STATE OF CALIFORNIA Edmund G. Brown Jr., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 1, 2017

Advice Letter 4947-E

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

Subject: Third Pricing Agreement to Existing QF Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources Between Burney Forest Products and PG&E

Dear Mr. Jacobson:

Advice Letter 4947-E is effective as of February 9, 2017 per Resolution E-4822.

Sincerely,

Edward Randolph
Director, Energy Division

Pacific Gas and Electric Company®

Erik Jacobson
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-1448

October 28, 2016

Advice 4947-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: **Third Pricing Agreement to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources between Burney Forest Products and Pacific Gas and Electric Company**

I. Introduction And Summary of Request

Pacific Gas and Electric Company ("PG&E") seeks California Public Utilities Commission ("CPUC" or "Commission") approval of a pricing amendment ("Third Pricing Agreement") to extend and amend the terms of an existing pricing extension to a 30-year Qualifying Facility ("QF") Interim Standard Offer No. 4 Power Purchase Agreement ("PPA") with Burney Forest Products ("Burney"). The Third Pricing Agreement has a maximum term of six months, from October 1, 2016 through March 31, 2017. If the Third Pricing Agreement expires or terminates, the PPA will revert to its original pricing and terms set forth in the underlying QF PPA.

Confidential Appendix A to this Advice Letter is a copy of the executed Third Pricing Agreement. Appendix B is an attestation from Burney describing the facility's need for the Third Pricing Agreement and Burney's ability to utilize biomass from the High Hazard Zones ("HHZ") designated by the State in response to Governor Brown's October 30, 2015 Emergency Proclamation on Tree Mortality ("Emergency Proclamation").[1] Appendix C and Confidential Appendix D are the public and confidential versions, respectively, of the report of the Independent Evaluator. Finally, Confidential Appendix E provides a summary and analysis of the terms and conditions contained in the Third Pricing Agreement.

PG&E requests that the Commission issue a resolution no later than February 28, 2017 that approves the Third Pricing Agreement without modification.

[1] Available at https://www.gov.ca.gov/docs/10.30.15_Tree_Mortality_State_of_Emergency.pdf.

II. Background

Burney operates a 31 megawatt ("MW") biomass generating facility located in Burney, California. The existing 30-year PPA was originally executed as part of PG&E's QF program and expires on January 2, 2020.

In 2010, Burney and other biomass plants indicated to PG&E that their QF PPA terms and conditions were uneconomic for continued operation at historic levels. In October 2011, PG&E and Burney executed a three-year pricing amendment with two separate PG&E options to extend. PG&E filed Advice Letter 3974-E on December 19, 2011 seeking CPUC approval of the amendment, which was approved by the CPUC in Resolution E-4491 on May 12, 2012. PG&E subsequently exercised both options to extend, and the amendment expired on its own terms August 31, 2016. Upon expiration of the amendment pricing and terms reverted to the underlying Interim Standard Offer No. 4 PPA.

Following expiration of the amendment, the plant has continued to operate. Burney has indicated that it will cease operations absent a new pricing amendment.[2]

III. The Third Pricing Agreement Is Consistent With State Policies.

A. Consistency with the Emergency Proclamation

Governor Brown's Emergency Proclamation seeks to address widespread drought-related tree mortality in California's forests. Ordering Paragraph 8 of the Emergency Proclamation directs the Commission to "utilize its authority to extend contracts on existing forest bioenergy facilities receiving feedstock from high hazard zones." PG&E has negotiated and executed the Third Pricing Agreement in furtherance of the Emergency Proclamation and the Commission's authority pursuant to it. The Third Pricing Agreement is intended to allow continued operations of the Burney facility and use of HHZ fuels until Burney learns whether it has received a longer-term PPA pursuant to the utilities' respective BioRAM solicitations, initiated pursuant to Resolution E-4770, that are currently underway. In sum, the Third Pricing Agreement is designed to ensure that this facility, located in a forested area of the State, will continue to operate and be available as a means of disposing of forest-derived and HHZ fuel. PG&E views this transaction as a temporary, interim solution providing additional time and uninterrupted deliveries until the BioRAM solicitation process is complete. Additional customer benefits are further discussed in Confidential Appendix E.

In Appendix B, Burney attests that the Third Pricing Agreement will allow that facility to continue to operate and to use HHZ fuel during the term of the Third Pricing Agreement.

---

[2] *See* Attestation of Noshir Irani, October 21, 2016 (attached as Appendix B).

The facilities are already built and interconnected to the electric grid and will not pose the environmental concerns associated with the construction and interconnection of a new biomass generating facility.

B. Consistency with State Renewables Portfolio Standard ("RPS") Need

Burney is an RPS-eligible facility that generates Portfolio Content Category ("PCC") 0[3] Renewable Energy Credits ("RECs").

Senate Bill ("SB") 2 1X was enacted in 2011 and was implemented by the Commission in Decision ("D.") 11-12-020 to require retail sellers of electricity to meet the following RPS procurement quantity requirements beginning on January 1, 2011:

- An average of twenty percent of the combined bundled retail sales during the first compliance period (2011-2013).
- Sufficient procurement during the second compliance period ("CP2") (2014-2016) that is consistent with the following formula: (.217 * 2014 retail sales) + (.233 * 2015 retail sales) + (.25 * 2016 retail sales).
- Sufficient procurement during the third compliance period ("CP3") (2017-2020) that is consistent with the following formula: (.27 * 2017 retail sales) + (.29 * 2018 retail sales) + (.31 * 2019 retail sales) + (.33 * 2020 retail sales).
- Thirty-three percent of bundled retail sales in 2021 and all years thereafter.

SB 350, enacted in 2015, extended the RPS statutory target to fifty percent by 2030 with interim requirements in 2024 and 2027. The Commission has not yet implemented SB 350's extended targets.

By ruling, the Commission has adopted a methodology for calculating a retail seller's renewable net short ("RNS") position relative to the RPS procurement targets adopted by SB 2 1X and implemented in D.11-12-020.[4] PG&E recently provided its RNS position in its Draft 2016 RPS Procurement Plan, filed August 8, 2016, and is incorporating the same RNS tables included in that filing into this Advice Letter by reference.

These RNS tables show that PG&E's existing RPS portfolio is expected to provide sufficient RPS-eligible deliveries to meet PG&E's near-term RPS compliance

---

[3] Because the original PPA with Burney Forest Products was executed prior to June 1, 2010, the output from this contract is grandfathered under the RPS statute and therefore must "count in full" toward all RPS requirements. *See* Cal. Pub. Util. Code § 399.16(d). Nothing in the Third Pricing Agreement impacts the grandfathered status of the PPA since the Third Pricing Agreement does not alter the facility's nameplate capacity, does not increase the expected quantity of generation under the PPA, and does not extend the term of the PPA. *Id.*

[4] *See* Administrative Law Judge's Ruling on Renewable Net Short issued on May 21, 2014, including subsequent changes to the RNS reporting template per direction from the Energy Division on May 29, 2014.

requirement, including both the current (2014-2016) RPS compliance period and the following 2017-2020 RPS compliance period. Accordingly, PG&E expects to bank the RECs generated by the PPAs pursuant to the RPS excess procurement rules and to apply the RECs toward PG&E's RPS obligations when PG&E has a net short position in the future.[5]

PG&E's Commission-approved 2015 RPS Procurement Plan did not originally authorize PG&E to execute bilaterally-negotiated RPS-eligible procurement during 2016. However, Resolution E-4770, adopted by the Commission in March 2016, authorized PG&E to "enter into bilateral contracts with existing forest bioenergy facilities receiving feedstock from high hazard zones during the duration of the 2015 RPS solicitation cycle."[6] PG&E negotiated and executed the Third Pricing Agreement consistent with the authority granted in Resolution E-4770.

C. Cost Reasonableness

The Third Pricing Agreement seeks to extend the terms, with modifications, of the prior amendment for the Burney facility. In this sense, it primarily seeks to maintain the status quo for the term of the Third Pricing Agreement to address the tree mortality emergency and to bridge to the BioRAM program.

As discussed in more detail in Confidential Appendix E, the amended price of the PPA is above the price that PG&E would expect to obtain for other RPS-eligible products in a general RPS solicitation. Additionally, the pricing in the Third Pricing Agreement is higher than the pricing in the underlying PPA and will therefore increase customer costs if the facility generates pursuant to the Third Pricing Agreement as expected. However, this higher cost is necessary to secure the opportunity for this facility to contribute toward addressing the needs of the Governor's Emergency Proclamation while transitioning to the BioRAM program. Additionally, the Third Pricing Agreement will provide other valuable information and rights to PG&E, as described in Confidential Appendix E

D. RPS Non-Modifiable Standard Terms and Conditions

By extending the terms of the prior pricing amendment, the Third Pricing Agreement incorporates the applicable RPS "non-modifiable" standard terms and conditions, as set forth in D.07-11-025; D.10-03-021, as modified by D.11-01-025; and D.13-11-024.

---

[5] *See* D.12-06-038 at p. 32 (holding that PCC 0 RECs may be banked as excess procurement in any compliance period).

[6] Resolution E-4770, Ordering Paragraph 3.

IV. PG&E Has Satisfied The Commission's Procedural Requirements

A. Procurement Review Group Participation

On September 28, 2016, PG&E notified the Procurement Review Group ("PRG") that it was planning to execute the Third Pricing Agreement. The notification also described PG&E's rationale for executing the Third Pricing Agreement. Additional information regarding the PRG consultation is included in Confidential Appendix E.

B. Independent Evaluator ("IE")

PG&E engaged an IE, Lewis Hashimoto of Arroyo Seco Consulting, to review PG&E's bilateral negotiations with Burney that resulted in the Third Pricing Agreement. Appendix C contains the public version of the IE's report, and Confidential Appendix D contains the confidential version of the IE's report. In the report, Arroyo Seco provides a qualified opinion that this agreement merits CPUC approval.

C. Advice Letter Filing

The filing of an advice letter seeking approval of the Third Pricing Agreement to the QF PPA is consistent with Commission procedures set forth in D.06-12-009.[7]

VI. Effective Date And Request For Confidential Treatment

A. Requested Effective Date

In light of the urgency of the Emergency Proclamation, PG&E requests that this advice filing be approved on or before February 28, 2017.

B. Request for Confidential Treatment

In support of this advice letter, PG&E provides the following confidential supporting documentation:

- Confidential Appendix A – Third Pricing Agreement between Pacific Gas and Electric Company and Burney Forest Power

- Confidential Appendix D – Independent Evaluator Report (Confidential Version)

- Confidential Appendix E – Confidential Summary and Analysis of the Third Pricing Agreement

---

[7] At pp. 6-8. *See also* Resolution E-4491 at p. 5 (explaining Commission process for seeking approval of amendments to QF PPAs).

VII. Request For Commission Approval

PG&E requests that the Commission issue a resolution no later than February 28, 2017, that:

1. Approves the Third Pricing Agreement in its entirety, including payments to be made by PG&E pursuant to the Third Pricing Agreement, subject to the Commission's review of PG&E's administration of the PPA.

2. Finds that any procurement pursuant to the Third Pricing Agreement is procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California RPS (Public Utilities Code Section 399.11 et seq.), D. 11-12-020 and D.11-12-052, or other applicable law.

3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.13(g), associated with the Third Pricing Agreement shall be recovered in rates.

4. Finds that PG&E's payments under the Third Pricing Agreement shall be recovered through PG&E's Energy Resource Recovery Account.

5. Adopts the following findings with respect to resource compliance with the Emission Performance Standard ("EPS") adopted in R.06-04-009:

    a. The Third Pricing Agreement is pre-approved as meeting the EPS because it is an existing biomass facility covered by Conclusion of Law 35(d) of D.07-01-039.

VIII. Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than November 17, 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, 4^{th} 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) 973-1448
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

IX. Effective Date and Tier Designation

PG&E requests that this Tier 3 advice letter be approved on or before February 28, 2017.

X. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list R.15-02-020. 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

<u>Public Attachments and Appendices:</u>

Attachment 1: Declaration and Matrix of Christina Yagjian Seeking Confidential Treatment Pursuant to D.08-04-023 and D.06-06-066

Appendix B: Attestation of Noshir Irani regarding Burney Forest Products, Dated October 21, 2016.

Appendix C: Independent Evaluator's Report (Public Version)

<u>Confidential Appendices:</u>

Appendix A: Third Pricing Agreement between Pacific Gas and Electric Company and Burney Forest Products

Appendix D: Independent Evaluator's Report (Confidential Version)

Appendix E: Confidential Summary and Analysis of the Third Pricing Agreement

<u>Limited Access to Confidential Material</u>:

The portions of this advice letter marked Confidential Protected Material are submitted under the confidentiality protections of Sections 583 and 454.5(g) of the Public Utilities Code and General Order 66-C. A separate Declaration Seeking Confidential Treatment regarding the confidential information is being submitted with this advice letter in accordance with D.08-04-023. This material is protected from public disclosure pursuant to D.06-06-066 because it consists of, among other items, the contract itself, price information, and analysis of the proposed energy procurement contract, which includes the following documents:

- Confidential Appendix A – Third Pricing Agreement between Pacific Gas and Electric Company and Burney Forest Products
- Confidential Appendix D – Independent Evaluator's Report (Confidential Version)
- Confidential Appendix E – Confidential Summary and Analysis of the Third Pricing Agreement

cc: Service List for R.15-02-020
Cheryl Lee, Energy Division, CPUC
Robert Blackney, Energy Division, CPUC

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

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

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:	Contact Person: Annie Ho
☑ ELC ☐GAS	Phone #: (415) 973-8794
☐ PLC ☐ HEAT ☐ WATER	E-mail: AMHP@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE	(Date Filed/ Received Stamp by CPUC)
ELC = Electric GAS = Gas PLC = Pipeline HEAT = Heat WATER = Water	

Advice Letter (AL) #: **4947-E** **Tier: 3**

Subject of AL: **Third Pricing Agreement to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources between Burney Forest Products and Pacific Gas and Electric Company**

Keywords (choose from CPUC listing): Compliance, Agreements

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other ______________________________

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.06-12-009

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. See the attached matrix that identifies all of the confidential information.

Confidential information will be made available to those who have executed a nondisclosure agreement: ☑ Yes ☐ No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Christina Yagjian (415) 973-8816

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 1

Declaration and Matrix of Christina Yagjian Seeking Confidential Treatment Pursuant to D.08-04-023 and D.06-06-066

Burney Forest Products (“Burney”) Third Pricing Agreement

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

PACIFIC GAS AND ELECTRIC COMPANY

DECLARATION OF CHRISTINA YAGJIAN SEEKING CONFIDENTIAL TREATMENT FOR CERTAIN DATA AND INFORMATION CONTAINED IN ADVICE LETTER 4947-E

I, Christina Yagjian, declare:

1. I am a Principal in Renewable Transactions within the Energy Policy and Procurement organization at Pacific Gas and Electric Company (PG&E). In this position, my responsibilities include negotiating new and amended power purchase agreements. 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.

2. Based on my knowledge and experience, and in accordance with the Decisions 06-06-066, 08-04-023, and relevant Commission rules, I make this declaration seeking confidential treatment for certain data and information contained in Advice Letter 4947-E.

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 and/or General Order 66-C. 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 October 27, 2016 at San Francisco, California.

Christina Yagjian

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

Advice Letter 4947-E
October 28, 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 Data To Be Kept Confidential**
Document: Advice Letter # 4947-E			
Appendix A	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments.	Three years from contract date for deliveries to start or one year after expiration
Appendix D (Gray Shaded text)	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments VII – Score sheets, analysis and evaluation for RPS Projects VIII.B – Quantitative analysis for scoring and evaluating bids General Order 66-C.	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments. Confidential score sheets, analyses and evaluation for RPS contract. Confidential quantitative analysis for scoring and evaluating bids in solicitation. Information concerning procurement strategy, transactions, and/or costs. Release of this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers.	Three years from contract date for deliveries to start or one year after expiration Three years Three years after winning bidders selected Indefinite
Appendix E (in its entirety)	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments VII – Score sheets, analysis and evaluation for RPS	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments. Confidential score sheets, analyses and evaluation for RPS contract.	Three years from contract date for deliveries to start or one year after expiration Three years

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

Advice Letter 4947-E
October 28, 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 Data To Be Kept Confidential
	Projects		
	VIII.B – Quantitative analysis for scoring and evaluating bids	Confidential quantitative analysis for scoring and evaluating bids in solicitation.	Three years after winning bidders selected
	General Order 66-C.	Information concerning procurement strategy, transactions, and/or costs. Release of this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers.	Indefinite

Confidential Appendix A

Third Pricing Agreement between Pacific Gas and Electric Company and Burney Forest Power

Burney Forest Products (“Burney”) Third Pricing Agreement

Confidential in its Entirety

Appendix B
Attestation of Noshir Irani regarding Burney Forest Products,
Dated October 21, 2016

Burney Forest Products (“Burney”) Third Pricing Agreement

ATTESTATION OF BURNEY FOREST PRODUCTS,
A JOINT VENTURE

I, Noshir Irani, as the Assistant Secretary and authorized representative of Burney Forest Products, a Joint Venture ("Seller"), hereby state that I have personal knowledge of the facts regarding Seller set forth herein and in the information provided herewith to Pacific Gas And Electric Company ("PG&E"), and, with respect to that certain Amendment To The Power Purchase Agreement Between Burney Forest Products And Pacific Gas And Electric Company (PG&E Log No. 13C038), dated as of October 4, 2016 (the "Amendment"), hereby declare as follows:

1. Seller's generation facility ("Facility") is described in the following table;

Facility Name or Designation	MW	Fuel Type	Condition of Equipment	Facility Location	Number of Employees
Burney Forest Products	31	waste wood	No significant repairs needed currently; major maintenance overhaul anticipated within next three to four years	35586-B Highway 299 East, Burney, CA 96013	24

2. Without the price relief set forth in the Amendment, Seller could not afford to operate the Facility and would have to shut down the Facility during the winter period from October 2016 – March 2017. Moreover, since the Facility is a cogeneration plant, shutting it down would result in the closure of the neighboring Shasta Green mill and the loss of hundred plus of jobs in small norther California town of Burney. With the price relief set forth in the Amendment, Seller intends to continue to operate the Facility at historic levels, which should result in the production of electric energy consistent with the Contract Quantity set forth in the Amendment of 98,600 MWh for the extension period (approximately 215,945 MWh on an annualized basis) during the expected term of the Amendment.

3. The proposed price relief set forth in the Amendment, serves as a bridge, allowing the Facility to continue operating and burning high hazard zones fuel, until a new potential longer term contract (BioRAM) is negotiated and approved.

4. The Facility plans to procure a percentage of its fuel from designated high hazard zones, in accordance with a California Public Utilities Commission ("CPUC") resolution, to address the Governor's emergency proclamation.

As an authorized representative of Seller, and under penalty of perjury, I state that the above statements, including financial, historical and projected operating data, are true and correct to the best of my knowledge.

Noshir Irani

Date: 10/21/2015

Name: Noshir Irani
Title: Assistant Secretary

This Attestation may be disclosed by Seller and PG&E to the California Public Utility Commission to substantiate and verify the accuracy of the parties' compliance with the requirements of the proposed Amendment to the PPA between Seller and PG&E.

Appendix C
Independent Evaluator's Report
(Public Version)

Burney Forest Products ("Burney")
Third Pricing Agreement

ARROYO SECO CONSULTING

PACIFIC GAS AND ELECTRIC COMPANY CONTRACT AMENDMENT EVALUATION

REPORT OF THE INDEPENDENT EVALUATOR ON AN AMENDMENT TO AN AGREEMENT WITH BURNEY FOREST PRODUCTS, A JOINT VENTURE

OCTOBER 20, 2016

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report evaluates an amendment to an existing contract between the Pacific Gas and Electric Company (PG&E) and Burney Forest Products, A Joint Venture ("BFP"), owner of a biomass-fueled generation facility. An independent evaluator (IE), Arroyo Seco Consulting (Arroyo), conducted various activities to review, test, and check PG&E's processes as the parties negotiated the amendment. PG&E and BFP executed the amendment on October 4, 2016. This amendment provides price relief to BFP from the beginning of October; a prior pricing amendment executed by the parties in 2015 had provided price relief through the end of August 2016.

BFP's generating facility is a 31-MW (contract capacity[1]) biomass-fueled generator located west of the town of Burney in Shasta County, adjacent to the sawmill operations of Shasta Green, Inc. whose kilns serve as steam host. The project interconnects to PG&E's 230-kV system. The facility began operations decades ago as a cogenerator and has operated under a thirty-year Interim Standard Offer #4 Qualifying Facility (QF) contract with PG&E since 1989. The facility has passed through several owners; Energy Investors Funds' private equity funds purchased the business from Conectiv and General Electric in 2006.[2]

The plant has historically burned a mix of mill wood waste and waste wood from forests, and offers the ability going forward to burn biofuel from High Hazard Zones ("HHZs") as designated by the California Department of Forestry and Fire Protection ("CalFire"). Burning such HHZ-derived biofuel would further the goals of the Governor's Emergency Proclamation of October 1, 2015 regarding tree mortality that ordered the California Public Utilities Commission (CPUC) to extend contracts on existing forest bioenergy facilities receiving feedstock from HHZs. This amendment includes a provision requiring BFP to use at least a minimum proportion of its fuel from HHZs during the term of the price extension.

The structure of this report follows a portion of the guidance of the 2014 RPS Shortlist Report Template provided by the Energy Division of the CPUC. Topics covered include:

- The role of the IE;
- Fairness of project-specific negotiations; and
- Merit of the contract for CPUC approval.

This report does not include a discussion of PG&E's outreach efforts for and the robustness of a Renewables Portfolio Standard (RPS) Request for Offers (RFO), the design of its Least-Cost Best-Fit evaluation methodology and its implementation, which would be appropriate elements if this contract had arisen from PG&E's RPS solicitation.

---

[1] While the nameplate rating of the facility is also reported to be 31 MW, the Net Qualifying Capacity designated for the project by the CAISO for 2016 averages 25.51 MW. PG&E pays BFP for 24 MW of firm capacity and 7 MW of as-available capacity under the existing QF agreement.

[2] Energy Investors Funds itself was acquired by Ares Management LP in 2014.

Arroyo's qualified[3] opinion is that the negotiations between PG&E and BFP were conducted fairly with respect to competitors. One could object that BFP received an extension of price relief while most of its direct competitors did not. PG&E's ratepayers will be somewhat disadvantaged in the short term compared to not executing the amendment, though the consequences of the amendment arguably could provide greater benefits in the longer term, so Arroyo does not regard the amendment as unfair to ratepayers. Arroyo lacks evidence that other investor-owned utilities (IOUs) and their ratepayers were disadvantaged unfairly [redacted]. Arroyo does not believe that BFP itself was unfairly disadvantaged by PG&E's negotiations including the utility leveraging its position as incumbent buyer.

In Arroyo's opinion, the amendment to the BFP agreement merits CPUC approval despite concerns about the fairness of the bilateral negotiations. Deliveries under the price extension will rank as moderate to high in price compared to competing alternatives for renewable energy, but low in price compared to alternatives for biomass-fueled energy using fuels harvested in High Hazard Zones. The net market value of the deliveries will rank high compared to other sources of energy from burning HHZ-derived fuel. Ratepayers will likely pay a modest premium to market pricing for renewable energy, but the potential benefits that the contract amendment's terms may confer to ratepayers might be greater in the longer term. The amendment scores highly against PG&E's previously stated evaluation criterion for RPS Goals, and supports public policy objectives regarding tree mortality that have been promulgated during the current drought emergency. The BFP facility ranks high for project viability; deliveries under the amendment will rank low for portfolio fit.

[3] This opinion about the fairness of negotiations is qualified: Arroyo was not included in the specific negotiation sessions in which the major terms of the amendment were agreed, so the IE can offer an opinion based only on review of written documentation rather than by comprehensive direct observation of the give and take of negotiations or of BFP's reactions to proposed contract provisions.

1. ROLE OF THE INDEPENDENT EVALUATOR

This chapter describes key roles of the IE.

A. KEY INDEPENDENT EVALUATOR ROLES

The CPUC first required an independent evaluator to participate in competitive solicitations for utility power procurement in its Decision 04-12-048. It required an IE when Participants in a competitive procurement solicitation include affiliates of IOUs, IOU-built projects, or IOU-turnkey projects. Decision 06-05-039 expanded requirements, ordering use of an IE to evaluate and report on the entire solicitation, evaluation, and selection process for the 2006 RPS RFO and future competitive solicitations. This was intended to increase the fairness and transparency of the Offer selection process. Decision 09-06-050 further expanded the requirement to require an IE to report on long-term RPS contracts that are bilaterally negotiated rather than awarded through a competitive solicitation; one might view the amendment to Burney Forest Products' contract as the result of such a bilateral negotiation, though the delivery term of the price relief provided by the amendment is short rather than long-term.

The CPUC's Decision 06-06-066 detailed guidelines for treating confidential information in IOU power procurement including competitive solicitations. It provides for confidential treatment of "Score sheets, analyses, evaluations of proposed RPS projects", vs. public treatment of the total number of projects and MW bid by resource type. Where Arroyo's reporting on the fairness of PG&E's negotiation of a contract amendment requires explicit discussion of such analyses, scores, and evaluations, these are redacted in the public version of this document.

B. IE ACTIVITIES

To fulfill the role of evaluating the renewable energy contract between PG&E and BFP, Arroyo performed various key tasks:

- Observed (telephonically) negotiations between the parties;
- Reviewed drafts of the contract amendment as the parties proposed changes to the initial proposal; and
- Performed an independent market valuation of the amendment.

2. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

This chapter provides an independent review of the extent to which PG&E's negotiations with Burney Forest Products for a contract amendment were conducted fairly with respect to competitors and to ratepayers.

Discussions between PG&E and BFP's commercial team began in mid-September 2016. Arroyo was engaged to serve as Independent Evaluator for the contract amendment after the parties' discussions began, and telephonically observed two negotiation sessions between PG&E and BFP in September 2016. By the time the IE was able to observe negotiations the major terms of the agreement had already been agreed by the parties, so most of the discussion that follows is based on the paper trail of draft documents and from debriefing the PG&E team, not on direct observation.

Arroyo's qualified opinion is that PG&E's negotiations with BFP were conducted in a manner that was fair to competitors, to BFP, and to other IOUs. The next chapter further addresses whether the contract amendment is fair to PG&E's ratepayers.

A. BACKGROUND INFORMATION

The original Qualifying Facilities agreement between BFP and PG&E was executed in April 1985 and, as amended, still governs the facility's sale of energy and capacity. It provides for capacity payments based on performance and, since the 11th contract year, for energy payments based on short-run avoided cost (SRAC). In recent years the SRAC calculation has led to energy payments sufficiently low that [redacted]. Given that situation, the parties executed an amendment to the QF agreement in October 2011 that provided price relief, setting energy price to $75/MWh, subject to a cap on all-in payments of $100.43/MWh. The 2011 price amendment had a term of three years with two options for PG&E to extend the term at its sole discretion, by one year and then by an additional eleven months.

In 2015, when PG&E agreed to exercise its option for the second extension of price relief into the October 2015 – August 2016 eleven-month period, the parties agreed to set [redacted] for that period. Both energy price and all-in payment cap in this last eleven months [redacted] first three years of the 2011 amendment.

The facility was brought into commercial operation in 1989. Its annual production, based on public filings, averaged about 221 GWh/year over the 2011-2015 period for a capacity utilization of 81%, compared to contract quantity of 216 GWh/year specified in the 2011 amendment.[4]

In October 2015, the Governor issued an emergency proclamation on tree mortality associated with the ongoing drought in California. Among other things the proclamation ordered CalFire and other agencies to identify high hazard zones for wildfire and falling trees, and ordered the CPUC to use its authority to extend contracts on existing bioenergy projects that receive feedstock from high hazard zones. BFP's facility is one of the biomass-fueled generators that is closest to CalFire-designated HHZs; the boundary of the nearest HHZ is perhaps a mile from the project. The only closer biomass-fueled facilities are two that are actually sited within HHZs, one of which has ceased operation.

EIF management approached PG&E in April 2016 with a concern about the impending expiration of the price amendment. The parties discussed various issues about the possibility of new contracting, including whether the use of mill waste from the adjacent Shasta Green sawmill could count towards requirements for HHZ fuel content. No next steps regarding a specific proposal were forthcoming.

Also in April 2016, PG&E was contacted by [redacted]. PG&E communicated that no bilateral negotiations for new long-term contracts were contemplated, and that [redacted] biomass-fueled facilities should instead use the upcoming Bioenergy Renewable Auction Mechanism (BioRAM) competitive solicitation (offers due in late July) as the vehicle for seeking a new longer-term contract. A similar message was provided to several other biomass-fueled generators in April, advising them to pursue the potential for new long-term contracts through the BioRAM competitive solicitation.

[redacted]

PG&E had been conducting bilateral negotiations with the owners of the Rio Bravo Fresno and Pacific Ultrapower Chinese Station biomass-fueled QFs from January through May 2016. Those discussions culminated in execution of contract amendments that provide three-month extensions of price relief for those two sellers through the end of October 2016. The amendment to the existing BFP agreement is analogous to the price extension amendments with RBF and PUCS, although with different timing for the period for which a higher energy price is available to the seller. In other words, PG&E has chosen to offer advantageous pricing terms for short periods to three biomass-fueled facilities currently under long-term contract, while denying such pricing relief to their competitors also under long-term contracts. The fairness of this treatment is explored in a later section.

[4] This includes production from both wood waste and natural gas as fuels; the latter is primarily used for unit startup and contributes only modestly to thermal input.

PG&E approached BFP with a proposal for a contract amendment for a short-term extension of price relief in September 2016. Discussions between PG&E and BFP proceeded rapidly; the parties executed an amendment to the contract on October 4, 2016.

B. PRINCIPLES FOR EVALUATING THE FAIRNESS OF NEGOTIATIONS

Arroyo considered some principles to evaluate the degree of fairness with which PG&E handled negotiations to amend the Burney Forest Products contract.

- Were sellers treated fairly and consistently by PG&E during negotiations? Were all sellers given equitable opportunities to advance proposals towards final PPAs? Were individual sellers given unique opportunities to move their proposals forward or concessions to improve their contracts' commercial value, opportunities not provided to others?

- Was the distribution of risk between seller and buyer in the PPAs distributed equitably across PPAs? Did PG&E's ratepayers take on a materially disproportionate share of risks in some contracts and not others? Were individual sellers given opportunities to shift their commercial risks towards ratepayers, opportunities that were not provided to others?

- Was non-public information provided by PG&E shared fairly with all sellers? Were individual sellers uniquely given information that advantaged them in securing contracts or realizing commercial value from those contracts?

- If any individual seller was given preferential treatment by PG&E in the course of negotiations, is there evidence that other sellers were disadvantaged by that treatment? Were other proposals of comparable value to ratepayers assigned materially worse outcomes?

C. NEGOTIATIONS BETWEEN PG&E AND BURNEY FOREST PRODUCTS

Some of the issues addressed in the negotiations included:

- <u>Contract price.</u> [redacted]

- Term. [redacted]

- High Hazard Zone fuel. [redacted]

  [redacted]

  [redacted]

- Contract quantity. [redacted]

• Fuel reporting.

[redacted]

• [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

• Fuel reporting. [redacted]

[redacted]

The provisions of the amendment were quickly agreed by the parties once PG&E placed an initial proposal before BFP's commercial team. There were few substantial changes to the major terms of the amendment [redacted]. Most of the negotiations or discussions focused on achieving clarity on terms and [redacted].

D. DEGREE OF FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

Arroyo acknowledges three major issues with the negotiation of the contract amendment that could represent unfair treatment of BFP or of its competitors. A fourth issue, of whether the negotiations were fair to PG&E's ratepayers, is addressed in the next chapter.

Fairness to competitors. One issue is whether it was fair to PG&E to provide short-term price relief to BFP but not to other biomass-fueled QFs currently under contract. PG&E did not treat all biomass-fueled sellers consistently, and not all sellers were allowed to advance discussions towards short-term price relief amendments. BFP and two other QFs were allowed to move their proposals forward while this opportunity was denied to others.

PG&E did provide analogous but not identical pricing extensions to Pacific Ultrapower Chinese Station and Rio Bravo Fresno earlier in 2016. Arroyo expressed an opinion in the IE report for those transactions that PG&E's choice to provide a price extension to Rio Bravo Fresno but not to its competitor [redacted] was less than fully fair. [redacted], Rio Bravo Fresno, and BFP had all received contract amendments for price relief from PG&E in 2011. [redacted] closer in proximity to High Hazard Zones than Rio Bravo Fresno. Unlike other QF-contracted biomass facilities such as [redacted] that had previously obtained price relief but subsequently shut down, [redacted] had continued to operate and arguably provided project viability comparable to Rio Bravo Fresno and BFP. A case could be made that PG&E's choice to provide price relief to BFP and not to [redacted] was unfair.

There are factors that could mitigate concerns that PG&E's favorable treatment of BFP compared to its competitors was unfair. At the time that PG&E embarked on negotiations for the price extension, the utility already knew that [redacted] This would provide an economic motivation for PG&E to seek ways to influence BFP [redacted]. Providing a price extension that would allow BFP to continue to operate economically until the point in time when a new five-year BioRAM contract took effect would seem to be a powerful incentive to influence BFP's decisions. Other biomass-fueled QFs did not offer this attractive opportunity for PG&E's ratepayers.

Another mitigating factor is that [redacted] did not submit an offer to PG&E's BioRAM solicitation, asserting instead its preference to obtain a long-term contract with PG&E through bilateral negotiations. Arroyo has no evidence that [redacted] is currently burning HHZ fuel or would be well-positioned to do so during a hypothetical price extension. Arroyo views [redacted] as ranking lower in proximity to High Hazard Zones than BFP.

The other contracted biomass-fueled QFs to which PG&E could have provided a price extension do not match BFP and [redacted] merits as sellers: they rank lower in project viability having already shut down, they are scored by PG&E as ranking lower in proximity to HHZs, and/or their pricing as revealed by offers in PG&E's BioRAM solicitation is less competitive.

Although BFP's competitors, were they aware of BFP's bilateral negotiation for price relief, might likely view it as unfair because they were not similarly approached by PG&E, PG&E could argue that there are compelling business reasons to offer BFP a pricing extension amendment and not offer an analogous deal to its competitors. Arguably PG&E's ratepayers are better off with PG&E securing a short-term amendment that gives BFP an incentive [redacted].

It may be a parochial argument when viewed in the context of benefits to all ratepayers in the state, but PG&E's own ratepayers are in fact better off buying biomass-fueled energy over the longer term from the lowest-priced competitor than from higher-priced alternatives. On that basis, it would be more attractive to ratepayers for PG&E to negotiate a pricing extension with BFP than with [redacted].[5]

Once a thermal power plant shuts down and furloughs its employees there is a risk that facility-specific skills of the labor force will be difficult to recover if and when the project

---

[5] In the absence of [redacted] This seems to Arroyo to be a reasonable motivation for PG&E to draft provisions in the price extension amendment to avert an outcome in which [redacted].

attempts to return to service months later. [redacted], it was logical to consider means to keep the project fully operational in the short term rather than to allow the facility to shut down after the prior price extension expired, [redacted].

BFP's biomass-fueled QF competitors that did not obtain a short-term amendment for price relief from PG&E have generally shut down operations because the economics of operating under the pricing terms of the original QF agreements became untenable. Arroyo does not have evidence that these competitors were specifically harmed by PG&E granting short-term price relief to BFP. It seems likely to Arroyo that any woody waste-fueled QF that fails to obtain a BioRAM contract from one of the IOUs will choose to cease operations when exposed to SRAC energy pricing. This is not a case of competitors being disadvantaged specifically by the BFP agreement; it is a comment on the adverse market conditions facing thermal plants with fuel costs nearer [redacted] attempting to compete in a market where electric prices for baseload power are in the $30s/MWh. For PG&E to attempt to subsidize many or all uneconomic wood-waste-fueled plants with short-term price relief regardless of their lack of competitiveness, as opposed to [redacted] would seem illogical.

Arroyo has no evidence that PG&E provided non-public information to BFP that might have uniquely advantaged it over its competitors in securing a pricing extension.

Arroyo's opinion is that, while PG&E's prior negotiations of bilateral price extension amendments with Pacific Ultrapower Chinese Station and Rio Bravo Fresno were less than fully fair to competing biomass-fueled facilities under QF contracts, the negotiation with BFP was fair to competitors. The distinction that Arroyo accepts is that [redacted]. On that basis, using a price extension [redacted] while not providing such a benefit to competitors that [redacted], does not seem unfair.[6]

Fairness to BFP. A second fairness issue is whether PG&E unfairly used its market position to force BFP into the contract amendment, making the price extension contingent on [redacted]. Was this fair to BFP?

PG&E was uniquely positioned, compared to the other two IOUs, to provide an incentive to BFP [redacted]. PG&E is the incumbent buyer in a contractual relationship that spans three decades. Only PG&E is in a position to

---

[6] [redacted]

offer price relief that would allow BFP to continue operating economically for six more months. It is hard to imagine [redacted]. BFP was vulnerable to persuasive inducements from PG&E; [redacted], and only PG&E is in a position to grant price relief on that existing agreement.

Arroyo views the situation as PG&E having strong leverage over BFP by virtue of its incumbency in the existing QF agreement, not from any exercise of classical market power or monopoly position. Arroyo's opinion is that PG&E exploited that incumbency to structure a contract whose short-term economic benefits would be hard for BFP to ignore, in a way that [redacted]. Was exploiting the advantages of incumbency unfair?

Arroyo notes that [redacted] when PG&E first proposed them. BFP appears to have had [redacted], focusing instead on [redacted]. BFP has freedom of choice at several points; it could have chosen to continue operating without price relief until the outcome of the BioRAM selection became known in October, which might have allowed it to be selected by Edison or SDG&E for a BioRAM contract, in which case it could continue operating without price relief until the effective date of a new contract. In the course of the negotiations for the amendment, it could have requested a weaker version of [redacted]. It could have agreed to the price relief amendment, then [redacted]. At any of these decision points BFP could have avoided [redacted], but it did not.

Arroyo has no information suggesting whether BFP participated in other IOUs' BioRAM solicitations or not, nor, if it did participate, what offer price it had submitted. Arroyo has no information suggesting that [redacted]. In the absence of such information, Arroyo cannot conclude that BFP was unfairly disadvantaged [redacted].

From Arroyo's perspective, BFP was not "forced" or coerced into the contract amendment but chose to negotiate it and execute it of its own free will. It appears to Arroyo that BFP recognized that it would be better off continuing to operate economically at a price higher than SRAC for six more months, was hopeful that it might be awarded a longer-term BioRAM contract by PG&E or by other IOUs, and was content [redacted].

On that basis Arroyo's opinion is that the negotiations for the contract amendment were fair to BFP. [redacted]

Fairness to other IOUs. A third issue is whether [redacted] was unfair to Edison and SDG&E and to their ratepayers. [redacted]

Arroyo lacks information about whether this hypothetical situation was factually the case [redacted]

PG&E has exploited its position as incumbent buyer of BFP's generation to prevent [redacted]

In Arroyo's opinion the actions taken by PG&E to take advantage of its incumbency in its pre-existing business relationship with BFP do not seem illegitimate or wrongful or even unfair. It does seem to Arroyo that PG&E took aggressive actions to [redacted]. To Arroyo, that seems to be forceful business conduct of the sort observed when buyers compete vigorously for the most competitively priced supply contracts, whether utilities or supermarket chains or aerospace manufacturers, and within the norms of legitimate business behavior.

Given that the IE has no information about [redacted], Arroyo cannot conclude that negotiations between PG&E and BFP were unfair to Edison and SDG&E. [redacted]

The next chapter addresses the degree to which the short-term price relief amendment imposes above-market costs on PG&E's ratepayers, and whether that was fair to them. Arroyo's qualified[7] opinion is that PG&E's negotiations with Burney Forest Products were,

---

[7] Had Arroyo been able to observe the two negotiation sessions in which PG&E made its initial proposal to BFP and in which BFP reacted to the provisions, the IE would be better positioned to form an opinion about whether BFP regarded PG&E's proposed terms as fair. As it stands, there is
(Footnote continued)

overall, conducted fairly with respect to BFP's competitors, to other IOUs and their ratepayers, and to BFP itself. Arroyo acknowledges that PG&E's aggressive effort to capitalize on its position as the incumbent buyer from BFP may strike other observers and policymakers as unfair to other parties that could be left worse off had PG&E not pursued its strategy [redacted].

This report does not address the separate but related issue of whether [redacted] was fair or unfair given [redacted].

some uncertainty in Arroyo's assessment about how BFP perceived [redacted].

3. MERIT FOR CPUC APPROVAL

This chapter provides an independent review of the merits of the amended and restated contract between PG&E and Burney Forest Products against criteria identified in the Energy Division's 2014 RPS IE template.

A. CONTRACT SUMMARY

On October 4, 2016, PG&E and Burney Forest Products executed an amendment for continued delivery of RPS-eligible energy from an existing biomass-fueled generation facility. Contract capacity continues to be that of the underlying QF agreement, 31 MW. The contract quantity for the PPA is 98.6 GWh over the six-month extension period. The amendment takes effect on October 1, 2016 and will continue for six months or until the delivery term of a BioRAM contract between PG&E and BFP commences. BFP will continue to be paid SRAC-based energy price as specified in the underlying QF agreement until and unless the CPUC approves the amendment, when a true-up payment would be made. The project is located west of the unincorporated town of Burney in Shasta County, adjacent to the Shasta Green sawmill.

B. NARRATIVE OF EVALUATION CRITERIA AND RANKING

The 2014 RPS template for IEs provided by the Energy Division calls for a narrative of the merits of the proposed project on the criteria of contract price, portfolio fit, and project viability.

<u>CONTRACT PRICE AND MARKET VALUATION</u>

The CPUC reviewed the 2011 contract amendment granting BFP price relief and approved PG&E's advice filing in Resolution E-4491, finding at that time that based on comparisons of its capacity and energy pricing that "the price under the Proposed Amendment is reasonable".

<u>Contract Price.</u> The fixed energy price paid to BFP during the amendment delivery term [redacted]

While the 2011 amendment's pricing was sufficiently competitive for the offer to merit approval by the CPUC, in today's market it ranks moderate or high in price in comparison to alternatives for deliveries of RPS-eligible energy recently available to PG&E in its most recent RPS RFO. [redacted], would rank in the highest-priced quartile of Offers received in PG&E's 2014 RPS RFO. If, however, actual performance led to a somewhat lower price for deliveries [redacted], the amendment's pricing would rank in the second-highest-priced quartile.

The deliveries from BFP under the contract amendment differ from other renewable energy proposals in that the contract imposes an obligation that [redacted] of the fuel used to provide energy deliveries come from High Hazard Zones. The state of California has placed a premium on biomass-fueled generation using HHZ fuels, and both regulatory and legislative bodies have set a priority on extending existing contracts for such generation. So a better benchmark for the market prices to which BFP's amendment should be compared is the set of proposals from biomass-fueled generators to PG&E's BioRAM solicitation. [redacted] is lower than all of the pre-TOD contract prices offered to PG&E in its BioRAM solicitation, [redacted]. The comparison is not apples-to-apples because the BioRAM offers were for contracts of five-year term or longer, vs. BFP's six-month extension. However, this illustrates that the amendment will provide renewable energy fueled by woody waste from HHZs at a lower price for six months than biomass-fueled facilities are willing to sustain for longer delivery terms.

PG&E previously executed three-month pricing extensions in 2016 with Pacific Ultrapower Chinese Station and Rio Bravo Fresno, which also agreed to meet minimum requirements for obtaining HHZ-based fuel. [redacted] It seems likely that ratepayers' cost of taking delivery of BFP's power including the required content from burning HHZ fuel will be lower than the cost of Chinese Station's or Rio Bravo Fresno's deliveries and lower than any BioRAM contract's.

Arroyo's conclusion is that the pricing of RBF's deliveries during the term of the contract amendment is moderate to high when compared to other providers of renewable energy, but low compared to other sources of biomass-fueled energy that has a requirement to burn biofuel harvested from HHZs.

Market Valuation. PG&E did not perform a market valuation of the BFP amendment using its approved Least-Cost Best-Fit methodology, and has not provided the results of its net market value analysis to the IE. Arroyo made an independent estimate of the net market value of the price extension of the BFP contract, using [redacted] as a conservative estimate of the actual pricing of the deliveries and using the generation profile [redacted]. This estimate would rank the BFP amendment near the bottom of net market value of offers received in PG&E's most recent RPS RFO (Arroyo does not have access to more recent results of RAM solicitations). It would rank the BFP amendment in the top quartile for value among offer variants PG&E received in its BioRAM solicitation. As noted, ranking the net market value of a six-month delivery period against offers of five years or longer in term is not an apples-to-apples comparison.

Another comparison to renewable energy market price can be constructed from expected market prices and a view of the price of California unbundled renewable energy credits. Arroyo lacks fresh pricing data for the latter. Using stale pricing information from early 2016, the net market value of the BFP six-month extension might be [redacted]. On the basis of that estimate, PG&E's ratepayers would expend [redacted] in payments to BFP above the market price of renewable energy, payments that would not be required if the amendment were not executed or approved. Actual above-market payments will depend on BFP's production performance and actual market price outcomes.

Arroyo's estimate of net market value for the BFP amendment is higher in $/MWh than those of the analogous three-month contract extensions that PG&E provided to Pacific Ultrapower Chinese Station and Rio Bravo Fresno. The CPUC approved both of those contract amendments in August 2016 in Resolution E-4797, in which it found the price and value of those amendments to be reasonable in the context of a response to a state of emergency.

In other words, while the BFP amendment is quite low in value compared to possible short-term contracts for renewable generation, it is high in value compared to other means of securing generation from biomass-fueled generators burning woody waste from HHZs. PG&E has a net long position in renewable energy credits in the current compliance period and generally does not have a compliance need to procure additional renewable generation in the immediate future, so the primary rationale for entering such an above-market contract amendment is to secure competitively-priced supplies of generation from HHZ-derived biofuels during the current drought and tree mortality emergency. The above-market payment that ratepayers would incur to secure the HHZ-based generation in the short-term amendment and in any BFP BioRAM contract is small but not insignificant.

If one accepted the hypothesis that [redacted] This hypothetical benefit of the contract amendment would more than compensate for the above-market cost of BFP's renewable energy deliveries during the term of the contract amendment.

The terms of the contract amendment do not shift risks from BFP to PG&E's ratepayers beyond the balance of risks already established in the original QF agreement and the 2011 price amendment. Arroyo views the balance of risks between buyer and seller as within the range of what PG&E achieves with other renewable energy sellers, and as fair to ratepayers.

CONSISTENCY WITH RPS GOALS AND PROCUREMENT PLAN

Procurement plan. As part of the RPS procurement cycle, PG&E drafted a 2015 RPS procurement plan in August 2015 that was accepted with conditions by the CPUC in Decision 15-12-025. The plan states that PG&E's existing RPS contract portfolio, its own RPS generation, and its expected bank of renewable energy credits are adequate to ensure compliance with near-term RPS requirements. In the plan, PG&E's projections for its renewable net short position suggest that its procurement of renewable energy in 2016 well exceeds its compliance need. This suggests that the BFP contract amendment is inconsistent with the procurement plan. The plan states that PG&E has no near-term need for RPS resources but will procure incremental volumes of RPS-eligible contracts in 2016 through CPUC-mandated programs such as the RAM, ReMAT, and BioMAT programs. None of these programs require the extension of the pricing relief that PG&E has previously granted to BFP. (One could argue that some specifics of PG&E's 2015 RPS procurement plan, which did not contemplate a drought and tree mortality emergency, have been superseded by the CPUC's issuance of Resolutions E-4770 and E-4805.)

PG&E's procurement plan states that the utility uses its Portfolio-Adjusted Value (PAV) methodology to evaluate which products provide the best fit at least cost. PG&E did not use its PAV methodology to evaluate the BFP contract amendment.

The BFP amendment will have the effect of increasing resource diversity, or at least deferring a decline in resource diversity, within PG&E's RPS portfolio, which is identified in the procurement plan as a possible risk-reducing strategy.

While PG&E stated no intent to enter into bilateral negotiations for new RPS contracts in its 2015 RPS procurement plan, the CPUC's Resolution E-4770 subsequently authorized the IOUs to pursue bilateral contracts to meet the targeted need to extend contracts with existing forest bioenergy projects receiving feedstock from High Hazard Zones. The BFP amendment fits clearly into this category.

RPS Goals. Because PG&E did not hold a 2015 RPS RFO there are no publicly stated goals or targets for procurement in PG&E's current annual procurement cycle. PG&E's 2014 RPS solicitation protocol included an evaluation criterion for a contract's contribution to RPS goals. One of the subcriteria was whether a project would provide economic benefits to "communities afflicted with high poverty or unemployment", which was one of the legislative goals for the state's RPS program. The community of Burney fits that characterization: median annual household income in Burney in 2014 was $38.2 thousand vs. $61.5 thousand for the state of California, based on the U.S. Census Bureau's 2014 American Community Survey. The percentage of population living below poverty levels was 19.9% vs. the state's 16.4%; an estimated 14.8% of the population over age 16 was unemployed vs. 7.0% for the state.

Arroyo speculates that any beneficial economic impact of the contract extension would likely be short-term in nature, averting possible staff reductions should the owner choose to shut down operations in the absence of a pricing extension. [redacted]

[redacted]

Another RPS Goals evaluation subcriterion in the 2014 RPS RFO was contribution to Executive Order S-06-06, which called for 20% of the state's renewable energy needs in electricity to be met by electricity from biomass. The amendment would contribute to meeting this goal by averting a decline in biomass-fueled production, assuming that BFP could likely shut down or reduce output rather than continue operating in baseload mode when exposed to SRAC energy pricing.

When the RPS Goals protocol was drafted for PG&E's 2014 RPS RFO neither PG&E nor its regulator anticipated the Governor's 2015 emergency proclamation. Ensuring continued operation of biomass-fueled generators to burn dead and dying trees harvested from high hazard zones was not specifically an element of PG&E's RPS Goals criterion. However, because the contract extension requires use of these as feedstock, the amendment provides immediate and timely support for the state's current executive, legislative, and regulatory goals in a period of emergency caused by tree mortality hazards.

PORTFOLIO FIT

According to its approved 2015 RPS procurement plan, PG&E uses its Portfolio-Adjusted Value methodology to evaluate both market value and portfolio fit. PG&E did not use its PAV methodology to value the BFP amendment, so it does not formally have a measure of the portfolio fit of these transactions.

Arroyo's opinion is that, qualitatively, the fit of the BFP amendment with PG&E's portfolio ranks low. The utility already expects a net long RPS position for the second and third compliance periods because of its prior procurement activities and because of changes in PG&E's retail load outlook. Contracting for deliveries of even more renewable energy in 2016 and 2017 increases PG&E's overprocurement of RPS-eligible energy in the current and next compliance period and increases the size of the REC bank that must be carried forward to future periods: costs for these RECs will be expended during the amendment's delivery term but the need for the RECs is projected to develop later in the 2020s.

BFP's production shape is generally baseload, whereas PG&E needs more flexible resources to deal with periods of overgeneration and negative market prices. BFP's 2011 price amendment provides PG&E with up to 100 buyer curtailment hours per contract year, fewer than the number allowed by most of the renewable energy contracts the utility has executed since 2012[8], so the utility has less flexibility to manage the BFP contract during periods of overgeneration compared to other parts of its RPS portfolio.

[8] The number of hours of buyer curtailment provided in BFP's price amendment is less than that of [redacted] of the offer variants received by PG&E in its 2014 RPS RFO. [redacted] offers that PG&E selected for its short list in that solicitation provided more buyer curtailment hours than BFP does.

PROJECT VIABILITY

As an existing generation facility that has operated reliably with production levels near or above its annual contract quantity, the project viability of the BFP facility ranks quite high. Arroyo assigns it a score of 100 using the Energy Division's project viability calculator.

C. DISCUSSION OF MERIT FOR APPROVAL

In Arroyo's opinion, the contract amendment to extend price relief for Burney Forest Products merits CPUC approval.

- The CPUC found BFP's 2011 price relief amendment to be reasonable, including its pricing; the current amendment's pricing is lower than that of the 2011 amendment. While Arroyo ranks the PPA's contract price as moderate to high compared to recent competing proposals from projects delivering renewable energy, the more relevant peer group to which to compare this short-term amendment is other short- to medium-term proposals from biomass-fueled facilities that agree to deliver power from biofuel harvested from High Hazard Zones. The pricing of the BFP amendment is low compared to that peer group.

- Similarly, the BFP amendment will likely result in payments above the market price of renewable energy. This might amount to excess payments of [redacted] by ratepayers above what they would pay for renewable energy at market prices, depending on market and performance outcomes. The $/MWh net market value of the BFP amendment deliveries will however be below those of previous price extensions that PG&E granted to other QFs that are burning HHZ fuel and also below those of proposals received in PG&E's BioRAM solicitation for delivering energy derived from HHZ fuel. So the BFP amendment is a means of obtaining bioenergy from HHZ fuel at a better value than competing alternatives.

- Because the BFP amendment requires the facility to meet a target for the content of its delivered fuel that originates in High Hazard Zones, it will contribute to meeting an urgent public policy goal stated in the Governor's emergency proclamation on tree mortality and in regulatory and legislative directives. In Arroyo's opinion the relatively modest above-market payment the amendment requires is justified by the progress toward burning HHZ biofuels it will provide in response to a state of emergency.

- While taking deliveries under the BFP amendment is not well aligned with PG&E portfolio fit or compliance needs, and it is not particularly consistent with PG&E's 2015 RPS procurement plan, the amendment aligns quite well with the directives of the CPUC's Resolution E-4770 to cope with the tree mortality emergency.

- The BFP amendment will contribute to PG&E's prior definitions of its RPS goals evaluation criterion, such as contributing economic benefits to a community afflicted by poverty and high unemployment, and supporting the state goal for biomass-fueled energy as a percentage of renewable energy generation.

- As an operating facility that has delivered biomass-fueled energy reliably to PG&E for decades, BFP ranks high for project viability.

- The provision of the amendment [redacted] raises concerns about fairness of negotiations. Arroyo's own opinion is that PG&E's action [redacted] is, overall, fair to BFP's competitors, fair to the other IOUs and to their ratepayers, and fair to BFP itself.

  [redacted] Arroyo has no information indicating that BFP participated in Edison's or SDG&E's BioRAM solicitations. Arroyo views BFP as having freedom of choice in making its decisions about the terms and conditions offered by PG&E, and has detected no reluctance to accept [redacted].

  Arroyo acknowledges that other observers of PG&E's business dealings [redacted] could view it as unfair treatment of BFP, of BFP's competitors, or of the other IOUs and their ratepayers. Arroyo would expect that other biomass-fueled QFs to which PG&E did not extend price relief might very well view the concession provided to BFP as unfair. Ratepayers of the other utilities similarly might, hypothetically, object that [redacted]. If this were the case, Arroyo would view it as the consequence of PG&E having a prior and ongoing business relationship with BFP vs. other IOUs having no business relationship.

Based on these observations and judgments about the fairness of negotiations and overall impact on ratepayer benefits and costs, Arroyo's qualified opinion is that the Burney Forest Products contract amendment merits CPUC approval. This opinion is qualified by Arroyo's inability to observe directly the negotiations in which BFP agreed to PG&E's terms and conditions, including [redacted].

Confidential Appendix D
Independent Evaluator's Report
(Confidential Version)

Burney Forest Products ("Burney")
Third Pricing Agreement

Confidential in its Entirety

Confidential Appendix E

Confidential Summary and Analysis of the Agreement

Burney Forest Products (“Burney”) Third Pricing Agreement

Confidential in its Entirety

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

AT&T
Albion Power Company
Alcantar & Kahl LLP
Anderson & Poole
Atlas ReFuel
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Braun Blaising McLaughlin & Smith, P.C.
Braun Blaising McLaughlin, P.C.
CENERGY POWER
CPUC
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
Clean Power Research
Coast Economic Consulting
Commercial Energy
Cool Earth Solar, Inc.
County of Tehama - Department of Public Works
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Dept of General Services

Division of Ratepayer Advocates
Don Pickett & Associates, Inc.
Douglass & Liddell
Downey & Brand
Ellison Schneider & Harris LLP
Evaluation + Strategy for Social Innovation
G. A. Krause & Assoc.
GenOn Energy Inc.
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Charge Networks
Green Power Institute
Hanna & Morton
ICF
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
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
McKenna Long & Aldridge LLP
McKenzie & Associates
Modesto Irrigation District
Morgan Stanley
NLine Energy, Inc.
NRG Solar
Nexant, Inc.
ORA

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Praxair
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
SCE
SDG&E and SoCalGas
SPURR
San Francisco Water Power and Sewer
Seattle City Light
Sempra Energy (Socal Gas)
Sempra Utilities
SoCalGas
Southern California Edison Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
TerraVerde Renewable Partners, LLC
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