

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 5930E
As of December 21, 2020

Subject: Update to Pacific Gas and Electric Company's Bundled Procurement Plan Carbon Free Energy (Appendix P)

Division Assigned: Energy

Date Filed: 08-27-2020

Date to Calendar: 09-04-2020

Authorizing Documents: D1510031

Disposition:

Signed

Effective Date:

12-17-2020

Resolution Required: Yes

Resolution Number: E-5111

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Kimberly Loo

415-973-4587

PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov

August 27, 2020

Advice 5930-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Update to Pacific Gas and Electric Company's Bundled Procurement Plan – Carbon Free Energy (Appendix P)

Purpose

Pacific Gas and Electric Company (PG&E) requests California Public Utilities Commission (CPUC or Commission) approval to update its Bundled Procurement Plan (BPP) adopted in Commission Decision (D.) 15-10-031.¹ This BPP update includes revisions to Appendix P ("Carbon Free Energy").

Background

In D. 15-10-031, the Commission adopted the investor-owned utilities' proposed BPPs with modifications and required PG&E to submit a conformed copy of its BPP, which was submitted on December 10, 2015. Since then, PG&E has updated the BPP as needed when market conditions or electric portfolio changes necessitate modifying the BPP.

On December 2, 2019, PG&E filed Advice Letter 5705-E, in which PG&E introduced a new Appendix P to its BPP. Appendix P describes a process for PG&E to sell Carbon Free Energy (as defined therein) in 2019 and 2020 as an interim measure until the Commission provides longer term guidance on the disposition of such energy as part of the Power Charge Indifference Adjustment Phase 2 (PCIA) proceeding.

PG&E developed Appendix P (Carbon Free Energy) to address concerns raised by parties to the PCIA proceeding. PG&E solicited input from representatives from

¹ In D.15-10-031, the Commission adopted PG&E's proposed 2014 BPP with modifications and required PG&E to conform the BPP to incorporate modifications made in D.15-10-031 no later than 90 days after the effective date of D.15-10-031. PG&E filed its conformed BPP on December 10, 2015, via Advice 4750-E, and the Energy Division issued a disposition letter approving Advice 4750-E on June 15, 2016.

Community Choice Aggregators and Energy Service Providers. PG&E also presented this process to its Procurement Review Group on October 15, 2019.

Discussion

PG&E seeks revisions to its BPP to extend the Carbon Free Energy sales framework described in Appendix P to also allow for the sale of Carbon Free Energy generated in future years.² Given that longer term guidance on disposition of such energy has not yet been provided in the PCIA proceeding, the existing structure remains an equitable way to allocate Carbon Free Energy from PG&E's portfolio in the interim. PG&E seeks to execute such sales after making a single offer of Carbon Free Energy to all eligible counterparties in each delivery year covered under Appendix P.

PG&E also seeks to streamline the transaction process in light of its experience with the sale of Carbon Free Energy generated in 2020. Specifically PG&E removes references to a two period offer of Carbon Free Energy. PG&E proposes to only sell Carbon Free Energy generated during the period beginning no earlier than date on which a sales transaction is executed and ending on December 31 of that particular year. Through this advice letter, PG&E seeks to continue its existing sales framework for delivery year 2021 and to have the option to do so in delivery years 2022 and 2023 as well. If PG&E elects to continue its existing sales framework for delivery years 2022 and 2023, PG&E will submit a Tier 1 Advice Letter to the CPUC on or before December 31 of the year preceding the applicable delivery year. If PG&E offers to sell the Carbon Free Energy in a particular year, it will do so once per year for the Carbon Free Energy produced during the following year. PG&E also proposes to simplify the transaction process by removing the need for Eligible LSEs to provide a formal written acceptance of PG&E's offer of Carbon Free Energy. Instead, PG&E proposes that offers will be deemed accepted upon the execution of a binding confirmation of the transaction.

Finally, PG&E makes a handful of editorial changes to the Appendix as detailed in the attached redline.

Attachments

Attachment A

Redline Edits, BPP (Appendix P)

Attachment B

Clean BPP (Appendix P)

² PG&E's deletions of references to delivery years 2019 and 2020 throughout Appendix P and edits to Section A of Appendix P effectively permit PG&E to continue its existing sales framework for delivery years 2021, 2022, and 2023. PG&E will be obligated to make sales of Carbon Free Energy generated in delivery year 2021 in accordance with Appendix P. PG&E may also elect to make sales of Carbon Free Energy generated in delivery years 2022 and 2023 in accordance with Appendix P by submitting a Tier 1 Advice Letter with the CPUC by December 31st of the year preceding the applicable delivery year. If PG&E does not elect to submit such a Tier 1 Advice Letter by December 31st of the year preceding the delivery year, Appendix P will not be in effect for that delivery year.

Protests

*****Due to the COVID-19 pandemic and the shelter at home orders, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com*****

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than September 16, 2020, 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 B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
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 3 advice filing become effective upon Commission approval and respectfully seeks such approval no later than October 31, 2020. Expedited consideration of this Tier 3 advice filing is warranted in order to support PG&E's efforts to continue sales of Carbon Free Energy under Appendix P in 2021 and beyond. It is important to the best interests of PG&E's customers that the Commission act on this advice filing promptly.

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.16-02-007 and R.20-05-003. 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 filings can also be accessed electronically at: <http://www.pge.com/tariffs/>.

_____/S/

Erik Jacobson
Director, Regulatory Relations

Attachments

cc: Service List R.16-02-007, R.20-05-003



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 U39E)

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) #: 5930-E

Tier Designation: 3

Subject of AL: Update to Pacific Gas and Electric Company's Bundled Procurement Plan – Carbon Free Energy (Appendix P)

Keywords (choose from CPUC listing): Compliance, Procurement

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

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.15-10-031

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:

No. of tariff sheets: 0

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: N/A

Service affected and changes proposed¹: N/A

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

¹Discuss in AL if more space is needed.

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

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Clear Form

PACIFIC GAS AND ELECTRIC COMPANY

Attachment A

PUBLIC Redline Version, BPP Sheets



Pacific Gas and Electric Company
San Francisco, California

Cal. P.U.C. Sheet No.
Pacific Gas and Electric Company
2014 Bundled Procurement Plan

APPENDIX P

CARBON FREE ENERGY

Issued by
Robert Kenney
Senior Vice President
Regulatory Affairs

Date Filed _____
Effective _____
Resolution No. _____



A. Introduction/Background

Appendix P describes the standards and criteria for Pacific Gas and Electric Company's (PG&E's) management and sales of energy from large hydroelectric¹ or nuclear resources from PG&E's portfolio (Carbon Free Energy). Appendix P will guide PG&E's actions with respect to sales of Carbon Free Energy ~~generated in calendar years 2019 and 2020~~. PG&E will submit Appendix P Carbon Free Energy transactions in the Quarterly Compliance Report (BPP Section IV Line No. 4) to demonstrate compliance with this Appendix P. PG&E will make sales of Carbon Free Energy generated in delivery year 2021 in accordance with the standards and criteria in Appendix P. PG&E may elect to make sales of Carbon Free Energy generated in delivery years 2022 and 2023 in accordance with the standards and criteria in Appendix P by submitting a Tier 1 Advice Letter with the CPUC. If PG&E does not elect to submit such a Tier 1 Advice Letter by December 31st of the year preceding the applicable delivery year, Appendix P will not be in effect for that delivery year, and PG&E will not make sales of Carbon Free Energy generated in that delivery year.

B. Overview of Carbon Free Energy

This section provides a description of the processes and activities for PG&E's intended sales of its Carbon Free Energy ~~generated in calendar years 2019 and 2020~~. These processes and activities include: (1) Product Definitions; (2) Allocation Methodology; (3) Commercial Processes; (4) Transaction Description; and (5) Resource Listing.

¹ Large hydroelectric is defined in the CEC's Power Source Disclosure Program Regulations at CCR Title 20, Section 1391(k).



1. Product Definitions

- a. **Allocation Amount** is defined as the amount of Carbon Free Energy generated from facilities identified in “Section 5 Resource Listing” corresponding to each Eligible LSE’s Allocation Ratio.
- b. **Allocation Ratio** is defined as the Eligible LSE’s monthly load forecast for Power Charge Indifference Adjustment (PCIA)-paying customers responsible for the costs of these Resources according to PG&E’s ERRR Forecast Application (refer to BPP Section IV Line No. 5) compared to the total forecasted load for PCIA-paying customers responsible for the costs of the Resources.
- c. **Confirmed LSE** is defined as an Eligible LSE that accepts PG&E’s offer of an Allocated Amount of Carbon Free Energy and executes a confirmation with PG&E for all or a portion of the Allocated Amount of Carbon Free Energy.
- d. **Eligible LSE** is defined as a Load Serving Entity (LSE) (as defined in the CAISO Tariff) that (1) has forecasted load identified in PG&E’s ERRR Forecast Application for the calendar year in which the Allocation Amount is accepted; and (2) that serves customers who pay the PCIA departing load charges for the above market costs of Resources.
- e. **Resource(s)** is defined as one or more of the facilities in the Resource Pools.
- f. **Resource Pool(s)** are defined as the two groups of eligible facilities aggregated and indicated as either large hydroelectric (one Resource Pool) or nuclear facilities (the second Resource Pool), as outlined in Section 5 Resource Listing.

2. Allocation Methodology

The Allocation Amount offered to Eligible LSEs will be reflected in Megawatt Hours based on the LSE’s Allocation Ratio multiplied by the amount of Carbon Free



Energy delivered monthly during the immediately preceding year on a per Resource basis. An example calculation for the 2019 Allocation Ratio and Allocation Amount for the Kerckhoff Power House 2 is provided below in Tables 1 and 2, respectively.

Table 1: Allocation Ratio Example

Monthly Allocation Ratio = Monthly Forecasted Eligible LSE Load / Monthly Forecasted PCIA Eligible Load.

	(a)	(b)	(c)
	Monthly Forecasted Eligible LSE Load (GWh)	Monthly Forecasted PCIA Eligible Load (GWh)	Monthly Allocation Ratio (%) Eligible LSE (a) / (b)
January	500	12,000	4.17%
February	500	12,000	4.17%
March	500	12,000	4.17%
April	700	12,000	5.83%
May	700	12,500	5.60%
June	700	13,000	5.38%
July	700	13,000	5.38%
August	700	14,000	5.00%
September	800	14,000	5.71%
October	800	14,000	5.71%
November	800	12,000	6.67%
December	800	11,000	7.27%

Table 2: Allocation Amount Example

Allocation Amount = Monthly Allocation Ratio x Monthly Generation during the immediately preceding year from a Resource within a Resource Pool selected by the Eligible LSE.



Example Large Hydroelectric Unit: Kerckhoff Power House 2 ²			
	(a)	(b)	(c)
	Monthly Delivered Energy (2018 / MWh)	Monthly Allocation Ratio (%) Eligible LSE	Monthly Allocation Amount (2018 / MWh) (a) * (b)
January	13,585	4.17%	566
February	6,472	4.17%	270
March	12,643	4.17%	527
April	64,294	5.83%	3,750
May	73,627	5.60%	4,123
June	48,974	5.38%	2,637
July	44,352	5.38%	2,388
August	28,613	5.00%	1,431
September	25,122	5.71%	1,436
October	102	5.71%	6
November	532	6.67%	35
December	8,949	7.27%	651

An Eligible LSE Allocation Ratio will not change during the course of the year it is determined.³ The quantities of Carbon Free Energy for sale will be generated from the first delivery date under a sales confirmation through December 31 of the relevant delivery year (an Allocation Period).

² Kerckhoff PH 2 data is sourced from the CEC's QFER CEC-1304 Power Plant Owner Reporting Database.

~~³ For the 2019 Allocation Ratio, PG&E will use the 2018 ERRA Forecast Application.~~



~~The quantities of Carbon Free Energy for sale will be offered in two categories (each an Allocation Period):~~

~~Period A:~~ represents quantities of Carbon Free Energy generated from January 1, 2019 through the day before the first delivery date under a sales confirmation.

~~Period B:~~ represents quantities of Carbon Free Energy generated from the first delivery date under a sales confirmation through December 31, 2020.

~~Quantities of Carbon Free Energy generated in Period A may not be acceptable to the CEC for PCL purposes and therefore PG&E sales of such quantities of Carbon Free Energy for such time period would be contingent on whether the CEC permits such sales for PCL reporting purposes (CEC Permission). PG&E and CalCCA requested that the CEC consider such CEC Permission in comments filed on October 28, 2019.⁴ If the CEC does not accept the proposed treatment of Period A by May 15, 2020, Period A quantities will remain with PG&E for PCL reporting purposes.~~

3. Commercial Process

This section provides an overview of the commercial process in which PG&E intends to sell Carbon Free Energy. PG&E will offer ~~(Offer)~~ to each Eligible LSE their respective Allocation Ratio which will correspond to an Allocation Amount of Carbon Free Energy generated ~~during calendar years 2019 and 2020~~ from the Resource Pools.

⁴PG&E recommended language in 10/28/19 comments: “Specified purchases shall be documented through purchase agreements executed prior to generation of the purchased electricity, except that purchases of generation from in-state or dynamically scheduled large hydroelectric and nuclear resources in 2019 and 2020 may be documented after the generation of the electricity when a retail supplier whose customers are paying for such resources through the California Public Utilities Commission approved Power Charge Indifference Adjustment elects to show such in-state large hydroelectric or nuclear resources following a CPUC approval of a mechanism for allocating such resources.”
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=230401&DocumentContentId=61959>



The quantities of Carbon Free Energy for sale will be offered once per delivery year.
PG&E will make the quantities of Carbon Free Energy for delivery years 2021, 2022, and
2023 available to Eligible LSEs on an annual basis.~~The Offer will be a one-time event~~
~~following the CPUC's approval of Appendix P with such date of Offer referred to as the~~
~~"Offer Date". Within thirty (30) days following the Offer Date (Offer Response Due~~
~~Date) each Eligible LSE must accept or reject in writing to PG&E its respective Offer of~~
~~the Allocation Ratio and corresponding Allocation Amounts along with, if accepting,~~
~~their choice of one or both of the Resource Pools for Carbon Free Energy.~~

~~In the event an Eligible LSE does not accept or reject in writing the Offer by the~~
~~Offer Response Date, then such non-response will be deemed a rejection by the Eligible~~
~~LSE. In the case of a non-response or a rejection on the part of an Eligible LSE, PG&E~~
~~shall have no obligation to offer such Allocation Amount and PG&E will retain such~~
~~Allocation Amount.~~

Within ~~thirty-five~~ (3015) ~~calendar~~ business days following the ~~Offer Response~~
~~Due Date~~, PG&E and each Eligible LSE which has accepted the ~~Offer~~ and selected the
Resource Pool(s) shall enter into a confirmation to the EEI Master Purchase and Sale
Agreement (Sales Agreement) to reflect the sale of such Carbon Free Energy as reflected
in the ~~Offer~~. Offers will be deemed accepted upon execution of a binding confirmation
of the transaction.

Following ~~acceptance of an Offer and~~ an executed Sales Agreement between an
Eligible LSE and PG&E, the Eligible LSE transaction will be considered confirmed,
~~subject to the CEC Permission,~~ as applicable to the Allocation Period (Confirmed LSE



Transaction Date). Following the Confirmed LSE Transaction Date, PG&E shall provide each Confirmed LSE with an estimate of its quarterly Allocation Amount at approximately fifty-five (55) ~~calendar~~-business days after each calendar quarter and shall commence sales of the Carbon Free Energy to the Confirmed LSEs pursuant to their Sales Agreement.

On or about each May 15th following the most recent calendar year end, PG&E will notify the Confirmed LSE in writing of actual, finalized Allocation Amount of Carbon Free Energy delivered to each Confirmed LSE from the Resource Pool(s) selected by the Confirmed LSE. After delivery of finalized Allocation Amounts to each LSE, PG&E will notify the CEC pursuant to the then current CEC Power Source Disclosure Program regulations of the sale of the Carbon Free Energy to the respective Confirmed LSE for purposes of Power Content Label (PCL) reporting on or before the annual reporting deadline.

4. Transaction Description

PG&E will only sell Carbon Free Energy to a Confirmed LSE pursuant to a Sales Agreement. PG&E will not post collateral or performance assurance for any sale of Carbon Free Energy to a Confirmed LSE and will not require a Confirmed LSE to post collateral or performance assurance for such transaction.

PG&E's ~~offer~~ to each Eligible LSE is in exchange for the following consideration from each Eligible LSE:

- a. Agreement that the sale and delivery of the Carbon Free Energy is a reasonable manner to manage disposition of the Carbon Free Energy; and



- b. Agreement to waive its ability to make petitions, arguments, or filings to the CPUC or the California Legislature asserting that PG&E has not offered any allocation, sale, or transfer of Carbon Free Energy or environmental attributes associated with such Carbon Free Energy for the Delivery Period of the Sales Agreement~~in which the Eligible LSE accepts the Offer.~~

5. Resource Listing

In executing the Sales Agreement~~accepting an Offer~~, Eligible LSEs may select one or both Resource Pools (i.e. nuclear and/or large hydroelectric), which Resource Pools are comprised of the Resources- identified below. The list of Resources in the Resource Pools may be modified by PG&E upon by submitting a Tier 1 Advice Letter ~~filing~~ with the CPUC.

#	Facility Name	Fuel Type	EIA ID
1	Diablo Canyon #1 Gen	NUCLEAR	6099
2	Diablo Canyon #2 Gen	NUCLEAR	6099
3	Balch #1 PH	LARGE HYDRO	217
4	Balch #2 PH	LARGE HYDRO	218
5	Belden	LARGE HYDRO	219
6	Bucks Creek	LARGE HYDRO	220
7	Butt Valley	LARGE HYDRO	221
8	Caribou 1	LARGE HYDRO	222
9	Caribou 2	LARGE HYDRO	223
10	Cresta	LARGE HYDRO	231
11	Drum #1	LARGE HYDRO	235
12	Drum # 2	LARGE HYDRO	236
13	Electra	LARGE HYDRO	239
14	Haas	LARGE HYDRO	240
15	James B Black	LARGE HYDRO	249
16	Kerckhoff #2 PH	LARGE HYDRO	682
17	Kings River	LARGE HYDRO	254



18	Pit 1	LARGE HYDRO	265
19	Pit 3	LARGE HYDRO	266
20	Pit 4	LARGE HYDRO	267
21	Pit 5	LARGE HYDRO	268
22	Pit 6	LARGE HYDRO	269
23	Pit 7	LARGE HYDRO	270
24	Poe	LARGE HYDRO	272
25	Rock Creek	LARGE HYDRO	275
26	Salt Springs	LARGE HYDRO	279
27	Stanislaus	LARGE HYDRO	285
28	Tiger Creek	LARGE HYDRO	287
29	SOUTH FEATHER WATER AND POWER AGENCY (Woodleaf and Forbestown)	LARGE HYDRO	417 <u>419</u>
30	NID-CHICAGO PARK	LARGE HYDRO	412

PACIFIC GAS AND ELECTRIC COMPANY

Attachment B

PUBLIC Clean Version, BPP Sheets



Pacific Gas and Electric Company
San Francisco, California

Cal. P.U.C. Sheet No.
Pacific Gas and Electric Company
2014 Bundled Procurement Plan

APPENDIX P

CARBON FREE ENERGY

Issued by
Robert Kenney
Senior Vice President
Regulatory Affairs

Date Filed _____
Effective _____
Resolution No. _____



A. Introduction/Background

Appendix P describes the standards and criteria for Pacific Gas and Electric Company's (PG&E's) management and sales of energy from large hydroelectric¹ or nuclear resources from PG&E's portfolio (Carbon Free Energy). Appendix P will guide PG&E's actions with respect to sales of Carbon Free Energy. PG&E will submit Appendix P Carbon Free Energy transactions in the Quarterly Compliance Report (BPP Section IV Line No. 4) to demonstrate compliance with this Appendix P. PG&E will make sales of Carbon Free Energy generated in delivery year 2021 in accordance with the standards and criteria in Appendix P. PG&E may elect to make sales of Carbon Free Energy generated in delivery years 2022 and 2023 in accordance with the standards and criteria in Appendix P by submitting a Tier 1 Advice Letter with the CPUC. If PG&E does not elect to submit such a Tier 1 Advice Letter by December 31st of the year preceding the applicable delivery year, Appendix P will not be in effect for that delivery year, and PG&E will not make sales of Carbon Free Energy generated in that delivery year.

B. Overview of Carbon Free Energy

This section provides a description of the processes and activities for PG&E's intended sales of its Carbon Free Energy. These processes and activities include: (1) Product Definitions; (2) Allocation Methodology; (3) Commercial Processes; (4) Transaction Description; and (5) Resource Listing.

¹ Large hydroelectric is defined in the CEC's Power Source Disclosure Program Regulations at CCR Title 20, Section 1391(k).



1. Product Definitions

- a. **Allocation Amount** is defined as the amount of Carbon Free Energy generated from facilities identified in “Section 5 Resource Listing” corresponding to each Eligible LSE’s Allocation Ratio.
- b. **Allocation Ratio** is defined as the Eligible LSE’s monthly load forecast for Power Charge Indifference Adjustment (PCIA)-paying customers responsible for the costs of these Resources according to PG&E’s ERRA Forecast Application (refer to BPP Section IV Line No. 5) compared to the total forecasted load for PCIA-paying customers responsible for the costs of the Resources.
- c. **Confirmed LSE** is defined as an Eligible LSE that accepts PG&E’s offer of an Allocated Amount of Carbon Free Energy and executes a confirmation with PG&E for all or a portion of the Allocated Amount of Carbon Free Energy.
- d. **Eligible LSE** is defined as a Load Serving Entity (LSE) (as defined in the CAISO Tariff) that (1) has forecasted load identified in PG&E’s ERRA Forecast Application for the calendar year in which the Allocation Amount is accepted; and (2) that serves customers who pay the PCIA departing load charges for the above market costs of Resources.
- e. **Resource(s)** is defined as one or more of the facilities in the Resource Pools.
- f. **Resource Pool(s)** are defined as the two groups of eligible facilities aggregated and indicated as either large hydroelectric (one Resource Pool) or nuclear facilities (the second Resource Pool), as outlined in Section 5 Resource Listing.

2. Allocation Methodology

The Allocation Amount offered to Eligible LSEs will be reflected in Megawatt Hours based on the LSE’s Allocation Ratio multiplied by the amount of Carbon Free



Energy delivered monthly during the immediately preceding year on a per Resource basis. An example calculation for the 2019 Allocation Ratio and Allocation Amount for the Kerckhoff Power House 2 is provided below in Tables 1 and 2, respectively.

Table 1: Allocation Ratio Example

Monthly Allocation Ratio = Monthly Forecasted Eligible LSE Load / Monthly Forecasted PCIA Eligible Load.

	(a)	(b)	(c)
	Monthly Forecasted Eligible LSE Load (GWh)	Monthly Forecasted PCIA Eligible Load (GWh)	Monthly Allocation Ratio (%) Eligible LSE (a) / (b)
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February	500	12,000	4.17%
March	500	12,000	4.17%
April	700	12,000	5.83%
May	700	12,500	5.60%
June	700	13,000	5.38%
July	700	13,000	5.38%
August	700	14,000	5.00%
September	800	14,000	5.71%
October	800	14,000	5.71%
November	800	12,000	6.67%
December	800	11,000	7.27%

Table 2: Allocation Amount Example

Allocation Amount = Monthly Allocation Ratio x Monthly Generation during the immediately preceding year from a Resource within a Resource Pool selected by the Eligible LSE.



Example Large Hydroelectric Unit: Kerckhoff Power House 2 ²			
	(a)	(b)	(c)
	Monthly Delivered Energy (2018 / MWh)	Monthly Allocation Ratio (%) Eligible LSE	Monthly Allocation Amount (2018 / MWh) (a) * (b)
January	13,585	4.17%	566
February	6,472	4.17%	270
March	12,643	4.17%	527
April	64,294	5.83%	3,750
May	73,627	5.60%	4,123
June	48,974	5.38%	2,637
July	44,352	5.38%	2,388
August	28,613	5.00%	1,431
September	25,122	5.71%	1,436
October	102	5.71%	6
November	532	6.67%	35
December	8,949	7.27%	651

An Eligible LSE Allocation Ratio will not change during the course of the year it is determined. The quantities of Carbon Free Energy for sale will be generated from the first delivery date under a sales confirmation through December 31 of the relevant delivery year (an Allocation Period).

² Kerckhoff PH 2 data is sourced from the CEC's QFER CEC-1304 Power Plant Owner Reporting Database.



3. Commercial Process

This section provides an overview of the commercial process in which PG&E intends to sell Carbon Free Energy. PG&E will offer to each Eligible LSE their respective Allocation Ratio which will correspond to an Allocation Amount of Carbon Free Energy generated from the Resource Pools. The quantities of Carbon Free Energy for sale will be offered once per delivery year. PG&E will make the quantities of Carbon Free Energy for delivery years 2021, 2022, and 2023 available to Eligible LSEs on an annual basis.

Within thirty (30) business days following the offer, PG&E and each Eligible LSE which has accepted the offer and selected the Resource Pool(s) shall enter into a confirmation to the EEI Master Purchase and Sale Agreement (Sales Agreement) to reflect the sale of such Carbon Free Energy as reflected in the offer. Offers will be deemed accepted upon execution of a binding confirmation of the transaction.

Following an executed Sales Agreement between an Eligible LSE and PG&E, the Eligible LSE transaction will be considered confirmed, as applicable to the Allocation Period (Confirmed LSE Transaction Date). Following the Confirmed LSE Transaction Date, PG&E shall provide each Confirmed LSE with an estimate of its quarterly Allocation Amount at approximately fifty-five (55) business days after each calendar quarter and shall commence sales of the Carbon Free Energy to the Confirmed LSEs pursuant to their Sales Agreement.

On or about each May 15th following the most recent calendar year end, PG&E will notify the Confirmed LSE in writing of actual, finalized Allocation Amount of Carbon Free Energy delivered to each Confirmed LSE from the Resource Pool(s) selected



by the Confirmed LSE. After delivery of finalized Allocation Amounts to each LSE, PG&E will notify the CEC pursuant to the then current CEC Power Source Disclosure Program regulations of the sale of the Carbon Free Energy to the respective Confirmed LSE for purposes of Power Content Label (PCL) reporting on or before the annual reporting deadline.

4. Transaction Description

PG&E will only sell Carbon Free Energy to a Confirmed LSE pursuant to a Sales Agreement. PG&E will not post collateral or performance assurance for any sale of Carbon Free Energy to a Confirmed LSE and will not require a Confirmed LSE to post collateral or performance assurance for such transaction.

PG&E's offer to each Eligible LSE is in exchange for the following consideration from each Eligible LSE:

- a. Agreement that the sale and delivery of the Carbon Free Energy is a reasonable manner to manage disposition of the Carbon Free Energy; and
- b. Agreement to waive its ability to make petitions, arguments, or filings to the CPUC or the California Legislature asserting that PG&E has not offered any allocation, sale, or transfer of Carbon Free Energy or environmental attributes associated with such Carbon Free Energy for the Delivery Period of the Sales Agreement.

5. Resource Listing

In executing the Sales Agreement, Eligible LSEs may select one or both Resource Pools (i.e. nuclear and/or large hydroelectric), which Resource Pools are comprised of the



Resources- identified below. The list of Resources in the Resource Pools may be modified by PG&E by submitting a Tier 1 Advice Letter with the CPUC.

#	Facility Name	Fuel Type	EIA ID
1	Diablo Canyon #1 Gen	NUCLEAR	6099
2	Diablo Canyon #2 Gen	NUCLEAR	6099
3	Balch #1 PH	LARGE HYDRO	217
4	Balch #2 PH	LARGE HYDRO	218
5	Belden	LARGE HYDRO	219
6	Bucks Creek	LARGE HYDRO	220
7	Butt Valley	LARGE HYDRO	221
8	Caribou 1	LARGE HYDRO	222
9	Caribou 2	LARGE HYDRO	223
10	Cresta	LARGE HYDRO	231
11	Drum #1	LARGE HYDRO	235
12	Drum # 2	LARGE HYDRO	236
13	Electra	LARGE HYDRO	239
14	Haas	LARGE HYDRO	240
15	James B Black	LARGE HYDRO	249
16	Kerckhoff #2 PH	LARGE HYDRO	682
17	Kings River	LARGE HYDRO	254
18	Pit 1	LARGE HYDRO	265
19	Pit 3	LARGE HYDRO	266
20	Pit 4	LARGE HYDRO	267
21	Pit 5	LARGE HYDRO	268
22	Pit 6	LARGE HYDRO	269
23	Pit 7	LARGE HYDRO	270
24	Poe	LARGE HYDRO	272
25	Rock Creek	LARGE HYDRO	275
26	Salt Springs	LARGE HYDRO	279
27	Stanislaus	LARGE HYDRO	285
28	Tiger Creek	LARGE HYDRO	287
29	SOUTH FEATHER WATER AND POWER AGENCY (Woodleaf and Forbestown)	LARGE HYDRO	417 419
30	NID-CHICAGO PARK	LARGE HYDRO	412

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

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Redwood Coast Energy Authority
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	Regulatory & Cogeneration Service, Inc.
	Energy Management Service	SCD Energy Solutions
Alta Power Group, LLC	Engineers and Scientists of California	
Anderson & Poole		
Atlas ReFuel	GenOn Energy, Inc.	SCE
BART	Goodin, MacBride, Squeri, Schlotz & Ritchie	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Green Power Institute	SPURR
California Cotton Ginners & Growers Assn	Hanna & Morton	San Francisco Water Power and Sewer
California Energy Commission	ICF	Seattle City Light
California Public Utilities Commission	IGS Energy	Sempra Utilities
California State Association of Counties	International Power Technology	Southern California Edison Company
Calpine	Intestate Gas Services, Inc.	Southern California Gas Company
	Kelly Group	Spark Energy
Cameron-Daniel, P.C.	Ken Bohn Consulting	Sun Light & Power
Casner, Steve	Keyes & Fox LLP	Sunshine Design
Cenergy Power	Leviton Manufacturing Co., Inc.	Tecogen, Inc.
Center for Biological Diversity		TerraVerde Renewable Partners
		Tiger Natural Gas, Inc.
Chevron Pipeline and Power	Los Angeles County Integrated	TransCanada
City of Palo Alto	Waste Management Task Force	Troutman Sanders LLP
	MRW & Associates	Utility Cost Management
City of San Jose	Manatt Phelps Phillips	Utility Power Solutions
Clean Power Research	Marin Energy Authority	Water and Energy Consulting Wellhead
Coast Economic Consulting	McKenzie & Associates	Electric Company
Commercial Energy		Western Manufactured Housing
Crossborder Energy	Modesto Irrigation District	Communities Association (WMA)
Crown Road Energy, LLC	NLine Energy, Inc.	Yep Energy
Davis Wright Tremaine LLP	NRG Solar	
Day Carter Murphy		
Dept of General Services	Office of Ratepayer Advocates	
Don Pickett & Associates, Inc.	OnGrid Solar	
Douglass & Liddell	Pacific Gas and Electric Company	
	Peninsula Clean Energy	