Pacific Gas and Electric Company

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May 31, 2022

Advice 6609-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: **Modifications to PG&E's Form 79-1174-02 ("Rule 21 Generator Interconnection Application") Attachments to Incorporate an Exception Option to the Latest Smart Inverter Requirements for Interconnections Participating in the Emergency Load Reduction Program**

Purpose

Pacific Gas and Electric Company (PG&E) hereby submits this Tier 2 advice letter to propose modifications to PG&E's existing Rule 21 interconnection application, Filed Form 79-1174-02, specifically to the associated technology-specific attachments D, E, F, G and H. These attachments will provide new smart inverter options (exceptions) to support Emergency Load Reduction Program (ELRP)[1] for DC Vehicle-to-grid (V2G) Electric Vehicle Service Equipment (EVSE). This advice letter complements Advice Letter (AL) 6543-E[2], which made changes in Rule 21 to implement these ELRP DC V2G EVSE smart inverter options. These options will also be reflected in PG&E online application portal, replacing some of the manual processes currently in place.

Background

Approved by the California Public Utilities Commission on May 16, 2022 and made effective as of May 1, 2022, AL 6543-E provides a detailed overview of the regulatory background for the creation on the options being added the forms. Suffice it to say AL

[1] The Emergency Load Reduction Program (ELRP) implementation was ordered in Decision 21-02-015. "Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023. The decision's Ordering Paragraph 6 adopts the earlier D.21-12-015's Attachment 2 creating exceptions to certain smart inverter requirements for DC Vehicle-to-grid (V2G) Electric Vehicle Service Equipment (EVSE) participating in the ELRP.

[2] AL 6543-E – "Modifications to Electric Rule 21 Pursuant to Emergency Load Reduction Program Decision 21-02-015" Effective May 1, 2022. This advice letter added the DC V2G EVSE smart inverter exceptions in Rule 21

6543-E and this advice letter touch on two regulatory proceedings – the Rule 21 proceeding Rulemaking (R.) 17-07-007 and a reliability proceeding, R. 20-11-003.

This Advice Letter

While AL 6543-E modified Rule 21 to allow for ELRP smart inverter options for DC E2V EVSE, PG&E has managed those requests "manually," in order to better support the initiative. This advice letter makes modifications to the attachments (listed below) to PG&E's existing Form 79-1174-02, PG&E's Rule 21 Interconnection Application Form for customers requesting customer-owned generating systems under various programs. Accordingly, these updates will also be incorporated into PG&E's online interconnection application portal, *YourProjects*.

Specifically, PG&E adds a new section to its interconnection application forms as shown below:

Z - Vehicle to Grid				
Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details.	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model
If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

PG&E proposes to incorporate this new section into the following forms:

- Form 79-1174-02D: Rule 21 Generator Interconnection Application - Attachment D (SOLAR (PV) TECHNOLOGY)
- Form 79-1174-02E: Rule 21 Generator Interconnection Application - Attachment E (WIND TURBINE TECHNOLOGY)
- Form 79-1174-02F: Rule 21 Generator Interconnection Application - Attachment F (MACHINE-BASED TECHNOLOGY)
- Form 79-1174-02G: Rule 21 Generator Interconnection Application - Attachment G (FUEL CELL TECHNOLOGY
- Form 79-1174-02H: Rule 21 Generator Interconnection Application - Attachment H (ENERGY STORAGE TECHNOLOGY)

Part of the new section above has been previously approved in AL 6539-E-A[3] for Form 79-1174-02H. This advice letter adds additional language to the approved section. Attachment 2 includes redlines that are color coded to each specific advice letter.

Protests

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than June 20, 2022, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
E-mail: EDTariffUnit@cpuc.ca.gov

The protest shall also be electronically sent to PG&E via E-mail at the address shown below on the same date it is electronically delivered to the Commission:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name and e-mail address of the protestant; and

[3] AL 6539-E-A – "Supplemental: Modifications to PG&E's Interconnection Application Form 79-1174-02 Attachment H to Support the Vehicle-to-Grid Pathway Pursuant to the Rule 21 Working Group 2 and 3 Decision 20-09-035, with Modifications Pursuant to Resolution E-5165" Pending Approval.

statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.2, this advice letter is submitted with a Tier 2 designation. PG&E requests that this Tier 2 advice submittal become effective on July 20, 2022, to coincide with planned implementation of these updates into PG&E's online application portal, *YourProjects*.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.17-07-007 and R.20-11-003. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Sidney Bob Dietz II
Director, Regulatory Relations

Attachments:
Attachment 1: Tariffs
Attachment 2: Redline Tariff Revisions

cc: Service List R.17-07-007 and R.20-11-003

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39 E)

Utility type:
☑ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Kimberly Loo
Phone #: (415)973-4587
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6609-E

Tier Designation: 2

Subject of AL: Modifications to PG&E's Form 79-1174-02 ("Rule 21 Generator Interconnection Application") Attachments to Incorporate an Exception Option to the Latest Smart Inverter Requirements for Interconnections Participating in the Emergency Load Reduction Program

Keywords (choose from CPUC listing): Rule 21

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? ☐ Yes ☑ No

If yes, specification of confidential information:
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☑ No

Requested effective date: 7/20/22

No. of tariff sheets: 7

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: See Attachment 1

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

[1]Discuss in AL if more space is needed.

Clear Form

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name: Sidney Bob Dietz II, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility/Entity Name: Pacific Gas and Electric Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: PGETariffs@pge.com

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Clear Form

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
53287-E	Electric Sample Form No. 79-1174-02D Rule 21 Generator Interconnection Application - Attachment D Sheet 1	52946-E
53288-E	Electric Sample Form No. 79-1174-02E Rule 21 Generator Interconnection Application - Attachment E Sheet 1	52947-E
53289-E	Electric Sample Form No. 79-1174-02F Rule 21 Generator Interconnection Application - Attachment F Sheet 1	52948-E
53290-E	Electric Sample Form No. 79-1174-02G Rule 21 Generator Interconnection Application - Attachment G Sheet 1	52949-E
53291-E	Electric Sample Form No. 79-1174-02H Rule 21 Generator Interconnection Application - Attachment H Sheet 1	52950-E
53292-E	ELECTRIC TABLE OF CONTENTS Sheet 1	52936-E
53293-E	ELECTRIC TABLE OF CONTENTS Sheet 25	52995-E

Electric Sample Form No. 79-1174-02D Sheet 1
Rule 21 Generator Interconnection Application - Attachment D

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
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
Please indicate the number of each "**type" and quantity** of Generator being installed 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
E - Modules.	_____ Manufacturer _____ Model #. _____ Quantity	_____ Manufacturer _____ Model #. _____ Quantity	_____ Manufacturer _____ Model #. _____ Quantity	_____ Manufacturer _____ Model #. _____ Quantity
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
K - AC Disconnect 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
L - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
N - Warranty or Service Agreement 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
O - Solar Ready Electric Panel 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
P - Green Meter Adapter (GMA) Will a GMA be installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
Q - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
R - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
S - Basic Single Line Diagram (SLD) 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)
T - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate the control device that will be used.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
U - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V – Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	_____ Yes _____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
W - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details.	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model
If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)? If yes, please provide ELRP Application Number.	_____ Yes _____ No _____ Application #	_____ Yes _____ No _____ Application #	_____ Yes _____ No _____ Application #	_____ Yes _____ No _____ Application #

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 (NEM2) arrangement..*

A. Customer Sector (Check one)

❑ Residential ❑ Educational ❑ Industrial
❑ Commercial ❑ Military ❑ Non-Profit
❑ 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
❑ 3rd 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:

_____

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:

_____

Electric Sample Form No. 79-1174-02E Sheet 1
Rule 21 Generator Interconnection Application - Attachment E

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed 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.	Type: _____ Qty.: _____	Type: _____ Qty.: _____	Type: _____ Qty.: _____	Type: _____ Qty.: _____
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 Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____Yes ____ No
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter

WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) Neutral Grounding System Used (Choose One) 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.	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms
M - *Induction Generators Only:* Locked Rotor Current: ***Stator Resistance:*** Stator Leakage Reactance: Rotor Resistance: Rotor Leakage Reactance: 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 Electric System.	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)
N - Short Circuit Current Produced by Generator	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
O - AC Disconnect 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
P - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Q – Warranty or Service Agreement 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
R - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
S - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
T - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
U - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS - Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
W - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

Electric Sample Form No. 79-1174-02F Sheet 1
Rule 21 Generator Interconnection Application - Attachment F

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
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.				

MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
G - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye
L - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
M – *Synchronous Generators Only:* 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 Electric 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 Electric System.				
Synchronous Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
Transient Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
Subtransient Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
N - *Induction Generators Only:*				
Locked Rotor Current:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
Stator Resistance:	_____(%)	_____(%)	_____(%)	_____(%)
Stator Leakage Reactance:	_____(%)	_____(%)	_____(%)	_____(%)
Rotor Resistance:	_____(%)	_____(%)	_____(%)	_____(%)
Rotor Leakage Reactance:	_____(%)	_____(%)	_____(%)	_____(%)
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 Electric System.				
O - Short Circuit Current Produced by Generator	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
P – *For Generators that are Started as a "Motor" Only:* This information is needed only for Generators that are started by "motoring" the generator. See PG&E's Rule 21, Sections L.3.d. and L.7.b. for significance and additional information. If this question was answered in Part IV, question C of this Application, it need not be answered here. 1. In-Rush Current: 2. Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating:	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)
Q – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
R - AC Disconnect 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
S - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
T – Warranty or Service Agreement 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	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
"agreement" ensuring proper maintenance and continued system performance.				
U - Cogeneration Please indicate whether this Generating Facility meets the definition of cogeneration in PUC 216.6 (5% useful thermal and 42.5% efficient):	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
V - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
W - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
X - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes __ __ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
Y - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Z - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
AA - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details.	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model
If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

Electric Sample Form No. 79-1174-02G Sheet 1
Rule 21 Generator Interconnection Application - Attachment G

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms
M - Short Circuit Current Produced by Generator:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
N – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
O - AC Disconnect For systems requiring an AC Disconnect only, please include the requested information about th 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
P - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
Q – Warranty or Service Agreement 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

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
R - Cogeneration Please indicate whether this Generating Facility meets the definition of cogeneration in PUC 216.6 (5% useful thermal and 42.5% efficient):	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
S - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
T - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
U - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
V - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
W - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
X - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

Electric Sample Form No. 79-1174-02H Sheet 1
Rule 21 Generator Interconnection Application - Attachment H

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	__ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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 - Energy Storage Electrical Source Function (in addition, please complete section: "Additional Information Required for Energy Storage")	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____
H - 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.				
I - 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.				
J - 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.				
K - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye
M - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms
N - Short Circuit Current Produced by Generator:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
O – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
P - AC Disconnect 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

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Q - Energy Storage (ES) System (For important sizing information related to DC-Couple configurations, see sizing note below).	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units
R - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
S – Warranty or Service Agreement 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
T - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
U - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V - Basic Single Line Diagram (SLD) If the interconnection is eligible to use a Basic SLD, please include the requested information.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) Can this system be used as a back-up generator? ____ Yes ____ No If so, please include the requested information for the back-up controller or other device. _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) ____ Yes ____ No _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) ____ Yes ____ No _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) ____ Yes ____ No _____ Manufacturer _____ Make _____ Model No.
W - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
X - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Y - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
Z - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)? If yes, please provide ELRP Application Number.	____ Yes ____ No _____ Application #	____ Yes ____ No _____ Application #	____ Yes ____ No _____ Application #	____ Yes ____ No _____ Application #

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Energy Storage Charging Function:

Rated Charge Demand (Load): _____ kW

Estimated annual Net Energy Usage* of the energy storage device(s): ____ ____ kWh

*Net Energy usage = (kWh input, including charging, storage device auxiliary loads and losses) – (kWh output including discharging)

Will the Distribution Grid be used to charge the storage device: ☐ Yes ☐ No

If no: Provide technical description of control systems including (e.g. Nationally-certified piece of equipment, Relays/metering):

Source of energy for Charging: _____

Mechanism to prevent charging from the Distribution System: _____

If Yes: Will charging the storage device(s) increase the host facility's existing peak load demand:

☐ Yes ☐ No

If Yes: Provide the following loading information:

Amount of added peak demand: _____ kW

If no: Provide technical description of controls systems including:

Charging periods: _____

Mechanism to prevent charging from the Distribution System during host facility peak:

_____

Expedited Interconnection Process Selection for Non-Export Energy Storage:

☐ This project meets the requirements identified in Rule 21 Section N and this process is being selected for expedited interconnection.

Note on Sizing (DC-Coupled Configurations)

The size of the storage system in DC-coupled NEM-eligible generator plus storage systems is the lesser of the shared inverter's (or inverters') nameplate capacity (capacities summed) and the storage device's (devices') maximum continuous discharge capacity (capacities summed) listed on the device's (devices') technical specifications sheets. A storage device's maximum continuous discharge capacity may be listed on technical specification sheets using different terminology. Note: PG&E will use common sense to determine whether a device's technical specification sheet includes the appropriate metric for purposes of determining system size, regardless of the terminology used. If that metric is not included, PG&E may rely on the inverter's nameplate rating.

For example:

- What is the maximum continuous discharge capability for each storage unit?
  _____ +_____ +_____ +_____ + _____ =. total_____
- What is each inverter's nameplate rating?
  _____ +_____ +_____ +_____ + _____ =. total_____

ELECTRIC TABLE OF CONTENTS Sheet 1

TABLE OF CONTENTS

(Continued)

ELECTRIC TABLE OF CONTENTS Sheet 25

(Continued)

Advice 6609-E
May 31, 2022

Attachment 2

Redline Tariff Revisions

For convenience of the reader, PG&E has included redline revisions in Attachment 2. Where Electric Rule 21 has been revised, the affected sheets are included in Attachment 1.

Electric Sample Form No. 79-1174-02D Sheet 1
Rule 21 Generator Interconnection Application - Attachment D

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
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
Please indicate the number of each "**type" and quantity** of Generator being installed 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
E - Modules.	Manufacturer Model #. Quantity	Manufacturer Model #. Quantity	Manufacturer Model #. Quantity	Manufacturer Model #. Quantity
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
K - AC Disconnect 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
L - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
N - Warranty or Service Agreement 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
O - Solar Ready Electric Panel 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
P - Green Meter Adapter (GMA) Will a GMA be installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
Q - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
R - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
S - Basic Single Line Diagram (SLD) 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)
T - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate the control device that will be used.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
U - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

Pacific Gas and Electric Company

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT D
SOLAR (PV) TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V – Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
W - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____EVSE _____EV	_____EVSE _____EV	_____EVSE _____EV	_____EVSE _____EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____Yes ____No	____Yes ____No	____Yes ____No	____Yes ____No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____Yes ____No	____Yes ____No	____Yes ____No	____Yes ____No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

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 (NEM2) arrangement..*

A. Customer Sector (Check one)

❑ Residential ❑ Educational ❑ Industrial
❑ Commercial ❑ Military ❑ Non-Profit
❑ 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
❑ 3rd 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:

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:

_____

Electric Sample Form No. 79-1174-02E Sheet 1
Rule 21 Generator Interconnection Application - Attachment E

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed 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.	Type: _____ Qty.: _____	Type: _____ Qty.: _____	Type: _____ Qty.: _____	Type: _____ Qty.: _____
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 Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____Yes ____ No
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter

WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) Neutral Grounding System Used (Choose One) 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.	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms	___ Ungrounded ___ Solidly Grounded ___ Ground Resistor ___ Ohms
M - *Induction Generators Only:* Locked Rotor Current: ***Stator Resistance:*** Stator Leakage Reactance: Rotor Resistance: Rotor Leakage Reactance: 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 Electric System.	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)	_____ (Amps) _____(%) _____(%) _____(%) _____(%)
N - Short Circuit Current Produced by Generator	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
O - AC Disconnect 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
P - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Q – Warranty or Service Agreement 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
R - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
S - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
T - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
U - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS - Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT E
WIND TURBINE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	_____ Yes _____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
W - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No	_____ Yes _____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

Electric Sample Form No. 79-1174-02F Sheet 1
Rule 21 Generator Interconnection Application - Attachment F

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
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.				

MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
G - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye
L - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
M – *Synchronous Generators Only:* 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 Electric 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 Electric System.				
Synchronous Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
Transient Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
Subtransient Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
N - *Induction Generators Only:*				
Locked Rotor Current:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
Stator Resistance:	_____(%)	_____(%)	_____(%)	_____(%)
Stator Leakage Reactance:	_____(%)	_____(%)	_____(%)	_____(%)
Rotor Resistance:	_____(%)	_____(%)	_____(%)	_____(%)
Rotor Leakage Reactance:	_____(%)	_____(%)	_____(%)	_____(%)
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 Electric System.				
O - Short Circuit Current Produced by Generator	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
P – *For Generators that are Started as a "Motor" Only:* This information is needed only for Generators that are started by "motoring" the generator. See PG&E's Rule 21, Sections L.3.d. and L.7.b. for significance and additional information. If this question was answered in Part IV, question C of this Application, it need not be answered here. 1. In-Rush Current: 2. Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating:	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)	_____ (Amps) _____ (Amps)
Q – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
R - AC Disconnect 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
S - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
T – Warranty or Service Agreement 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	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
"agreement" ensuring proper maintenance and continued system performance.				
U - Cogeneration Please indicate whether this Generating Facility meets the definition of cogeneration in PUC 216.6 (5% useful thermal and 42.5% efficient):	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
V - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
W - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
X - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes __ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
Y - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT F
MACHINE-BASED TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Z - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
AA - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____EVSE _____EV	_____EVSE _____EV	_____EVSE _____EV	_____EVSE _____EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year	_____ Vehicle Make _____ Vehicle Model _____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____Yes ____No	____Yes ____No	____Yes ____No	____Yes ____No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____Yes ____No	____Yes ____No	____Yes ____No	____Yes ____No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

Electric Sample Form No. 79-1174-02G Sheet 1
Rule 21 Generator Interconnection Application - Attachment G

Please Refer to Attached Sample Form

(Continued)

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

Pacific Gas and Electric Company

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter
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 - 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.				
H - 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.				
I - 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.				
J - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				
K - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms
M - Short Circuit Current Produced by Generator:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
N – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
O - AC Disconnect For systems requiring an AC Disconnect only, please include the requested information about th 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
P - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
Q – Warranty or Service Agreement 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

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
R - Cogeneration Please indicate whether this Generating Facility meets the definition of cogeneration in PUC 216.6 (5% useful thermal and 42.5% efficient):	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
S - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
T - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
U - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
V - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS – Option 9) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT G
FUEL CELL TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
W - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
X - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	EVSE EV	EVSE EV	EVSE EV	EVSE EV
Please provide Electric Vehicle details. If inverter is in the EVSE, please provide EVSE model manufacture year.	Vehicle Make Vehicle Model EV Year EVSE Model Year	Vehicle Make Vehicle Model EV Year EVSE Model Year	Vehicle Make Vehicle Model EV Year EVSE Model Year	Vehicle Make Vehicle Model EV Year EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	Yes No	Yes No	Yes No	Yes No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	Yes No	Yes No	Yes No	Yes No
If yes, please provide ELRP Application Number.	Application #	Application #	Application #	Application #

Form 79-1174-02H

In this advice letter, part of the new section has been previously approved in AL 6539-E-A for Form 79-1174-02H. The redlines for Form 79-1174-02H in Attachment 2 are color coded to the specific advice letter. The color coding is as follows:

Redline Text Color	Advice Letter	Subject	Comments
	6539-E-A	Supplemental: Modifications to PG&E's Interconnection Application Form 79-1174-02 Attachment H to Support the Vehicle-to-Grid Pathway Pursuant to the Rule 21 Working Group 2 and 3 Decision 20-09-035, with Modifications Pursuant to Resolution E-5165	Effective May 16, 2022
	6609-E	Modifications to PG&E's Form 79-1174-02 ("Rule 21 Generator Interconnection Application") Attachments to Incorporate an Exception Option to the Latest Smart Inverter Requirements for Interconnections Participating in the Emergency Load Reduction Program	In this advice letter, revisions are made to 79-1174-02 Attachments D-G.

Electric Sample Form No. 79-1174-02H Sheet 1
Rule 21 Generator Interconnection Application - Attachment H

Please Refer to Attached Sample Form

(Continued)

Pacific Gas and Electric Company

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

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

Instructions				
Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Please indicate the number of each "**type" and quantity** of Generator being installed. 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.				
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/Inverter certified? 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&E, has been verified by the customer as having safety certification from a nationally recognized testing laboratory. See PG&E's Rule 21, Section L for additional information regarding Generator certification.	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
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.	____ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter	__ Synch ____ Induct. ____ Inverter	____ Synch ____ Induct. ____ Inverter

ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
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 - Energy Storage Electrical Source Function (in addition, please complete section: "Additional Information Required for Energy Storage")	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____	Max kWh Capacity: _____ Rated kW Discharge: _____
H - 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.				
I - 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.				
J - 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.				
K - Wiring Configuration Please indicate whether the Generator is a single-phase or three-phase device. See PG&E's Rule 21, Section H.3.				

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
L - (MP) 3-Phase Winding Configuration (Choose One) For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye	__3 Wire Delta __3 Wire Wye __4 Wire Wye
M - (MP) Neutral Grounding System Used (Choose One) 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.	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms	__ Ungrounded __ Solidly Grounded __ Ground Resistor __ Ohms
N - Short Circuit Current Produced by Generator:	_____ (Amps)	_____ (Amps)	_____ (Amps)	_____ (Amps)
O – Prime Mover Type Please indicate the type and fuel used as the prime mover or source of energy for the Generator. 1 = Natural Gas 2 = Diesel Fueled 3 = Other Fuel	1 2 3	1 2 3	1 2 3	1 2 3
P - AC Disconnect 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

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Q - Energy Storage (ES) System (For important sizing information related to DC-Couple configurations, see sizing note below).	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units	_____ Manufacturer _____ Model # _____ Quantity of Units
R - Lineside Tap 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: Rule21Gen@PGE.com for more information.	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side	____ Customer side ____ PG&E side
S – Warranty or Service Agreement 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
T - Distribution Interconnect Handbook (DIH) and Greenbook Requirements Does this interconnection meet the DIH and Greenbook Requirements	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
U - Gas Clearance Requirements Certify that this interconnection meets Greenbook Gas Clearance Requirements?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
V - Basic Single Line Diagram (SLD) If the interconnection is eligible to use a Basic SLD, please include the requested information.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) Can this system be used as a back-up generator? ____ Yes ____ No If so, please include the requested information for the back-up controller or other device. _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) Can this system be used as a back-up generator? ____ Yes ____ No If so, please include the requested information for the back-up controller or other device. _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) Can this system be used as a back-up generator? ____ Yes ____ No If so, please include the requested information for the back-up controller or other device. _____ Manufacturer _____ Make _____ Model No.	_____ Panel Voltage (Volts) _____ Main Breaker (Amps) _____ Storage Breaker Size (Amps) Can this system be used as a back-up generator? ____ Yes ____ No If so, please include the requested information for the back-up controller or other device. _____ Manufacturer _____ Make _____ Model No.
W - Back-up Generator Operation Will the generator be operated as a back-up? If yes, please indicate control device.	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker	____ Yes ____ No ☐ Automatic Transfer Switch ☐ Contactor ☐ Breaker
X - Limited Export Will the generator export be limited? If yes, please indicate how export will be limited.	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter	____ Yes ____ No ☐ Power Control System (PCS) ☐ Relay ☐ Derated Inverter

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Generator Information	Existing Generator type 1	Existing Generator type 2	New Generator type 1	New Generator type 2
Y - Telemetry Will the Generating Facility Gross Nameplate Rating exceed 1 MW?	____ Yes ____ No			
If yes, please select a Telemetry Option.	_____ Customer-owned Telemetry - Gateway _____ Customer-owned Telemetry - Aggregator _____ Mini RTU			
If one of the Customer-owned Telemetry options is selected, please identify the preferred Site Metering Arrangement.	_____Customer-side net load metering _____Replace PG&E meter with a Mark V meter and terminal block _____Add terminal block to existing PG&E Mark V meter _____Replace meter socket with dual-socket meter cabinet for installation of customer-owned meter _____Install customer-owned meter in existing dual socket meter cabinet.			
Z - Vehicle to Grid Will the inverter be located in the Electric Vehicle Service Equipment (EVSE) or in the Electric Vehicle (EV) itself?	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV	_____ EVSE _____ EV
Please provide Electric Vehicle details.	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model	_____ Vehicle Make _____ Vehicle Model
If inverter is in the EVSE, please provide EVSE model manufacture year.	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year	_____ EV Year _____ EVSE Model Year
If inverter is in the EVSE, is the EVSE newly installed?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If inverter is in the EVSE, will the Generator participate in the Emergency Load Reduction Program (ELRP)?	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No	____ Yes ____ No
If yes, please provide ELRP Application Number.	_____ Application #	_____ Application #	_____ Application #	_____ Application #

INTERCONNECTION APPLICATION (Form 79-1174-02)
ATTACHMENT H
ENERGY STORAGE TECHNOLOGY

Energy Storage Charging Function:

Rated Charge Demand (Load): _____ kW

Estimated annual Net Energy Usage* of the energy storage device(s): ____ ____ kWh

*Net Energy usage = (kWh input, including charging, storage device auxiliary loads and losses) – (kWh output including discharging)

Will the Distribution Grid be used to charge the storage device: ☐ Yes ☐ No

If no: Provide technical description of control systems including (e.g. Nationally-certified piece of equipment, Relays/metering):

Source of energy for Charging: _____

Mechanism to prevent charging from the Distribution System: _____

If Yes: Will charging the storage device(s) increase the host facility's existing peak load demand:

☐ Yes ☐ No

If Yes: Provide the following loading information:

Amount of added peak demand: _____ kW

If no: Provide technical description of controls systems including:

Charging periods: _____

Mechanism to prevent charging from the Distribution System during host facility peak:

_____

Expedited Interconnection Process Selection for Non-Export Energy Storage:

☐ This project meets the requirements identified in Rule 21 Section N and this process is being selected for expedited interconnection.

Note on Sizing (DC-Coupled Configurations)

The size of the storage system in DC-coupled NEM-eligible generator plus storage systems is the lesser of the shared inverter's (or inverters') nameplate capacity (capacities summed) and the storage device's (devices') maximum continuous discharge capacity (capacities summed) listed on the device's (devices') technical specifications sheets. A storage device's maximum continuous discharge capacity may be listed on technical specification sheets using different terminology. Note: PG&E will use common sense to determine whether a device's technical specification sheet includes the appropriate metric for purposes of determining system size, regardless of the terminology used. If that metric is not included, PG&E may rely on the inverter's nameplate rating.

For example:

- What is the maximum continuous discharge capability for each storage unit?
  _____ +_____ +_____ +_____ + _____ =. total_____
- What is each inverter's nameplate rating?
  _____ +_____ +_____ +_____ + _____ =. total_____

PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
Braun Blaising Smith Wynne, P.C.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency Financing

California Alternative Energy and Advanced Transportation Financing Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison Schneider & Harris LLP
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McClintock IP
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Stoel Rives LLP

Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy