



**Electric Sample Form No. 79-1174-03D**  
Interconnection Application, Attachment D, Solar (PV) Technology

Sheet 1

**Please Refer to Attached  
Sample Form**



# INTERCONNECTION APPLICATION (Form 79-1174-03)

## ATTACHMENT D

### SOLAR (PV) TECHNOLOGY

#### Part I - Describing the Generating Facility and Host Customer's Electrical Facilities

Please complete the following table for the specific generator technology indicated.

Instructions				
Inverter	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<p>Please indicate the number of each <b>"type"</b> and <b>quantity</b> of Generator being installed</p> <p>Be sure all Generators classified as one "type" are identical in all respects.</p> <p>If only one type of Generator is to be used, only one column needs to be completed.</p>				
<p>A - Generator/Inverter Manufacturer</p> <p>Enter the brand name of the Generator.</p>				
<p>B - Generator/Inverter Model</p> <p>Enter the model name or number assigned by the manufacturer of the Generator.</p>				
<p>C - Generator/Inverter Software Version</p> <p>If this Generator's control and or protective functions are dependent on a software program supplied by the manufacturer of the equipment, please provide the version or release number for the software that will be used.</p>				
<p>D - Is the Generator/Inverter certified?</p> <p>Applicant has verified that all major solar system components are on the verified equipment list maintained by the California Energy Commission and other equipment, as determined by PG&amp;E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory.</p> <p>See PG&amp;E's Rule 21, Section L for additional information regarding Generator certification.</p> <p>For Net Billing Customers all major solar system components shall comply with Electric Rule 21 Section L.2-L.4 and Section L.7</p>	<p>____ Yes</p> <p>____ No</p>	<p>____ Yes</p> <p>____ No</p>	<p>____ Yes</p> <p>____ No</p>	<p>____ Yes</p> <p>____ No</p>

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Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<b>E – Anti-Islanding Detection Method</b> Please select an Anti-Islanding Detection Method <div> Group 1 – Frequency Shift with continuous positive frequency feedback  Group 2A – Frequency Shift with discontinuous or stepped positive frequency feedback  Group 2B – Frequency Shift similar to Group 2A except with a dead zone around 60Hz  Group 2C – Frequency shift with unidirectional frequency feedback  Group 3 – Monitors change of impedance  Group 4 – Monitors shift at a harmonic frequency (multiple of the fundamental)  Group 5 – Passive methods like rate of change of frequency, vector shift  Group 6 – Produces negative sequence current and monitor voltage </div>	Group 1 _____  Group 2A _____  Group 2B _____  Group 2C _____  Group 3 _____  Group 4 _____  Group 5 _____  Group 6 _____	Group 1 _____  Group 2A _____  Group 2B _____  Group 2C _____  Group 3 _____  Group 4 _____  Group 5 _____  Group 6 _____	Group 1 _____  Group 2A _____  Group 2B _____  Group 2C _____  Group 3 _____  Group 4 _____  Group 5 _____  Group 6 _____	Group 1 _____  Group 2A _____  Group 2B _____  Group 2C _____  Group 3 _____  Group 4 _____  Group 5 _____  Group 6 _____
<b>F–Volt-Var Smart Inverter Setting</b> <i>If proposing non-default inverter settings, please provide:</i> Power Factor Value  Inverter Power Factor  Volt-Var Voltage Values  Volt-Var Reactive Values  Volt-Watt Real Power Values	V1 _____  Q1 _____  V1 _____ Q1 _____  P1 _____	V2 _____  Q2 _____  V2 _____ Q2 _____  P2 _____	V3 _____  Q3 _____  V3 _____ Q3 _____  P3 _____	V4 _____  Q4 _____  V4 _____ Q4 _____  P4 _____

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Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
G - Modules	<div>Manufacturer</div> <div>Model #.</div> <div>Quantity</div>	<div>Manufacturer</div> <div>Model #.</div> <div>Quantity</div>	<div>Manufacturer</div> <div>Model #.</div> <div>Quantity</div>	<div>Manufacturer</div> <div>Model #.</div> <div>Quantity</div>
H - Gross Nameplate Rating (kVA) This is the capacity value normally supplied by the manufacturer and stamped on the Generator's nameplate. This value is not required where the manufacturer provides only a kW rating. However, where both kVA and kW values are available, please indicate both.				
I - Operating Voltage This value should be the voltage rating designated by the manufacturer and used in this Generating Facility. Please indicate phase-to-phase voltages for 3-phase installations. See PG&E's Rule 21, Section H.2.b. and Table H.1., for additional information.				
J - Power Factor Rating This value should be the nominal power factor rating designated by the manufacturer for the Generator. See PG&E's Rule 21, Section H.2.i. for additional information.				
K - PF Adjustment Range Where the power factor of the Generator is adjustable, please indicate the maximum and minimum operating values. See PG&E's Rule 21, Section H.2.i.				



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Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<b>L - Wiring Configuration</b> Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
<b>M - AC Disconnect</b> For systems requiring an AC Disconnect only, please include the requested information about the AC Disconnect. See PG&E's Rule 21, Section H.1.d  Located within 10 feet of the PG&E meter?	_____ Manufacturer _____ Model # _____ Rating (amps)  ____ Yes ____ No	_____ Manufacturer _____ Model # _____ Rating (amps)  ____ Yes ____ No	_____ Manufacturer _____ Model # _____ Rating (amps)  ____ Yes ____ No	_____ Manufacturer _____ Model # _____ Rating (amps)  ____ Yes ____ No
<b>N - Lineside Tap</b> Where is the point of interconnection in relation to the main breaker? PG&E has special requirements for a lineside tap. Contact PG&E at: <a href="mailto:Rule21Gen@PGE.com">Rule21Gen@PGE.com</a> for more information.	_____ Customer side ____ PG&E side	_____ Customer side ____ PG&E side	_____ Customer side ____ PG&E side	_____ Customer side ____ PG&E side
<b>O - Warranty or Service Agreement</b> Applicant has verified that (i) a warranty of at least 10 years has been provided on all equipment and on its installation, or (ii) have a 10-year service warranty or executed "agreement" ensuring proper maintenance and continued system performance.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
<b>P - Solar Ready Electric Panel</b> Is the Generating Facility connecting to a circuit breaker on the supply side of the main breaker?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
<b>Q - Green Meter Adapter (GMA)</b> Will a GMA be installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
<b>R - Distribution Interconnect Handbook (DIH) and Greenbook Requirements</b> Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

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### SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<b>S - Gas Clearance Requirements</b> Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
<b>T - Basic Single Line Diagram (SLD)</b> If the interconnection is eligible to use a Basic SLD, please include the requested information.	Panel Voltage (Volts)  Main Breaker (Amps)  PV Breaker Size (Amps)	Panel Voltage (Volts)  Main Breaker (Amps)  PV Breaker Size (Amps)	Panel Voltage (Volts)  Main Breaker (Amps)  PV Breaker Size (Amps)	Panel Voltage (Volts)  Main Breaker (Amps)  PV Breaker Size (Amps)
<b>U - Back-up Generator Operation</b> Will the generator be operated as a back-up?  If yes, please indicate the control device that will be used.	____ Yes ____ No  <input type="checkbox"/> Automatic Transfer Switch  <input type="checkbox"/> Contactor  <input type="checkbox"/> Breaker	____ Yes ____ No  <input type="checkbox"/> Automatic Transfer Switch  <input type="checkbox"/> Contactor  <input type="checkbox"/> Breaker	____ Yes ____ No  <input type="checkbox"/> Automatic Transfer Switch  <input type="checkbox"/> Contactor  <input type="checkbox"/> Breaker	____ Yes ____ No  <input type="checkbox"/> Automatic Transfer Switch  <input type="checkbox"/> Contactor  <input type="checkbox"/> Breaker

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Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<b>V - Limited Export</b> Will the generator export be limited?  If yes, please indicate how export will be limited.	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Power Control System (PCS – Option 9)  <input type="checkbox"/> Relay  <input type="checkbox"/> Derated Inverter	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Power Control System (PCS – Option 9)  <input type="checkbox"/> Relay  <input type="checkbox"/> Derated Inverter	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Power Control System (PCS – Option 9)  <input type="checkbox"/> Relay  <input type="checkbox"/> Derated Inverter	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Power Control System (PCS – Option 9)  <input type="checkbox"/> Relay  <input type="checkbox"/> Derated Inverter
<b>W – PCS with Limited Generation Profile</b> If project is using a Limited Generation Profile Select the proposed PCS make/model: If equipment is not listed in Distribution Provider's list of certified PCS, upload UL3141 certificates of compliance from the NRTL identifying that the proposed PCS has been certified under UL3141 with PEL:  Indicate the PCS's controlled nameplate capacity (as provided in the NRTL testing reports)  Indicate the PCS's Maximum Steady State percentage (as provided in the NRTL testing reports)	(Select from Utility's UL3141 PEL PCS approved list)      _____ kW     _____ %	(Select from Utility's UL3141 PEL PCS approved list)      _____ kW     _____ %	(Select from Utility's UL3141 PEL PCS approved list)      _____ kW     _____ %	(Select from Utility's UL3141 PEL PCS approved list)      _____ kW     _____ %



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Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
<p>X – Telemetry</p> <p>Will the Generating Facility Gross Nameplate Rating exceed 1 MW?</p> <p>If yes, please select a Telemetry Option.</p> <p>If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Customer-owned Telemetry - Gateway <input type="checkbox"/> Customer-owned Telemetry - Aggregator <input type="checkbox"/> Mini RTU</p> <p><input type="checkbox"/> Customer-side net load metering <input type="checkbox"/> Replace PG&amp;E meter with a Mark V meter and terminal block <input type="checkbox"/> Add terminal block to existing PG&amp;E Mark V meter <input type="checkbox"/> Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter <input type="checkbox"/> Install customer-owned meter in existing dual socket meter cabinet.</p>			





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### SOLAR (PV) TECHNOLOGY

#### Part II Solar Statistics Data Fields

Per Appendix A of CPUC D. 14-11-001, the following data fields must all be completed, in their entirety, in order to initiate PG&E's interconnection review of the proposed Generating Facility. *Only complete Part II if the solar generating facility is serving as part of a Net Energy Metering (NEM/NEM2) or Net Billing Tariff (NBT) arrangement.*

#### A. Customer Sector (Check one)

- |   |                                      |                                     |
|---|--------------------------------------|-------------------------------------|
| <input type="checkbox"/> Residential      | <input type="checkbox"/> Educational | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Commercial       | <input type="checkbox"/> Military    | <input type="checkbox"/> Non-Profit |
| <input type="checkbox"/> Other Government |                                      |                                     |

#### B. Are Performance Monitoring and Reporting Services (PMRS) being utilized?

- ☐ Yes ☐ No

If yes, please indicate who is receiving the data? (check all that apply)

- ☐ Customer
- ☐ 3<sup>rd</sup> Party (list name) \_\_\_\_\_

#### C. Are there electric vehicles charging on site at the above generating facility address?

- ☐ Yes ☐ No

If yes, please indicate how many electric vehicles \_\_\_\_\_

#### D. System Ownership and Financing

##### i. System Owner (check one):

- ☐ PG&E Customer Owned

If PG&E Customer Owned, please answer the following:

Indicate the System Cost paid by Customer: \$ \_\_\_\_\_

Property Assessed Clean Energy (PACE) Financed?

- ☐ Yes ☐ No

If Yes, PACE financed by which entity? \_\_\_\_\_

If you have non-PACE financing or a lease, please fill in the information below

Financial Institution/Lessor Name \_\_\_\_\_

Financial Institution/Lessor Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

- ☐ Third Party Owned

If Third Party Owned, please answer the following:

Claimed Federal Investment Tax Credit (ITC) Cost Basis: \$ \_\_\_\_\_

Name of Developer at the time of sale: \_\_\_\_\_



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### SOLAR (PV) TECHNOLOGY

Contract Type: ☐ PPA ☐ Lease ☐ Pre-Paid Lease ☐ Other \_\_\_\_\_

#### ii. Rebate Information:

Did you participate in a California rebate program? ☐ Yes ☐ No

Please indicate the rebate program that you participated in: \_\_\_\_\_

Rebate Amount: \$ \_\_\_\_\_

If you are participating in the Single-family Affordable Solar Home (SASH) program, please provide SASH project number: \_\_\_\_\_

#### E. Additional Generating Facility Information (Solar PV Only)

i. Mounting Method: ☐ Rooftop ☐ Ground ☐ Mixed

ii. Tracking Type: ☐ Fixed ☐ Single-Axis ☐ Dual-Axis ☐ Mixed

If fixed, please indicate: Tilt: \_\_\_\_\_ degrees Azimuth: \_\_\_\_\_ degrees

F. Installer's/Vendor's California State Contractor License Number: \_\_\_\_\_

#### G. CPUC Consumer Protection Requirements Pursuant to Decision 21-06-026

##### a. Home Improvement Salesperson (HIS) Registration Number

Was a Home Improvement Salesperson (HIS) involved in the development of your project?

☐ Yes ☐ No

California Public Utilities Commission (CPUC) Decision 21-02-026 requires "*the Home Improvement Salesperson (HIS) registration number of solar providers who are required to have a HIS registration number, while enabling solar providers who are not required to have a HIS registration number to indicate they are exempt and to instead provide the applicable contractor's license.*"

If you checked "Yes" above:

Please provide the Home Improvement Salesperson (HIS) registration number below.

Home Improvement Salesperson (HIS) registration number:

\_\_\_\_\_