February 26, 2015

REVISED

Advice Letter 4580-E

Meredith Allen
Senior Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

SUBJECT: Compliance with Emissions Performance Standard for the Purchase of Excess Electricity from Efficient Combined Heat and Power Systems (Assembly Bill 1613 Contracts)

Dear Ms. Allen:

Advice Letter 4580-E is effective as of January 30, 2015.

Sincerely,

Edward Randolph
Director, Energy Division
January 30, 2015

Advice 4580-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Compliance with Emissions Performance Standard for the Purchase of Excess Electricity From Efficient Combined Heat and Power Systems (“Assembly Bill 1613 Contracts”)

Pacific Gas and Electric Company (“PG&E”) hereby submits to the California Public Utilities Commission (“CPUC” or “Commission”) a proposal for complying with the Emissions Performance Standard established in Decision (“D.”)07-01-039 when purchasing electricity from an eligible Combined Heat and Power (“CHP”) System selling its excess electricity to PG&E under a form power purchase agreement (“PPA”) approved by the Commission in accordance with its Assembly Bill (“AB”) 1613 Feed-in Tariff Program, codified at Public Utilities Code Section 2840.

I. Background

On February 9, 2012, the Commission, acting through the Director of the Energy Division, approved the “Standard and Simplified Contracts and Tariffs for the Purchase of Excess Electricity from Eligible Combined Heat and Power Systems” that PG&E submitted via Advice 3970-E in compliance with Resolution E-4424 and CPUC Decision D.10-12-055 (“AB 1613 Orders”). The Commission had issued the AB 1613 Orders pursuant to Assembly Bill (“AB”) 1613, which is now codified at Public Utilities Code section 2840 et seq. The CPUC-approved form PPAs are commonly referred to as “AB 1613 PPAs”.1

Under the AB 1613 PPA, generators may operate at capacity of 60 percent or above for a term of five or more years, so that the AB 1613 PPA constitutes a new long-term financial commitment with a baseload resource that is subject to the Emissions

1 The CPUC has approved three non-modifiable and non-negotiable PPAs for eligible CHP Facilities that meet PPA criteria for the following different sizes: a standard contract for CHP Facilities less that 20 megawatts (“MW”) in capacity, a simplified contract for CHP Facilities not greater than 5 MW in capacity, and a further simplified contract for CHP Facilities with a power rating less than 500 kw. The term of the agreement may be no less than one year and no more than ten years.
Performance Standard (“EPS”) established by D.07-01-039 (“EPS Decision”). The EPS provides that the net emissions rate of each baseload facility may not exceed 1,100 lbs of carbon dioxide (“CO2”) per megawatt hour (“MWh”).

Neither the EPS Decision nor the AB 1613 Orders require the Commission to make a specific finding that the AB 1613 PPA is in compliance with the EPS. On the other hand, the PPAs included as part of the Qualifying Facilities/Combined Heat and Power Settlement Agreement (“QF/CHP Settlement Agreement”) approved by D.12-10-035 must be found to comply with the EPS. On August 27, 2013, the Director of the Energy Division proposed a standard finding that a natural gas-fired cogeneration facility that meets the electrical and thermal output efficiency requirements of the Public Utility Regulatory Policies Act of 1978 (“PURPA”) as specified by 18 Code of Federal Regulations § 292.205 de facto meets the EPS standard of a maximum of 1,100 lbs of CO2 per MWh of generation. The proposal was circulated to various CPUC service lists related to the AB 1613 and QF/CHP Settlement proceedings for comment by September 20, 2013. Footnote 1 of Energy Division’s proposal acknowledges that AB 1613 Contracts are deemed to be EPS Compliant because the facility must first be certified by the California Energy Commission as being eligible for the AB 1613 program in order to qualify for an AB 1613 Contract. PG&E is not aware of any negative comments on this proposition and assumes that the Energy Division has now implemented the August 27, 2013 proposal.

Generators seeking to sign AB 1613 PPA with a term of five or more years must provide to Buyer documentation evidencing its compliance with the greenhouse gas EPS.

II. Documentation

The AB 1613 PPAs have received Commission pre-approval when the standard form contract is executed without modification, and no Commission finding of EPS compliance is required before deliveries may commence under these AB 1613 PPAs. PG&E will report newly executed AB 1613 PPAs in its Quarterly Compliance Report.

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2 D.10-12-055, Attachment 7, p. 4.
3 See, QF/CHP Settlement Agreement Term Sheet Sec. 4.10.4.1.
4 AB 1613 directs the California Energy Commission (“CEC”) to establish the technical and legal criteria for eligibility of CHP Systems to comply with the CPUC’s EPS standard. The CEC’s Guidelines for certification of CHP systems pursuant to AB 1613 can be found here: http://www.energy.ca.gov/2009publications/CEC-200-2009-016/CEC-200-2009-016-CMF-REV2.PDF. If the Executive Director of the CEC determines that the CHP System complies with these guidelines, the CHP System will receive a “Certificate of Initial Compliance.” To demonstrate ongoing compliance with the CEC guidelines, the facility must file a report of its technical performance by April 1 each year.
5 A copy of the Energy Division’s draft proposal dated August 27, 2013 is provided as Attachment 1 to this advice letter.
6 PG&E “Standard Contract for Eligible CHP Facilities,” Article One, Special Conditions.
advice letter. For eligible generators seeking to sign an AB 1613 PPA with a term of five or more years, PG&E’s provision of the CEC certification of an AB 1613 seller’s facilities as a CEC-Certified CHP System will constitute sufficient documentation that the AB 1613 PPA constitutes long term procurement of a baseload facility and complies with the EPS Decision.

Effective Date

PG&E requests that this Tier 1 advice filing be approved effective January 30, 2015.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or E-mail, no later than February 19, 2015, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division
EDTariffUnit
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 also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Meredith Allen
Senior Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

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 service list for R.13-12-010. 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/
Meredith Allen
Senior Director – Regulatory Relations

Attachment 1: Proposed Energy Division Process to Implement Section 4.10.4.3 of the QF/CHP Settlement and Issue Emissions Performance Standard (EPS) Compliance Letters, dated August 27, 2013

cc: Service List R.13-12-010
Damon Franz, Energy Division, CPUC
Jason Houck, Energy Division, CPUC
Amy Kochanowsky, Energy Division, CPUC
Yuliya Shmidt, Office of Ratepayer Advocates, CPUC
CALIFORNIA PUBLIC UTILITIES COMMISSION  
ADVICE LETTER FILING SUMMARY  
ENERGY UTILITY

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

<table>
<thead>
<tr>
<th>Company name/CPUC Utility No.</th>
<th>Pacific Gas and Electric Company (ID U39 E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility type:</td>
<td></td>
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<tr>
<td>☑ ELC</td>
<td>☐ GAS</td>
</tr>
<tr>
<td>☐ PLC</td>
<td>☑ HEAT</td>
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<tr>
<td>☐ WATER</td>
<td></td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Jennifer Wirowek</td>
</tr>
<tr>
<td>Phone #:</td>
<td>(415) 973-1419</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:J6ws@pge.com">J6ws@pge.com</a> and <a href="mailto:PGETariffs@pge.com">PGETariffs@pge.com</a></td>
</tr>
</tbody>
</table>

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

Advice Letter (AL) #: 4580-E  
Tier: 1
Subject of AL: Compliance with Emissions Performance Standard for the Purchase of Excess Electricity From Efficient Combined Heat and Power Systems (“Assembly Bill 1613 Contracts”)

Keywords (choose from CPUC listing): Contracts, Compliance
AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other
If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: __________________
Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No
Summarize differences between the AL and the prior withdrawn or rejected AL: __________________
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:  N/A
Resolution Required? ☐ Yes ☑ No
Requested effective date: January 30, 2015  
No. of tariff sheets: N/A
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 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: Meredith Allen  
Senior Director, Regulatory Relations  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177  
E-mail: PGETariffs@pge.com
August 27, 2013

RE: Proposed Energy Division Process to Implement Section 4.10.4.3 of the Qualifying Facility/Combined Heat and Power Program Settlement (QF/CHP Settlement) and Issue Emissions Performance Standard (EPS) Compliance Letters

Dear Parties Interested in and Affected Groups to the QF/CHP Settlement and the Emissions Performance Standard Proceeding (A.08-11-001; R.06-02-013; R.04-04-003; R.04-04-025; R.99-11-022; R.06-04-009; R.08-06-024:

I am writing to solicit your feedback about how Energy Division is proposing to implement Section 4.10.4.3 of the QF/CHP Settlement, which is relevant to affected parties of the Settlement as well as those interested in our ongoing implementation of the Emissions Performance Standard ("EPS") Decision (D.)07-01-039.

Section 4.10.4.3 of the QF/CHP Settlement establishes an atypical EPS compliance process for the pro-forma PPAs authorized in the Settlement that have terms equal to or greater than five years in length and that will not be submitted to the CPUC in a Tier 2 or Tier 3 Advice Letter: it requires investor-owned utilities ("IOUs") to use "reasonable efforts to obtain" an "EPS Compliance Letter" from Energy Division, and it provides that the IOUs "will not execute the applicable PPA until the CPUC Energy Division provides the EPS Compliance Letter.”

As a practical matter, the contracts affected by this Section are limited to two types of QF/CHP Settlement pro forma contracts without material modifications: the Standard Contract for Qualifying Facilities with a Power Rating Less than or Equal to 20 MW (the “PURPA ≤ 20 MW Contract”) and the Standard Contract for As-Available CHP Facilities ("Optional As-Available Contract"), if they are executed for a term equal to or greater than five years. These two types of contracts contain standard terms and conditions that the Commission has pre-approved. Absent the EPS compliance determination required by Section 4.10.4.3 of the Settlement, the IOUs would otherwise be allowed to execute and implement these contracts without additional review or approval by the Commission or Energy Division staff.1 All other contracts authorized in the Settlement will be submitted for approval via a Tier 2 or Tier 3 Advice Letter, which will allow the Commission and the public an opportunity to assess a QF/CHP facility’s compliance with the EPS.

1 A third type of pro-forma contract, the Assembly Bill 1613 CHP Feed-in-Tariff Contracts (“AB 1613 Contracts”), is deemed to be EPS Compliant, and therefore an additional letter of EPS Compliance from Energy Division is unnecessary. To qualify for an AB 1613 Contract, a facility must first be certified by the California Energy Commission (“CEC”) as eligible for the AB 1613 program. This certification of eligibility involves a finding by the CEC that the facility is compliant with the EPS, as required by Public Utilities Code §2843.
Importantly, each of these two affected pro forma contracts requires the QF/CHP Facility to either a) comply with the Qualifying Facility ("QF") definition established by the Federal Energy Regulatory Commission ("FERC") to implement the Public Utility Regulatory Policies Act ("PURPA") and other applicable requirements in 18 C.F.R. §292.204 or §292.205, which govern small power production facilities (renewable QFs) and qualifying cogeneration facilities (CHP QFs), respectively, during the term of the contract or b) receive a waiver from FERC exempting the facility from certain QF requirements.

Pacific Gas & Electric Company ("PG&E") recently presented to Energy Division staff information demonstrating that, for natural-gas fueled generation, the minimum system efficiency permitted for QFs under PURPA will always result in emissions less than the 1,100 lbs CO2/MWh permitted by the EPS. The lowest (and therefore potentially the most emissive) CHP efficiency permitted by PURPA is 42.5% for topping-cycle CHP facilities. According to this analysis, any natural-gas fueled CHP facility that meets the minimum PURPA QF efficiency standards (other than by waiver) will by definition also comply with the EPS. PG&E’s analysis of EPS compliance also addresses renewable QFs.

Energy Division has reviewed PG&E’s showing and is in agreement that any CHP facility that meets the minimum QF efficiency standards of 18 C.F.R. §292.205, and any renewable QF, will by definition also emit less than 1,100 lbs CO2/MWh, and therefore comply with the EPS. Attached to this letter are formulas that explain the relationship between PURPA QF minimum efficiency requirements and the EPS requirement that facilities with a contract term of five years and greater emit less than 1,100 lbs CO2/MWh.

Each of the two contracts affected by Section 4.10.4.3 of the QF/CHP Settlement requires that the facility meet the definition and other requirements of a qualifying facility set forth in 18 C.F.R. §292.205; thus, the facility will meet the required Emissions Performance Standard. I therefore propose that it is reasonable for Energy Division to issue two form EPS Compliance Letters, pursuant to Section 4.10.4.3 of the Settlement, 1) for renewable or non-base-load facilities that are deemed compliant pursuant to California Public Utilities Code §§ 8340 and 8341, and 2) for those natural gas fueled facilities that seek to execute either the PURPA ≤ 20 MW Contract or the Optional As-Available Contract without material modifications and that have not received a FERC waiver of the efficiency standards for qualifying facilities. Facilities that do not fit within one of these two categories will not be able to use a form EPS Compliance Letter and the utility must demonstrate to Energy Division that the facility is EPS compliant.

I would appreciate your feedback on the reasonableness of this proposal and the supporting attachments that explain the basis for Energy Division’s conclusions. Please provide your feedback via email to Jason Houck in the Energy Division (jason.houck@cpuc.ca.gov) by September 20, 2013.

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2 FERC has authority under 18 C.F.R. §292.205(c) to waive the efficiency standards set forth in 18 C.F.R. §292.205(a) and (b) for a particular facility. As a result, Energy Division’s form EPS Compliance Letter process only applies to facilities that have not been granted a waiver by FERC from these efficiency standards.
Edward Randolph  
August 27, 2013  
Page 3

Regards,

Edward Randolph  
Director, Energy Division  
California Public Utilities Commission

Attachments:
- Attachment A: Relationship Between the Emissions Performance Standard and PURPA QF Efficiency Requirements
- Attachment B: PURPA QF Efficiency and EPS Compliance (Spreadsheet)
- Attachment C: EPS Compliance Analysis for New Facilities (Spreadsheet)
- Attachment D-1: Draft Form Emissions Performance Standard Compliance Letter - Deemed Compliant Facilities
- Attachment D-2: Draft Form Emissions Performance Standard Compliance Letter -

Cc:  
Judith Ikle, CPUC  
Damon Franz, CPUC  
Jason Houck, CPUC  
Christine Hammond, CPUC
PG&E Gas and Electric  
Advice Filing List  
General Order 96-B, Section IV

AT&T  
Albion Power Company  
Alcantar & Kahl LLP  
Anderson & Poole  
BART  
Barkovich & Yap, Inc.  
Bartle Wells Associates  
Braun Blaisin McLaughlin, P.C.  
CENERGY POWER  
California Cotton Ginners & Growers Assn  
California Energy Commission  
California Public Utilities Commission  
California State Association of Counties  
Calpine  
Casner, Steve  
Center for Biological Diversity  
City of Palo Alto  
City of San Jose  
Clean Power  
Coast Economic Consulting  
Commercial Energy  
Cool Earth Solar, Inc.  
County of Tehama - Department of Public Works  
Crossborder Energy  
Davis Wright Tremaine LLP  
Day Carter Murphy  
Defense Energy Support Center  
Dept of General Services  
Division of Ratepayer Advocates  
Douglass & Liddell  
Downey & Brand  
Ellison Schneider & Harris LLP  
G. A. Krause & Assoc.  
GenOn Energy Inc.  
GenOn Energy, Inc.  
Goodin, MacBride, Squier, Schlotz & Ritchie  
Green Power Institute  
Hanna & Morton  
In House Energy  
International Power Technology  
Intestate Gas Services, Inc.  
K&L Gates LLP  
Kelly Group  
Linde  
Los Angeles County Integrated Waste Management Task Force  
Los Angeles Dept of Water & Power  
MRW & Associates  
Manatt Phelps Phillips  
Marin Energy Authority  
McKenna Long & Aldridge LLP  
McKenzie & Associates  
Modesto Irrigation District  
Morgan Stanley  
NLine Energy, Inc.  
NRG Solar  
Nexant, Inc.  
Occidental Energy Marketing, Inc.  
OnGrid Solar  
Pacific Gas and Electric Company  
Praxair  
Regulatory & Cogeneration Service, Inc.  
SCD Energy Solutions  
SCE  
SDG&E and SoCalGas  
SPURR  
Seattle City Light  
Sempra Utilities  
SoCalGas  
Southern California Edison Company  
Spark Energy  
Sun Light & Power  
Sunshine Design  
Tecogen, Inc.  
Tiger Natural Gas, Inc.  
TransCanada  
Utility Cost Management  
Utility Power Solutions  
Utility Specialists  
Verizon  
Water and Energy Consulting  
Wellhead Electric Company  
Western Manufactured Housing Communities Association (WMA)  
YEP Energy