



ELECTRIC SAMPLE FORM NO. 79-974
GENERATING FACILITY INTERCONNECTION APPLICATION

**Please Refer to Attached
Sample Form**

Advice Letter No: 3969-E
Decision No.

Issued by
Brian K. Cherry
Vice President
Regulation and Rates

Date Filed December 13, 2011
Effective January 1, 2012
Resolution No. _____

Part 1 – Introduction and Overview

- A. Applicability:** This Generating Facility Interconnection Application (Application) is used to request the interconnection of a Generating Facility to Pacific Gas and Electric Company's (PG&E) Distribution System (over which the California Public Utilities Commission (CPUC) has jurisdiction). Refer to PG&E's Rule 21 to determine the specific requirements for interconnecting a Generating Facility. Capitalized terms used in this Application, and not otherwise defined herein, shall have the same meanings as defined in PG&E's Rule 21 and Rule 1.

Except as noted in the next paragraph, this Application may be used for any Generating Facility to be operated by, or for, a Customer and/or Producer to supplement or serve part or all of its electric energy requirements that would otherwise be provided by PG&E, including "distributed generation", "cogeneration," emergency, backup, and standby generation, and Net Energy Metered Generating Facilities. A simpler, shorter form is also available from PG&E for Net Energy Metering Customers with Solar and/or Wind Electric Generating Facilities less than 30kW (Form 79-1101). This form is available upon request by telephoning 415-972-5676 or on PG&E's website at <http://www.pge.com/gen>. While Customers operating Generating Facilities isolated from PG&E's Distribution System are not obligated to enter into an Interconnection Agreement with PG&E, parts of this Application will still need to be completed to satisfy PG&E's notice requirements for operating an isolated Generating Facility as specified in the California Health and Safety Code Section 119085 (b).

This Application may not be used to apply for interconnecting Generating Facilities used to participate in transactions where all, or a portion of, the electrical output of the Generating Facility is scheduled with the California Independent System Operator. Such transactions are subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) and require a different application available from PG&E.

This Application is not applicable for incentives and/or rebates offered by the Energy Resources Conservation and Development Commission ("CEC") or the CPUC. Please contact those agencies directly or on their respective websites (www.energy.state.ca.us and www.cpuc.ca.gov).

Guidelines and Steps for Interconnection: This Application must be completed and sent to PG&E along with the additional information indicated in Part 1, Section C below to initiate PG&E's interconnection review of the proposed Generating Facility. An Initial Review fee of \$800 (payable by check or money order to PG&E must accompany the Applications except those Applications for isolated Generating Facilities and Net Energy Metering Generating Facilities. Supplemental Review and Interconnection Study fees may be required for large capacity and/or more complex Generating Facility Interconnections; see PG&E's Rule 21, Section C.1.b. & c. for more information regarding interconnection of a generator to PG&E's Distribution System. Please refer to the California Energy Commission's website: http://www.energy.ca.gov/distgen/interconnection/guide_book.html.

This document is only an Application. Upon acceptance of the Generating Facilities, PG&E will prepare an Interconnection Agreement for execution by the "Producer," the party that will be responsible for the Generating Facility. PG&E may also require an inspection and testing of the Generating Facility and installation of any related Interconnection Facilities prior to giving the Producer written authorization to operate in parallel. **Unauthorized Parallel Operation may be dangerous and may result in injury to persons and/or may cause damage to equipment and/or property for which a Producer/Customer may be liable!**

Please note, other approvals may need to be acquired, and/or other agreements may need to be formed with PG&E or regulatory agencies, such as the Air Quality Management Districts and local governmental building and planning commissions prior to operating a Generating Facility. PG&E's authorization to operate in parallel does not satisfy the need for an Applicant to acquire such other approvals.

- B. Required Documents:** Four (4) copies of this Application and each of the following documents **are required to be submitted** before this application will be processed. Drawings must conform to accepted engineering standards and must be legible. 11"x17" drawings are preferred.
1. A **Single-line drawing** showing the electrical relationship and descriptions of the significant electrical components such as the primary switchgear, secondary switchboard, protective relays, transformers, generators, circuit breakers, with operating voltages, capacities, and protective functions of the Generating Facility, the Customer's loads, and the interconnection with PG&E's Distribution System. Please show the location of all required net generation electric output meter(s) and the A.C. manual operated disconnect switch on the single line drawing.
 2. **Site plans and diagrams** showing the physical relationship of the significant electrical components of the Generating Facility such as generators, transformers, primary switchgear/secondary switchboard, and control panels, the Customer's loads and the interconnection with PG&E's Distribution System. Please show the location of all required net generation electric output meter(s) and the A.C. manual operated disconnect switch on the site plans.
 3. If **transformers** are used to interconnect the Generating Facility with PG&E's Distribution System, please provide transformer nameplate information (voltages, capacity, winding arrangements, connections, impedance, et cetera).
 4. If a **transfer switch** or scheme is used to interconnect the Generating Facility with PG&E Distribution System, please provide component descriptions, capacity ratings, and a technical description of how the transfer scheme is intended to operate.
 5. If **protective relays** are used to control the interconnection, provide protection diagrams or elementary drawings showing relay wiring and connections, proposed relay settings, and a description of how the protection scheme is intended to function.
 6. An Initial Review fee check or money order in the amount of \$800, if applicable, made out to PG&E referencing the electric service agreement ID number and "Initial Interconnection Review Fee."

Part 1 Cont'd – Introduction and Overview

C. **Mailing Instructions, Assistance:** When this application has been completed it may be printed and mailed, along with the required attachments to:

**Pacific Gas and Electric Company
Attn: Manager, Generation Interconnection Services
P.O. Box 770000
Mail Code N7L
San Francisco, California, 94177**

Alternatively, you may contact PG&E at (415) 972-5676 or e-mail at gen@pge.com

Part 2 – Identifying the Generating Facility's Location and Responsible Parties

Project Name:	Date Received:	Generating Facility ID:	Application Expiration Date (Refer to Part 2, Section E)

(For PG&E Use Only)

A. Customer Electric Account Information (What electric service will the Generating Facility be interconnected for parallel operation with PG&E? For aggregated electric accounts (under NEMBIO, dairy operations only) provide the primary and all associated accounts/meter information)

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Name shown on PG&E service account Electric Service agreement ID number Electric Badge (Meter) Number

NOTE: Customer Electric account must match the customer's utility bill account information.

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Meter Location Street Address City State Zip

Please check all that apply:

- A New Generating Facility interconnection (at an existing service)
- For Physical Changes to an interconnected Generating Facility with previous approval by PG&E (adding PV panels, changing inverters/turbines or changing load and/or operations).
- A New interconnection in conjunction with a new service
 - An **Application for Service** must be completed. Additional fees may be required if a service or line extension is required (in accordance with PG&E Electric Rules 15 and 16). Please contact PG&E at 1-800-PGE-5000.
- An Interconnection under Direct Access (DA)
 - Customers applying for interconnection who are served under Direct Access by an Energy Service Provider (ESP) must contact their ESP directly for information regarding the options available under their Direct Access contract.
- An Interconnection under Community Choice Aggregation Service (CCA Service)
 - Customers applying for interconnection who are served under Community Choice Aggregation Service (CCA Service) by an Community Choice Aggregator (CCA) must contact their CCA directly for information regarding the options available under their CCA Service Program.
- An interconnected non-exporting Generating Facility (load always exceeds generation)

Customer Electric Account Contact Information (Who is the customer contact for progress updates and/or additional information?)

Contact Person		Company Name	
Phone	Fax	E-mail	
Mailing Address	City	State	Zip

B. Project Contact Information (Who is the project manager for this Generating Facility?)

Project Contact Person (Optional)		Company Name	
Phone	Fax	E-mail	
Mailing Address	City	State	Zip

B.1. Will the Generating Facility be owned by a (third) party other than the name appearing on the PG&E service account in A. above (please check)? Yes No

Part 2 Cont'd – Identifying the Generating Facility's Location and Responsible Parties

C.1. Customer - Generating Facility Interconnection Agreement (“GFIA”) or Customer Generation Agreement (“CGA”) (for 3rd Party Generator on Premises) Information (Please identify the party that will execute the applicable agreement.) This Section is not applicable to Net Energy Metering (NEM) Applicants because PG&E and the Customer, not the 3rd Party if any, must enter into the Net Energy Metering Interconnection Agreement.

Company Name to be entered on GFIA/CGA	Legal Title of Company to be entered on GFIA/CGA
Person Executing the GFIA/CGA	Title of Person Executing the GFIA/CGA

Mailing Address	Phone	E-Mail

C.2. 3rd Party Owner – GFIA Information (Please identify the Party, if known, that will execute the GFIA). This Section is not applicable to Net Energy Metering (NEM) Applicants because PG&E and the Customer, not the 3rd Party if any, must enter into the Net Energy Metering Interconnection Agreement.

Company Name to be entered on GFIA/CGA	Legal Title of Company to be entered on GFIA/CGA
Person Executing the GFIA	Title of Person Executing GFIA

Mailing Address	Phone	E-Mail

D. Operating Date (What date is this Generating Facility expected to begin operation?)

E. Expiration Date* (The date the status of this Application is changed to “withdrawn” by PG&E?)

- **The information submitted in this Application will remain active and valid for a period of 12 months from the date the Application was accepted by PG&E as a “completed” Application. If the project has not been interconnected, or that reasonable proof the project is going forward has not been submitted to PG&E by that time, the Application will be considered “withdrawn” and removed from the queue. To the extent that the Initial Review, Supplemental Review, or Detailed Interconnection Study fees have been paid to and the corresponding reviews/study completed by PG&E, Applicant will only be entitled to a return of one-half of the Initial Review fee of \$400. All other fees will be forfeited.**

Part 2 Cont'd – Electing Interconnection Cost Responsibilities

F. Estimated Versus Actual Cost Responsibility

Under Rule 21 Applicants can elect estimated or actual costs for (1) detailed interconnection studies, and/or (2) Interconnection Facilities and distribution system modifications. This election must be made at the time of application submission. Under both cost options, an estimate is prepared. If the Applicant elects the actual cost option, there will be a true-up after the completion of the work. If actual costs exceed the original estimated amounts, Applicant will be responsible for costs above the estimated amounts. Conversely, if actual costs are less than the original estimated amounts, PG&E will refund the difference.

Applicants seeking interconnection under PG&E's Net Energy Metering tariffs are not responsible for Initial Review, Supplemental Review and Detailed Interconnection Study fees, nor for distribution system modifications' costs.

Selection of detailed interconnection study cost responsibility* (Non-NEM only):

Estimated Cost

Actual Cost

Selection of Interconnection Facilities and distribution system modifications' (if applicable) cost responsibility*:

Estimated Cost

Actual Cost

* **Note:** If no selections are made, estimated cost responsibility will apply.

Part 3 - Describing the Generating Facility and Host Customer's Electrical Facilities

A. (MP&I)	Indicate the operating mode of the Generating Facility	operating mode options: ___1 ___2 ___3 (Choose one)
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Instructions and Notes

Choose from the following operating mode options:

- Parallel Operation:** The Generating Facility will interconnect and operate "in parallel" with PG&E's Distribution System for more than one (1) second.
- Momentary Parallel Operation (MP):** The Generating Facility will interconnect and operate on a "momentary parallel" basis with PG&E's Distribution System for a duration of one (1) second or less through transfer switches or operating schemes specifically designed and engineered for such operation.
- Isolated Operation (I):** The Generating Facility will be "isolated" and prevented from becoming interconnected with PG&E's Distribution System through a transfer switch or operating scheme specifically designed and engineered for such operation.

Part 3 – Cont’d - Describing the Generating Facility and Host Customer’s Electrical Facilities

If the answer is operating mode option 1, “parallel operation,” please supply all of the information requested for the Generating Facility. Be sure to supply adequate information including diagrams and written descriptions regarding the protective relays that will be used to detect faults or abnormal operating conditions on PG&E’s Distribution System.

If the answer is operating mode option 2, “momentary parallel operation,” only questions A, E and F of this Part 3 and questions A, B, E, F, I, L, M, N, and S of Part 4 need be answered. Be sure, however, to supply adequate information including diagrams and written descriptions regarding the switching device or scheme that will be used to limit the parallel operation period to one second or less. Please also describe the back up or protective device and controls that will trip the Generating Facility should the transfer switch or scheme not complete the transfer in one second or less.

If the answer is operating mode option 3, “Isolated Operation,” only questions A, E, and F of this Part 3 and questions A, B, F, and S of Part 4 need be answered. Be sure, however, to supply adequate information including diagrams and written descriptions regarding the isolating switching device or scheme that will be used to prevent the Generating Facility from operating in parallel with PG&E’s Distribution System.

B.

*Parallel
Operation
Applications
Only*

If the Answer to Section A above was operating mode option 1, please indicate the type of agreement that is being requested with this Application. If operating mode option 2 or 3 was selected, please skip to questions E and F.

If agreement options 2, 3, 5, 7, 8, 9, or 10 to this Section B are chosen, please provide an estimate of the maximum kW the Generating Facility is expected to export to PG&E’s Distribution System. If PG&E determines that the amount of power to be exported is significant in relation to the capacity available on its Distribution System, it may request additional information, including time of delivery or seasonal kW/kWh estimates.

agreement options:

 1 2 3 4 5
 6 7 8 9 10
 (Choose all that apply)

_____ Maximum kW

Instructions and Notes

Sample agreements are available from PG&E for review. Choose from the following ten (10) agreement options:

Customer Owned Generating Facility (non-NEM)

1. **A Generating Facility Interconnection Agreement** that provides for parallel operation of the Generating Facility, but does not provide for exporting power to PG&E’s Distribution System. This non-export agreement, however does allow the occasional and uncompensated export of energy to PG&E’s Distribution System for less than 2 seconds in duration.
2. **A “Qualifying Facility” Power Purchase Agreement** that provides for parallel operation of the Generating Facility, and exporting energy to PG&E’s Distribution System for sale to PG&E. This option is available only to “Qualifying Facilities” with a total Nameplate Capacity of 100 kW or less. See Question F for the definition of a Qualifying Facility. (This type of agreement has not yet been developed by PG&E or approved by the CPUC. Check with PG&E for availability).
3. **A Generating Facility Interconnection Export Addendum** that provides for parallel operation of the Generating Facility and the occasional, continuous, non-compensated, export of inverter-based technology solar and wind energy, 1 MW or less to PG&E’s Distribution System. Continuous export is export greater than 60 seconds in duration. This addendum must be executed in concert with Agreement 1.

Third Party Owned Generating Facility (non-NEM)

4. **A Generating Facility Interconnection Agreement** that provides for parallel operation of the 3rd Party owned Generating Facility, but does not provide for exporting energy to PG&E’s Distribution System.
5. **A “Qualifying Facility” Power Purchase Agreement** that provides for parallel operation of the 3rd Party owned Generating Facility, and exporting energy to PG&E’s Distribution System for sale to PG&E. This option is available only to “Qualifying Facilities” with a total Nameplate Capacity of 100 kW or less. See Question F for the definition of a Qualifying Facility. (This type of agreement has not yet been developed by PG&E or approved by the CPUC. Check with PG&E for availability).
6. **A Customer Generation Agreement** that defines the relationship between the Customer whose name appears on PG&E’s electric service account. This agreement must be executed in addition agreements 4 and 5.

Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities

Net Energy Metering Generating Facility

If you wish to have your Generating Facility participate on one of PG&E's Net Energy Metering tariffs, following your bi-directional meter installation, your meter and disconnect switch must be installed in a safe PG&E accessible location and remain unobstructed by plants, structures, locked gates or pets. Meter and disconnect switch access must be maintained at all times for your safety and PG&E's electrical system safety. Additionally, unencumbered access is required for meter reading, system maintenance, and operations. Any animals owned by the customer, for example pet dogs, should be kept clear from these areas to avoid hindering PG&E service personnel from completing their work.

Are there any meter access issues? Please check all that apply to avoid interconnection delays.

- Dog, or other animals at Residence
- Locked Gate
- Shrubs or Bushes
- Other (please explain) _____

7. **A Net Energy Metering Agreement: Solar and Wind**, that provides for parallel operation of the Generating Facility, and exporting energy to PG&E's Distribution System for credit under the terms of PG&E's Net Energy Metering tariffs pursuant to Public Utility Code Section 2827 for solar pv and/ or wind Generating Facilities greater than 30 kw to 1MW or a Renewable Electrical Generation Facility (as defined in Schedule NEM) sized less than 1 MW, or any combination of these with a total size of no more than 1MW. This agreement also requires submittal of an expanded net energy metered supplemental application. This option is available only to eligible Generating Facilities as defined in PG&E's Net Energy Metering tariffs.
8. **A Net Energy Metering Agreement: Fuel Cell**, that provides for parallel operation of the Generating Facility, and exporting energy to PG&E's Distribution System for credit under the terms of PG&E's Net Energy Metering tariffs for fuel-cell Generating Facilities. This option is available only to eligible Generating Facilities as defined in PG&E's NEMFCs.
9. **Multiple Tariff Generating Facility Agreement**, that provides for the parallel operation of multiple Generating Facilities that are electrically connected behind the same Point of Common Coupling at least one of which is a Generator Facility eligible for service under NEM or other applicable Net Energy Metering tariffs, and may include a Generating Facility not eligible to receive service under a Net Energy Metering tariff.
10. **Other, please describe:** _____

<p>C. <i>Parallel Operation Applications Only</i></p>	<p>If the answer to Section B above was agreement option 1 or 4, please indicate the protection option that will be used to prevent energy from being exported to PG&E's Distribution System.</p> <p>If protection option 3 to this Section C is selected, please provide the continuous current rating of the host Customer facility's service entrance equipment (service panel rating):</p> <p>If Protection Option 4 to this Section C is selected, please provide the minimum load of the host Customer facility:</p>	<p>Protection Option: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 (Choose one)</p> <p>_____ Amps</p> <p>_____ kW</p>
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Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities

Instructions and Notes

Refer to PG&E's Rule 21, Section I.2., for additional information as to how to answer this question. If the Generating Facility will never export power to PG&E's Distribution System, a simpler, lower cost, protection scheme may be used to control the interface between the Generating Facility and PG&E's Distribution System. Choose from the following four options:

1. A reverse-power protection device will be installed to measure any export of power and trip the Generating Facility or open an intertie breaker to isolate the Generating Facility if limits are exceeded.
2. An under-power protection device will be installed to measure the inflow of power and trip or reduce the output of the Generating Facility if limits are not maintained.
3. The Generating Facility Interconnection Facility equipment has been certified as Non-Islanding and the incidental export of power will be limited by the design of the interconnection. If this option is to be used, the continuous ampere rating of the service entrance equipment (service panel rating) that is used by the host Customer facility must be stated in the space provided above.
4. The Gross Nameplate Rating of the Generating Facility will not exceed 50% of the host Customer facility's minimum electrical load. If this option is to be used, the minimum load of the host Customer facility must be stated in the space provided above.

Note: With the approval of PG&E, a Producer that wishes to retain the option to export power from a Generating Facility to PG&E's Distribution System may use a different protection scheme that provides for the detection of faults and other abnormal operating conditions.

<p>D.</p> <p><i>Parallel Operation Applications Only</i></p>	<p>What is the maximum 3-phase fault current that will be contributed by the Generating Facility to a 3-phase fault at the Point of Common Coupling (PCC)? (If the Generating Facility is single phase in design, please provide the contribution for a line-to-line fault.)</p> <p>Please indicate the short circuit interrupting rating of the host Customer facility's service panel:</p>	<p>_____</p> <p>Amps</p> <p>_____</p> <p>Amps</p>
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Instructions and Notes

Refer to PG&E's Rule 21 Sections D.4.a. and I.3.g. for significance and additional information. To determine this value, any transformers and/or significant lengths of interconnecting conductor used between each of the Generators (if there are more than one) that make up the Generating Facility and the PCC must be taken into account. The details, impedance, and arrangement of such transformers and interconnecting conductors should be shown on the single-line diagram that is provided. Consult an electrical engineer or the equipment supplier if assistance is needed in answering this question.

It is expected that most Applicants will want to reserve the flexibility to operate any or all of their Generators in parallel. If the design of the proposed Generating Facility limits the amount of generation that may be interconnected at any time to PG&E's Distribution System, please describe the assumptions used in calculating the maximum fault current contribution value.

<p>E.</p> <p>(MP&I)</p>	<p>Please indicate how this Generating Facility will be operated.</p>	<p><input type="checkbox"/>_1 <input type="checkbox"/>_2 <input type="checkbox"/>_3 <input type="checkbox"/>_4 <input type="checkbox"/>_5 <input type="checkbox"/>_6</p> <p>(Please choose all options that may apply.)</p>
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Choose from the following six operation options:

1. **Combined Heat and Power or Cogeneration** – Where the operation of the Generating Facility will produce thermal energy for a process other than generating electricity.
2. **Peak Shaving/Demand Management** – Where the Generating Facility will be operated primarily to reduce electrical demands of the host Customer facility during PG&E's "peak pricing periods".
3. **Primary Power Source** – Where the Generating Facility will be used as the primary source of electric power and power supplied by PG&E to the host Customer's loads will be required for supplemental, standby, or backup power purposes only.
4. **Standby / Emergency / Backup** – Where the Generating Facility will normally be operated only when PG&E's electric service is not available.
5. **Net Energy Metering** – Where the Generating Facility qualifies and receives service under PG&E's Net Energy Metering tariffs. For applicants for service under Schedule NEM as described in Part 3 B (7.) and (9.), a supplemental application (Form Number 79-998) is also required.
6. **Multiple Tariff** - Generating Facilities that have one or more Net Energy Metering (NEM) generator(s) and optionally a non-Net Energy Metering (non-NEM) generator(s). Check one of the following four options on the next sheet.

Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities

For **Multiple Tariff** Generating Facilities, check one of the following:

- New facility installing non-NEM generator(s) and NEM generator(s) at the same time.
- Existing facility with non-NEM generator(s) and planning to add NEM generator(s). Please provide data for the table below.
- Existing facility with NEM generator(s) and planning to add non-NEM generator(s). Please provide data for the table below.
- Existing facility with NEM generator(s) and planning to add NEM generator(s) under a different NEM tariff. Please provide data for the table below.

Instructions (From Part 4)	Generator Information	Existing Generator Type	Existing Generator Type	New Generator Type	New Generator Type	Generating Facility Totals
#	Please indicate the number of each "type" of Generator being installed: (see Instruction)					
A	Gen/Inverter Manufacturer					
B	Generator/Inverter Model					
C	Gen/Inverter software Version					
D	Is the Gen/Inverter certified	___ Yes ___ No	___ Yes ___ No	___ Yes ___ No	___ Yes ___ No	
E	Generator design	___ Synch ___ Induct. ___ Inverter	___ Synch ___ Induct. ___ Inverter	___ Synch ___ Induct. ___ Inverter	___ Synch ___ Induct. ___ Inverter	
F	Gross Nameplate Rating					
I	Operating Voltage					
J	Power Factor rating					
K	PF Adjustment Range					
L	Wiring Configuration					

GENERATING FACILITY INTERCONNECTION APPLICATION

Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities

Instructions From Part 4	Generator Information	Existing Generator Type	Existing Generator Type	New Generator Type	New Generator Type
M (MP)	3-Phase Winding Configuration (Choose One)	<input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye	<input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye	<input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye	<input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye
N (MP)	Neutral Grounding System Used (Choose One)	<input type="checkbox"/> Ungrounded <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor <div style="text-align: right;">_____ Ohms</div>	<input type="checkbox"/> Ungrounded <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor <div style="text-align: right;">_____ Ohms</div>	<input type="checkbox"/> Ungrounded <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor <div style="text-align: right;">_____ Ohms</div>	<input type="checkbox"/> Ungrounded <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor <div style="text-align: right;">_____ Ohms</div>
O	<i>For Synchronous Generators Only:</i> Synchronous Reactance: Transient Reactance: Subtransient Reactance:	<div style="text-align: right;">_____ (Xd %)</div> <div style="text-align: right;">_____ (X'd %)</div> <div style="text-align: right;">_____ (X''d %)</div>	<div style="text-align: right;">_____ (Xd %)</div> <div style="text-align: right;">_____ (X'd %)</div> <div style="text-align: right;">_____ (X''d %)</div>	<div style="text-align: right;">_____ (Xd %)</div> <div style="text-align: right;">_____ (X'd %)</div> <div style="text-align: right;">_____ (X''d %)</div>	<div style="text-align: right;">_____ (Xd %)</div> <div style="text-align: right;">_____ (X'd %)</div> <div style="text-align: right;">_____ (X''d %)</div>
P	<i>For Induction Generators Only:</i> Locked Rotor Current: OR Stator Resistance: Stator Leakage Reactance: Rotor Resistance: Rotor Leakage Reactance:	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div> <div style="text-align: right;">_____ (%)</div>
Q	Short Circuit Current Produced by Generator:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
R	<i>For Generators that are Started as a "Motor" Only</i> 1. In-Rush Current: 2. Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating:	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (Amps)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (Amps)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (Amps)</div>	<div style="text-align: right;">_____ (Amps)</div> <div style="text-align: right;">_____ (Amps)</div>
S (MP&I)	Prime Mover Type: (Circle One)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities

F. (MP&I)	Please indicate if Qualifying Facility Status will be obtained from the FERC for this Generating Facility.	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Instructions and Notes

Parties operating Generating Facilities complying with all of the requirements for qualification as either a small power production facility or cogeneration facility pursuant to the regulations of the FERC (18 Code of Federal Regulations Part 292, Section 292.203 et seq.) implementing the Public Utility Regulatory Policies Act of 1978 (16 U.S.C.A. Section 796, et seq.), or any successor requirements for "Qualifying Facilities," may seek certification from FERC to have the Generating Facility designated as a Qualifying Facility or "QF." In summary, QF's are Generating Facilities using renewable or alternative fuels as a primary energy source or facilities that utilize the thermal energy given off by the generation process for some other useful purpose. QF's enjoy certain rights and privileges not available to non-QF Generating Facilities.

QF status is not required to interconnect and operate in parallel with PG&E's Distribution System.

G.	Please indicate if Generating Facility will meet the annual Efficiency and Operating Standards of PUC Code 216.6 (Applicable to Cogeneration Only)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
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Part 4 – Instructions for Describing the Generators

	Generator Information	Instructions and Comments
#	Please indicate the number of each "type" of Generator being installed:	Please provide the following information for each Generator "type". Be sure all Generators classified as one "type" are identical in all respects. If only one type of Generator is to be used, only one column needs to be completed. Please be sure the information in the "Totals" column is correct and reflects the total number of Generator units to be installed.
A	Generator/Inverter Manufacturer	Enter the brand name of the Generator.
B	Generator/Inverter Model	Enter the model name or number assigned by the manufacturer of the Generator.
C	Generator/Inverter Software Version	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.
D	Is the Generator Certified by a Nationally Recognized Testing Laboratory (NRTL) according to Rule 21?	Answer "Yes" only if the Generator manufacturer can or has provided certification data. See PG&E's Rule 21, Section J for additional information regarding Generator certification.

Part 4 – Instructions for Describing the Generators

	Generator Information	Instructions and Comments
E	Generator Design	Please indicate the design of each Generator. Designate “Inverter” anytime an inverter is used as the interface between the Generator and the electric system regardless of the primary power production/storage device used.
F	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.
G	Gross Nameplate Rating (kW)	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 “kVA” rating. However, where both kVA and kW values are available, please indicate both.
H	Net Nameplate Rating (kW)	This capacity value is determined by subtracting the “auxiliary” or “station service” loads used to operate the Generator or Generating Facility. Applicants are not required to supply this value but, if it is not supplied, applicable standby charges may be based on the higher “gross” values.
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 D.2.b. 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 D.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 D.2.i.
L	Wiring Configuration	Please indicate whether the Generator is a single-phase or three-phase device. See PG&E’s Rule 21, Section D.3.
M	3-Phase Winding Configuration	For three-phase generating units, please indicate the configuration of the Generator’s windings or inverter systems.
N	Neutral Grounding	Wye connected generating units are often grounded – either through a resistor or directly, depending upon the nature of the electrical system to which the Generator is connected. If the grounding method used at this facility is not listed, please attach additional descriptive information.

Part 4 – Instructions for Describing the Generators

	Generator Information	Instructions and Comments
O	<i>For Synchronous Generators Only:</i>	If the Generator is of a “synchronous” design, please provide the synchronous reactance, transient reactance, and subtransient reactance values supplied by the manufacturer. This information is necessary to determine the short circuit contribution of the Generator and as data in load flow and short circuit computer models of PG&E’s Distribution System. If the Generator’s Gross Nameplate Capacity is 10 MW or greater, PG&E may request additional data to better model the nature and behavior of the Generator with relation to its Distribution System.
P	<i>For Induction Generators Only:</i>	If the Generator is of an “induction” design, please provide the “locked rotor current” value supplied by the manufacturer. If this value is not available, the stator resistance, stator leakage reactance, rotor resistance, rotor leakage reactance values supplied by the manufacturer may be used to determine the locked rotor current. If the Generator’s Gross Nameplate Capacity is 10 MW or greater, PG&E may request additional data to better model the nature and behavior of the Generator with relation to its Distribution System.
Q	Short Circuit Current Produced by Generator	Please indicate the current each Generator can supply to a three-phase fault across its output terminals. For single phase Generators, please supply the phase-to-phase fault current.
R	<i>For Generators that are Started as a “Motor” Only:</i> 1. In-Rush Current 2. Host Customer’s Service Entrance Panel (Main Panel) Continuous Current Rating	This information is needed only for Generators that are started by “motoring” the generator. See PG&E’s Rule 21, Section I.3.e. for significance and additional information. If this question was answered in Part 3, question C of this Application, it need not be answered here.
S	Prime Mover Type	Please indicate the type and fuel used as the “prime mover” or source of energy for the Generator. 1 = Internal Combustion Engine – Natural Gas 2 = Internal Combustion Engine – Diesel Fueled 3 = Internal Combustion Engine - Other Fuel 4 = Microturbine– Natural Gas 5 = Microturbine – Other Fuel 6 = Combustion Turbine Natural Gas 7 = Combustion Turbine - Other Fuel 8 = Steam Turbine 9 = Photovoltaic Panels 10 = Solar-thermal engine 11 = Fuel Cell– Natural Gas 12 = Fuel Cell– Other Fuel 13 = Hydroelectric Turbine 14 = Wind Turbine 15 = Other (please describe)