSTOMER BILLING AND PAYMENT OPTIONS

Customer-Generator selects Pacific Gas and Electric Company's electric rate Schedule \_\_\_\_\_ as its otherwise-applicable rate schedule, in addition to Schedule E-NET. Customer-Generator understands:

Customer-Generator will be billed and will be expected to pay monthly for the non-energy charges (i.e., non-per-kilowatt-hour charges) due under Customer-Generator's otherwise-applicable rate schedule. In addition, Customer-Generator may (at its option) pay any amount for energy charges monthly, with the understanding that any and all payments will be reconciled annually as set forth herein. At the end of every twelve (12) month period, or other reconciliation period as provided in Schedule E-NET, the Customer-Generator's charges will be totaled including: (1) the monthly non-energy charges, (2) the charge for any net-energy consumption as defined in rate Schedule E-NET. The Customer-Generator's total payments for the twelve (12) months or other reconciliation period as provided in Schedule E-NET, will then be subtracted from the total charges. The Customer-Generator will then be billed for any balance due. If the Customer-Generator has overpaid for the energy they consumed, a credit will be applied to the next month's bill.

**DECLARATIONS (Continued)**

3. NOTICES

All written notices shall be directed as follows:

Pacific Gas and Electric Company  
Attn: Manager, Generation Interconnection Services  
Mail Code B13M  
P.O. Box 770000  
San Francisco, California 94177

CUSTOMER-GENERATOR:

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Street or PO Box)

\_\_\_\_\_  
(City) (State) (Zip Code)

4. DECLARATIONS, ATTACHMENTS AND AGREEMENT TO THE TERMS THEREOF

Customer-generator has read, understands, and agrees that interconnection of the facilities of the Customer-Generator shall be established and maintained in accordance with the terms in Attachment A, PROVISIONS, incorporated herein by reference, and the applicable rules on file with the California Public Utilities Commission.

This Agreement includes the following exhibits that are specifically incorporated herein and made a part of this Agreement.

Attachment A, PROVISIONS

In addition, PG&E Electric Tariff Rules and Rates, including but not limited to Electric Rules 2, 14, 15, 16, and 21, Schedule E-NET, and Customer-Generator's otherwise-applicable rate schedule, available at PG&E's website at [www.pge.com](http://www.pge.com) or by request, are specifically incorporated herein and made part of this Agreement.

**DECLARATIONS (Continued)**

5. 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" Name \_\_\_\_\_

By (Signature): \_\_\_\_\_ Date: \_\_\_\_\_

Type/Print Name: \_\_\_\_\_

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

Pacific Gas and Electric Company

By (Signature) \_\_\_\_\_ Date \_\_\_\_\_

Type/Print Name: \_\_\_\_\_

Title: Manager, Generation Interconnection Services \_\_\_\_\_



**Pacific Gas and Electric Company**

**INTERCONNECTION AGREEMENT FOR  
NET ENERGY METERING FOR  
RESIDENTIAL AND SMALL  
COMMERCIAL SOLAR OR WIND  
ELECTRIC GENERATING FACILITIES OF  
10 KILOWATTS OR LESS**

**Attachment A, PROVISIONS**

1. PURPOSE OF INTERCONNECTION AND REPRESENTATIONS

The purpose of this Agreement is to allow Customer-Generator to interconnect with Pacific Gas and Electric Company's distribution system, subject to the provisions of this Agreement and Pacific Gas and Electric Company's rate schedule E-NET. Customer-Generator has elected to interconnect and operate its solar or wind electric generating facility in parallel with Pacific Gas and Electric Company's electric grid. The solar or wind electric generating facility is intended primarily to offset part or all of the Customer-Generator's own electrical requirements. Customer-Generator shall at all times comply with this Agreement as well as with all applicable laws and tariffs, and applicable requirements of the Public Utilities Commission of the State of California.

2. INTERRUPTION OR REDUCTION OF DELIVERIES

2.1 Pacific Gas and Electric Company shall not be obligated to accept or pay for, and may require Customer-Generator to interrupt or reduce deliveries of, available energy:

- a. when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or part of Pacific Gas and Electric Company's system; or
- b. if Pacific Gas and Electric Company determines that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

2.2 Whenever possible, the Utility shall give Customer-Generator reasonable notice of the possibility that interruption or reduction of deliveries may be required.

2.3 Notwithstanding any other provision of this Agreement, if at any time Pacific Gas and Electric Company determines that either (a) the Customer Generator's Facility, or its operation, may endanger Pacific Gas and Electric Company personnel, or (b) the continued operation of the Customer-Generator's Facility may endanger the integrity of Pacific Gas and Electric Company's electric system, Pacific Gas and Electric Company shall have the right to disconnect the Facility from Pacific Gas and Electric Company's system. Customer-Generator's Facility shall remain disconnected until such time as Pacific Gas and Electric Company is satisfied that the condition(s) referenced in (a) or (b) of this Section 2.3 have been corrected.

## ATTACHMENT A, PROVISIONS (continued)

### 3. INTERCONNECTION

3.1 Customer-Generator shall deliver the available energy to Pacific Gas and Electric Company at the utility's meter.

3.2 The metering requirements are detailed in electric rate Schedule E-NET and, if applicable, Pacific Gas and Electric Company's electric Rule 21. If the Customer-Generator refuses consent to dual metering pursuant to Rate Schedule E-NET, Pacific Gas and Electric Company shall have the right to refuse interconnection.

3.3 Customer-Generator shall not commence parallel operation of the Generating Facility until Pacific Gas and Electric Company has provided express written approval. Such approval shall normally be provided no later than (30) business days following PG&E's receipt of: (1) a completed Application (Form 79-994) including all supporting documents and payments as described in the Application; (2) a completed and signed Interconnection Agreement; and (3) a copy of the Customer-Generator's final inspection clearance from the governmental authority having jurisdiction over the Generating Facility. Such approval shall not be unreasonably withheld. Pacific Gas and Electric Company shall have the right to have representatives present at the initial testing of Customer-Generator's protective apparatus. Customer-Generator shall notify the utility five (5) working days prior to the initial testing.

3.4 Customer-Generator authorizes to release to the California Energy Commission (CEC) information regarding Customer-Generator's facility, including customer name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC's rules and regulations.

### 4. DESIGN REQUIREMENTS

Customer-Generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the California Public Utilities Commission regarding safety and reliability. A Customer-Generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

### 5. MAINTENANCE AND PERMITS

Customer-Generator 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, Section 4, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Facility and interconnection facilities. Customer-Generator shall reimburse Pacific Gas and Electric Company 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 Facility.

## ATTACHMENT A, PROVISIONS (continued)

### 6. ACCESS TO PREMISES

Pacific Gas and Electric Company may enter Customer-Generator's premises: (a) to inspect, at reasonable hours, Customer-Generator's protective devices and read or test meters; and (b) to disconnect, without notice, the interconnection facilities if, in the utility's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or the utility's facilities, or property of others from damage or interference caused by Customer-Generator's solar or wind electric generating facilities, or lack of properly operating protective devices.

### 7. INDEMNITY AND LIABILITY

7.1 Each Party as indemnifier 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, 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 indemnifier's facilities; provided, however, Customer-Generator's duty to indemnify Pacific Gas and Electric Company hereunder shall not extend to loss, liability, damage, claim, cost, charge, demand, or expense resulting from interruptions in electrical service to the utility's customers other than Customer-Generator. This indemnity shall apply, notwithstanding the active or passive negligence of the indemnified. 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.

7.2 Notwithstanding the indemnity of Section 7.1, 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.

7.3 The provisions of this Section 7 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.

7.4 Except as otherwise provided in Section 7.1 neither Party shall be liable to the other Party for consequential damages incurred by that Party.

## **ATTACHMENT A, PROVISIONS (continued)**

7.5 If Customer-Generator fails to comply with the insurance provisions of this Agreement, Customer-Generator shall, at its own cost, defend, save harmless and indemnify Pacific Gas and Electric Company, 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 the utility, to the extent that the utility would have been protected had Customer-Generator complied with all such insurance provisions. The inclusion of this Section 7.5 is not intended to create any expressed or implied right in Customer-Generator to elect not to provide any such required insurance.

### **8. INSURANCE**

8.1 To the extent that Customer-Generator has currently in force Property insurance and Commercial General Liability or Personal Liability insurance, Customer-Generator agrees that it will maintain such insurance in force for the duration of this Agreement in no less amounts than those currently in effect. Pacific Gas and Electric Company shall have the right to inspect or obtain a copy of the original policy or policies of insurance prior to commencing operation.

8.2 Customer-Generator shall meet the standards and rules set forth in Section 4, have the appropriate liability insurance required in Section 8.1 and shall not be required to purchase any additional liability insurance.

8.3 Such insurance required in Section 8.1 shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to the utility prior to cancellation, termination, alteration, or material change of such insurance.

### **9. GOVERNING LAW**

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.

### **10. AMENDMENTS, MODIFICATIONS OR WAIVER**

Any amendments or modifications to this Agreement shall be in writing and agreed to 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. No waiver by any Party of the breach of any term or covenant contained in this 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.

## **ATTACHMENT A, PROVISIONS (continued)**

11. NOTICES

11.1 All written notices shall be directed as follows:

Pacific Gas and Electric Company  
Attn: Manager, Generation Interconnection Services  
Mail Code B13M  
P.O. Box 770000  
San Francisco, California 94177

11.2 Customer-Generator's notices to Pacific Gas and Electric Company pursuant to this Section 11 shall refer to the utility's project identification number set forth in the Declarations Section of this Agreement.

12. TERM OF AGREEMENT

This Agreement shall become effective as of the last date set forth in Section 5 of the Declarations and shall continue in full force and effect until terminated by either Party providing 30-days prior written notice to the other Party in accordance with Section 11. This Agreement may be terminated prior to 30 days notice by agreement of both Parties.

13. GOVERNING AUTHORITY

This contract shall at all times be subject to such changes or modification by the Public Utilities Commission of the State of California as said Commission may, from time to time, direct in the exercise of its jurisdiction.