



Electric Sample Form No. 79-1174-03B
Interconnection Application, Attachment B, Non-Export

Sheet 1

(N)

(N)

**Please Refer to Attached
Sample Form**

(Continued)

Advice 6849-E
Decision D.22-12-056

Issued by
Meredith Allen
Vice President, Regulatory Affairs

Submitted January 30, 2023
Effective March 1, 2023
Resolution _____

Operating Mode

Please select one option below:

- Parallel Operation (no export):** The Generating Facility will interconnect and operate “in parallel” with PG&E’s Electric System for more than one (1) second.

Please supply all of the information requested for the Generating Facility. Be sure to supply adequate information including diagrams and written descriptions regarding the protective relays that will be used to detect faults or abnormal operating conditions on PG&E’s Electric System.

- Inadvertent Export:** The Generating Facility will interconnect and operate, providing unscheduled and uncompensated export of real power for a duration exceeding two (2) seconds but fewer than sixty (60) seconds. The expected frequency of “inadvertent export” occurrences should be less than two occurrences per 24-hour period. Protective Functions, technical requirements and operational limitations are described in Rule 21, Section M.

Be sure to supply adequate information including diagrams and written descriptions regarding the switching device or scheme that will be used to limit the parallel operation period to one second or less. Please also describe the back up or protective device and controls that will trip the Generating Facility should the transfer switch or scheme not complete the transfer in one second or less.

- Uncompensated Export:** A Generating Facility Interconnection Export Addendum that provides for parallel operation of the Generating Facility and the occasional, continuous, non-compensated, export of generator facilities sized 2 MW or less to PG&E’s Electric System. Continuous export is export greater than 60 seconds in duration. This addendum must be executed in concert with the generating facility interconnection agreement.

- Momentary Parallel Operation (Make Before Break):** The Generating Facility will interconnect and operate on a “momentary parallel” basis with PG&E’s Electric System for a duration of one (1) second or less through transfer switches or operating schemes specifically designed and engineered for such operation.

Be sure to supply adequate information including diagrams and written descriptions regarding the switching device or scheme that will be used to limit the parallel operation period to one second or less. Please also describe the back up or protective device and controls that will trip the Generating Facility should the transfer switch or scheme not complete the transfer in one second or less.

- Isolated Operation (Break Before Make):** The Generating Facility will be “isolated” and prevented from becoming interconnected with PG&E’s Electric System through a transfer switch or operating scheme specifically designed and engineered for such operation.

Be sure to supply adequate information including diagrams and written descriptions regarding the isolating switching device or scheme that will be used to prevent the Generating Facility from operating in parallel with PG&E’s Electric System.

Note: There is no application fee for Generating Facilities employing Isolated Operation mode, however, an application is needed to satisfy PG&E’s notice requirements for operating an isolated Generating Facility as per California Health and Safety Code Section 119085 (b)

Protection Options

Parallel Only:

Please select one Rule 21 Screen I option below:

- Reverse Power (Option 1): A **reverse-power protection device** will be installed to measure any export of power and trip the Generating Facility or open an intertie breaker to isolate the Generating Facility if limits are exceeded.
- Under Power (Option 2): An **under-power protection device** will be installed to measure the inflow of power and trip or reduce the output of the Generating Facility if limits are not maintained.
- Non-Islanding (Option 3): The Generating Facility Interconnection Facility equipment has been **certified as non-islanding and the incidental export of power will be limited by the design of the interconnection**. If this option is to be used, the nominal ampere rating of the service entrance equipment (service panel rating) that is used by the host Customer facility is:
_____.
- Gross Nameplate 50% or Less (Option 4): The **Gross Nameplate Rating of the Generating Facility will not exceed 50% of the host Customer facility's minimum electrical load over the past 12 months**. If this option is to be used, the minimum load of the host Customer facility must be stated in the space provided above.
- AC/DC Converter (Option 7): An AC/DC Converter is employed to prevent export by only allowing one way power flow.
- Certified Power Control System (PCS) Non-Export (Option 8): A PCS is employed to prevent export. For this option, the open loop response time of the PCS must be less than 2 seconds.

Please indicate:

- Qualifying Facility (QF) Status will be obtained from the FERC for this Generating Facility.

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

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

Inadvertent Export:

The Generating Facility **completely offsets their facility load** by being (a) optimally sized to meet their peak demand with load following functionality on the Generator controls and (b) ensuring conditional (inadvertent) export of electric power from the Generation Facility to Distribution Provider's Distribution or Transmission System occurs no more frequently than twice in any 24 hour period and the exports are greater than 2 seconds but no more than more than 60 seconds.

Please select one Rule 21 Screen I option below:

- Reverse Power (Option 5): Two **reverse-power protection devices** will be installed to measure any export of power and trip the Generating Facility or open an intertie breaker to isolate the Generating Facility if limits are exceeded.
- Under Power (Option 5): A **reverse-power protection devices** will be installed to measure any export of power and trip the Generating Facility or open an intertie breaker to isolate the Generating Facility if limits are exceeded; AND an **under-power protection device** will be installed to measure the inflow of power and trip or reduce the output of the Generating Facility if limits are not maintained.
- Non-islanding Inverters (Option 6): Designed to detect and disconnect from a stable Unintended Island with matched load and generation.
- Certified Power Control System (PCS) Inadvertent (Option 10): A PCS is employed to allow inadvertent export. For this option, the open loop response time of the PCS must be greater than 2 seconds and no more than 10 seconds.
- Certified Power Control System (PCS) Inadvertent/Limited Export (Option 11): A PCS is employed to allow inadvertent limited export. For this option, the open loop response time of the PCS must be greater than 2 seconds and no more than 10 seconds.

Please indicate:

- Qualifying Facility (QF) Status will be obtained from the FERC for this Generating Facility.

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

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

Uncompensated Export:

Please provide Maximum Expected Facility Net Export (kW): _____

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