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

Edmund G. Brown Jr., *Governor*

April 25, 2012

Advice Letter 3944-E

Brian K. Cherry
Vice President, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Subject: Fourth Amendment to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources between Eel River Power, Inc., and PG&E Company

Dear Mr. Cherry:

Advice Letter 3944-E is effective April 19, 2012 per Resolution E-4488.

Sincerely,

Edward Randolph

Edward F. Randolph, Director
Energy Division

Pacific Gas and Electric Company

Brian K. Cherry
Vice President
Regulation and Rates

Mailing Address
Mail Code B10C
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

Fax: 415.973.6520

November 14, 2011

Advice 3944-E
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: Fourth Amendment to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources Between Eel River Power, Inc., and Pacific Gas and Electric Company

I. INTRODUCTION

A. Purpose

Pacific Gas and Electric Company ("PG&E") seeks the California Public Utilities Commission's ("Commission") approval of the fourth amendment ("Fourth Amendment") to a Qualifying Facility ("QF") Standard Offer Power Purchase Agreement ("PPA") that PG&E has executed with Eel River Power, Inc. ("Eel River" or "Seller"). The Commission's approval of the Fourth Amendment will enable Eel River to continue to generate and sell to PG&E Renewables Portfolio Standard ("RPS")-eligible power from its existing 28.8 megawatt ("MW") biomass facility ("Facility") located in Humboldt County, California. Eel River is owned by Greenleaf Power, LLC ("Greenleaf").

The Fourth Amendment provides the Facility with a higher price for delivered energy and capacity payments in exchange for stricter performance obligations and other beneficial terms and conditions. The Fourth Amendment will take effect October 1, 2011, and will, if approved, enable Eel River to continue to operate its Facility and provide RPS-eligible generation for a minimum term of 3 years.[1] The term of the Fourth Amendment can be extended twice at PG&E's option, first by one year, and second by six months or until March 31, 2016. Since the Fourth Amendment term is less than five

[1] As detailed further in Confidential Appendix D, the Facility's owner does not believe that continued operation of this facility would occur in the absence of this amendment.

years (even if PG&E exercises both options to extend the Fourth Amendment), it may be approved through the advice letter process according to Decision ("D.") 06-12-009.[2] PG&E submits the Fourth Amendment for Commission approval to establish the reasonableness of its terms and for authorization to recover its payments and any other costs incurred under the Fourth Amendment through its Energy Resource Recovery Account ("ERRA").

B. Subject of the Advice Letter

The existing PPA is a Standard Offer 1 ("SO1") contract that only delivers as-delivered capacity and energy and remains in effect until terminated by Seller. Eel River has delivered electricity generated by the Facility under the PPA since the Facility began operations and started delivering energy in 1986. The Facility burns biomass for its fuel. The continued operation of biomass-fueled facilities prevents open burning or decomposition of the wood waste used for fuel, which would generate higher levels of greenhouse gas emissions and other air borne pollutants if not consumed as fuel; and in some instances results in the diversion wood waste from landfills.

In 2007, PG&E and Eel River's predecessor, the Pacific Lumber Company ("PALCO"), executed the Third Amendment to the PPA which set a fixed price for energy and eliminated the Seller's termination right until March 31, 2016 (the "2007 Amendment"). The 2007 Amendment was filed with the Commission on January 11, 2008, in Advice Letter 3193-E, and approved on November 21, 2008, by Resolution 4212-E. After Greenleaf acquired the Facility in November 2010, Eel River and PG&E began discussions regarding an amendment to the PPA with pricing terms that would support the Facility's continued operation. As a result, PG&E and Eel River negotiated and executed the Fourth Amendment, which is attached as Confidential Appendix A, on September 21, 2011.

If approved, the Fourth Amendment will enable the Facility to continue deliveries of RPS-eligible energy to PG&E at a reasonable price for a minimum of 3 years and up to March 31, 2016, which is the expiration date of the 2007 Amendment. The Fourth Amendment provides the Facility with a higher price for delivered energy and capacity payments in exchange for stricter performance obligations and other beneficial terms and conditions. The Facility is expected to deliver approximately 97 gigawatt-hours ("GWh") of RPS-eligible power to PG&E each year during the term of the Fourth Amendment. The Fourth Amendment will maintain an existing supply of RPS-eligible energy at a reasonable price and will improve the value of the PPA to PG&E's customers in non-price terms.

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[2] *See* D.06-12-009 at 7.

PG&E negotiated the Fourth Amendment to maintain the contribution of this biomass resource to its existing RPS portfolio. Additionally, the Facility is already built and interconnected to the electric grid, and will not pose any of the environmental concerns associated with the construction and interconnection of a new generating facility. Approval of the Fourth Amendment will also allow Eel River to preserve 59 direct and indirect jobs associated with the Facility.

A detailed explanation of the terms of the Fourth Amendment is provided in Confidential Appendix B. Confidential Appendix B also includes an analysis of the Facility's costs and revenues in both recorded and forecasted terms. Eel River has provided an attestation to demonstrate the need for the Fourth Amendment, which is attached as Confidential Appendix D.

Confidential Appendix B also demonstrates that the price and market value of the amended PPA is reasonable by using a net market value ("NMV") comparison of other biomass transactions that have been executed and other alternatives for procurement of RPS-eligible resources. Based on the Facility's cost and revenue projections, and the terms of contracts or amendments that PG&E has recently executed with other biomass generators, PG&E concludes that the price and performance terms of the Fourth Amendment are reasonable.

The Fourth Amendment will become effective upon Commission approval. Once approved, certain true-up payments will be made under the terms of the Fourth Amendment. The true-up mechanism is explained in Confidential Appendix B.

C. General Facility Description

In January 2007, PALCO filed for bankruptcy protection. In 2008, the resolution of PALCO's bankruptcy proceeding led to the transfer of the assets of the bankrupt PALCO and all its subsidiaries to the Mendocino Redwood Company and Marathon Structured Finance. After 145 years as PALCO, the new company overseeing Eel River became known as the Humboldt Redwood Company/ Marathon Asset Management ("Marathon").

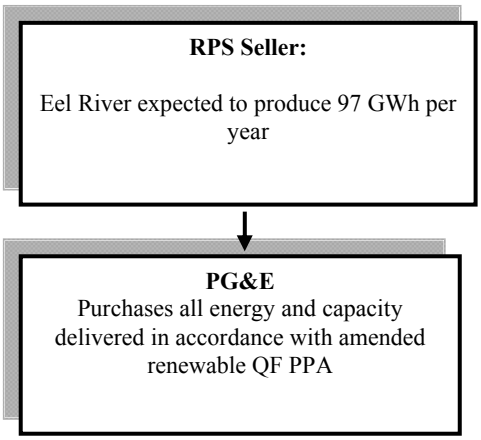
In November 2010, Greenleaf, a newly formed owner/operator of biomass power plants, announced its purchase of the Eel River facility from Marathon. Greenleaf is backed by Denham Capital Management, a leading global energy-focused private equity firm.

The following table summarizes the primary features of the Facility:

Facility Name	Eel River Power, Inc.
Technology	Biomass
Capacity (MW)	28.8 MW nameplate capacity
Capacity Factor	Approximately 38.5 percent
Expected Generation (GWh/Year)	Approximately 97 GWh/year
Amendment Effective date	October 1, 2011
Amendment Term (Years)	3 years with two options to extend, for a maximum term of 4 years 6 months
Location (City and State)	Humboldt County, CA
Control Area (e.g., California Independent System Operator ("CAISO"), Bonneville Power Administration ("BPA")	CAISO

D. General Deal Structure

Figure 1: PPA Delivery Structure



E. Confidentiality

In support of this Advice Letter, PG&E has provided the confidential information listed under Section III.B, "Request for Confidential Treatment," below. This information includes the Fourth Amendment and other information that more specifically describes the rights and obligations of the parties. This information is being submitted in the manner directed by D.08-04-023 and the August 22, 2006, Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with D.06-06-066 to demonstrate the confidentiality of the material and to invoke the protection of confidential utility information provided under either the terms of the IOU Matrix, Appendix 1 of D.06-06-

066 and Appendix C of D.08-04-023, or General Order 66-C. A separate Declaration Seeking Confidential Treatment is being filed concurrently with this Advice Letter.

II. CONSISTENCY WITH COMMISSION DECISIONS

A. Consistency With PG&E's Adopted RPS Procurement Plan

The Fourth Amendment will benefit PG&E's customers by: (1) allowing an existing QF resource that provides RPS-eligible energy to continue operations and deliver renewable energy at a competitive price; and (2) modifying the PPA's performance obligations so that production from the Facility will be more in line with historical delivery levels and provide deliveries on a year-round basis.

Senate Bill 2 in the First Extraordinary Session of the 2011 Legislative Session ("SB 2 1X") requires load-serving entities ("LSEs") to gradually increase procurement of renewable resources until such deliveries meet 33 percent of their retail sales. The statute creates a compliance structure that includes both enforceable compliance period targets and unenforceable reasonable progress targets for individual years through 2020. The reasonable progress targets will be used to establish the total enforceable quantities of renewable deliveries that each LSE will need to procure by the end of each compliance period. For instance, while SB 2 1X requires that LSEs procure an average of 20% of retail sales from renewable resources for the first compliance period of January 1, 2011, to December 31, 2013,[3] the Commission has yet to define the reasonable progress targets for the second and third compliance periods (2014-2016 and 2017-2020, respectively). Once the Commission has established the reasonable progress targets for these later compliance periods, LSEs will be able to calculate the percentages of their total sales for each respective period that represents the enforceable compliance period targets.[4]

PG&E's 2011 Renewable Energy Procurement Plan ("2011 RPS Plan") was approved by D.11-04-030 on April 20, 2011. In the 2011 RPS Plan, PG&E indicated that it was "pursuing both short- and long-term contracts to meet [the] statutory goals" set forth in SB 2 1X.[5] The amended PPA will help PG&E to maintain its baseline RPS portfolio, which provides a foundation from which PG&E can make progress toward compliance with the 33 percent RPS program. The Fourth Amendment therefore meets the needs defined in the 2011 RPS Plan.

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[3] Public Utilities Code Section 399.15(b)(2)(B).

[4] *Id.* at Section 399.15(b)(2)(C).

[5] PG&E's 2011 RPS Plan, p. 8.

PG&E's 2011 RPS Solicitation Protocol requests participants to describe how their projects improve environmental quality, stimulate sustainable economic development, and provide tangible demonstrable benefits to communities with low-income populations.[6] These considerations are based on the policies underlying the RPS statute.[7] The Commission has identified benefits to low income or minority communities as a qualitative attribute to be considered in the least cost best fit evaluation of RPS bids.[8] The Fourth Amendment will allow Eel River to continue operations and preserve jobs in the local community where the Facility is located. The Facility directly employs approximately 29 people and in addition indirectly supports the full-time employment of approximately 30 people. In addition to helping preserve a significant number of jobs in the Humboldt County area, the Facility's operations also help to improve forest health and reduce fire potential. Finally, as noted above, the Facility is already built and interconnected to the electric grid, and will not pose any of the environmental concerns associated with the construction and interconnection of a new generating facility.

B. Procurement Review Group Participation

On July 12, 2011, PG&E presented its Procurement Review Group ("PRG") with a description of the proposed transaction. Further discussion is included in Confidential Appendix B.

C. Independent Evaluator

Although an amendment to an existing QF PPA is not required to be reviewed by an Independent Evaluator ("IE"), PG&E voluntarily elected to have an IE, Arroyo Seco Consulting, review the Fourth Amendment. As noted in Resolution E-4412, "the IE plays a valuable role in validating the specific claims made by the developer regarding the reasonableness of the drivers of underlying costs and losses in revenue."[9] Although the IE noted some reservations about the Fourth Amendment, the IE report concludes that the Fourth Amendment merits Commission approval.

Please refer to Appendix E for the public portion of the IE's report on the Fourth Amendment and Confidential Appendix C for the confidential portion of the IE's report.

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[6] PG&E's "RPS 2011 Solicitation Protocol," p. 25, "Other Project Attributes."

[7] *See* Public Utilities Code Section 399.13(a)(7).

[8] D.04-07-029, Findings of Fact 28 and 29.

[9] Resolution E-4412, p. 6.

III. REGULATORY PROCESS

A. Requested Effective Date

PG&E requests that this advice filing be approved on or before April 12, 2012. PG&E submits this request as a Tier 3 advice letter.

B. Request for Confidential Treatment

Confidential Attachments:

In support of this Advice Letter, PG&E provides the following confidential supporting documentation:

- Confidential Appendix A - Amendment to Power Purchase Agreement
- Confidential Appendix B - Contract Amendment Terms and Conditions Explained
- Confidential Appendix C - Independent Evaluator Report (confidential portion)
- Confidential Appendix D - Attestation of Hugh Smith.

Public Appendix:

- Appendix E – Independent Evaluator Report (public portion)

IV. REQUEST FOR COMMISSION APPROVAL

PG&E requests that the Commission issue a resolution no later than April 12, 2012, that:

1. Approves the Fourth Amendment without modification as just and reasonable; and,
2. Determines that all costs associated with the Fourth Amendment may be recovered through PG&E's ERRA.

Protests:

Anyone wishing to protest this filing may do so by sending a letter by **December 5, 2011**, which is **21** days from the date of this filing.[10] The protest must state the grounds upon which it is based, including such items as financial and service impact, and it should be submitted expeditiously. Protests should be mailed to:

CPUC Energy Division
Attention: Tariff Unit, 4th Floor
505 Van Ness Avenue
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: mas@cpuc.ca.gov and jnj@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004, and Honesto Gatchalian, Energy Division, at the address shown above.

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

Pacific Gas and Electric Company
Attention: Brian K. Cherry
Vice President, Regulation and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-6520
E-mail: PGETariffs@pge.com

Effective Date:

PG&E requests that this advice filing be approved on or before April 12, 2012, to be effective as of **October 1, 2011**. PG&E submits this request as a Tier 3 advice letter.

[10] As the 20th day following this filing falls on a weekend, the end of the protest period is moved to the next business day.

Notice:

In accordance with General Order 96-B, Section IV, a copy of this Advice Letter excluding the confidential appendices is being sent electronically and via U.S. mail to parties shown on the attached list and the service lists for R.11-05-005 and R.10-05-006. Non-market participants who are members of PG&E's Procurement Review Group and have signed appropriate Non-Disclosure Certificates will also receive the Advice Letter and accompanying confidential attachments by overnight mail. Address changes to the GO 96-B service list and electronic approvals should be directed to e-mail 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. Advice letter filings can also be accessed electronically at: http://www.pge.com/tariffs.

Vice President – Regulation and Rates

cc: Service List for R.11-05-005
Service List for R.10-05-006
Andrew Schwartz – Energy Division

Attachments

Limited Access to Confidential Material:

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. This material is protected from public disclosure because it consists of, among other items, the Fourth Amendment itself, price information, and analysis of the proposed Fourth Amendment, which are protected pursuant to D.06-06-066 and D.08-04-023. A separate Declaration Seeking Confidential Treatment regarding the confidential information is filed concurrently herewith. Please see Section III.B above for the list of confidential attachments.

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 M)**

Utility type:	Contact Person: David Poster and Linda Tom-Martinez
☑ ELC ☑ GAS	Phone #: (415) 973-1082 and (415) 973-4612
☐ PLC ☐ HEAT ☐ WATER	E-mail: dxpu@pge.com and lmt1@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **3944-E** **Tier: 3**

Subject of AL: **Fourth Amendment to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources Between Eel River Power, Inc., and Pacific Gas and Electric Company**

Keywords (choose from CPUC listing): Agreements, Portfolio, Qualifying Facility

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

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

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: 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 All members of PG&E's Procurement Review Group who have signed nondisclosure agreements will receive the confidential information.

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Marc Renson (415) 973-1721

Resolution Required? ☑Yes ☐ No

Requested effective date: **October 1, 2011** 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[1]: 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:

CPUC, Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Ave.,
San Francisco, CA 94102
jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Brian Cherry
Vice President, Regulation and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

DECLARATION OF MARC L. RENSON SEEKING CONFIDENTIAL TREATMENT FOR CERTAIN DATA AND INFORMATION CONTAINED IN ADVICE LETTER 3944-E (PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)

I, Marc L. Renson, declare:

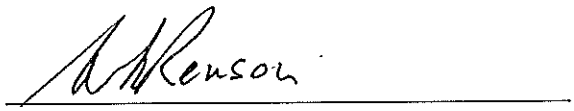
1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), and have been an employee at PG&E since 1979. My current title is Principal within PG&E's Energy Procurement organization. In this position, my responsibilities include negotiating new and amended Power Purchase Agreements. In carrying out these responsibilities, I have acquired knowledge of PG&E's contracts with numerous counterparties and have also gained knowledge of the operations of electricity sellers in general. Through this experience, I have become familiar with the type of information that would affect the negotiating positions of electricity sellers with respect to price and other terms, as well as with the type of information that such sellers consider confidential and proprietary.

2. Based on my knowledge and experience, and in accordance with Decision ("D.") 08-04-023 and the August 22, 2006 "Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with Decision 06-06-066," I make this declaration seeking confidential treatment of Appendices A, B, C, and D to PG&E's Advice Letter 3944-E submitted on November 14, 2011. By this Advice Letter, PG&E is seeking Commission approval of an amendment to its Qualifying Facility Power Purchase Agreement with Eel River Power, L.L.C.

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 the particular type of data and information listed in Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023 (the "IOU Matrix"), and/or constitutes information

that should be protected under General Order 66-C. The matrix also specifies the category or categories in the IOU Matrix to which the data and information corresponds, if applicable, and why confidential protection is justified. Finally, the matrix specifies that: (1) PG&E is complying with the limitations specified in the IOU Matrix for that type of data or information, if applicable; (2) the information is not already public; and (3) the data 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 filing.

I declare under penalty of perjury, under the laws of the State of California, that to the best of my knowledge the foregoing is true and correct. Executed on November 10, 2011 at San Francisco, California.



Marc L. Renson

PACIFIC GAS AND ELECTRIC COMPANY
Advice Letter 3944-E
November 14, 2011

IDENTIFICATION OF CONFIDENTIAL INFORMATION PER DECISION 06-06-066 AND DECISION 08-04-023

	Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 and Appendix C to D.08-04-023 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
1	Document: Advice Letter 3944-E							
2	Appendix A - Amendment	Y	Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties.	Y	Y	Y	This Appendix contains the amendment (the "Amendment") to the existing Power Purchase Agreement ("PPA") with Eel River Power. Disclosure of the Amendment would provide valuable market sensitive information to competitors. Individual contract information, such as price, other key terms, and descriptive information for the Amendment are protected from disclosure by Item VII B) in the IOU Matrix. The Amendment is subject to a confidentiality agreement between the parties which prohibits either party from making an unauthorized disclosure of the information within the Amendment. Thus, the Amendment is not already public. The Amendment cannot be aggregated, redacted, summarized, masked or otherwise protected to allow partial public disclosure without violating the non-disclosure agreement. PG&E has already summarized the terms of the Amendment in more general terms in the body of the Advice Letter.	For information covered under Item VII B), remain confidential for three years.
3	Appendix B - Contract Amendment Terms and Conditions Explained	Y	Item V C) LSE Total Energy Forecast Bundled Customer (MWh). Item VI B) Utility Bundled Net Open (Long or Short) Position for Energy (MWh). Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties. Item VII F) Renewable Resource Contracts under RPS program - Contracts with SEPs.	Y	Y	Y	This Appendix restates and describes the Amendment terms, describes the parties' negotiations, analyzes the effect of the Amendment on the terms of the existing PPA, and describes the financial circumstances of Eel River Power and how the Amendment will enable the Facility to operate and deliver power to PG&E at the specified price. Disclosure of this information would provide valuable market sensitive information to competitors. Individual contract information, such as price, other key terms, and descriptive information for the PPA and Amendment are protected from disclosure by Item VII B) in the IOU Matrix. Information about the counterparty's financial condition and business plans and about the parties' negotiations is protected by General Order 66-C, paragraph 2.8. It constitutes "[i]nformation obtained in confidence from other than a business regulated by the Commission where the disclosure would be against the public interest." Disclosure would inhibit generators from providing PG&E with the information the Commission needs for its reasonableness review and hamper negotiations between PG&E and the seller.	For information covered under Items V C), VI B), VII B), VII F), VII G), and VII (un-numbered category following VII G)), remain confidential for three years. For information covered under Item VIII A) remain confidential until after final contracts submitted to CPUC for approval.
	Appendix B - Contract Amendment Terms and Conditions Explained (continued)		Item VII G) Renewable Resource Contracts under RPS program - Contracts without SEPs. Item VII (un-numbered category following VII G)) Score sheets, analyses, evaluations of proposed RPS projects. Item VIII A) Bid information. Item VIII B) Specific quantitative analysis involved in scoring and evaluation of participating bids. General Order 66-C.				The Amendment, the parties' negotiations, and information regarding Eel River Power's financial condition are also covered by a confidentiality agreement between the parties, which prohibits either party from making an unauthorized disclosure of such information. The description of the Amendment in the Appendix consists only of information that is commercially sensitive and limited information from the public advice letter which is necessary to provide a logical context for the confidential information. This Appendix also analyzes the Amendment's contribution toward PG&E's compliance with California's Renewables Portfolio Standard ("RPS") program, assesses the Facility's viability, and compares the Amendment to other alternatives for PG&E to procure RPS-eligible energy. This information is protected from disclosure by Items V C), VI B), VII F), VII G), VII (un-numbered category following VII G)), VIII A) and VIII B) in the IOU Matrix. Disclosure of this information would provide valuable market sensitive information to competitors.	For information covered under Item VIII B), remain confidential for three years after winning bidders selected. For information covered by General Order 66-C, remain confidential indefinitely.

	Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 and Appendix C to D.08-04-023 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
4	Appendix C - Independent Evaluator Report	Y	Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties. Item VII (un-numbered category following VII G)) Score sheets, analyses, evaluations of proposed RPS projects. General Order 66-C.	Y	Y	Y	This Appendix contains information regarding the terms of the PPA and the Amendment, the financial circumstances of Eel River Power, and the negotiations between the parties. Disclosure of this information would provide valuable market sensitive information to competitors. Individual contract information, such as price, other key terms, and descriptive information for the PPA and Amendment are protected from disclosure by Item VII B) in the IOU Matrix. Information about the counterparty's financial condition and the parties' negotiations is protected by General Order 66-C, paragraph 2.8. It constitutes "[i]nformation obtained in confidence from other than a business regulated by the Commission where the disclosure would be against the public interest." Disclosure would inhibit generators from providing PG&E with the information the Commission needs for its reasonableness review and hamper negotiations between PG&E and the seller.	For information covered under Items VII B) and VII (un-numbered category following VII G)), remain confidential for three years. For information covered by General Order 66-C, remain confidential indefinitely.
	Appendix C - Independent Evaluator Report (continued)						The Amendment, the parties' negotiations, and information regarding Eel River Power's financial condition are also covered by a confidentiality agreement between the parties, which prohibits either party from making an unauthorized disclosure of such information. The description of the Amendment in the Appendix consists only of information that is commercially sensitive and limited information from the public IE report which is necessary to provide a logical context for the confidential information. This Appendix also analyzes the fairness of negotiations between PG&E and Eel River Power and reviews the merits of the Amendment for Commission approval (including contract price and market valuation, portfolio fit, and project viability). This information is protected from disclosure under Item VII (un-numbered category following VII G)) in the IOU Matrix. Disclosure of this information would provide valuable market sensitive information to competitors.	
5	Appendix D - Eel River Power Attestation		General Order 66-C.				This Appendix contains an Attestation from Eel River Power, which describes the need for the Amendment and includes information regarding Eel River Power's financial condition, facility operations, and fuel mix. Information about the counterparties' financial condition and business plans is protected by General Order 66-C, paragraph 2.8 It constitutes "[i]nformation obtained in confidence from other than a business regulated by the Commission where the disclosure would be against the public interest." Disclosure of this information would provide valuable market sensitive information to competitors, would inhibit generators from providing PG&E with the information the Commission needs for its reasonableness review, and would hamper negotiations between PG&E and the seller. This information is also covered by a confidentiality agreement between PG&E and Eel River Power, which prohibits either party from making an unauthorized disclosure of such information.	For information covered by General Order 66-C, remain confidential indefinitely.

Public Appendix E

Independent Evaluator Report

ARROYO SECO CONSULTING

PACIFIC GAS AND ELECTRIC COMPANY CONTRACT AMENDMENT EVALUATION

ADVICE LETTER REPORT OF THE INDEPENDENT EVALUATOR ON AN AMENDED CONTRACT WITH EEL RIVER POWER, LLC

NOVEMBER 14, 2011

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report provides an independent evaluation of the process by which the Pacific Gas and Electric Company ("PG&E") negotiated and executed a contract amendment to an existing long-term Qualifying Facility (QF) contracts with Eel River Power, LLC ("ERP"), a wholly-owned subsidiary of Greenleaf Power, LLC.

This proposed amendment originated from the project owner's pursuit of temporary price relief from the existing contract. An independent evaluator (IE), Arroyo Seco Consulting (Arroyo), conducted activities to review and assess PG&E's processes as the utility evaluated and negotiated the contract amendment.

The structure of this report generally follows the 2011 RPS Independent Evaluator Report Template provided by the Energy Division of the CPUC.[1] Topics covered include:

- The role of the IE;
- The fairness of the design of PG&E's least-cost, best-fit (LCBF) methodology;
- Fairness of project-specific negotiations; and
- Merit of the amendment for CPUC approval.

Arroyo's opinion is that the negotiations between PG&E and ERP were generally conducted fairly. Ratepayer protections in the amendment are stronger than those in the existing QF contract and Arroyo's opinion is that ratepayers were treated fairly in the project-specific negotiations.

While Arroyo agrees with PG&E that the amendment merits CPUC approval, Arroyo has a few reservations that are described in greater detail in the confidential appendix to this report. In Arroyo's opinion, the contract amendment ranks as moderate in net valuation and ranks moderate in contract price relative to competing short-term in-state alternatives available to PG&E. Arroyo ranks the currently operational facility as quite high in physical project viability, and as high in portfolio fit. Continued operation of the project will contribute to Executive Order S-06-06's goal for the role of biomass in the state's renewable energy mix.

[1] The amendment is not a modern RPS contract, but rather an amended QF contract, so this report does not strictly follow the RPS IE template but omits sections relevant for an RPS solicitation.

1. ROLE OF THE INDEPENDENT EVALUATOR

This chapter elaborates on the prior CPUC decisions that form the basis for an Independent Evaluator's participation in reviewing contracts that are negotiated by IOUs, describes key roles of the IE, details activities undertaken by the IE in this transaction to fulfill those roles, and identifies the treatment of confidential information.

A. CPUC DECISIONS REQUIRING INDEPENDENT EVALUATOR PARTICIPATION

The CPUC first mandated a requirement for an independent, third-party evaluator to participate in competitive solicitations for utility power procurement in its Decision 04-12-048 on December 16, 2004 (Findings of Fact 94-95, Ordering Paragraph 28). In that Decision, which addressed the approval of three utilities' long-term procurement plans, the CPUC required the use of an IE when Participants in a competitive procurement solicitation include affiliates of investor-owned utilities (IOUs), IOU-built projects, or IOU-turnkey projects. The Decision envisaged that establishing a role for an IE would serve as a safeguard in the process of evaluating IOU-built or IOU-affiliated projects competing against Power Purchase Agreements (PPAs) with independent power developers, a safeguard to protect consumers from any anti-competitive conduct between utilities and their corporate affiliates or from anti-competitive conduct by utilities developing their own generation.

Later, in approving the IOUs' 2006 RPS procurement plans and solicitation protocols, the CPUC issued Decision 06-05-039 on May 25, 2006. In that Decision, the CPUC expanded its requirement, ordering that each IOU use an IE to evaluate and report on the entire solicitation, evaluation, and selection process, for the 2006 RPS RFO and all future competitive solicitations, whether or not a utility affiliate or utility-owned generation is involved. The ERP contract amendment did not arise from a competitive solicitation.

Subsequently, as part of Rulemaking 08-08-009 to continue implementation of the RPS program, the CPUC issued Decision 09-06-050 on June 19, 2009. In that decision, the Commission concluded that short-term bilaterally negotiated RPS contracts (e.g. those with term of less than ten years but more than one month) should be governed by the same contract review processes and standards as contracts that arise through competitive solicitations, including review by an IE.

Arroyo perceives there to a spectrum between (1) a minimally amended 1980s-style Standard Offer contract with a renewable QF (e.g. one in which, say, the delivery point is altered by amendment but all other terms and conditions are unchanged) and (2) a fully renegotiated agreement with a renewable QF that closely follows PG&E's 2011 RPS Form Agreement and for which price, delivery term, and most terms and conditions are altered from 1980s' language to 2011 language. Arroyo would speculate that (2) would likely meet

the intent of Decision 09-06-050 and clearly require an accompanying IE report, while (1) might not. Arroyo perceives the amendment to the ERP QF agreement to be closer to (1) than to (2) and appears to fall into a gray area where it is unclear whether an IE report is formally required. The Energy Division has directed the utility to provide an accompanying IE reports with its advice letters for amendments to biomass-fueled QF agreements.

B. KEY INDEPENDENT EVALUATOR ROLES

PG&E retained Arroyo Seco Consulting to serve as IE for the ERP contract amendment.

The CPUC stated its intent for participation of an IE in competitive procurement solicitations to "separately evaluate and report on the IOU's entire solicitation, evaluation and selection process", in order to "serve as an independent check on the process and final selections."[2] More specifically, the Energy Division (ED) of the CPUC has provided a template to guide how IEs should report on the 2011 RPS competitive procurement process, outlining specific issues that should be addressed:

1. Describe the IE's role.
2. Did the IOU do adequate outreach to potential bidders, and was the solicitation robust?
3. Was the IOU's least-cost, best-fit (LCBF) methodology designed such that bids were fairly evaluated?
4. Was the LCBF bid evaluation process fairly administered?
5. Describe the fairness of the project-specific negotiations.
6. Does the contract merit CPUC approval?

In this situation, in which the contract is an amendment to an existing QF contract with an eligible renewable resource rather than a modern RPS contract that resulted from a competitive solicitation, Arroyo's focus is in reporting is on the first, third, fifth, and sixth of these elements of a standard IE report for RPS solicitations.

C. IE ACTIVITIES

To fulfill the role of evaluating the ERP contract amendment, several tasks were undertaken. Arroyo had performed several of these tasks within its work scope of serving as IE for PG&E's 2011 RPS competitive solicitation; these prior activities were directly relevant to the evaluation of the ERP contract amendment.

[2] CPUC Decision 06-05-039, May 25, 2006, "Opinion Conditionally Approving Procurement Plans for 2006 RPS Solicitations, Addressing TOD Benchmarking Methodology", page 46.

- Reviewed the 2011 RPS RFO Solicitation Protocol and its various attachments including the Forms of Power Purchase Agreement (PPA) and PG&E's detailed description of its LCBF bid evaluation and selection process and criteria;

- Examined the utility's non-public protocols detailing how PG&E evaluates proposed contracts against various criteria, including market valuation, portfolio fit, transmission adders, project viability, and RPS goals;

- Interviewed members of PG&E's evaluation committee and sub-committees regarding the process, data inputs and parameters, background industry and utility information, quantitative models, and other considerations taken into account in evaluating contracts against non-quantitative criteria and in performing market valuation of contracts;

- Reviewed in detail various data inputs and parameters used in PG&E's LCBF market valuation methodology.

- Spot-checked contract-specific data inputs to PG&E's valuation model;

- Built an independent valuation model and used it to value proposed contracts. This served as a cross-check against PG&E's LCBF market valuation model. The independent model used independent inputs and a different methodology than PG&E's LCBF methodology. It was much simpler and lacked detail and granularity used in aspects of the PG&E model.

- Developed an independent project viability score, using the ED's 2011 version of the Project Viability Calculator;

- Reviewed PG&E's evaluation on criteria other than market valuation and project viability, testing for consistency and fairness in the treatment of contracts;

- Attended meetings of PG&E's Procurement Review Group (PRG) in which the utility updated the PRG on negotiations with biomass-fueled QFs;

- Directly observed (telephonically and in person) negotiation sessions between PG&E and Greenleaf Power;

- Conducted an open-book review of a cash flow model prepared by Greenleaf Power that projects ERP's expected financial performance under the amended contract, to assess whether the price change in ERP's contract is justified;

- Reviewed documents that passed between the two parties during the negotiation, including draft term sheets, draft contracts, and supporting documentation.

D. TREATMENT OF CONFIDENTIAL INFORMATION

The CPUC's Decision 06-06-066, issued on June 29, 2006, detailed specific guidelines for the treatment of information as confidential vs. non-confidential in the context of IOU

electricity procurement and related activities, including competitive solicitations and bilaterally negotiated agreements. For example, the Decision provides for confidential treatment of "Score sheets, analyses, evaluations of proposed RPS projects",[3] as opposed to public treatment (after submittal of final contracts for CPUC approval) of the total number of projects and megawatts bid by resource type.

To the extent that Arroyo's reporting on the evaluation of the ERP contract amendment requires a more explicit discussion of such analyses, scores, and evaluations, an in-depth narrative of commercially sensitive negotiations, and a more specific critique of specific contract terms and conditions, these are handled in greater detail in the confidential appendix to this report.

[3] California Public Utilities Commission, "Interim Opinion Implementing Senate Bill No. 1488, Relating to Confidentiality of Electric Procurement Data Submitted to the Commission", June 29, 2006, Appendix 1, page 17

2. FAIRNESS OF PG&E'S CONTRACT EVALUATION METHODOLOGY

The key finding of this chapter is that, based on IE activities and findings, PG&E's evaluation methodology was designed fairly. The same methodology that the utility applies to bilaterally negotiated RPS proposals was applied to the review of the ERP contract amendment.

The following discussion identifies principles for evaluating the methodology, describes the methodology, evaluates the strengths and weaknesses of the chosen methodology, and identifies some specific issues with the methodology and its inputs that Arroyo recommends be addressed in future solicitations.

A. PRINCIPLES FOR EVALUATING THE METHODOLOGY

The Energy Division of the CPUC has usefully suggested a set of principles for evaluating the process used by IOUs for evaluating contracts in competitive renewable solicitations, within the template intended for use by IEs in reporting. The principles include:

- The IOU bid evaluation should be based only on information submitted in bid proposal documents.
- There should be no consideration of any information that might indicate whether the bidder is an affiliate.
- Procurement targets and objectives were clearly defined in the IOU's solicitation materials.
- The IOU's methodology should identify quantitative and qualitative criteria and describe how they will be used to rank bids. These criteria should be applied consistently to all bids.
- The LCBF methodology should evaluate bids in a technology-neutral manner.
- The LCBF methodology should allow for consistent evaluation and comparison of bids of different sizes, in-service dates, and contract length.

Some additional considerations appear relevant to the specific situation PG&E finds itself in when evaluating renewable power contracts. Unlike some utilities, PG&E does not rely on weighted-average calculations of scores for various evaluation criteria to arrive at a total aggregate score. Instead, the team ranks contracts by net market value using its methodology, after which, "[u]sing the information and scores in each of the other evaluation criteria, PG&E will decide which Offers to include and which ones not to include

on the Shortlist."[4] The application of judgment in bringing the non-valuation criteria to bear on decision-making, rather than a mechanical, quantitative means of doing so, implies an opportunity to test the fairness and consistency of the method using additional principles:

- The methodology should identify how non-valuation measures will be considered; non-valuation criteria used in evaluating contracts should be clear to counterparties.
- The logic of using non-valuation criteria or preferences to reject high-value contracts and select low-value contracts should be applied consistently and without bias.
- The valuation methodology should be reasonably consistent with industry practices.

B. PG&E'S LEAST-COST BEST-FIT METHODOLOGY

The California state legislation that mandated the RPS program required that the procurement process use criteria for the selection of least-cost and best-fit renewable resources; in its Decisions D.03-06-071 and D.04-07-029 the CPUC laid out detailed guidelines for the IOUs to select LCBF renewable resources. PG&E adopted selection and evaluation processes and criteria for its 2011 RPS RFO. These are summarized in Section XI of PG&E's 2011 Solicitation Protocol for its renewable solicitation, and detailed in Attachment K to that Solicitation Protocol.

Additionally, PG&E developed nonpublic documents for internal use that detail the protocols for each individual criterion used in the evaluation process. These include:

- Market valuation
- Portfolio fit
- Project viability
- RPS goals
- Adjustment for transmission cost adders
- Ownership eligibility
- Sites for development

The first five of these are listed as evaluation criteria in the 2011 RPS RFO solicitation protocol. Additionally, the protocol states two other evaluation criteria: the materiality and cost impact of counterparty's proposed modifications to PG&E's Form Agreement, and the total volume of offers submitted by a single counterparty (considering the volume of energy already under contract as well).

[4] "Renewables Portfolio Standard, 2011 Solicitation Protocol, Pacific Gas and Electric Company, May 11, 2011 (Updated June 7, 2011)", page 40.

This section summarizes PG&E's methodology briefly and at a high level; readers are referred to the Solicitation Protocol and its Attachment K for a fuller treatment of the detailed methodology.

MARKET VALUATION

PG&E measures market value as benefits minus costs. Benefits include energy value and capacity value (Resource Adequacy value); ancillary services value is assumed zero. Costs are PG&E's payments to the counterparty, appropriately adjusted by Time-of-Delivery (TOD) factors as specified in the Solicitation Protocol. The TOD factors serve as a multiplier to the contract price per megawatt-hours (MWh) based on the time of day and season of the delivery, and are intended to reflect the relative value of the energy and capacity delivered in those time periods. Also, costs are adjusted to reflect transmission adders. The costs of integrating an intermittent resource into the electric system, such as load-following, providing imbalance services, operational reserves, and regulation, are assumed zero. Both benefits and costs are discounted from the entire contract period to 2011 dollars per MWh in the methodology.

For as-available energy delivery, PG&E measures energy value by projecting a forward energy curve (in hourly granularity) out to the time horizon of the contract period, and multiplying projected hourly energy price by the projected hourly generation specified by the contract's generation profile. For peaking or baseload contracts, the energy quantity is based on the performance requirements of the contract.

PG&E projects Resource Adequacy (capacity) value as a nominal dollar per kilowatt-year estimate. The CPUC recently revised the Resource Adequacy methodology that load-serving entities use to calculate Net Qualifying Capacity for intermittent generation that is sold on an as-available basis. While previously capacity quantity was calculated based on the annual average of the generation profile for the noon to 6 p.m. period, now the calculation is based on averaging the generation profile over five-hour blocks, the hours of which differ between April-October and November-May to reflect the different timing of peak demand in different seasons.[5] Also, the CPUC decided to base the Net Qualifying Capacity on a 70% exceedance level for these solar and wind resources whose output is stochastic in nature, in a calculation that takes into account diversity benefits of multiple individual generators with different profiles. The PG&E team has adapted its calculations of Resource Adequacy value to reflect the new definition of Net Qualifying Capacity.

For baseload and dispatchable resources, the capacity quantity is determined by the performance requirements of the contract. Capacity benefit is calculated as the product of capacity value and quantity, and discounted to 2011 nominal dollars.

PG&E incorporates compliance costs for greenhouse gases into the costs of non-renewable generation. This feature only affects the net valuation of contracts indirectly, to the extent that projected future compliance costs are estimated to affect the value of capacity.

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[5] California Public Utilities Commission, Decision 09-06-028, "Decision Adopting Local Procurement Obligations for 2010 and Further Refining the Resource Adequacy Program", June 18, 2009

PORTFOLIO FIT

For the 2011 renewable solicitation, PG&E employed a quantitative scoring system to assess the portfolio fit of a contract into its overall set of energy resources and obligations. The team calculated one score for the firmness of delivery of the offered resource and another score for the time of delivery of the resource (relative to PG&E's portfolio needs). The overall score for portfolio fit is the numerical average of the two. This detailed methodology is not typically employed by PG&E for evaluating bilateral contracts.

CREDIT

PG&E assesses the degree to which counterparties propose to meet the requirements for providing collateral to meet their obligations. The requirements for collateral, described in detail in Section VII of the Solicitation Protocol, include posting Project Development Security after a PPA or PSA is executed and before Commercial Operation Date of the project, and posting Delivery Term Security for a PPA following the commencement of commercial operation.

PROJECT VIABILITY

PG&E uses the 2011 final version of the Project Viability Calculator provided by the ED as a screening tool to assess the likelihood that a proposed generation facility will be completed and enter full commercial operation on the proposed on-line date.

The viability score is developed through an assessment of several attributes of the project, including

- Project development experience,
- Ownership and operating and maintenance experience,
- Technical feasibility,
- Resource quality,
- Manufacturing supply chain (e.g. degree of constraints upon availability of key components),
- Site control,
- Permitting status,
- Project financing status,
- Interconnection progress,
- Transmission requirements, and
- Reasonableness of Commercial Operation Date (COD).

In ERP's case, the generating facility already exists and is currently operating, so physical viability is not a concern. The Calculator is most useful in screening proposed new projects to assess their relative viability as opposed to evaluating existing, operating projects.

RPS GOALS

PG&E assesses the degree to which a contract is consistent with and will contribute to the state of California's goals for the RPS Program, and the degree to which a contract will contribute to PG&E's goals for supplier diversity. The CPUC has articulated specific attributes of renewable generation projects which can be considered in utility procurement evaluations, such as benefits to low-income or minority communities, environmental stewardship, and resource diversity, that do not clearly fall within the other evaluation criteria. Similarly, the CPUC has issued a Water Action Plan, and to the extent a renewable energy project makes use of water on site, its proposed use of water is evaluated for consistency or inconsistency with the CPUC's recommended water conservation practices.

Additionally, the California Legislature articulated program benefits anticipated for the RPS program in the Legislative Findings and Declarations associated with the laws passed to create the program, and PG&E assesses the degree to which contracts would promote these benefits.

The Governor of California issued Executive Order S-06-06 that, among other things, established a goal that the state will meet 20% of its renewable energy needs with electricity generated from biomass. PG&E assesses the extent to which a project supports that goal.

PG&E has well-defined corporate objectives for supplier diversity, and evaluates whether the counterparty is, or will make a good faith effort to subcontract with, Women-, Minority-, and Disabled Veteran-owned Business Enterprises.

PG&E's methodology for scoring projects in the RPS solicitations on their support for RPS Goals involves numerically scoring attributes of the proposal. This numerical approach is typically not employed to evaluate bilaterally negotiated contracts.

TRANSMISSION COST ADDERS

The cost of transmission to move power from a project offered in the solicitation to PG&E retail customers is considered in the process of market valuation. The methodology takes into account the possible need to upgrade the transmission network in order to accommodate the increment of new renewable generation in locations (clusters) that may require significant capital outlay, either by PG&E or by other IOUs. Each California IOU publishes a Transmission Ranking Cost Report (TRCR) which identifies clusters that would require network upgrades to accommodate some level of new generation, and estimates a proxy for the cost of upgrades and the amount of new generation that would trigger the need for upgrades. If a CAISO interconnection study has been completed, the team can use the more project-specific estimate of transmission network upgrade costs identified in the study rather than the TRCR proxy.

PG&E does not use TRCR adders in the evaluation of bilaterally negotiated contracts, and did not use a TRCR adder in evaluating the ERP contract amendment; the facility is

already interconnected to the grid and operating, and continued operation will likely require no network upgrades as long as the QF continues operating under its existing agreement, which includes a CPUC-jurisdictional interconnection rather than a FERC-jurisdictional interconnection.

UTILITY OWNERSHIP ALTERNATIVES AND SITES FOR DEVELOPMENT

PG&E developed protocols to evaluate proposals to sell the utility sites for development of renewable generation, to build and transfer to utility ownership a new facility, to provide the utility with an option to purchase a facility after some period of commercial operation. The evaluation of such Offers includes both an analysis of the economics of the project under utility ownership, analogous to the valuation of PPAs, as well as considering whether ownership of such a project is compatible with PG&E's core competencies.

COUNTERPARTY CONCENTRATION

In the 2011 RPS solicitation protocol, PG&E stated explicitly that it will consider its total exposure to volume of contracted deliveries from any individual counterparty as well as the volume already contracted with the counterparty in making short list decisions. Arroyo regards supplier concentration as a legitimate business concern for the utility, both with respect to credit risk for the utility's supply portfolio as well as risk of development failure.

PG&E'S PREFERENCES REGARDING OFFERS

In addition to the various evaluation criteria, PG&E's 2011 solicitation protocol stated two preferences regarding selection of Offers. In section III regarding Solicitation Goals, the discussion of resource needs indicates that because of uncertainty about regulatory implementation of SBX 2 the utility "will encourage bids that recognize that uncertainty and offer flexibility toward meeting a range of possible targets" Arroyo views this as a reasonable preference to take into account when making a short list given the utility's current procurement position and the state of flux in regulatory decisions.

PG&E also stated in its solicitation protocol a preference for projects that deliver power to "a nodal delivery point…within PG&E's service territory" over projects that deliver to CAISO interface points (e.g. the California-Oregon Border, or COB, or points such as Mead, Palo Verde, or Four Corners substations) or to "California locations outside of the CAISO's control area", or to out-of-state locations.

Arroyo regards this as a reasonable preference, and appropriate to state in the protocol. Some of the operators of control areas external to the CAISO have in the past chosen not to provide services such as imbalance service or operating reserves that would be required to enable an intermittent generator such as a wind or solar photovoltaic facility that interconnects in their territory to schedule firm deliveries to a CAISO intertie. For other control area operators, there is a limitation on availability of transmission to wheel power within their territory from a generator to and across a CAISO interface point, as there has been on Path 42 between the IID and Southern California Edison territories.

In addition to these preferences stated in the 2011 RPS RFO solicitation protocol, in the bidders' conference for the RFO PG&E stated that it "expects to focus on the latter part of the second (2014-2016) compliance period".

3. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

This chapter gives an independent review of the extent to which PG&E's negotiations with Greenleaf Power to enter into a contract amendment to the existing ERP QF agreement were conducted fairly. A more detailed narrative of discussion points of the negotiation and issues of fairness to other counterparties is provided in the confidential appendix to this report.

A. PRINCIPLES FOR EVALUATING THE FAIRNESS OF NEGOTIATIONS

Arroyo took into account several principles to evaluate the degree of fairness with which ratepayers, ERP itself, and competing facilities that are seeking to obtain temporary price relief PG&E were treated in the course of project-specific negotiations.

- Were counterparties treated fairly and consistently by PG&E during negotiations? Were all counterparties given equitable opportunities to advance their proposals towards final PPAs? Were individual counterparties 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 counterparties 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 counterparties in discussions? Were individual counterparties uniquely given information that advantaged them in securing contracts or realizing commercial value from those contracts?

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

- Were some parties denied the opportunity to make changes to basic terms of the contract amendment while other parties were allowed to adjust those terms in their amendments based on their preferences or concerns?

B. INDEPENDENT EVALUATOR'S OBSERVATIONS OF NEGOTIATIONS BETWEEN ERP AND PG&E

Arroyo observed several negotiation sessions between PG&E's and Greenleaf Power's staffs over the course of several weeks. Arroyo was also able to review several draft versions of term sheets and agreements in order to identify specific proposals and counterproposals the parties made regarding terms in the course of discussion, as well as supporting documents.

Based on this review, Arroyo did not identify any situations where PG&E provided ERP with concessions in contract terms that Arroyo considered to be materially unfair to ratepayers. Arroyo believes that information provided to Greenleaf Power has generally been made available to other competing counterparties that are renewable QF generators actively seeking contract amendments. Arroyo's opinion is that ERP was not unfairly advantaged (to the detriment of ratepayers or competing facilities) by PG&E providing unique confidential information that has not been provided to others. Arroyo believes that in the course of the summer of 2011, PG&E stood open to pursue discussions with other contracted renewable QFs with issues similar to ERP, with the qualification that Arroyo is not directly involved in all contacts the utility has with all owners of renewable QFs.

The executed ERP amendment provides ratepayers with several specific protections not provided in the existing QF contracts. The QF contract as amended shifts certain risks towards ERP from ratepayers that the project does not bear in the existing contract. Arroyo believes that the ERP contract amendment falls somewhat short of the ratepayer protections provided by modern short-term RPS contracts that PG&E has entered, though there are provisions in the amendment that significantly mitigate concerns about these variances. Arroyo does not believe that, given the situation where a 1980's-era QF agreement is amended for a short portion of the remaining term, rather than a fully new long-term RPS contract being executed, these variances create a serious level of concern about the fairness to ratepayers of the amendment, especially given the new protections given to ratepayers compared to the unamended contract. These issues are discussed in detail in the confidential appendix to this report.

Arroyo's review of the ERP contract amendment suggests that in most respects it does not provide the project with terms and conditions that are materially more advantageous to the sellers than could have been the case had the parties used a short-term version of PG&E's RPS Form Agreement. In that sense the amended contract is almost comparable in ratepayer protections to other agreements with terms less than five years that PG&E has executed.

Arroyo has been asked by the ED to opine on the extent to which project-specific negotiations with biomass-fueled QFs have been fair to the individual sellers; this has not been an aspect of procurement of RPS-eligible energy that Arroyo routinely discusses in the course of other IE reports. While Arroyo believes that ERP itself was generally treated fairly in the course of negotiations, there are cases in which disparate treatment of other projects tended to disfavor those sellers compared to the treatment that ERP received. Arroyo's opinion is that the treatment of some competing sellers appears to be less than fully fair but that this slight inequity is not sufficient to render ERP's contract amendment objectionable; details are provided in the confidential appendix to this report.

4. MERIT FOR CPUC APPROVAL

This chapter provides an independent review of the merits of the amendment to the contracts between PG&E and ERP against criteria identified in the Energy Division's 2011 RPS IE template.[6]

A. CONTRACT SUMMARY

On September 21, 2011, PG&E and ERP executed a contract amendment to their existing QF contract that governs delivery of renewable energy from a woody waste biomass-fueled generator. The existing, operating facility is located in the town of Scotia in Humboldt County, and has produced renewable energy for PG&E customers for more than two decades. The term of the amendment is three years and can be extended at PG&E's option by two periods of an additional year and an additional eleven months. The amendment sets a contract quantity of 97 GWh annually.

B. NARRATIVE OF EVALUATION CRITERIA AND RANKING

The 2011 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. More specific details are provided in the confidential appendix to this report.

CONTRACT PRICE AND MARKET VALUATION

Arroyo has compared the net value of the ERP amendment to relevant peer groups of previously and currently offered competing sources of RPS-eligible energy, using both PG&E's LCBF methodology and the simpler but independent IE model. Based on those comparisons, Arroyo opines that the market valuation of the ERP amendment ranks as moderate compared to relevant peer groups of competing proposals, and the contract price also ranks as moderate. The confidential appendix to this report provides a more detailed discussion of the pricing of the contract amendment and the basis for Arroyo's opinion that the net valuation of the amendment ranks as moderate among competing alternatives.

OPEN-BOOK REVIEW

Both Arroyo and PG&E conducted an open-book review of a cash flow model provided by Greenleaf Power that projects ERP's financial performance over the term of the amendment. Arroyo's opinion based on this model is that the price change made by the contract amendment is justified by the cash flow model inputs, although Arroyo expects that

[6] While the amendments modify existing QF contracts for power delivery from eligible renewable resources and are not strictly RPS agreements, Arroyo regards the 2011 RPS IE template as the most applicable approach to discussing the amendments' merits, rather than a non-RPS template.

the projected financial performance of the project bears a high degree of forecast error. Assessment of the model inputs is rendered difficult by the absence of a consistent and continuous set of historical financial records for the power plant under prior ownership.

PORTFOLIO FIT

Arroyo ranks the ERP contract amendment's fit with PG&E's supply portfolio needs as high. The existing facility generally operates as an intermediate generator, with seasonally and daily shaped variations in deliveries to PG&E. While PG&E does not have an immediate need for more intermediate generation, removing the project's production from the portfolio might accelerate such a need at some point in time. Similarly, if ERP should curtail or cease production in the absence of temporary price relief, this might create or accelerate a need for PG&E to procure more RPS-eligible power in the first or second RPS compliance periods.

PROJECT VIABILITY

In Arroyo's opinion, the physical project viability of the ERP facility is quite high. The project has operated for decades to provide PG&E customers with renewable energy. An existing, currently operating project is more viable, in a physical sense, than any proposed as-yet-unbuilt generator.

RPS GOALS

The ERP contract amendment would advance PG&E and the state towards the goal stated in Executive Order S-06-06 of providing at least 20% of the state's renewable power needs from biomass-based generation. Arroyo believes that PG&E currently exceeds that target, but over time there is some risk that biomass as a portion of PG&E's portfolio will drop below 20% because of impending rapid growth in other sources of renewable generation. Arroyo believes that approval of the contract amendment will significantly increase the likelihood that ERP will continue to provide PG&E customers with generation over the term of the amendment, as opposed to seasonally curtailing or ceasing its production under the pricing of the existing contract, though there is no guarantee that the price relief in the executed amendment will fully assure continued operation.

Additionally, the legislative findings stated in Senate Bill 1078 that established the RPS program included a view that increasing the use of renewable energy sources may create employment opportunities. The CPUC's Decision 04-07-029 included benefits to low-income communities as a qualitative attribute that could be taken into consideration by utilities in evaluating competitive offers for new renewable generation. In the absence of a contract amendment there is greater risk to ERP's employment base. The project is sited in a location with higher incidence of poverty and lower median household income than the state as a whole.

C. DISCUSSION OF MERIT FOR APPROVAL

Arroyo concurs with PG&E management that the ERP contract amendment merits CPUC approval, although Arroyo has a few reservations about the amendment, described in greater detail in the confidential appendix to this report. In Arroyo's opinion the contract

amendment offers moderate net value, moderate contract price, high portfolio fit, and high project viability. In Arroyo's opinion, the price change is justified by the projections of Greenleaf Power's cash flow model, though it is difficult to assess the quality of inputs to that model in the absence of a consistent historical record of financial performance. The amendment would help contribute to PG&E's efforts to meet its RPS Goals. In particular, the contract amendment would support continued compliance with Executive Order S-06-06 regarding the goal for biomass-fueled generation in the state. It would protect against employment losses in a locality with a higher proportion of low-income residents than the state at large.

Arroyo's opinion is that the special considerations relating to the contract amendment's support of RPS program goals outweigh the IE's modest reservations. However, any individual decision-maker's judgment about the merits of the ERP contract amendment may depend on the policy-maker's relative emphasis placed on the cost impact of the amendment upon ratepayers or the fairness with how the amendment was negotiated, vs. the contribution of the projects' continued operation to meeting the state's biomass-fueled generation goal, and to employment stability.

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

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City of Palo Alto Utilities
City of San Jose
Clean Energy Fuels
Coast Economic Consulting
Commercial Energy
Consumer Federation of California
Crossborder Energy
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Department of Water Resources
Dept of General Services
Douglass & Liddell
Downey & Brand
Duke Energy
Economic Sciences Corporation
Ellison Schneider & Harris LLP
Foster Farms
G. A. Krause & Assoc.
GLJ Publications
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
Hitachi
In House Energy
International Power Technology
Intestate Gas Services, Inc.
Lawrence Berkeley National Lab
Los Angeles Dept of Water & Power
Luce, Forward, Hamilton & Scripps LLP
MAC Lighting Consulting
MBMC, Inc.
MRW & Associates
Manatt Phelps Phillips
McKenzie & Associates
Merced Irrigation District
Modesto Irrigation District
Morgan Stanley
Morrison & Foerster
NLine Energy, Inc.
NRG West
NaturEner
Navigant Consulting
Norris & Wong Associates
North America Power Partners
North Coast SolarResources
Northern California Power Association
Occidental Energy Marketing, Inc.
OnGrid Solar
Praxair
R. W. Beck & Associates
RCS, Inc.
Recurrent Energy
SCD Energy Solutions
SCE
SMUD
SPURR
San Francisco Public Utilities Commission
Seattle City Light
Sempra Utilities
Sierra Pacific Power Company
Silicon Valley Power
Silo Energy LLC
Southern California Edison Company
Spark Energy, L.P.
Sun Light & Power
Sunshine Design
Sutherland, Asbill & Brennan
Tabors Caramanis & Associates
Tecogen, Inc.
Tiger Natural Gas, Inc.
TransCanada
Turlock Irrigation District
United Cogen
Utility Cost Management
Utility Specialists
Verizon
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
eMeter Corporation