

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 26, 2017

Advice Letter 5103-E

Erik Jacobson
Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

**Subject: Modifications to Electric Rule 21 to Enhance the Expedited
Interconnection Storage Process for Non-Exporting Storage
in Accordance with Advice 4941-E/E-A and D.16-06-052**

Dear Mr. Jacobson:

Advice Letter 5103-E is effective as of July 23, 2017.

Sincerely,

A handwritten signature in black ink that reads "Edward Randolph".

Edward Randolph
Director, Energy Division



Erik Jacobson
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B23A
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-1448

June 23, 2017

Advice 5103-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Modifications to Electric Rule 21 to Enhance the Expedited Interconnection Storage Process for Non-Exporting Storage in Accordance with Advice 4941-E/E-A and Decision 16-06-052

Purpose

Pacific Gas & Electric Company (PG&E) respectfully submits this advice letter in accordance with Advice Letter 4941-E/E-A. Advice Letters 4941-E/E-A were filed pursuant to Decision (D.) 16-06-052¹, to update PG&E's Electric Rule 21 Tariff and associated forms in order to incorporate and implement an Expedited Interconnection Process for Non-Exporting Storage.

Background

The California Public Utilities Commission (CPUC or Commission) opened Rulemaking (R.) 11-09-011 on September 22, 2011, to review and, as required, make changes to Electric Rule 21, which governs the interconnection of CPUC jurisdictional generating facilities, including storage, to the PG&E electric distribution system.

On June 23, 2016, D.16-06-052 granted the November 18, 2015, motion in Ordering Paragraph 2 for revisions to Electric Tariff Rule 21 to address interconnection of behind-the-meter, non-exporting energy storage) and Ordering Paragraph 10 (regarding the Advice Letter Schedule in Attachment D of D.16-06-052). Attachment C of D.16-06-052 required IOUs and stakeholders to explore ways to improve storage interconnection, including further discussion of proposals to incorporate an expedited

¹ *ALTERNATE DECISION INSTITUTING COST CERTAINTY, GRANTING JOINT MOTIONS TO APPROVE PROPOSED REVISIONS TO ELECTRIC TARIFF RULE 21, AND PROVIDING SMART INVERTER DEVELOPMENT A PATHWAY FORWARD FOR PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY, AND SAN DIEGO GAS & ELECTRIC COMPANY* – dated June 23, 2016, issued July 1, 2016.

interconnection process for certain cases of non-exporting storage. The IOU²s and interested industry members collaborated on defining criteria for an expedited interconnection process for non-export energy storage during July, August, and September 2016.

Pursuant to D. 16-06-052, Attachment C, Section II.1 (page 2-3), PG&E submitted Advice Letter 4941-E³ on October 21, 2016 to create an expedited interconnection process for non-export energy storage. Subsequently, PG&E submitted Supplement Advice Letter 4941-E-A⁴ on February 1, 2017, at the request of Energy Division, in order to adopt the recommendations of 4941-E/E-A on a pilot basis for a period of one year to develop experience and monitor results of PG&E's expedited interconnection review process. The duration of the pilot will be from July 1, 2017 to June 30, 2018.

In Advice 4941-E-A in section 3, PG&E agreed to submit an advice letter in the second quarter of 2017 with a new non-export interconnection agreement form, as an additional phase in the streamlining process:

3) Information required in an Interconnection Request under this process and any changes needed to file Application Forms;

To capture the information required in the interconnection request under this new process for non-exporting storage, PG&E herein proposes updates to its interconnection application form to identify eligible storage projects for expedited processing. PG&E has included a set of redlined changes to the interconnection application forms. Please refer to the attached forms 79-1174 and 79-1174-02 with changes marked on them. See the Tariff Changes section below for a description of the changes.

If these form changes are approved, PG&E will work to update the online modular application that targets specific topic areas arranged by technology and tariff program. This tool assures the applicant supplies the requisite field data, simplifying the application process and thereby avoiding application errors and reducing document handoffs.

Additionally, PG&E plans to revise the non-export interconnection agreement forms as an additional phase in the streamlining process. The goal would be to find ways to simplify the forms for this specific project type. PG&E plans to submit these new

² The Independently Owned Utilities (IOUs) include Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas and Electric Company.

³ *Modifications to Electric Rule 21 to Incorporate an Expedited Interconnection Process for Non-Exporting Storage, Pursuant to Decision 16-06-052 Attachment C*

⁴ *Supplemental: Modifications to Electric Rule 21 to Incorporate an Expedited Interconnection Process for Non-Exporting Storage, Pursuant to Decision 16-06-052 Attachment C*

agreement forms in a separate advice letter for Commission approval in the second quarter of 2017.

PG&E submits the included new interconnection agreement form accordingly.

New Interconnect Agreement Form for the Expedited Interconnection of Non-Export Storage

Attached is a new Interconnection Agreement Form 79-1192, titled *INTERCONNECTION AGREEMENT FOR NON-EXPORT STORAGE GENERATING FACILITIES 500kw or LESS* created out of existing form 79-978 - *Interconnection Agreement for Net Energy Metering of Solar or Wind Electric Generating Facilities of 1,000 Kilowatts or Less, Other Than Facilities of 30 Kilowatts or Less*.

The new interconnection agreement cites to the requirements of Rule 21 Sections N.1 and N.2 and removes interconnection agreement elements that would not be germane to the interconnection of eligible expedited non-export storage generating facilities 500 kw or less.

The filing would not increase any current rate or charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than July 13, 2017, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B23A
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-1448
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, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and 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

PG&E requests that this Tier 2 advice filing become effective on regular notice, July 23, 2017, which is 30 calendar days after the date of filing.

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 R. 11-09-011. 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 filings can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Erik Jacobson
Director, Regulatory Relations

Attachments

cc: Service List R. 11-09-011

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING 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: Contact Person: Yvonne Yang

ELC GAS Phone #: (415) 973-2094

PLC HEAT WATER E-mail: QXY1@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **5103-E**

Tier: **2**

Subject of AL: **Modifications to Electric Rule 21 to Enhance the Expedited Interconnection Storage Process for Non-Exporting Storage in Accordance with Advice 4941-E/E-A and Decision 16-06-052**

Keywords (choose from CPUC listing): Compliance

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.16-06-052

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: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: _____

Resolution Required? Yes No

Requested effective date: **July 23, 2017**

No. of tariff sheets: 3

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: New Electric Sample Form 79-1192 - Interconnection Agreement for Non-Export Storage Generating Facilities 500KW or Less

Service affected and changes proposed: N/A

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

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

California Public Utilities Commission

Energy Division

EDTariffUnit

505 Van Ness Ave., 4th Flr.

San Francisco, CA 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Erik Jacobson

Director, Regulatory Relations

c/o Megan Lawson

77 Beale Street, Mail Code B23A

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

Cal P.U.C. Sheet No.	Title of Sheet	
40703-E	Electric Sample Form No. 79-1192 Interconnection Agreement for Non-Export Storage Generating Facilities 500KW or Less Sheet 1	
40704-E	ELECTRIC TABLE OF CONTENTS Sheet 1	40230-E
40705-E	ELECTRIC TABLE OF CONTENTS Sheet 27	38236-E*



Electric Sample Form No. 79-1192 Sheet 1 (N)
Interconnection Agreement for Non-Export Storage Generating Facilities 500Kw or Less (N)

**Please Refer to Attached
Sample Form**

(Continued)

Advice	5103-E	Issued by	Date Filed	June 23, 2017
Decision	16-06-052	Robert S. Kenney Vice President, Regulatory Affairs	Effective Resolution	July 23, 2017



INTERCONNECTION AGREEMENT FOR NON-EXPORT STORAGE GENERATING FACILITIES 500KW or LESS

This **INTERCONNECTION AGREEMENT FOR NON-EXPORT STORAGE GENERATING FACILITIES 500kW or LESS** (Agreement) is entered into by and between _____, a _____,

_____, (Producer), and Pacific Gas and Electric Company (PG&E) a California Corporation. Producer and PG&E are sometimes also referred to in this Agreement jointly as "Parties" or individually as "Party." In consideration of the mutual promises and obligations stated in this Agreement and its attachments, the Parties agree as follows:

1. SCOPE AND PURPOSE

This Agreement provides for Producer to interconnect and operate a Non-Export Storage Generating Facility in parallel with PG&E's Distribution System to serve the electrical loads connected to the electric service account that PG&E uses to interconnect Producer's Generating Facility (or, where permitted under Section 218 of the California Public Utilities Code (PUC), the electric loads of an on-site or neighboring party lawfully connected to Producer's Generating Facility through Producer's circuits). To be eligible for interconnection using this agreement, Producer's Non-Export Energy Storage Generating Facility interconnection must satisfy the Fast Track Process technical review requirements of Rule 21 Section F.2 and all of the following requirements must be met:

1.1 The Producer must meet all the eligibility criteria described in Rule 21, Section N.1 for the expedited storage interconnection process, including:

- (a) Producer must have electronically submitted a completed Interconnection Request, including completing all application fields and submitting all supporting documentation necessary to facilitate the expedited review as required by Distribution Provider. Such documentation may include, but is not limited to, single line diagrams with specific details, manufacturer data sheets for proposed equipment, description of control systems, validation of the right to do business in the state, etc. PG&E shall clearly communicate these requirements as part of the application process. Producer shall select this process option in the Interconnection Request.
- (b) Producer's Interconnection Request must be eligible for, and select, the Fast Track Process, as described in Rule 21.
- (c) Producer's Interconnection Request must pass Fast Track Initial Review and not require any Interconnection Facilities, Distribution Upgrades or Network Upgrades to remain eligible under this Section. As such, Interconnection Requests that select the Cost Envelope Option are not eligible.

1.2 The Producer's Generating Facility must meet and adhere to all of the following criteria, per Rule 21 Section N.2

- (a) The Generating Facility must be comprised solely of the following specific categories of generation technology: Non-Exporting battery storage.
- (b) The Generating Facility must have an aggregate maximum inverter nameplate rating of no greater than 500 kW. There is no limitation on an energy storage device's kWh capacity rating.



- (c) The Generating Facility must be located behind an existing single retail meter and Point of Common Coupling with a single, clearly marked and accessible disconnect. No other Generators, other than isolated back-up Generators, may be at the same Point of Interconnection or Point of Common Coupling.
- (d) The Generating Facility must utilize Option 3 (Certified Non-Islanding Protection) or Option 4 (Relative Generating Facility Rating) to meet the non-export protection requirements of Screen I in Section G.1.i.
- (e) The Generating Facility must have a single or coordinated control system for all charging functions if utilizing multiple inverters. The control system must also ensure that there is no increase in the Interconnection Customer's existing peak load demand.
- (f) The Generating Facility must utilize only inverter-based, UL 1741 and UL 1741 SA-listed equipment. Additionally, all installed equipment must meet Distribution Provider's current electric service requirements with no violations or variances.

2. SUMMARY AND DESCRIPTION OF PRODUCER'S GENERATING FACILITY

- 2.1. A description of the Generating Facility, including a summary of its significant components and a single-line diagram showing the general arrangement of how Producer's Generating Facility and loads are interconnected with PG&E's Distribution System, are attached to and made a part of this Agreement. (Supplied by Producer as Appendix A).
- 2.2. Generating Facility identification number: _____ (Assigned by PG&E).
- 2.3. Producer's electric service account number: _____ (Assigned by PG&E).
- 2.4. Name and address used by PG&E to locate the electric service account used to interconnect the Generating Facility with PG&E's Distribution System:

Name: _____
Address: _____
City/Zip Code: _____

- 2.5. The Gross Nameplate Rating for the inverter of the Storage Generating Facility is: _____ kW.
- 2.6. The Net Nameplate Rating of the Generating Facility is _____ kW.
(must be 500 kW or less)
- 2.7. The expected annual energy production of the Generating Facility is _____ kWh.
- 2.8. The Generating Facility's expected date of Initial Operation is _____.
The expected date of Initial Operation shall be within two years of the date of this Agreement.

3. DOCUMENTS INCLUDED; DEFINED TERMS

- 3.1. This Agreement includes the following exhibits which are specifically incorporated herein and made a part of this Agreement.



Appendix A-	Description of Generating Facility and Single-Line Diagram (Supplied by Producer).
Appendix B-	Copies of Rules 2 and 21 and other selected rules and tariffs of PG&E (Supplied by PG&E).
Appendix C -	(Intentionally Left Blank)
Appendix D-	Operating Requirements for Energy Storage Device(s).

3.2. When initially capitalized, whether in the singular or in the plural, the terms used herein shall have the meanings assigned to them either in this Agreement or in PG&E's Rule 21, Section C.

4. TERM AND TERMINATION

4.1. This Agreement shall become effective as of the last date entered in Section 16, below. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:

- (a) The Parties agree in writing to terminate the Agreement.
- (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following the date the electric service account through which Producer's Generating Facility is interconnected to PG&E's Distribution System is closed or terminated.
- (c) At 12:01 A.M. on the 61st day after Producer or PG&E provides written Notice pursuant to Section 9 below to the other Party of Producer's or PG&E's intent to terminate this Agreement.

4.2. Producer may elect to terminate this Agreement pursuant to the terms of Section 4.1(c) for any reason. PG&E may elect to terminate this Agreement pursuant to the terms of Section 4.1(c) for one or more of the following reasons:

- (a) A change in applicable rules, tariffs, and regulations, as approved or directed by the Commission, or a change in any local, state or federal law, statute or regulation, either of which materially alters or otherwise affects PG&E's ability or obligation to perform PG&E's duties under this Agreement; or,
- (b) Producer fails to take all corrective actions specified in PG&E's Notice that Producer's Generating Facility is out of compliance with the terms of this Agreement within the time frame set forth in such Notice; or,
- (c) Producer fails to interconnect and operate the Generating Facility per the terms of this Agreement prior to 120 days after the date set forth in Section 2.9, above, as the Generating Facility's expected date of Initial Operation; or,
- (d) Producer abandons the Generating Facility. PG&E shall deem the Generating Facility to be abandoned if PG&E determines, in its sole opinion, the Generating Facility is non-operational and Producer does not provide a substantive response to PG&E Notice of its intent to terminate this Agreement as a result of Producer's apparent abandonment of the



Generating Facility affirming Producer's intent and ability to continue to operate the Generating Facility.

- 4.3. Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application to terminate this Agreement.
- 4.4. Any agreements attached to and incorporated into this Agreement shall terminate concurrently with this Agreement unless the Parties have agreed otherwise in writing.

5. GENERATING FACILITY, OPERATION AND CERTIFICATION REQUIREMENTS

- 5.1. The electric power produced by Producer's Generating Facility shall be used solely to serve electrical loads connected to the electric service account that PG&E uses to interconnect Producer's Generating Facility (or, where permitted under Section 218 of the PUC, the electric loads of an on-site or neighboring party lawfully connected to Producer's Generating Facility through Producer's circuits). Producer shall attempt in good faith to regulate the electric power output of Producer's Generating Facility so as to prevent the flow of electric energy from the Generating Facility to PG&E's electric system. Unless otherwise agreed upon in writing by the Parties, this Agreement does not provide for, nor otherwise require PG&E to receive, purchase, transmit, distribute, or store the electrical power produced by Producer's Generating Facility.
- 5.2. Given that the Producer's Generating Facility includes energy storage device(s), Distribution Provider may provide requirements that must be met by the Producer prior to initiating Parallel Operation with PG&E's Distribution System and throughout the term of this Agreement, including but not limited to the requirements set forth in Appendix D of this Agreement.

6. INTERCONNECTION FACILITIES

- 6.1. Producer and/or PG&E, as appropriate, shall provide Interconnection Facilities that adequately protect PG&E's Distribution System, personnel, and other persons from damage or injury, which may be caused by the operation of Producer's Generating Facility.
- 6.2. Producer shall be solely responsible for the costs, design, purchase, construction, operation, and maintenance of the Interconnection Facilities that Producer owns.
- 6.3. If the provisions of PG&E's Rule 21, or any other tariff or rule approved by the Commission, requires PG&E to own and operate a portion of the Interconnection Facilities, Producer and PG&E shall promptly execute an Special Facilities Agreement that establishes and allocates responsibility for the design, installation, operation, maintenance, and ownership of the Interconnection Facilities. This Special Facilities Agreement shall be attached to and made a part of this Agreement as Appendix C.



7. LIMITATION OF LIABILITY

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever.

8. INSURANCE

8.1. In connection with Producer's performance of its duties and obligations under this Agreement, Producer shall maintain, during the term of this Agreement, general liability insurance with a combined single limit of not less than:

- (a) Two million dollars (\$2,000,000) for each occurrence if the Gross Nameplate Rating of Producer's Generating Facility is greater than one hundred (100) kW;
- (b) One million dollars (\$1,000,000) for each occurrence if the Gross Nameplate Rating of Producer's Generating Facility is greater than twenty (20) kW and less than or equal to one hundred (100) kW; and
- (c) Five hundred thousand dollars (\$500,000) for each occurrence if the Gross Nameplate Rating of Producer's Generating Facility is twenty (20) kW or less.
- (d) Two hundred thousand dollars (\$200,000) for each occurrence if the Gross Nameplate Rating of Producer's Generating Facility is ten (10) kW or less and Producer's Generating Facility is connected to an account receiving residential service from PG&E.

Such general liability insurance shall include coverage for "Premises-Operations, Owners and Contractors Protective, Products/Completed Operations Hazard, Explosion, Collapse, Underground, Contractual Liability, and Broad Form Property Damage including Completed Operations."

- 8.2. The general liability insurance required in Section 8.1 shall, by endorsement to the policy or policies, (a) include PG&E as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that PG&E shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days' written notice to PG&E prior to cancellation, termination, alteration, or material change of such insurance.
- 8.3. If Producer's Generating Facility is connected to an account receiving residential service from PG&E and the requirement of Section 8.2(a) prevents Producer from obtaining the insurance required in Section 8.1, then upon Producer's written Notice to PG&E in accordance with Section 9.1, the requirements of Section 8.2(a) shall be waived.
- 8.4. Evidence of the insurance required in Section 8.2 shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by PG&E.



- 8.5. Producer agrees to furnish the required certificates and endorsements to PG&E prior to Initial Operation. PG&E shall have the right to inspect or obtain a copy of the original policy or policies of insurance.
- 8.6. If Producer is self-insured with an established record of self-insurance, Producer may comply with the following in lieu of Sections 8.1 through 8.4:
 - (a) Producer shall provide to, PG&E, at least thirty (30) calendar days prior to the date of Initial Operation, evidence of an acceptable plan to self-insure to a level of coverage equivalent to that required under Section 8.1.
 - (b) If Producer ceases to self-insure to the level required hereunder, or if Producer are unable to provide continuing evidence of Producer's ability to self-insure, Producer agrees to immediately obtain the coverage required under Section 8.1.
- 8.7. All insurance certificates, statements of self-insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance, if any, shall be made available to PG&E upon request.

9. NOTICES

- 9.1. Any written notice, demand, or request required or authorized in connection with this Agreement (Notice) shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:

If to PG&E: [Contact information to be supplied]

If to Producer: [Contact information to be supplied]

- 9.2. A Party may change its address for Notices at any time by providing the other Party Notice of the change in accordance with Section 9.1.
- 9.3. The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, and phone numbers may be communicated or revised by one Party's Notice to the other.

10. REVIEW OF RECORDS AND DATA

- 10.1. PG&E shall have the right to review and obtain copies of Producer's operations and maintenance records, logs, or other information such as, unit availability, maintenance outages, circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to Producer's Generating Facility or its interconnection with PG&E's Distribution System.



- 10.2. Producer authorizes to release to the California Energy Commission (CEC) information regarding Producer's facility, including customer name, location, size, and operational characteristics of the unit, as requested from time to time pursuant to the CEC's rules and regulations.

11. ASSIGNMENT

Producer shall not voluntarily assign its rights nor delegate its duties under this Agreement without PG&E's written consent. Any assignment or delegation Producer makes without PG&E's written consent shall not be valid. PG&E shall not unreasonably withhold its consent to Producer's assignment of this Agreement.

12. NON-WAIVER

None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.

13. GOVERNING LAW, JURISDICTION OF COMMISSION, INCLUSION OF PG&E's TARIFF SCHEDULES AND RULES

- 13.1. This Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
- 13.2. This Agreement shall, at all times, be subject to such changes or modifications by the Commission as it may from time to time direct in the exercise of its jurisdiction.
- 13.3. The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the Tariff Schedules and Rules applicable to the electric service provided by, PG&E, which Tariff Schedules and Rules are hereby incorporated into this Agreement by this reference.
- 13.4. Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.
- 13.5. In accordance with PG&E Advice Letter 4941-E-A, the provisions provided for in Rule 21 Section N and covered under this interconnection agreement are being implemented under a pilot approach with a July 1, 2017 through June 30, 2018 reporting period. As such, the provisions may be continued, modified and/or withdrawn as determined by the Commission.

14. AMENDMENT AND MODIFICATION

This Agreement can only be amended or modified in writing, signed by both Parties.



15. ENTIRE AGREEMENT

This Agreement, including any incorporated Tariff Schedules and rules, contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement or in the incorporated tariff schedules and rules.

16. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

BY:

(Producer's Company Name)

PACIFIC GAS AND ELECTRIC COMPANY

(Signature)

(Signature)

(Print Name)

(Print Name)

(Title)

(Title)

(Date)

(Date)



**APPENDIX A
DESCRIPTION OF GENERATING FACILITY
AND SINGLE-LINE DIAGRAM,
(Provided by Producer)**



APPENDIX B
RULES “2” AND “21”
(and any other Tariffs pertinent to the situation)
(Provided by PG&E)

(Note: PG&E's tariffs are included for reference only and shall at all times be subject to such changes or modifications by the Commission as the Commission may, from time to time, direct in the exercise of its jurisdiction.)



*Pacific Gas and
Electric Company®*

**INTERCONNECTION AGREEMENT FOR NON-EXPORT
STORAGE GENERATING FACILITIES 500KW or LESS**
— Appendix C —

APPENDIX C

(Intentionally Left Blank)



APPENDIX D

(If Applicable)

OPERATING REQUIREMENTS FOR ENERGY STORAGE DEVICE(S)

The following Operating Requirement(s) apply to the charging functions of the Generating Facility:

- Producer's storage device(s) will not consume power from Distribution Provider's Distribution System at any time.
- Producer's storage device(s) will not cause the Host Load to exceed its normal peak demand. Normal peak demand is defined as the highest amount of power required from the Distribution System by Producer's complete facilities without the influence or use of the energy storage device(s).
- To avoid upgrades or other technical mitigation items identified in the interconnection process, Producer has chosen the following Generating Facility operating constraint(s):

For the annual period between _____ [Month/Day] and _____ [Month/Day]

And during the hours of _____

The storage device(s) will consume no more than a total of _____ kW from the Distribution System.

This operating constraint voids the need for the following specific mitigation scope:

No other charging function limitation is required for this Generating Facility except the requirements above. Producer will be responsible for the costs of the corresponding upgrades or other technical mitigations if at any time the Producer elects to forego or violates the operating requirement.

Consistent with current load service Rules, Distribution Provider is not required to reserve capacity for load. Producer is responsible to contact the utility for any modification to its equipment or change in operations that may result in increased load demand per Electric Rule 3.C.

If any operating requirement is specified above, Distribution Provider reserves the right to ask for data at the 15-minute interval level at any time to verify that the operating requirement is being met. Distribution Provider will make such request via a written notice no more than once per calendar quarter. Producer must provide such data within 30 Calendar Days of the written request.

If the Generating Facility fails to adhere to the operating requirements at any time, it will be disconnected immediately in accordance with Rule 21 Section D.9 and not reconnected until an approved mitigation (e.g., supervising controls) is in place as determined by Distribution Provider.*



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**Pacific Gas and
Electric Company®**

San Francisco, California

Revised
Cancelling Revised

Cal. P.U.C. Sheet No. 40704-E
Cal. P.U.C. Sheet No. 40230-E

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

AT&T	Division of Ratepayer Advocates	Office of Ratepayer Advocates, Electricity Planning and Policy B
Albion Power Company	Don Pickett & Associates, Inc.	OnGrid Solar
Alcantar & Kahl LLP	Douglass & Liddell	Pacific Gas and Electric Company
Anderson & Poole	Downey & Brand	Praxair
Atlas ReFuel	Ellison Schneider & Harris LLP	Regulatory & Cogeneration Service, Inc.
BART	Evaluation + Strategy for Social Innovation	SCD Energy Solutions
Barkovich & Yap, Inc.	G. A. Krause & Assoc.	SCE
Bartle Wells Associates	GenOn Energy Inc.	SDG&E and SoCalGas
Braun Blaising McLaughlin & Smith, P.C.	GenOn Energy, Inc.	SPURR
Braun Blaising McLaughlin, P.C.	Goodin, MacBride, Squeri, Schlotz & Ritchie	San Francisco Water Power and Sewer
CENERGY POWER	Green Charge Networks	Seattle City Light
CPUC	Green Power Institute	Sempra Energy (SoCal Gas)
CalCom Solar	Hanna & Morton	Sempra Utilities
California Cotton Ginners & Growers Assn	ICF	SoCalGas
California Energy Commission	International Power Technology	Southern California Edison Company
California Public Utilities Commission	Intestate Gas Services, Inc.	Southern California Gas Company (SoCalGas)
California State Association of Counties	Kelly Group	Spark Energy
Calpine	Ken Bohn Consulting	Sun Light & Power
Casner, Steve	Leviton Manufacturing Co., Inc.	Sunshine Design
Center for Biological Diversity	Linde	Tecogen, Inc.
City of Palo Alto	Los Angeles County Integrated Waste Management Task Force	TerraVerde Renewable Partners
City of San Jose	Los Angeles Dept of Water & Power	TerraVerde Renewable Partners, LLC
Clean Power	MRW & Associates	Tiger Natural Gas, Inc.
Clean Power Research	Manatt Phelps Phillips	TransCanada
Coast Economic Consulting	Marin Energy Authority	Troutman Sanders LLP
Commercial Energy	McKenna Long & Aldridge LLP	Utility Cost Management
Cool Earth Solar, Inc.	McKenzie & Associates	Utility Power Solutions
County of Tehama - Department of Public Works	Modesto Irrigation District	Utility Specialists
Crossborder Energy	Morgan Stanley	Verizon
Crown Road Energy, LLC	NLine Energy, Inc.	Water and Energy Consulting
Davis Wright Tremaine LLP	NRG Solar	Wellhead Electric Company
Day Carter Murphy	Nexant, Inc.	Western Manufactured Housing Communities Association (WMA)
Defense Energy Support Center	ORA	YEP Energy
Dept of General Services	Office of Ratepayer Advocates	Yelp Energy