



Electric Sample Form No. 79-1174-02
Rule 21 Generator Interconnection Application

Sheet 1

**Please Refer to Attached
Sample Form**



RULE 21 GENERATOR INTERCONNECTION APPLICATION (Form 79-1174-02)

Part I - Introduction and Overview

- A. Applicability:** This Generating Facility Interconnection Application (Application) is used to request the interconnection to Pacific Gas and Electric Company's (PG&E) Electric System (over which the California Public Utilities Commission (CPUC) has jurisdiction) one or more of the following¹ tariffs:
- (1) Non-Exporting Generating Facilities;
 - (2) NEM2 Solar (PV) (other than PV 30 KW or less)²; or RPS Generating Facilities
 - (3) NEM2 California Dept. of Corrections & Rehabilitation
 - (4) NEM2A – NEM2 Load Aggregation (under Schedule NEM2)
 - (5) NEM2MT- generating facilities subject to multiple tariff treatment
 - (6) RES-BCT (Renewable Energy Self-Generation Bill Credit Transfer) Generating Facilities;
 - (7) NEMFC / NEMFCA Net Energy Metering for Fuel Cells
 - (8) NEM2V – Virtual Net Energy Metering
 - (9) NEMVMASH (on a single Service Delivery Point, or for a Low Income Development)

Refer to PG&E's Electric Rule 21 and program tariffs to determine the specific requirements for interconnecting a Generating Facility. Capitalized terms used in this Application, and not otherwise defined herein, shall have the same meanings as defined in PG&E's Rule 21 and Rule 1.

Except as noted in the next paragraph, this Application may be used for any Generating Facility to be operated by, or for, a Customer and/or Interconnection Customer to supplement or serve part or all of its electric energy requirements that would otherwise be provided by PG&E, including distributed generation, cogeneration, emergency, backup, standby generation, and certain Net Energy Metered Generating Facilities. While Customers operating Generating Facilities isolated from PG&E's Electric System are not obligated to enter into an Interconnection Agreement with PG&E, parts of this Application will still need to be completed to satisfy PG&E's notice requirements for operating an isolated Generating Facility as specified in the California Health and Safety Code Section 119085 (b).

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

This Application is not applicable for incentives and/or rebates offered by the Energy Resources Conservation and Development Commission (CEC), the CPUC or any other entity. Please contact those agencies directly or on their respective websites:

www.energy.ca.gov and www.cpuc.ca.gov.

¹ Also when included with Energy Storage (e.g., batteries), or when operating under the provisions of PU Code 218, where permitted.

² For Net Energy Metering Customers with Solar and/or Wind Electric Generating Facilities less than 30 kW that are not paired with Energy Storage, simpler, shorter forms are available from PG&E (i.e., Forms 79-1151-02 A and B). These forms are available on PG&E's website at <http://www.pge.com/gen>.

RULE 21 GENERATOR INTERCONNECTION APPLICATION (Form 79-1174-02)

B. Guidelines and Steps for Interconnection: This Application must be completed and sent to PG&E along with the additional information indicated in Part II below to initiate PG&E's interconnection review of the proposed Generating Facility. When applicable per Rule 21, unless exempted by CPUC Decision, a non-refundable Interconnection Request fee shall be invoiced and must be paid by Interconnection Customer. Pursuant to PG&E's Rule 21, there may be additional study and other costs; see PG&E's Rule 21, Sections E.2.c and E.3., for more information regarding interconnection of a generator to PG&E's Electric System.

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

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

Part II – Describing the Generating Facility and Host Customer's Electrical Facilities

Required Documents: Each of the following documents **is required to be submitted** before this application will be processed. Drawings must conform to accepted engineering standards and must be legible. Electronic documents are preferred.

1. A **Single-line drawing** showing the electrical relationship and descriptions of the significant electrical components such as the primary switchgear, secondary switchboard, protective relays, transformers, generators, circuit breakers, with operating voltages, capacities, and protective functions of the Generating Facility, the Customer's loads, and the interconnection with PG&E's Electric System. Please show the location of all required net generation electric output meter(s) and the A.C. manual operated disconnect switch on the single line drawing, when required.
2. **Site plans and diagrams** showing the physical relationship of the significant electrical components of the Generating Facility such as generators, transformers, primary switchgear/secondary switchboard, and control panels, the Customer's loads and the interconnection with PG&E's Electric System. Please show the location of all required net generation electric output meter(s) and the A.C. manual operated disconnect switch on the site plans, when required.
3. **Disconnect Switch Specification Sheet** - as required in Rule 21 Section H.1.d, along with the disconnect switch specification sheet.

PG&E allows only one AC Disconnect for a generating facility but does make exceptions upon review and approval. Please provide a Variance Letter explaining why multiple AC disconnect switches are needed. This Variance Request will be reviewed in parallel with the Engineering Review.

RULE 21 GENERATOR INTERCONNECTION APPLICATION (Form 79-1174-02)

4. **Variance Request** - A variance request will be required for anything outside Electric Rule 21³, PG&E's Greenbook⁴, or PG&E's Distribution or Transmission Interconnection Handbooks^{5,6} stated requirements. (See links below)
5. **Transformer nameplate information** - Provide **transformer nameplate information** (voltages, capacity, winding arrangements, connections, impedance, et cetera), if transformers are used to interconnect the Generating Facility with PG&E's Electric System,
6. **Transfer switch/scheme documentation** - If used to interconnect the Generating Facility with PG&E Electric System, Documentation shall include component descriptions, capacity ratings, and a technical description of how the transfer scheme is intended to operate.
7. **Protective relay documentation** If used to control the interconnection, documentation shall include protection diagrams or elementary drawings showing relay wiring and connections, proposed relay settings, and a description of how the protection scheme is intended to function.

Part III Application Appendices

Application Instructions: Complete this application for the complete Generating Facility and enter this information into PG&E's web-based form. (PG&E strongly recommends preparing all information and materials before starting the online application.) The online web-based form can be found at:

https://www.pge.com/en_US/for-our-business-partners/interconnection-renewables/interconnections-renewables.page?ctx=large-business

Questions concerning PG&E's Online Application process can be directed to the Electric Generation Interconnection Department at rule21gen@pge.com.

For each new generating facility you are applying to interconnect, please complete and submit the applicable appendices.

³ Rule 21 can be found at: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_RULES_21.pdf

⁴ PG&E's Greenbook can be found at: <http://www.pge.com/greenbook/>

⁵ Distribution Interconnection Handbook (DIH) can be found at: https://www.pge.com/en_US/large-business/services/alternatives-to-pge/distribution-handbook.page

⁶ Transmission Interconnection Handbook (TIH) can be found at: https://www.pge.com/en_US/large-business/services/alternatives-to-pge/third-party-electric-options/electric-transmission-services/transmission-interconnection-handbooks.page

Part IV Attachments / On-Line Form - Overview

Table 1 - Summary of the attachment to this form.

		Attachment	Project Type
	1	A	Customer Project Information
EXPORT	2	B	Non Export
	3	C	Export
TECHNOLOGY	4	D	Solar (PV) Only
	5	E	Wind Only
	6	F	Machine-Based Only
	7	G	Fuel Cell
	8	H	Energy Storage Only
TARIFF PROGRAM	9	I	RES-BCT
	10	J	NEM2A
	11	K	NEMFCA
	12	L	NEM2V
	13	M	NEMVMASH
	14	N	NEMVMASH Development

RULE 21 GENERATOR INTERCONNECTION APPLICATION (Form 79-1174-02)

Table 2 below summarizes which attachments to this form will be required for each tariffed program.

Table 2 – New Application Form/Attachments as they apply to PG&E’s Various Tariffed Programs

Category			Non-Export	NEMEXP	RES-BCT	NEM2A	NEMFC	NEM2V	NEMVMASH
	Main (79-1174-02)	Customer info	Black	Black	Black	Black	Black	Black	Black
	A	Customer & Project info	Black	Black	Black	Black	Black	Black	Black
Rule 21 - must complete one of these Attachments	B	Non-export	Grey	White	White	White	White	White	White
	C	Export	Grey	Black	Black	Black	Black	Black	Black
Each generating facility must complete one corresponding to technology	D	Solar	Grey	Grey	Grey	Grey	White	Grey	Black
	E	Wind	Grey	White	White	White	White	Grey	White
	F	Machine	Grey	(1)	(1)	(1)	White	(1)	White
	G	Fuel Cell	Grey	(1)	(1)	(1)	(2)	(1)	White
	H	Storage	Grey	(3)	(3)	(3)	(3)	White	White
Complete Attachment that corresponds to tariff program for a generating facility	I	RES-BCT	White	White	Black	White	White	White	White
	J	NEM2A	White	White	White	Black	White	White	White
	K	Fuel Cell Aggregation	White	White	White	White	Black	White	White
	L	NEM2V	White	White	White	White	White	Black	White
	M	NEMVMASH Single building	White	White	White	White	White	White	Black
	N	NEMVMASH development	White	White	White	White	White	White	Black

Black – must be complete.

Grey – at least one option in category must be selected

Note (1) – must be fueled with a renewable (RPS-Eligible) fuel.

Note (2) – may be fueled with a non-renewable fuel.

Note (3) – treatment consistent with Decision 14-05-033, if NEM paired.

If an applicant’s project has multiple generating facilities, they would need to complete all forms/screens relevant for each generating facility in technology and tariff program (e.g. for NEM2MT).