

April 1, 2016

Advice 4814-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Pacific Gas and Electric Company's Proposed Updates to Greenhouse Gas Procurement Plan

Pacific Gas and Electric Company ("PG&E") hereby submits for filing proposed updates to its Greenhouse Gas ("GHG") Procurement Plan to reflect current market conditions.

Background

In D.15-10-031, the California Public Utilities Commission ("Commission" or "CPUC") adopted PG&E's 2014 BPP with modifications, and required PG&E to file a conformed copy of the BPP. The Conformed 2014 BPP was filed on December 10, 2015 in Advice Letter 4750-E, which is still pending at the Commission.

PG&E's GHG Procurement Plan, which is included as Appendix G to the 2014 BPP, contains a confidential GHG procurement strategy. PG&E is proposing to amend the GHG procurement strategy to better reflect recent market conditions and events related to the procurement of GHG compliance instruments. In Confidential Attachments 1 and 2 to this advice letter, PG&E provides a clean and redline version of the proposed GHG Procurement Plan (Appendix G) changes. Public Attachment 4 is a clean version of the proposed GHG Procurement Plan changes.¹ Finally, in Confidential Attachment 3, PG&E provides an explanation of the market conditions prompting the proposed changes and how these market conditions are addressed in the proposed changes.

If the Commission approves the Conformed 2014 BPP while this advice letter is pending, PG&E will simply include the modified GHG Procurement Plan into the 2014 BPP if this advice letter is approved.

¹ Because the proposed changes appear within the confidential sections of the GHG Procurement Plan, a redline of the redacted (public) version has not been included among the Attachments.

Attachments

Confidential Attachment 1	GHG Procurement Plan, Appendix G (Clean)
Confidential Attachment 2	GHG Procurement Plan, Appendix G (Redlined)
Confidential Attachment 3	Explanation of Changes
Public Attachment 4	Public version of GHG Procurement Plan, Appendix G (Clean)
Public Attachment 5	Confidentiality Declaration and Matrix

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than April 21, 2016, 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 B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
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.

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.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/

Erik Jacobson
Director, Regulatory Relations

Attachments

cc: Service List R.13-12-010

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:

ELC GAS
 PLC HEAT WATER

Contact Person: **Jennifer Wirowek**

Phone #: **(415) 973-1419**

E-mail: **J6ws@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) #: **4814-E**

Tier: **3**

Subject of AL: **Pacific Gas and Electric Company's Proposed Updates to Greenhouse Gas Procurement Plan**

Keywords (choose from CPUC listing): **Compliance, Procurement**

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

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: **Decision 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: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: Yes

Confidential information will be made available to those who have executed a nondisclosure agreement: Yes

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Maria Vanko Wilson (415) 973-5639

Resolution Required? Yes No

Requested effective date: **Upon Commission Approval**

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: Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

Attachment 4:

Public Version of PG&E Conformed Bundled Procurement Plan
Replacement Pages, Appendix G



APPENDIX G
GREENHOUSE GAS PROCUREMENT PLAN

PUBLIC



A. Background

1. California Air Resource Board's Cap-and-Trade Regulations

Assembly Bill ("AB") 32 is California's groundbreaking Greenhouse Gas ("GHG") legislation that requires the reduction of statewide GHG emissions to 1990 levels by 2020. To this end, the California Air Resources Board ("CARB") proposed a statewide Cap-and-Trade regulation and other programmatic measures, including a Renewables Energy Standard, Customer Energy Efficiency, and Combined Heat and Power, to achieve these emissions reductions. The Cap-and-Trade regulation, which became effective on January 1, 2012, is intended to establish a market-based price for GHG emissions and, over time, provide market signals for efficient resource utilization and procurement activities to reduce GHG emissions.

Compliance with the emissions cap established in the CARB Cap-and-Trade regulation began in 2013 and is broken up into three compliance periods. The first compliance period—for the years 2013 through 2014—began on January 1, 2013. Covered entities in the first compliance period include operators of any facility that annually emits at least 25,000 metric tons of carbon dioxide equivalent ("mtCO₂e").¹ Operators are required to obtain and surrender compliance instruments equivalent to the annual GHG emissions for each such facility. Importers of electricity into California are also responsible for obtaining and retiring compliance instruments for GHG emissions deemed to be associated with electricity imports for purposes of compliance with Cap-and-Trade.

¹ Units of GHG are typically measured in terms of mtCO₂e.



The second compliance period—for the years 2015 through 2017—is scheduled to commence on January 1, 2015. Beginning in the second compliance period, covered entities expand to include, among others, suppliers of natural gas that meet or exceed the 25,000 mtCO₂e threshold. A supplier of natural gas is required to obtain and surrender compliance instruments for every metric ton of CO₂e that would result from the full combustion or oxidation of all fuel delivered to end users in California, less the emissions associated with fuel that is delivered to its customers that are required to participate in the Cap-and-Trade Program (“covered entities”).

This plan only covers procurement activities necessary to comply with Pacific Gas and Electric Company’s (“PG&E”) obligations related to electric procurement. Additional procurement necessary to meet PG&E’s compliance obligations as a natural gas supplier and the associated cost recovery will be as authorized through California Public Utilities Commission (“CPUC” or “Commission”) Order Instituting Rulemaking (“R.”) 14-03-003 or subsequent Commission proceedings.

There are two types of compliance instruments:

- i. **Allowances** are limited tradable authorizations accepted by CARB to emit up to one mtCO₂e. Allowances are year-specific and can be used for an annual compliance filing for the year it was issued or for any subsequent compliance filing. An allowance can be bought, sold, transferred, or “banked” for use in a particular compliance period. Allowances are available via direct allocation² by CARB, auctions conducted under the

² According to the Cap-and-Trade regulation, the Investor-Owned Utilities (“IOU”) are required to consign 100 percent of their Electric Distribution Utility (“EDU”) directly allocated allowances to the auctions in the allocation year. An IOU cannot use a directly allocated EDU allowances to satisfy its compliance obligation.



auspices of CARB, and the Allowance Price Containment Reserve³ (“APCR”) established by CARB. CARB auctions are held quarterly. Allowances are also available in the market.

- ii. **Offset Credits** (“Offsets”) are tradable compliance instruments accepted by CARB that represent verified reductions of one mtCO₂e from projects whose emissions or avoided emissions are not from a source covered under the Cap-and-Trade Program. For compliance purposes, an Offset and an allowance are virtually interchangeable for the year issued, however, an entity can only use Offsets to meet up to 8 percent of its compliance obligation in any compliance period. In addition, CARB’s Cap-and-Trade regulation allows CARB to invalidate an Offset for errors, regulatory violations or fraud. CARB has adopted specific rules for using Offsets for Cap-and-Trade compliance, including the types of projects that qualify and the process for Offset verification, issuance, and registration.

Allowances and Offsets may also be available from external GHG Emissions Trading Systems to which California has linked.⁴

PG&E’s actual Cap-and-Trade compliance obligation for a given year is determined by the GHG emissions reported annually to CARB per the Mandatory Reporting Rule.⁵ Annual reports are due to CARB by April 10 of the calendar year following the emission year for facility operators or suppliers, and June 1 for electric power entities. Cap-and-Trade compliance showings are made annually and at the end of each compliance period. In order to demonstrate compliance in a given year, PG&E must surrender enough compliance instruments to cover 30 percent of its qualifying emissions by November 1 of the following calendar year (annual surrender date). In addition,

³ The CARB APCR is populated with a finite quantity of allowances available for purchase at fixed prices and only by covered entities.

⁴ CARB’s Board-approved amendments allowing for the use of compliance instruments issued by linked jurisdictions on May 10, 2013. California is currently linked with Quebec.

⁵ Regulation for the Mandatory Reporting of GHG Emissions (Division 3, Chapter 1, Subchapter 10, Article 2, Sections 95100-95133, title 17, California Code of Regulations).



PG&E must surrender enough compliance instruments to cover the balance of its qualifying emissions over a multi-year compliance period by November 1 of the calendar year following the end of each compliance period (“compliance period surrender date”).

PG&E receives an allocation of free allowances associated with its business as an EDU directly from CARB annually; however, these free allowances cannot be used directly by PG&E to satisfy its compliance obligation.

All directly-allocated electric allowances must be consigned by PG&E into one or more of the auctions. In each year, allowances consigned at least 75 days prior to a quarterly auction will be offered for sale at that auction and each consigning entity agrees to accept the auction settlement price for allowances sold at auction. Until 2015, only IOUs and Publicly-Owned Utilities can consign allowances to the auction, and beginning in 2015, natural gas suppliers can also consign allowances into the auction.

2. Greenhouse Gas Compliance Instruments and CARB Auctions

A description of the authorized GHG compliance instruments is provided in Appendix A. A description of the CARB Auction and APCR process is provided in Appendix B of the Bundled Procurement Plan (“BPP”).

B. PG&E’s Allowance Consignment

[Redacted]

[Redacted]

[Redacted]

[Redacted]

6 [Redacted]

[Redacted]



C. PG&E's Potential Greenhouse Gas Risks

1. Greenhouse Gas Obligations

PG&E is required by CARB's Cap-and-Trade regulation to surrender compliance instruments for its qualifying Utility-Owned Generation ("UOG") and imports (collectively described as "physical" obligations). PG&E also has contractual obligations associated with certain tolling agreements that require it to either: (1) provide the counterparty with compliance instruments for the energy under contract; or (2) reimburse the counterparty for the Cap-and-Trade compliance costs associated with its facility's operation under the contract.

2. Cap-and-Trade Penalties

PG&E could face CARB penalties for failure to surrender an adequate number of compliance instruments for which it has a compliance obligation. CARB's Cap-and-Trade rule imposes a four-time excess emissions penalty resulting from "untimely surrender" of allowances. This penalty would be assessed by requiring that additional compliance instruments be surrendered, rather than by cash payment. In addition, if an entity fails to surrender the required compliance instruments within five days of the first auction or reserve sale conducted by CARB following the applicable surrender date, whichever is the latter, and for which the registration deadline has not passed when the untimely surrender obligation is assessed, CARB's Cap-and-Trade rule would treat each ton of GHG emissions for which a compliance instrument was not surrendered as a separate violation for each day the violation continues.



3. Offset Credits

CARB's Cap-and-Trade regulation allows CARB to invalidate an Offset for errors, regulatory violations, or fraud. In the case where an Offset is used to meet a compliance requirement and is later invalidated, the complying entity must replace the invalidated Offset with a valid compliance instrument within six months of notification by CARB of the Offset's invalidation or be subject to compliance penalties. PG&E will only purchase Offsets if the purchase contract requires the seller to assume the risk of invalidation and to post appropriate collateral. PG&E will assess the risk of invalidation for each Offset transaction.

D. PG&E's GHG-Related Product Procurement

This GHG Procurement Plan addresses the GHG-related procurement authority necessary for PG&E to comply with the obligations associated with emissions from electricity sectors covered by Cap-and-Trade Program, namely facilities with GHG emissions greater than or equal to 25,000 mtCO₂e per year and imported electricity. As an entity that is required to comply with Cap-and-Trade, PG&E will need to procure compliance instruments to meet the compliance requirements associated with its own facilities and imports, as well as the GHG contractual obligations associated with Power Purchase Agreements with third parties that require PG&E to procure GHG compliance products or assume GHG compliance costs for such parties. Below, PG&E describes its GHG obligations and GHG procurement strategy. As noted below, Commission-approved GHG-related products ("GHG Products"), procurement processes, and GHG Procurement Limits are provided in Appendices A, B and C, respectively, of this BPP. The products, procurement processes, GHG Procurement Limits, and GHG



procurement strategy establish the upfront achievable standards for PG&E's procurement activities consistent with AB 57.

1. Greenhouse Gas Obligations

PG&E's primary need to procure GHG compliance instruments and engage in GHG transactions arises in connection with the following:

- Utility-Owned Facilities: Conventional generation facilities owned by PG&E that are either operating or under construction and that emit at least 25,000 mtCO₂e per year, such as the Humboldt Generating Station, Colusa Generating Station, and Gateway Generating Station, will have a compliance obligation under Cap-and-Trade.
- Certain Tolling Agreements: Contracts that allocate to PG&E or where PG&E has assumed GHG compliance instrument procurement responsibility for such counterparties.
- Electricity Imports: PG&E is responsible for GHG emissions deemed to be associated with its electricity imports for purposes of compliance with Cap-and-Trade.

2. Greenhouse Gas-Related Products

GHG Products approved by the Commission are listed in Appendix A.

3. Greenhouse Gas-Related Processes

PG&E will procure GHG Products using the procurement methods and processes in accordance with Appendix B.

4. Greenhouse Gas Procurement Strategy

PG&E will procure sufficient GHG Products during each compliance period to meet its GHG obligations. PG&E's procurement strategy includes the following key elements:

[REDACTED]



[Redacted text block]

i. GHG Procurement Limits

Each of these elements is described in more detail below.

[Redacted text block]



[Redacted content]



[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

7 [Redacted]

8 [Redacted]



[Redacted content]



[Redacted text block containing multiple paragraphs of blacked-out content]

- 11 [Redacted text]
- 12 [Redacted text]
- 13 [Redacted text]



[Redacted content]



[Redacted content]



[REDACTED]

i. GHG Procurement Limits

GHG Procurement limits are provided in Appendix C.

5. Procurement Review Group Consultation

PG&E's consultation with the PRG is addressed in Appendix M.

6. Cost Recovery

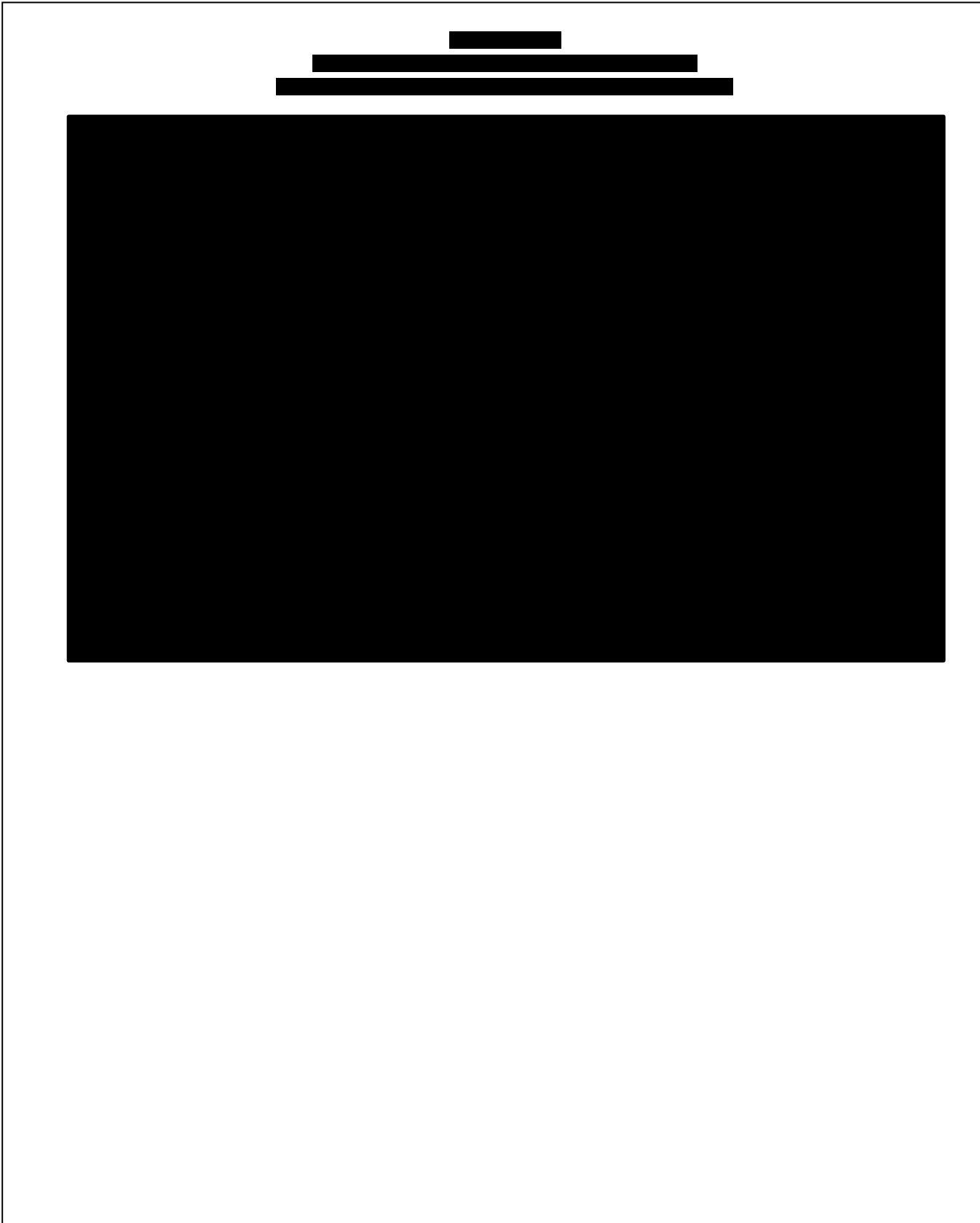
Cost recovery of GHG Products is discussed in Section IV.C of the BPP

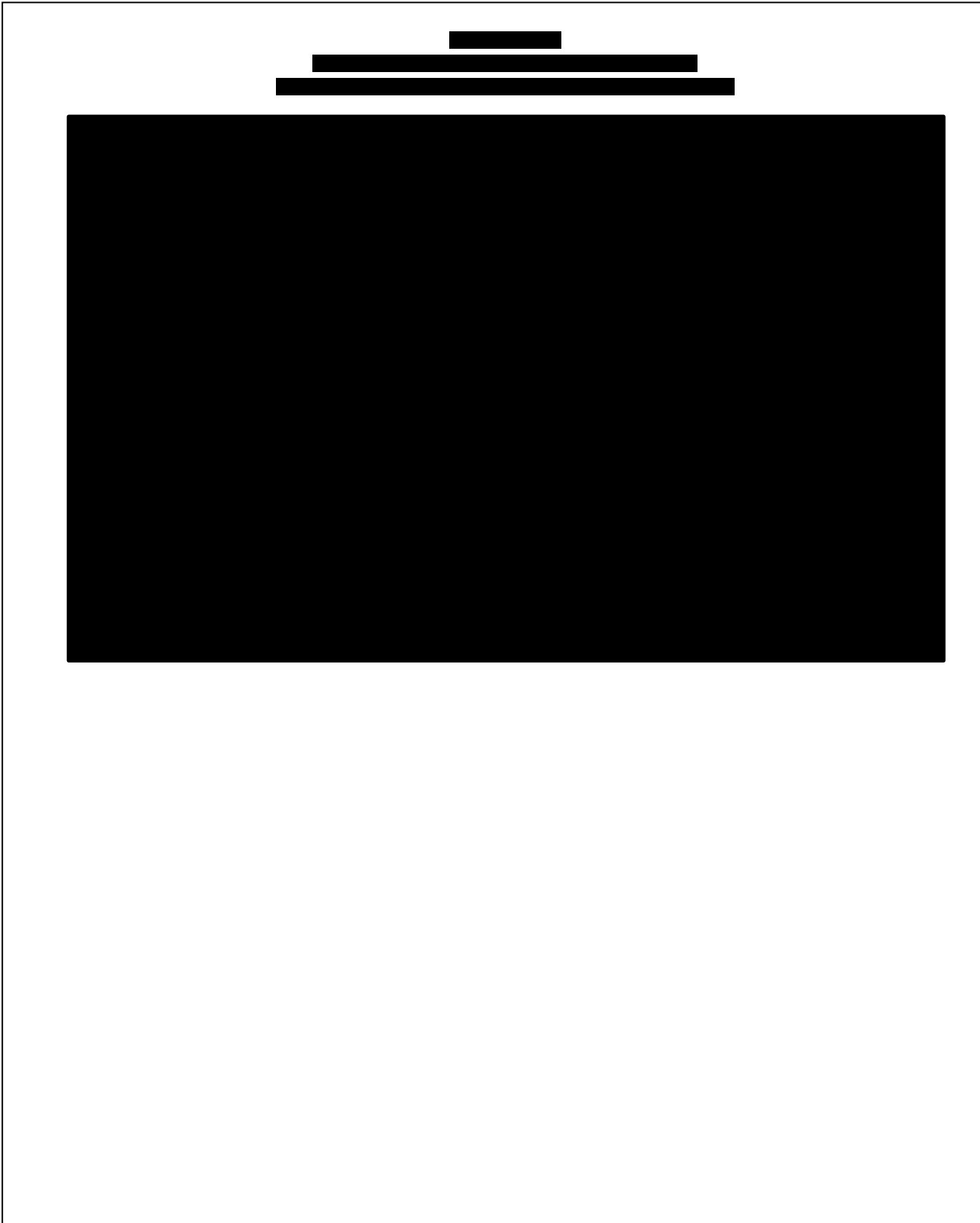
7. Approval for Contract Term Duration

CPUC approval of transactions is discussed in Section V of the BPP

8. Independent Evaluator

Independent Evaluator requirements are discussed in Appendix M.





Attachment 5:

Confidentiality Declaration and Matrix

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

**DECLARATION OF MARIA VANKO WILSON
SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION CONTAINED IN PG&E'S PROPOSED
UPDATE TO THE BUNDLED PROCUREMENT PLAN
(ADVICE LETTER 4814-E)**

I, Maria Vanko Wilson, declare:

1. I am a Manager in the Portfolio Management Department within the Energy Procurement Organization at Pacific Gas and Electric Company (PG&E). In this position, my responsibilities include commercial Greenhouse Gas (GHG) policy activities. This declaration is based on my personal knowledge of PG&E's electric energy and GHG compliance instrument procurement practices and my understanding of the Commission's decisions protecting the confidentiality of market-sensitive information concerning electric procurement of an investor-owned utility.

2. Based on my knowledge and experience, and in accordance with the "Administrative Law Judge's Ruling Clarifying Interim Procedures For Complying With Decision 06-06-066," issued in Rulemaking 05-06-040 on August 22, 2006, I make this declaration seeking confidential treatment of Appendices A, B, and C contained in PG&E's Advice Letter 4814-E submitted on April 1, 2016.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes data and information covered by Decision 14-10-033 and General Order (GO)-66-C, Section 2.2b, which would place PG&E in an unfair business disadvantage if disclosed; and Public Utilities Code Section 454.5(g), which would reveal market sensitive information. The matrix also specifies why confidential protection is justified. Further, the data and information: (1) is not already public; and (2) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating

into this declaration all of the explanatory text that is pertinent to my testimony in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed on April 1, 2016 at San Francisco, California.

/s/

MARIA VANKO WILSON

**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
ADVICE LETTER 4814-E
APRIL 1, 2016**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order that Data Corresponds To	Justification for Confidential Treatment	Length of Time Date To Be Kept Confidential
Attachments 1, 2, and 3	D.14-10-033 General Order ("G.O.") 66-C	This information includes confidential greenhouse gas information, the disclosure of which is prohibited according to Title 17 of the California Code of Regulations. This information also includes confidential business information protected under G.O. 66-C.	Indefinite

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

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