STATE OF CALIFORNIA GAVIN NEWSOM, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



August 13, 2020

Advice Letter 5748-E, 5748-E-A, 5748-E-B

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: Procurement Transaction Quarterly Compliance Submittal (Q4, 2019)

Dear Mr. Jacobson:

Advice 5748-E, 5748-E-A, 5748-E-B is effective as of February 29, 2020.

Sincerely,

Edward Randolph

Deputy Executive Director for Energy and Climate Policy/

Director, Energy Division

Edward Ramlofah



Erik JacobsonDirector
Regulatory Relations

Pacific Gas and Electric Company 77 Beale St., Mail Code B13U P.O. Box 770000 San Francisco, CA 94177

Fax: 415-973-3582

February 26, 2020

Advice 5748-E-A

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Supplemental: Procurement Transaction Quarterly Compliance Filing

(Q4, 2019)

<u>Purpose</u>

Pacific Gas and Electric Company ("PG&E") is submitting this advice letter to the California Public Utilities Commission ("Commission" or "CPUC") related to its Procurement Transaction Quarterly Compliance Report ("QCR") for record period October 1, 2019 to December 31, 2019, (Q4-2019) to supplement the material in Confidential Attachment G of Advice Letter 5478-E. Please note this workpaper is being provided as additional documentation to Attachment G and does not replace Attachment G.

Background

Advice Letter 5748-E

PG&E submitted its QCR for Q4-2019 on January 30, 2020 in accordance with D.03-12-062, Ordering Paragraph 19, which requires that the Procurement Transaction Quarterly Compliance Reports to be submitted within 30 days of the end of the quarter.

Advice Letter 5748-E-A

PG&E employed an Independent Evaluator (IE) to oversee PG&E's 2020 Balance of Year RA and Import Energy E-Solicitation issued November 4, 2019. However, PG&E inadvertently omitted the IE report from the Q4 2019 QCR filing submitted January 30, 2020.

Attachment 2: Public Attachment G
Feb-Dec 2020 RA and Import Energy IE Report

Attachment 3: Confidential Attachment G
Feb-Dec 2020 RA and Import Energy IE Report

Protests

PG&E asks that the Commission, pursuant to GO 96-B, General Rule 7.5.1, maintain the original protest and comment period designated in Advice 5748-E and not reopen the protest period.

Effective Date

PG&E requests that this Tier 2 advice letter become effective on regular notice, February 29, 2019, 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 and the service list for Rulemaking ("R.") 16-02-007. 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

Attachment 1: Q4 2019 Public Narrative

Attachment 2: G-1_Feb-Dec 2020 RA and Import Energy IE Report (Public)

Attachment 3: G-2_Feb-Dec 2020 RA and Import Energy IE Report (Confidential)

Attachment 4: Confidentiality Declaration and Matrix

cc: Service List R.16-02-007 (Public Version)
PG&E's Procurement Review Group (Confidential Version)





California Public Utilities Commission

ADVICE LETTER UMMARY



MUST BE COMPLETED BY UT	ILITY (Attach additional pages as needed)			
Company name/CPUC Utility No.: Pacific Gas at	nd 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 WATER	(Date Submitted / Received Stamp by CPUC)			
Advice Letter (AL) #: 5748-E-A	Tier Designation: 2			
Subject of AL: Supplemental: Procurement Transaction Quarterly Compliance Filing (Q4, 2019)				
Keywords (choose from CPUC listing): Complian	ice			
AL Type: Monthly Quarterly Annu				
If AL submitted in compliance with a Commissi D.15-10-031 and D.03-12-062	on order, indicate relevant Decision/Resolution #:			
Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: $_{ m No}$				
Summarize differences between the AL and the prior withdrawn or rejected AL:				
Confidential treatment requested? 🔽 Yes 🗌 No				
If yes, specification of confidential information: See Confidentiality Declarations and Matrix 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: Marianne Aikawa, (415)973-0375, MLC0@pge.com				
Resolution required? Yes V No				
Requested effective date: 2/29/20	No. of tariff sheets: $_{ m 0}$			
Estimated system annual revenue effect (%): N	N/A			
Estimated system average rate effect (%): N/A	1			
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: $_{ m N/A}$				
Service affected and changes proposed $^{ ext{l:}}$ $_{ ext{N/N}}$	A			
Pending advice letters that revise the same tariff sheets: $\mathrm{N/A}$				

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:

Attachment 1 Q4 2019 Public Narrative

PACIFIC GAS AND ELECTRIC COMPANY PROCUREMENT TRANSACTION QUARTERLY COMPLIANCE REPORT FOR THE FOURTH QUARTER OF 2019

January 30, 2020

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Summary of Public Attachments

Public Attachment G: *Independent Evaluator Reports*, provides any relevant

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Ouarter redacted to protect confidential information.

Public Attachment H: New Contracts Executed/Contracts Amended, provides a

summary of all agreements executed and/or amended during the

Quarter redacted to protect confidential information.

Summary of Confidential Attachments

Confidential Attachment A: Transactions, provides a summary of all transactions executed

> during the Quarter, which are less than five years in length and that have not been filed through a separate advice filing or

application.

Confidential Attachment B: Counterparty Information, provides a summary of (1) all

> non-investment grade counterparties with whom PG&E transacted; and (2) the top 10 counterparties by volume during

the Quarter.

Confidential Attachment C: Electric Transactions Summary, provides a summary of the

electric transactions executed during the Quarter.

Confidential Attachment D: Natural Gas Transactions Summary, provides a summary of the

gas transactions executed during the Quarter.

Confidential Attachment E: Other Transactions, provides the executed transactions for non-

energy-related products during the Quarter.

Confidential Attachment F: Key Briefing Packages, provides a summary of all relevant

Procurement Review Group (PRG) agendas and presentations

presented.

Confidential Attachment G: Independent Evaluator Reports, provides any relevant IE

report(s) completed during the Quarter.

Confidential Attachment H: New Contracts Executed/Contracts Amended, provides a

summary of all agreements executed and/or amended during the

Ouarter.

Summary of Confidential Attachments (Continued)

Confidential Attachment I: Summary of Retained Generation Investments Completed,

provides a summary of any investments related to retained generation facilities and multiple contracts for the same

supplier, resource or facility, consistent with the requirements of

D.07-01-039.

Confidential Attachment J: System Load Requirements/Conditions, provides a summary of

all information related to addressing PG&E's residual net open

position.

Confidential Attachment K: Risk Management Strategy Communication and Management

Disclosure, provides a summary of all procurement-related risk

strategies and issues communicated to PG&E's senior

management.

Confidential Attachment L: Reasonable Number of Analyses Models, Description of Models,

and How Models Operate, provides a summary of any models related to the relevant transactions identified in this filing.

Confidential Attachment M: Transactions Subject to Strong Showing, provides a summary

and supporting documentation for strong showing transactions.

A. Introduction

As required by Ordering Paragraph (OP) 8 of Decision (D.) 02-10-062, and clarified in D.03-06-076, D.03-12-062, D.04-07-028, D.04-12-048 and D.07-12-052, Pacific Gas and Electric Company (PG&E) hereby provides its report demonstrating that its procurement-related transactions during the period October 1, 2019 through December 31, 2019 (Quarter), were in compliance with PG&E's Bundled Procurement Plan (BPP or Plan) approved by the California Public Utilities Commission (CPUC or Commission) in D.15-10-031.

PG&E manages its transactions in compliance with its BPP. During the Quarter, PG&E filed the following Advice Letters for approval which will update its BPP:

- Advice Letter 5704-E (Electric Portfolio Hedging Plan), submitted December 2, 2019
- Advice Letter 5705-E (Appendix S Sales Framework and Appendix P Carbon Free Energy), submitted December 2, 2019
- Advice Letter 5725-E (Appendix C –Procurement Limits & Ratable Rates), submitted December 20, 2019

B. Summary

During the Quarter, PG&E engaged in the following procurement activities in accordance with its BPP-approved procurement methods and practices:

- 1. Competitive Solicitations (Approval Through the Quarterly Compliance Report)
 - a. None for the Quarter.

2. Other Competitive Solicitations (Approval Through Separate Advice Filing or Regulatory Process)

PG&E is seeking approval through separate advice filings or other regulatory processes and are referenced here for informational purposes only:

- a. Bioenergy Market Adjusting Tariff (bi-monthly auctions for Category 1 and 2, monthly auctions for Category 3), ongoing
- b. Renewable Market Adjusting Tariff (ReMAT) (bi-monthly auctions)¹

¹ The ReMAT Program was suspended on December 15, 2017 by the Executive Director of the CPUC.

- c. Tree Mortality Non-Bypassable Charge (TMNBC) Resource Adequacy (RA) Sale (issued July 19, 2019)
- d. Vantage Firming and Shaping Request for Offers (RFO) (issued August 16, 2018)
- e. 2019 Distribution Investment Deferral Framework RFO (issued February 21, 2019)
- f. Winter Regional Renewable Choice RFO (aka Enhanced Community Renewables (issued November 13, 2018)²
- g. 2018 Oakland Clean Energy Initiative (issued April 13, 2018)
- h. 2019 System Reliability RFO, Distributed Generation Enabled Microgrid Services (issued December 11, 2019)

3. Other Procurement Activities (Approval Through the Quarterly Compliance Report)

PG&E also seeks approval of transactions executed from the following procurement activities, other than competitive solicitations, through the Quarterly Compliance Report (QCR).

a) Electric Transactions

- i. California Independent System Operator (CAISO) Allocations and Auctions
 - a. CAISO Monthly Congestion Revenue Rights (CRR) Allocation Processes
 - b. CAISO's 2020 Annual CRR Tier 2 and Tier 3 Allocation Processes
- ii. CAISO Markets and Processes
 - a. Convergence Bidding
- iii. Direct Bilateral Contracting for Short-Term Products
- iv. Bilateral Negotiated Contracts
- v. Electronic Solicitations issued by PG&E
- vi. Market Request for Proposal (RFP)
- vii. Transparent Exchange

b) Gas Transactions

- i. Transparent Exchanges
- ii. Direct Bilateral Contracting for Short-Term Products
- iii. Voice Brokers

The 2018 Winter Regional Renewable Choice RFO was on hold pending Resolution on Advice Letter 3920-G/5206-E. The Resolution was approved on September 26, 2019 and the RFO has resumed.

- iv. Electronic Solicitations
- v. Cashouts

These procurement activities are described in greater detail in Section C.3, below.

4. Other Procurement Activities (Approval Through Separate Advice Filing or Regulatory Process)

During the Quarter, approval of contracts resulting from the following procurement activities was requested through separate advice filings or regulatory processes and are referenced here for informational purposes only:

- a. Bilaterally negotiated contracts or amendments executed pursuant to other regulatory requirements.
 - i. For the quarter, there are no bilaterally negotiated contracts or amendments executed pursuant to other regulatory requirements.
- b. QF contracts or amendments executed pursuant to other regulatory requirements.
 - i. Frito Lay Cogen: Pursuant to Qualifying Facility/Combined Heat and Power (QF/CHP) Settlement, PG&E executed a Public Utility Regulatory Policies Act (PURPA) Power Purchase Agreement (PPA) with Frito Lay Cogen on October 30, 2019. Relevant information is included in the Informational Only section of Attachment H. Advice Letter Filing is pending.
 - Olsen Power Partners: Pursuant to Qualifying Facility/Combined Heat and Power (QF/CHP) Settlement,³ PG&E executed a Public Utility Regulatory Policies Act (PURPA) Power Purchase Agreement (PPA) with Olson Power Partners on December 17, 2019. Relevant information is included in the Informational Only section of Attachment H. Advice Letter Filing is pending.

³ See Decision Adopting Proposed Settlement, D.10-12-035.

iii. EIF Haypress, LLC: Pursuant to Qualifying Facility/Combined Heat and Power (QF/CHP) Settlement,³ PG&E executed an extension to its Public Utility Regulatory Policies Act (PURPA) Power Purchase Agreement (PPA) with Olson Power Partners on December 20, 2019. Relevant information is included in the Informational Only section of Attachment H. Supplemental Advice Letter 5592-E-A was filed on January 17, 2020.

5. Other Procurement Activities, Approval Through the 2019 Energy Resource Recovery Account (ERRA) Compliance Proceeding

During the Quarter, PG&E participated in a Market RFP issued by another market participant that resulted in sale transactions.

• PG&E executed these sales transactions in an effort to meet its local RA compliance obligations for the 2020 Annual Compliance Filing submitted October 31, 2019. PG&E's BPP Appendix S provides that PG&E will only engage RA sales transactions pursuant to its own solicitations. These transactions are detailed in Confidential Attachment H (information only). PG&E will submit these transactions with its 2019 ERRA Compliance Proceeding for review.

C. Master Data Request (MDR) Documentation

D.02-10-062, Appendix B, as clarified by D.03-06-076, sets forth specific elements to be addressed in this report. Each element is discussed below.

1. Identification of the ultimate decision maker(s) up to the Board level, approving the transactions.

All procurement-related activity during the Quarter was approved and executed either by, or under the direction of, Fong Wan, Senior Vice President, Energy Policy and Procurement; Gillian Clegg, Senior Director, Electric and Gas Acquisition;

Martin Wyspianski, Senior Director, Energy Portfolio Procurement and Policy; Marino Monardi, Director, Structured Energy Transactions; Scott Ranzal, Director, Portfolio Management; Anna Foglesong, Director, Energy Transactions and Legislative Policy; Chris McNeece, Director, Short-Term Electric Supply; and/or John Ulloa, Manager, Electric Gas Supply consistent with the delegation of authority effective for the period.

2. The briefing package provided to the ultimate decision maker.

The "decision-maker" for a particular contemplated transaction depends on many factors, such as term, volume, and notional value. For many of the transactions during the Quarter, the "decision-maker" was a gas or power trading employee executing transactions per an established plan or to achieve a particular objective (such as balancing the portfolio supply and demand). For such transactions, briefing packages are not prepared. Briefing packages prepared during the Quarter for transactions or procurement activities that required senior management approval are included in Confidential Attachment K. In addition, copies of presentations made by PG&E to its PRG during the Quarter are included in Confidential Attachment F.

3. Description of and justification for the procurement processes used to select the transactions.

a) Electric Procurement – Description

PG&E used BPP-approved electricity procurement transaction processes during the Quarter, including:

- Competitive Solicitations
- CAISO Allocations and Auctions
- CAISO Markets and Process
- Direct Bilateral Contracting for Short-Term Products
- Bilateral Negotiated Contracts
- Electronic Solicitations
- Market Request for Proposal (RFP)
- Transparent Exchanges, Voice and On-Line Brokers

- QF/CHP Amendments Executed under the CHP Settlement (*for informational purposes only*)
- Pro forma contracts executed under the CHP Feed-In Tariffs Program (*for informational purposes only*)

b) Electric Procurement – Justification

i. For competitive solicitations held by PG&E, describe the process used to rank offers and select winning bid(s).

None for the Quarter.

ii. For other transactional methods, provide the documentation supporting the selection of the chosen products.

The approved procurement processes used during the Quarter and supporting documentation include the following:

CAISO Allocations and Auctions

CAISO Monthly CRR Allocation Process

PG&E procures CRRs to narrow the distribution of PG&E's energy procurement costs due to expected electric transmission congestion. PG&E obtains CRRs, subject to risk assessment, for specific source/sink combinations as approved in its BPP.

PG&E acquires CRRs for any path (represented by a source-sink pair) connecting existing generation sources to existing loads (e.g., retail loads and Helms pumping load) or for any path that PG&E reasonably anticipates that it might need to flow energy in the future due to the addition of new contracts, resources or load obligations. Additionally, there may be CRRs which are positively correlated in value with CRRs for paths that have limited availability. PG&E is also authorized to acquire CRRs for such positively correlated paths.

PG&E estimated that a portion of its generation, imports and load in the months of November 2019, December 2019, and January 2020, remained exposed to congestion risk, and, therefore, participated in the CAISO's monthly CRR allocation process to obtain CRRs to mitigate this risk. In October 2019, November 2019, and December 2019, PG&E participated in the CAISO's monthly CRR allocation processes to procure CRRs for November 2019, December 2019, and January 2020, respectively.

CAISO 2020 Annual CRR Allocation Process

PG&E participated in the 2020 Tiers 2 and 3 Allocation Processes. Awards from Tier 2 were posted on October 11, 2019, and for Tier 3 on October 24, 2019. Combined results from the Tier 1, Tier 2, Tier 3, and Long-Term Allocation Processes are included in this QCR.

PG&E's procurement during the Quarter was consistent with PG&E's updates to its BPP Congestion Revenue Rights (Appendix I) filed in Advice Letter 5473-E, effective May 30, 2019.

Relevant information for the Monthly CRRs is included in Confidential Attachments F, J and L.

• CAISO Markets and Processes

Convergence Bidding

PG&E suspended Convergence Bidding activities after trade day May 26, 2018. As of December 31, 2019, all Convergence Bidding activities remain suspended. Relevant information is included in Confidential Attachment E, F and J.

• Direct Bilateral Contracting for Short-Term Products

Transmission capacity is purchased to relocate power from one point to another, often necessary outside a Regional Transmission Operator such as the CAISO. Relevant information is included in Confidential Attachment A.

• Bilateral Negotiated Contracts

<u>Resource Adequacy (RA)</u> – During the Quarter, PG&E executed a transaction to purchase Local RA. Relevant information is included in Confidential Attachment E, F, H and M.

• Electronic Solicitations issued by PG&E

<u>Import Energy</u> – During the Quarter, PG&E executed a firm energy transaction at a selected import delivery location. Relevant information is included in Confidential Attachment A.

Resource Adequacy (RA) – During the Quarter, PG&E executed the following transaction types: (1) System RA purchase transactions; 2) System RA sale transactions; (3) Local RA purchase transactions; (4) Local RA sale transactions; and (5) Import Allocation Rights sale transactions.

Transactions listed above that were part of the Multi-Year RA Sale Solicitation (Phase 1 and Phase 2) were monitored by an Independent Evaluator (IE). This solicitation spanned Q3 and Q4 QCRs. The final IE Report was filed as a Supplemental to the Q3 2019 QCR filing and is also included in this Q4 2019 filing.

In addition, PG&E is including the IE reports for the Q4 RA and Import Energy E-Solicitation and the Feb-Dec 2020 RA and Import E-Solicitation. Relevant information is included in Confidential Attachments E, F, G, H and L.

• <u>Electric Financial Transactions</u> – PG&E did not execute any electric financial transactions during the Quarter via E-Solicitation or Transparent

Exchange (including voice and on-line brokers). Relevant information is included in Confidential Attachments A and L.

Market Request for Proposal (RFP) – During the Quarter, PG&E
participated in SCE's Market RFP and executed Local RA purchase
transactions. Relevant information is included in Confidential Attachments
E, F, and H.

• Transparent Exchange, Voice and On-Line Brokers

<u>Electric Financial Transactions</u> – PG&E did not execute any electric financial transactions during the Quarter via Transparent Exchange (including voice and on-line brokers). Relevant information is included in Confidential Attachments A and L.

• QF/CHP Legacy Contracts (for informational purposes only)

Under the QF/CHP Program, QF generators may enter into one of two pro forma PPAs (i.e., PURPA PPA for QFs up to 20 megawatts (MW), and As-Available PPA for CHP up to 20 MW. In addition, many of the remaining legacy QF contracts are still active and may require amendments or letter agreements to help the generator meet the requirements of the Commission's CHP Program (e.g., greenhouse gas (GHG) administration and metering issues) that were not required under the former program. Relevant information is included in the "Informational Purposes Only" Section of Attachment H.

• CHP Feed-In Tariffs (for informational purposes only)

Under the Waste Heat and Carbon Emissions Act, codified as California Public Utilities Code (Pub. Util. Code) Section 2840 et seq. (Stats. 2007, Ch. 713), the Commission established a standard tariff for the sale of electricity from efficient CHP systems under 20 MW and directed the electrical corporations to purchase excess electricity from eligible CHP generators. A CHP generator that is certified by the California Energy Commission (CEC) is eligible under the CEC's legal and technical guidelines to obtain a CHP feed-in tariff. In D.09-12-042, the Commission approved three pro forma contracts for use with CHP systems (known as "AB 1613 PPAs") that are applicable to generators of different sizes: a standard contract for CHP generators up to 20 MW, a simplified PPA for CHP generators less than 5 MW, and a further simplified PPA for smaller CHP systems under 500 kilowatts. Relevant information is included in the "Informational Purposes Only" section of Attachment H.

c) Natural Gas Procurement – Description

PG&E procured natural gas during the Quarter using various BPP-approved procurement processes and methods, including:

- Competitive Solicitations
- Transparent Exchanges
- Direct Bilateral Contracting for Short-Term Products
- Voice and On-Line Brokers
- Electronic Solicitations
- Cashouts

d) Natural Gas Procurement – Justification

i. For competitive solicitations (RFOs), describe the process used to rank offers and select winning bid(s).

PG&E did not execute any contracts during this Quarter through competitive solicitations for approval through this QCR.

- ii. For other transactional methods, provide the documentation supporting the selection of the chosen products.
 - <u>Transparent Exchanges</u>: Electronic trading exchanges for transparent prices:

Commodity Purchases/Sales – PG&E buys and sells physical natural gas on Intercontinental Exchange (ICE) and the ICE Natural Gas Exchange (ICE/NGX) physical clearing service. ICE is an electronic system that matches buyers and sellers of natural gas products. Once buyer and seller are matched, ICE trades become bilateral trades. ICE/NGX trades are cleared by NGX, rather than bilaterally. Physical transactions in the Quarter include next-day and same-day transactions, for delivery periods of one to five days, and monthly transactions for deliveries each day of a calendar month. Relevant information of transactions executed via Transparent Exchanges during the QCR period is included in Confidential Attachment A.

Gas Financial Transactions (in Compliance with D.15-10-031) – PG&E's procurement during the Quarter is consistent with PG&E's updates to its BPP Hedging Plan (Appendix E) filed in Advice Letter 5507-E and 5704-E.

Gas Financial Transactions are cleared through exchanges (ICE or the New York Mercantile Exchange (NYMEX)). ICE and NYMEX provide access to anonymous bids and offers establishing both a liquid and robust market for financial products, and a benchmark for over-the-counter products. These products include Henry Hub futures and options, and basis futures against the industry benchmark indices, including Canadian Gas Price Reporter (CGPR), Gas Daily, Natural Gas Intelligence (NGI) and Inside FERC (IFERC) Gas Market Report. Details demonstrating PG&E's compliance with D.15-10-031 during the QCR period are included in Confidential Attachments J and L. Relevant information

executed during the QCR period is included in Confidential Attachment A.

• Direct Bilateral Contracting for Short-Term Products

Commodity Purchases/Sales – PG&E buys and sells physical gas directly with counterparties in the bilateral market. Spot gas (deliveries less than one month) is traded at fixed prices and daily index (Gas Daily or CGPR). Prompt month supply (deliveries each day of the following month) and term gas (greater than one month forward or one month in duration) is traded at fixed price, daily index (Gas Daily or CGPR), or monthly or bi-week index (CGPR, NGI, or IFERC) prices. For any bilateral physical supply trades with a term of one month, PG&E concluded these transactions bilaterally, but also used electronic solicitation methods, such as instant messaging, e-mail, voice solicitation (telephone), Real-Time Market (RTM) prices, and/or broker quotes, to inform and conduct these transactions. Relevant information executed during the QCR period is included in Confidential Attachments A and M.

• Voice and On-Line Brokers – Gas Financial Transactions

PG&E executes natural gas financial transactions (futures) through voice brokers that resulted in exchange-cleared trades. Brokers provide access to anonymous bids and offers from both over-the-counter parties and cleared counterparties. After a broker matches a buyer and a seller in a trade, the parties will determine whether the trade will be settled over-the-counter or cleared through NYMEX or ICE. The broker market trades the same financial products as the exchanges. Relevant information of transactions executed via voice brokers during the QCR period is included in Confidential Attachment A.

• Voice and On-Line Brokers – Commodity Purchases/Sales

PG&E executes physical gas supply transactions through voice brokers that resulted in transactions. Brokers provide access to anonymous bids and offers from both over-the-counter parties and cleared counterparties. After a broker matches a buyer and a seller in a trade, the parties will determine whether the trade will be settled over-the-counter or cleared through NGX. The broker market trades the same products as the bilateral market. Relevant information of transactions executed via voice brokers during the QCR period is included in Confidential Attachment A.

• Electronic Solicitations

<u>Conducted via Instant Messaging and Telephone</u> – PG&E conducts electronic solicitations for the purchase of physical gas supply, with delivery terms one month or longer, using instant messaging and telephone. In this way, PG&E is able to obtain robust price quotes from the marketplace, in real time, and may then execute with the counterparty with the best offer(s). Relevant information of transactions executed via

electronic solicitation during the QCR period is included in Confidential Attachment A.

• Cashouts: Commodity Purchases/Sales

Cashouts are used by gas pipelines, according to their tariff, to cure certain imbalances between supply and demand. When a pipeline applies a cashout, it results in a commodity transaction.

e) GHG and Other Commodities

- *i.* For competitive solicitations, describe the process used to rank offers and select winning bid(s).
 - PG&E did not execute any contracts during this Quarter through competitive solicitations for approval through this QCR.
- ii. For other transactional methods, provide the documentation supporting the selection of the chosen products.
 - PG&E received its annual allocation of Electric Distribution Utility (EDU) Current Vintage allowances for the 2020 year from the California Air Resources Board (CARB) in October 2019. All of the EDU allowances will be consigned into the 2020 CARB Auctions as required by the regulations and consistent with PG&E's BPP. CARB and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques held a joint allowance auction on November 19, 2019, for Current 2013, 2014, 2015, 2016, 2017, 2018, and 2019 Vintage and Advance 2022 Vintage allowances.
 - PG&E is authorized to procure GHG products through CARB Auctions and other CPUC-approved procurement processes and methods. PG&E provided information regarding its bilateral market procurement strategy to the PRG.
 - PG&E's procurement during the Quarter was consistent with PG&E's Conformed BPP GHG Procurement Plan filed in Advice Letter 5579-E, effective July 1, 2019.

All relevant GHG transactional information and supporting justification is included in Confidential Attachments E and L.

4. Explanation/justification of the timing of the transactions.

a) Electric Transactions

When selecting electric transactions, the best-priced bids/offers are selected first (merit-order selection) among those available for the required products at the time of the transaction, subject to credit and other limitations and operational

constraints. Detailed explanation/justification for the timing of the transactions is included in Confidential Attachment J.

b) Natural Gas Transactions

For daily physical gas transactions, timing of execution is primarily driven by the requirement to match fuel usage by utility-owned and contracted electric generating units and supply delivered on a daily and monthly basis, and by the availability of information impacting expectations for daily dispatch of these units. For transactions one month or longer, PG&E typically fills its forecast short gas positions in month-ahead, seasonal, or annual blocks, depending on the liquidity and prices available in each of these markets. Execution of term transactions was based on the PG&E Electric Portfolio Quarterly Position Update, presented to the PRG on September 17, 2019. Documentation supporting the timing of transactions is included in Confidential Attachment J.

5. Discussion of the system load requirements/conditions underlying the need for the Quarter's transactions.

a) PG&E Participation in the CAISO Markets

PG&E participates in the CAISO Day-Ahead and RTMs. PG&E's day-ahead planning and procurement incorporates weather-adjusted load forecasts, resource availability, price forecasts, dispatch costs and current bilateral electric market and forecasts of the CAISO's Integrated Forward Market (IFM) prices. The results of this process allow PG&E to determine the incremental costs of dispatchable resources that are bid into the IFM and the RTM. It also determines the price upon which PG&E is willing to pay the CAISO for meeting its hourly load. The CAISO then assures least cost dispatch by considering all resources simultaneously with all transmission constraints.

In the RTM, similar to the day-ahead market, PG&E submits resource bids and schedules into CAISO markets and those resources that clear the market will be obligated to operate in real time.

b) PG&E-Owned Generation Conditions During Q4 2019

PG&E received 72 percent of normal rainfall during the Quarter.

Helms Pumped Storage Facility (Helms) was used throughout the Quarter as system conditions and economics allowed. There were three planned outages at Helms Unit 1, Unit 2 and Unit 3 for annual maintenance during the Quarter lasting longer than 72 hours. There were no maintenance outage events at Helms lasting longer than 72 hours during the Quarter. There was one forced outage event at Helms Unit 1 longer 24 hours due to a fire protection system malfunction releasing CO₂ into an enclosed operational space.

Planned outages lasting longer than 72 hours on conventional hydro facilities greater than 30 MW during the Quarter included: Caribou 2 Units 4 and 5 (120 MW total), Drum 2 Unit 5 (49.5 MW), Electra Units 1, 2 and 3 (98 MW total), Haas Units 2 (72 MW), Kerckhoff 2 Unit 1 (155 MW), Pit 1 Units 1 and 2 (61 MW total), Pit 5 Units 1, 2, 3 and 4 (160 MW total), Pit 6 Units 1 and 2 (80 MW total), Pit 7 Unit 2 (56 MW), Poe Units 1 and 2 (120 MW total), Salt Springs Unit 2 (33 MW) and Stanislaus Unit 1 (91 MW). In addition, there were seven maintenance outages lasting longer than 72 hours which included: Balch 2 Unit 3 (52.5 MW), Caibou 1 Units 1, 2, and 3 (75 MW total), Salt Springs Unit 1 (11 MW), and Tiger Creek Units 1 and 2 (58 MW total).

Forced outages lasting longer than 24 hours at conventional hydro facilities greater than 30 MW during the Quarter were incurred at the following facilities: Butt Valley (41 MW), Drum 1 Unit 2 (13.2 MW), Drum 2 Unit 5 (49.5 MW), Kerckhoff 2 Unit 1 (155 MW), Pit 6 Unit 1 (40 MW), Pit 7 Units 1 and 2 (112 MW), Salt Springs Units 1 and 2 (44 MW total), Tiger Creek Units 1 and 2 (58 MW total).

At PG&E's fossil combined cycle facilities there were no planned outages longer than 72 hours for the Quarter. There were no maintenance outages during the Quarter. There were no forced outages greater than 24 hours.

During Fourth Quarter 2019, Diablo Canyon Power Plant Unit 1 operated at 98.8 percent capacity factor. Unit 1 operated at full power during October and November. During December, Unit 1 curtailed to 55% power for removal of marine growth and debris from inside the main condenser waterboxes, operating below full power for 63 hours. Removal of marine growth from inside the plant's ocean cooling water systems is a normal occurrence for Diablo Canyon. Also in December, per direction from the Grid Control Center, Unit 1 curtailed to 89% power to support the correction of a grid system protection problem, operating below full power for 6 hours.

During Fourth Quarter 2019, as planned, Diablo Canyon Power Plant Unit 2 operated at 12.3 percent capacity factor due to performing its scheduled 2R21 refueling outage, having started on September 22nd, being off-line during all of October and November, and returning to operation on December 18th, finishing in 87.3 days. Unit 2 returned to full power on December 22nd.

6. Discussion of how the Quarter's transactions meet the goals of the risk management strategy reflected in the Plan.

As described in Sections 3.b. and 3.d. above, during the Quarter, PG&E executed transactions in accordance with its Hedging Plan. A list of relevant information regarding Consumer Risk Tolerance notifications and management disclosures is included in Confidential Attachments F and K.

7. Copy of each contract.

A list of transactional contracts executed and/or modified by PG&E during the Quarter is included in Confidential Attachment H. Copies of the contracts PG&E seeks approval of through this QCR are also included in this attachment.

8. The valuation results for the contract(s) (for contracts of three months or greater duration).

PG&E provides the valuation method and results for the contracts filed via this QCR in Confidential Attachment H.

9. An electronic copy of any data or forecasts used to analyze the transactions.

Because transaction personnel are continuously monitoring a wide range of market information on a 24-hour-per-day, 7-day-per-week basis, it is not feasible to provide all the data and forecasts used to analyze all potential and executed transactions. However, key analysis data utilized during the Quarter is in Confidential Attachment J.

10. Provide a reasonable number of analyses requested by the Commission or the PRG and provide the resulting outputs.

To the extent any analyses requested by the Commission or PRG during the Quarter were not already included as a part of PG&E's response to Items 1 through 9 above, such additional analyses would be contained in Confidential Attachment F.

11. Any other information sought by the Commission under the Pub. Util. Code.

To the extent that the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) has requested information for the Quarter as identified in its MDR, this information will be included in PG&E's MDR response and submitted to the Cal Advocates 14 days after the filing of the QCR. In addition, the Commission's Energy Division has requested that PG&E provide transparent exchange traded prices. PG&E has included this information in Confidential Attachments A and E.

D. Additional Reporting Requirement Pursuant to D.07-01-039

As required by OP 12 of D.07-01-039, PG&E has included in Confidential Attachment I, investments in retained generation that were completed during the Quarter, as well as any multiple contracts of less than five years with the "same supplier, resource or facility" as required in D.07-01-039 on page 154. There were no transactions or investments to report during the Quarter.

E. Cost Allocation Mechanism (CAM)

For the Quarter, PG&E executed one PURPA CHP PPA that qualifies as a CAM resource under the QF/CHP Settlement. The PURPA CHP PPA with Frito Lay Cogen is



Attachment 2

G-1 Feb-Dec 2020 RA and Import Energy IE Report (Public)



PACIFIC GAS & ELECTRIC

Independent Evaluator Report 2020 February through Balance of Year Resource Adequacy and Import Energy E-Solicitation

February 2020



PA Regional Office:

PA Consulting Group US Bank Tower, 633 W 5th Street, 26th Floor Los Angeles, CA 90071 USA

Tel: +1 213 689 1515 Fax: +1 213 486 4801

www.paconsulting.com Version no: 1.0

Prepared by: C. Janecek

INDEPENDENT EVALUATOR REPORT

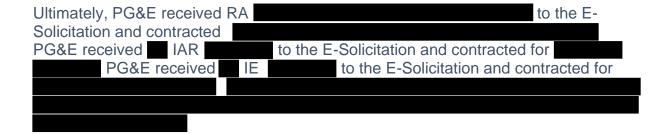
PA Consulting Group, Inc. (PA) served as the Independent Evaluator for the Pacific Gas and Electric Company (PG&E) 2020 February through Balance of Year RA and Import Energy E-Solicitation (2020 Feb-BoY RA and Import Energy E-Solicitation or the Solicitation). This report provides a summary of PA's evaluation of the process from the drafting of the Solicitation documents through to the recommendation of selected bids and negotiations of contracts submitted to the California Public Utilities Commission (CPUC or Commission).

Overview of solicitation

PG&E issued its 2020 Feb-BoY RA and Import Energy E-Solicitation on via an electronic Market Notice on November 4, 2019, with bids/offers due November 7, 2019.

In this Solicitation, PG&E sought offers for sale (i.e., **PG&E buys**), bids to purchase (i.e., **PG&E sells**), and offers for sale / bids to purchase (i.e., **simultaneous PG&E buys/PG&E sells**) of both Local and System RA and Import Allocation Rights (IAR) monthly products with February-December 2020 delivery periods. PG&E also sought offers for sale (i.e., **PG&E buys**) of WSPP Schedule C Import Energy (IE) for the September and October 2020 delivery periods. In the Market Notice, PG&E noted that it was specifically interested in procuring capacity in the Kern and Stockton local capacity areas. Table 1 below from the E-Solicitation Market Notice describes the products sought in the E-Solicitation. PG&E did not specify the amounts of RA capacity it wished to purchase.

Table 1: Summary of Solicitation Products				
Product	PG&E Seeking to	Pricing	Delivery Period	
Monthly System and Local RA	Buy or Sell	Flat price (\$/kW-month)	February through December 2020	
Monthly Import Allocation Rights			February through December 2020	
Monthly System and Local RA	Simultaneous Buy and Sell	Flat price (\$/kW-month)	February through December 2020	
Monthly Import Energy	Buy	Premium/Discount (+/-) to Index or Fixed Price (\$/MWh)	September and October 2020	



Main IE activities during solicitation

PA's role in PG&E's 2020 Feb-BoY RA and Import Energy E-Solicitation spanned approximately six weeks in November and December 2019. PA performed the role of IE and was involved from PG&E's development of the Market Notice materials through the submittal of the bids/offers and ultimately the negotiation of the RA confirms. PA ensured that the procedures followed by PG&E were aligned with the process it established in its E-Solicitation and provided fair and equitable treatment of all bids/offers. PA was in regular contact with PG&E staff throughout the process, addressing PG&E's questions, identifying and resolving potential issues, and providing recommendations throughout the process. The following provides a summary of PA's main activities during this solicitation:

- PA reviewed the Solicitation's Market Notice prior to PG&E's issuance and had no substantial comments or suggested edits to the Notice.
- PA received all communications between PG&E and bidders. PA directly received all of the emails, including bids/offers that were sent to and received from bidders.
- PA provided guidance related to PG&E's questions regarding a potential issue with a bids/offers submittal.
- PA reviewed the bids/offers received and discussed with the PG&E team the team's intent to shortlist the bids/offers.
- PA monitored negotiation calls and emails with all bidders.
- PA reviewed presentation materials related to the November 19, 2019 PRG meeting.
- PA reviewed the draft and executed confirmation documents related to the selected bids/offers.

Adequacy of PG&E's Outreach

PG&E's outreach included Market Notices to PG&E's RA E-Solicitation distribution list as well as its Import Energy distribution list. PG&E has conducted multiple RA and related solicitations in the last two years. In some Solicitations, PG&E has included additional outreach beyond the Market Notices, including telephone calls to potential bidders to ensure they were aware of the Solicitation. While PG&E did not conduct such additional outreach for this Solicitation, PA believes market participants are increasingly aware of PG&E's solicitations and that PG&E extended adequate outreach for the 2020 Feb-BoY RA and Import Energy E-Solicitation.

PG&E's Bid Evaluation Methodology

PG&E primarily relied on a quantitative evaluation of each bidder's proposed volumes of RA desired and the bidders' proposed price for each product. Had competing bidders made bids/offers for RA in the same month that exceeded PG&E's available RA or need for RA in that month, PG&E would have selected the higher priced bidder. However, that situation did not occur in this E-Solicitation.

Further, there were numerous offers to sell RA which PG&E either manually accepted or rejected based on the following logic to evaluate:



PA found PG&E's bid/offer evaluation methodology appropriate for this E-Solicitation.

PG&E's Shortlisting and Negotiations of Confirms

The Market Notice for this E-Solicitation specified that PG&E would only contract for RA and IAR products with participants under an EEI Master Agreement. PG&E provided participants its Standard EEI RA Confirm and Import Allocation Confirm. During the confirm negotiations, PG&E provided draft Confirms to each participant specific to their awarded price and volume. The Market Notice also specified that Import Energy offers should be for WSPP Schedule C firm energy.

As noted, PG&E received
-

Ultimately, PG&E contracted

Summary of PA's Findings

Overall, PA confirms that PG&E conducted a fair and equitable 2020 Feb-BoY RA and Import Energy E-Solicitation.

Some specific findings are noted below:

- PG&E in no way prevented PA from observing its process and analyzing its methods and did not interfere with PA's conducting the Independent Evaluation.
- PA finds that PG&E's outreach for this E-Solicitation was adequate and that the Market Notice materials were clear and concise related to the E-Solicitation.
- PA finds that PG&E appropriately treated
- Based on our review of PG&E's analysis, our participation in calls and meetings and other IE activities, PA finds that PG&E conducted the 2020 Feb-BoY RA and Import Energy E-Solicitation fairly.



We are an employee-owned firm of over 2,500 people, operating globally from offices across North America, Europe, the Nordics, the Gulf and Asia Pacific.

We are experts in energy, financial services, life sciences and healthcare, manufacturing, government and public services, defence and security, telecommunications, transport and logistics.

Our deep industry knowledge together with skills in management consulting, technology and innovation allows us to challenge conventional thinking and deliver exceptional results with lasting impact.

Corporate headquarters

123 Buckingham Palace Road London SW1W 9SR United Kingdom Tel: +44 20 7730 9000

paconsulting.com

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Attachment 3

G-1 Feb-Dec 2020 RA and Import Energy IE Report (Confidential)

Attachment 4Confidentiality Declaration and Matrix

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

PACIFIC GAS AND ELECTRIC COMPANY QUARTERLY COMPLIANCE REPORT FILING SUPPLEMENTAL ADVICE LETTER 5748-E-A

DECLARATION OF MARIANNE AIKAWA
SEEKING CONFIDENTIAL TREATMENT OF CERTAIN DATA AND
INFORMATION CONTAINED IN PG&E'S
SUPPLEMENTAL ADVICE LETTER 5748-E-A
Q4 2019 QCR: CONFIDENTIAL ATTACHMENT 3
G-2_FEB-DEC 2020 RA AND IMPORT ENERGY IE REPORT

I, Marianne Aikawa, declare:

- 1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), and have been an employee at PG&E since 1989. My current title is Senior Manager within PG&E's Energy Policy and Procurement organization. In this position my responsibilities include reviewing regulatory reports. In carrying out these responsibilities, I have acquired knowledge of PG&E's regulatory reporting and have also gained knowledge of electric energy procurement data, processes, and practices. This declaration is based on my personal knowledge of PG&E's practices and my understanding of the Commission's decisions protecting the confidentiality of market-sensitive information.
- 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 confidential market sensitive data and information covered by D.06-06-066, 14-10-033, and/or Public Utilities Code Section 454.5(g). 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 in the attached matrix that is pertinent to this submittal.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct.

Executed on February 26, 2020, at San Francisco, California.

Marianne Aikawa

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) QUARTERLY COMPLIANCE REPORT ADVICE LETTER 5748-E-A PROCUREMENT TRANSACTION QUARTERLY COMPLIANCE REPORT OF Q4 2019 FEBRUARY 26, 2019

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
Document: Quarterly Compliance Report Supplemental Advice Letter 5478-E-A			
	Item VI) E) and F) Utility Planning Area Matrix Net Open (Electric)	Disclosure of information in these executed contracts could provide market participants regarding PG&E's net open position.	3 Years
Confidential Attachment 2: G- 2_Feb-Dec 2020 RA and Import Energy IE Report _CONFIDENTIAL	Item VII) B) Bilateral Contract Terms and Conditions – contracts and power purchase agreements between utilities and non-affiliated third parties; Items VIII) A) Bid Information and VIII) B) Specific quantitative analysis involved in scoring and evaluation of participating bids	Disclosure of bid term, price and notional value information would provide market sensitive information regarding PG&E bid strategy and selection. This is commercially market sensitive information because it could be used by other market participants to gain a commercial advantage and could impact market prices and cause harm to PG&E's customers.	3 Years

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

AT&T

Albion Power Company Alcantar & Kahl LLP

Alta Power Group, LLC Anderson & Poole

Atlas ReFuel BART

Barkovich & Yap, Inc. P.C. CalCom Solar

California Cotton Ginners & Growers Assn California Energy Commission California Public Utilities Commission California State Association of Counties

Calpine

Cameron-Daniel, P.C. Casner, Steve Cenergy Power

Center for Biological Diversity

Chevron Pipeline and Power

City of Palo Alto

City of San Jose Clean Power Research Coast Economic Consulting Commercial Energy

County of Tehama - Department of Public

Works

Crossborder Energy Crown Road Energy, LLC Davis Wright Tremaine LLP Day Carter Murphy

Dept of General Services Don Pickett & Associates, Inc.

Douglass & Liddell

Downey & Brand

East Bay Community Energy Ellison Schneider & Harris LLP Energy Management Service

Engineers and Scientists of California

Evaluation + Strategy for Social

Innovation

GenOn Energy, Inc.

Goodin, MacBride, Squeri, Schlotz &

Ritchie

Green Charge Networks Green Power Institute Hanna & Morton

ICF

IGS Energy

International Power Technology Intestate Gas Services, Inc.

Kelly Group Ken Bohn Co

Ken Bohn Consulting Keyes & Fox LLP

Leviton Manufacturing Co., Inc. Linde Los Angeles County Integrated Waste Management Task Force Los Angeles Dept of Water & Power

MRW & Associates Manatt Phelps Phillips Marin Energy Authority McKenzie & Associates

Modesto Irrigation District

Morgan Stanley NLine Energy, Inc. NRG Solar

Office of Ratepayer Advocates

OnGrid Solar

Pacific Gas and Electric Company

Peninsula Clean Energy

Pioneer Community Energy

Praxair

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.

SCD Energy Solutions

SCE

SDG&E and SoCalGas

SPURR

San Francisco Water Power and Sewer

Seattle City Light Sempra Utilities

Southern California Edison Company Southern California Gas Company

Spark Energy Sun Light & Power Sunshine Design Tecogen, Inc.

TerraVerde Renewable Partners

Tiger Natural Gas, Inc.

TransCanada

Troutman Sanders LLP Utility Cost Management Utility Power Solutions Utility Specialists

Verizon

Water and Energy Consulting Wellhead

Electric Company

Western Manufactured Housing Communities Association (WMA)

Yep Energy