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

July 14, 2011

Advice 3875-E
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: **Second Amendment to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources Between Mt. Lassen Power 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 an amendment and letter agreement (collectively, the "Second Amendment") to a Qualifying Facility ("QF") Standard Offer Power Purchase Agreement ("PPA") with Mt. Lassen Power ("Mt. Lassen" or "Seller"). The Commission's approval of the Second Amendment would enable Mt. Lassen to continue to generate and sell Renewables Portfolio Standard ("RPS")-eligible power from its existing 11.4 megawatt ("MW") biomass facility (the "Facility") located in Lassen County, California. Mt Lassen is a wholly-owned subsidiary of Covanta Energy Corporation ("Covanta").

The Second Amendment changes the energy price and payment structure for a minimum term of three years, which at PG&E's option can be extended twice – initially by twelve months, then subsequently through the expiration date of the existing PPA, for a maximum period of 50 months. Since the Second Amendment is less than five years, it may be approved through the advice letter process according to Decision ("D.") 06-12-009.[1] PG&E submits the Second 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 Second Amendment through its Energy Resource Recovery Account ("ERRA").

---

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

B. Subject of the Advice Letter

The existing PPA is an Interim Standard Offer 4 contract that expires in September, 2015. The remaining term of the PPA is approximately four years and two months. Since 1984[2], the Facility has supplied power to PG&E by burning biomass waste from saw mill operations and forest residues from areas around Lassen and Plumas Counties. For over 25 years, the Facility has also been a steady employer in the Lassen County area and has provided a means of disposal for waste resulting from local forest thinning operations.

On November 1, 2010, the Facility shut down due to uneconomic conditions. Mt Lassen then approached PG&E to negotiate an amendment that would support Seller's return to operations. As the result of negotiations, the Facility resumed operations at the end of May, 2011.[3]

PG&E and Mt Lassen executed the Second Amendment, which is attached as Confidential Appendix A, on June 1, 2011. If approved, the Second Amendment will enable the Facility to continue its deliveries of RPS-eligible energy to PG&E at a reasonable price for the remaining term of the PPA. The Second Amendment provides Mt. Lassen with a higher price for delivered energy in exchange for stricter performance obligations. Mt. Lassen is expected to deliver approximately 74 gigawatt-hours ("GWh") of RPS-eligible power to PG&E each year during the term of the Second Amendment. PG&E expects that under the amended PPA, customers should receive RPS-eligible power on a more reliable basis than they would under the current PPA. The Second Amendment will preserve the value of the existing PPA for PG&E's customers and maintain an existing supply of RPS-eligible energy at a reasonable price while Mt. Lassen seeks a long-term solution to the financial challenges facing the Facility.

PG&E negotiated the Second Amendment with Seller largely to maintain the contribution of this biomass resource to its existing RPS portfolio. An additional benefit of resource retention is that PG&E maintains the ability to count the California Independent System Operator ("CAISO") Net Qualifying Capacity associated with the QF PPA towards its Resource Adequacy obligations. In addition, PG&E used the negotiation process to improve the value of the PPA to its customers in non-price terms.

---

[2] The PPA was executed in 1983 and commenced deliveries in 1984.

[3] A letter agreement that removes potential ambiguities and other non-substantive refinements of the PPA was signed July 8, 2011.

A detailed explanation of the proprietary negotiated contract terms is provided in Confidential Appendix B. In this confidential appendix, PG&E provides an analysis of the Facility's costs and revenues in both recorded and projected terms. The Regional Business Manager-West Region of Covanta Energy has provided financial information about the Facility's operations to demonstrate the need for the Second Amendment in the declaration attached as Confidential Appendix D.[4] The Appendix explains how the Second Amendment terms will encourage Mt. Lassen to provide increased deliveries on a reliable, year-round basis.

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, as approved by Resolution E-4412. Based on Mt. Lassen'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 amended PPA are reasonable.

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

C. General Facility Description

The following table summarizes the primary features of the Facility:

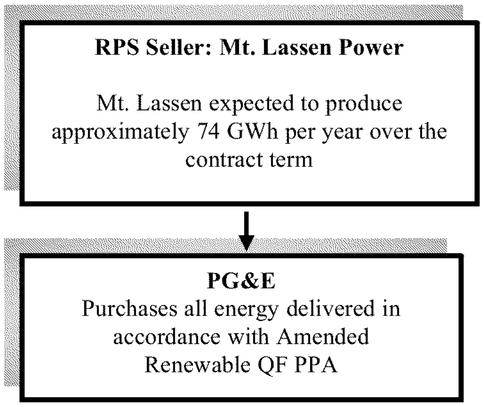
Facility Name	Mt. Lassen
Technology	Biomass
Capacity (MW)	11.4 MW nameplate capacity
Capacity Factor	75%
Expected Generation (GWh/Year)	Approximately 74 GWh/yr
Amendment Effective date	June 1, 2011
Amendment Term (Years)	Minimum: 3 years Maximum: remaining term of the PPA, currently 4 years and 2 months
Location (City and State)	Westwood, CA
Control Area (e.g., California Independent System Operator ("CAISO"), Bonneville	CAISO

[4] *See* Confidential Appendix D, "Affidavit of Christopher Baker."

Power Administration ("BPA")	

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 V.C, "Request for Confidential Treatment," below. This information includes the Second 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 Second Amendment will benefit PG&E's customers by: (1) allowing an existing QF resource that provides RPS-eligible energy to continue operation and deliver renewable energy at a competitive price and (2) modifying PPA performance obligations so that production from the Facility will be more reliable and be provided on a year-round basis.

PG&E's 2011 Renewable Energy Procurement Plan ("2011 RPS Plan") was approved by D.11-04-030 on April 20, 2011. In this Plan PG&E indicated that it has "attempted to procure deliveries from existing renewable facilities for a short-term period to match its prior deficits and anticipated short-term future needs. PG&E urges the Commission to expediently approve these short-term transactions… Deliveries from existing projects between now and 2013 will allow PG&E to fulfill its 20 percent renewables mandate while other projects are being developed."[5] The Second Amendment will help PG&E to maintain its baseline RPS portfolio consistent with the needs defined in the 2011 RPS Plan.

The enactment of SBX1 2 on April 12, 2011 places an additional premium on existing, proven renewable QF generation. PG&E will be required to procure an average of 20 percent of retail sales from renewable resources between the period of January 1, 2011 to December 31, 2013; 25 percent of retail sales by December 31, 2016; and 33 percent by December 31, 2020. Existing biomass generators such as Mt. Lassen play a critical role in PG&E's compliance with the RPS targets because, as existing generation, they provide a foundation from which PG&E can make progress toward its 2011-2013 goals, as well as the 33 percent RPS goal by 2020.

The Second Amendment also supports Governor's Executive Order S-06-06, which established California's goal that 20 percent of its renewable energy needs be produced from biomass resources.[6] With substantial solar and wind-powered generation expected to begin operation in the next two years, Mt. Lassen's deliveries are needed to contribute to the 20 percent biomass component of renewable generation.

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.[7] These considerations are based on the policies underlying the RPS statute.[8] 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.[9] The Second Amendment will allow the Seller to preserve a significant number of jobs in Lassen County, in which the number of persons below the poverty level in 2009 was 18.2%, compared to 14.2% in the State. In addition to contributing to the preservation of an economically depressed area, the Facility's operations are said to improve forest health and reduce fire potential. This biomass facility is already built and interconnected

---

[5] PG&E's 2011 RPS Plan, p. 14.

[6] Executive Order S-06-06 was issued April 25, 2006.

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

[8] See, Public Utilities Code section 399.13 (a)(7).

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

to the electric grid, and will not pose any of the environmental concerns associated with the construction and interconnection of a new generating facility. By enabling Mt. Lassen to continue operations within the local community, the Second Amendment will support the economic and environmental goals of the RPS program.

B. Procurement Review Group Participation

On May 17, 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 IE, PG&E voluntarily elected to have an IE review the Second Amendment. Lewis Hashimoto from Arroyo Seco Consulting evaluated the Second 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." The IE Report concludes that the Second Amendment merits CPUC approval. The IE noted some concerns that PG&E has addressed in Confidential Appendix B.

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

III. REGULATORY PROCESS

A. Requested Effective Date

PG&E requests that this advice filing be approved on or before January 1, 2012. PG&E submits this request as a Tier 3 advice letter.

B. Request for Confidential Treatment

<u>Confidential Attachments</u>:

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

- Confidential Appendix A - Power Purchase Agreement Second Amendment and Letter Agreement

- Confidential Appendix B - Contract Amendment Summary
- Confidential Appendix C - Independent Evaluator Report (confidential portion)
- Confidential Appendix D - Affidavit of Christopher Baker, Regional Business Manager-West Region of Covanta Energy

Public Appendix:

- Appendix E – Independent Evaluator Report (public portion)

VI. REQUEST FOR COMMISSION APPROVAL

PG&E requests that the Commission issue a resolution no later than January 1, 2012, that:

1. Approves the Amendment without modification as just and reasonable; and,
2. Determines that all costs associated with the Amendment, including any costs incurred if PG&E elects to exercise its options to extend the Amendment, for up to a maximum period of 50 months, be recovered through PG&E's Energy Resource Revenue Account ("ERRA").

Protests:

Anyone wishing to protest this filing may do so by sending a letter by **August 3, 2011**, which is **20** days from the date of this filing. 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 **January 1, 2012**. PG&E submits this request as a Tier 3 advice letter.

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.

Brian Cherry

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 contract itself, price information, and analysis of the proposed RPS contract, 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. See Section III.B. above for 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: ☑ ELC ☑ GAS ☐ PLC ☐ HEAT ☐ WATER	Contact Person: David Poster and Greg Backens Phone #: (415) 973-1082, (415) 973-4390 E-mail: DxPU@pge.com, GAB4@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) #: **3875-E** **Tier: 3**

Subject of AL: **Second Amendment to Existing Qualifying Facility Power Purchase Agreement for Procurement of Eligible Renewable Energy Resources Between Mt. Lassen Power and Pacific Gas and Electric Compan y**

Keywords (choose from CPUC listing): Contracts, Portfolio

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

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

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

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Is AL requesting confidential treatment? Yes. If so, what information is the utility seeking confidential treatment for: See the attached matrix identifying the confidential information.

Confidential information will be made available to those who have executed a nondisclosure agreement: 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: Hugh Merriam ((415)-973-1269)

Resolution Required? ☑ Yes ☐No

Requested effective date: **On or before January 1, 2012** 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

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 K. 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 HUGH M. MERRIAM
SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION
CONTAINED IN ADVICE LETTER 3875-E
(PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)

I, Hugh M. Merriam, declare:

1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), and have been an employee at PG&E since 1983. My current title is Manager 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 3875-E submitted on July 14, 2011. By this Advice Letter, PG&E is seeking this Commission's approval of an amendment to its Qualifying Facility Power Purchase Agreement with Mt Lassen Power.

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 July 14, 2011 at San Francisco, California.

Hugh M. Merriam

PACIFIC GAS AND ELECTRIC COMPANY
Advice Letter 3875-E
July 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 3875-E							
2	Appendix A - Power Purchase Agreement Amendment and Letter Agreement	Y	Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties. General Order 66-C	Y	Y	Y	This Appendix contains the amendment and the letter agreement (together, the "Amendment"). 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 each contract 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 Summary	Y	Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties. General Order 66-C	Y	Y	Y	This Appendix restates and describes the Amendment terms, analyzes the effect of the Amendment on the terms of the existing Power Purchase Agreement ("PPA"), and describes the financial circumstances of Mt Lassen Power and how the Amendment will enable the Facility to operate and deliver power to PG&E at the specified price. Disclosure of the this information would provide valuable market sensitive information to competitors. Individual contract information, such as price, other key terms, and descriptive information for each contract are protected from disclosure by Item VII.B in the IOU Matrix. Information about the counterparties' financial condition and business plans is protected by General Order 66-C 2.8 It constitutes "Information 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. The Amendment is subject to a confidentiality agreement between the parties which prohibits either party from making an ur	For information covered under Item VII B), remain confidential for three years. Information covered by General Order 66-C remains confidential indefinitely.
4	Appendix C - Independent Evaluator Report	Y	Item VII B) Contracts and power purchase agreements between utilities and non-affiliated third parties. General Order 66-C	Y	Y	Y	This Appendix contains information regarding the terms of the existing Power Purchase Agreement ("PPA") and the Amendment. Disclosure of the this information would provide valuable market sensitive information to competitors. Individual contract information, such as price, other key terms, and descriptive information for each contract 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. The description of the Amendment in the Appendices 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.	Information covered under Item VII B), will remain confidential for three years. Information covered by General Order 66-C will remain confidential indefinitely.
5	Appendix D - Mt Lassen Affidavit	Y	Item II -- Cost Forecast Data -- Electric, Section B.3 (Generation Cost Forecasts, QF Contracts); GO 66-C 2.8, and Public Utilities Code sections 454.5 (g) and 583	Y	Y	Y	This Appendix contains an Affidavit from Mt Lassen Power. Information includes historic, current and forecast QF Contract costs. Also included is information regarding facility operations. Disclosure of this information would provide valuable market sensitive information to competitors, as described above with regard to Appendices A-C. Information about the counterparties' financial condition and business plans is protected by General Order 66-C 2.8 It constitutes "Information 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 Item II, remain confidential for three years. Information covered by General Order 66-C remains confidential indefinitely.

Appendix E

Independent Evaluator Report

(Public Portion)

PACIFIC GAS AND ELECTRIC COMPANY CONTRACT AMENDMENT EVALUATION

ADVICE LETTER REPORT OF THE INDEPENDENT EVALUATOR ON AN AMENDED CONTRACT WITH MOUNT LASSEN POWER

JULY 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) contract with Mount Lassen Power ("MLP"), a wholly-owned subsidiary of Covanta Energy Corporation ("Covanta").[1], for the output of a currently operating biomass-fueled generating facility in the unincorporated community of Westwood, in southwestern Lassen County.

This proposed amendment originated from Covanta's pursuit of medium term price relief from MLP's existing contract, having executed a short-term contract amendment for another of Covanta's project subsidiaries. After considerable discussion the parties bilaterally negotiated and then executed on May 26, 2011 a short-term amendment to the existing QF 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 2009 RPS Independent Evaluator Report Template provided by the Energy Division of the CPUC.[2] 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 PPA for CPUC approval.

Arroyo's opinion is that the negotiations between PG&E and MLP were generally conducted fairly and resulted in an amendment with reasonable terms. Ratepayer protections in the amendment are stronger than those in the existing QF contract, though not quite as strong as would be provided if it followed PG&E's standard for short-term RPS contracts. Arroyo would view the amendment as more fully fair to competing projects if MLP had acceded to one of PG&E's requests to insert a standard RPS contract provision.

While Arroyo agrees with PG&E that the MLP amendment merits CPUC approval, Arroyo has some reservations about the contract amendment 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 in contract price relative to competing short-term alternatives available to PG&E. Arroyo ranks the currently operational MLP facility as quite high in physical project viability, and its output as moderate in portfolio fit. MLP's continued operation will contribute to Executive Order S-06-06's goal for the role of biomass in the state's renewable energy mix.

---

[1] Covanta Energy Corp. is itself a wholly-owned subsidiary of Covanta Holding Corporation.
[2] 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 Mount Lassen Power 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 Mount Lassen Power 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.

B. KEY INDEPENDENT EVALUATOR ROLES

PG&E retained Arroyo Seco Consulting to serve as IE for the contract amendment to be negotiated between PG&E and Mount Lassen Power.[3]

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."[4] More specifically, the Energy Division (ED) of the CPUC has provided a template to guide how IEs should report on the 2009 RPS competitive procurement process, outlining four 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 amended 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 proposed Mount Lassen Power contract amendment, several tasks were undertaken. Arroyo Seco had performed several of these tasks within its work scope of serving as IE for PG&E's 2008 and 2009 RPS competitive solicitations; these prior activities were directly relevant to the evaluation of the Mount Lassen Power contract amendment.

[3] The contract amendment in question is arguably not an amendment to an existing RPS contract in form but rather an amendment to a Standard Offer Qualifying Facilities contract.

[4] 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 2009 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 nonpublic protocols detailing how PG&E evaluates proposed contracts against various criteria, including market valuation, portfolio fit, transmission adders, credit, 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.

- Spot-checked the assignment of individual projects to transmission clusters or to local zones within the system controlled by the California Independent System Operator (CAISO).

- Built an independent valuation model and using it to value proposed contracts. This served as a cross-check against PG&E's LCBF market valuation model. The IE 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. Its main value was to provide an independent check on the ranking of contracts provided by PG&E's valuation model and to scan for data input errors and differences in treatment of contracts between PG&E and the IE. Where variances in the ranking of contracts between the two models were large (and there were very few such situations) the cross-comparison was helpful in identifying errors such as incorrect energy pricing, inappropriate exclusion or inclusion of Resource Adequacy (RA) value, or inaccurate assignment of Transmission Ranking Cost Report (TRCR) adders.

- Developed an independent project viability score, using the ED's 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).

- Directly observed (telephonically) negotiation sessions between PG&E and Mount Lassen Power or Covanta.

- Reviewed documents that passed between the two parties during the negotiation, including draft contracts.

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",[5] 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 Mount Lassen Power contract amendment requires a more explicit discussion of such analyses, scores, and evaluations, and a more specific critique of specific contract terms and conditions, these are handled in greater detail in the confidential appendix to this report.

[5]"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 Mount Lassen Power's proposed contract amendment.[6]

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 provided 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

[6] This approach is a modified version of the methodology applied to Offers received in PG&E's competitive RPS solicitations; the modification is described below, under "Transmission Cost Adders"

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."[7] 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 2009 RPS RFO. These are summarized in Section XI of PG&E's 2009 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
- Credit (including provision of collateral requirements)
- Project viability
- RPS goals
- Adjustment for transmission cost adders
- Ownership eligibility
- Sites for development

[7] "Renewables Portfolio Standard, 2009 Solicitation Protocol, Pacific Gas and Electric Company, June 29, 2009", page 42

The first six of these are listed as evaluation criteria in the 2009 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). In other words, the utility stated that it will take into account the degree to which potential counterparties have proposed changes to PG&E's 2009 Form Agreement as the basis for contracting, and the degree of supplier concentration in contracts with individual counterparties.

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 2010 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.

For dispatchable contracts, the protocol specifies use of a real-option pricing model to measure energy benefit. Similarly, the protocol specifies use of a real-option pricing model to value the utility buyout option attached to contracts that provide for a PPA plus such an option.

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.[8] 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 2009 nominal dollars.

PG&E incorporates compliance costs for greenhouse gases into the costs of non-renewable generation, assumed to begin in 2012. This feature is consistent with the CPUC's final resolution regarding the 2009 Market Price Referent that applies to contracts resulting from PG&E's 2009 RPS RFO.[9] 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.

PORTFOLIO FIT

For the 2009 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. PG&E altered the time-of-delivery methodology for its 2011 RPS solicitation.

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. In the 2009 renewable solicitation, a subcommittee of PG&E's evaluation committee assigned numerical scores to each contract based primarily on the degree to which the counterparty proposed to comply with the utility's requirements for security; this scoring approach is not employed to evaluate bilaterally negotiated contracts, but such contracts are still rigorously evaluated by PG&E's credit department to ensure that its requirements are met.

---

8 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

9 California Public Utilities Commission, Energy Division, Final Resolution E-4298, December 17, 2009, pages 9 - 10

PROJECT VIABILITY

New in 2009, PG&E employs a version of the Project Viability Calculator to assess the likelihood that a proposed generation facility will be completed and enter full commercial operation on the proposed on-line date.

The history of renewable power procurement by California IOUs has been fraught with a certain incidence of contract failure. IOUs have, on occasion, negotiated PPAs with developers of new generation facilities, only to find later that some projects failed to come into full commercial operation on their proposed on-line dates. The failures or delays have arisen from a number of underlying causes, including impediments to site control, permitting, financing, transmission interconnection, and technical performance of the projects.[10] Such failures or delays have contributed to a degree of shortfall between planned growth in delivered volumes of renewable energy and realized growth.

The Commission sought to address these issues of contract failure or delay related to poor viability of contracted facilities through vehicles such as Rulemaking 08-08-009 that included a review of LCBF methodologies for RPS offer evaluation, including an assigned Commissioner's ruling that addressed the issue of how to change procurement rules to ensure that viable projects are selected in the IOU's solicitations.[11] Pursuant to that ruling, the Energy Division of the CPUC drafted, circulated among stakeholders for comment, and finalized a Project Viability Calculator. The Calculator is envisaged to serve as a tool that will use standardized criteria to quantify a project's viability, relative to other projects.

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,

[10] The CPUC's "Renewables Portfolio Standard Quarterly Report" to the California Legislature in July 2008 also reported other risk factors that could impede successful on-time completion of contracted renewable projects, such as uncertainty about the renewal of federal production and investment tax credits, developer inexperience, price reopeners, military radar, fuel supply, and equipment procurement.

[11] California Public Utilities Commission, "Assigned Commissioner's Ruling Regarding Potential Renewables Portfolio Standard Development in Imperial Valley and Evaluation of Renewable Procurement Contracts", February 3, 2009, pages 7-8.

- Project financing status,
- Interconnection progress,
- Transmission requirements, and
- Reasonableness of Commercial Operation Date (COD).

The Energy Division provided a set of scoring guidelines for each of these criteria, in an effort to standardize how a project would be assigned a score between zero and ten for each. These guidelines proved to be helpful for pursuing consistency and fairness in rating the viability of proposed projects.

In its Decision accepting the IOU's 2009 procurement plans, the CPUC noted that the Calculator "is a screening, not a dispositive, tool" that permits room for judgment.[12] Arroyo reads this to indicate that scores provided by the Calculator should not be used as the only determinant for selecting contracts based on superior viability, nor used to set a hard cutoff for selection vs. rejection based on score, but that the PG&E team may consider the Calculator score among other facts and considerations in assessing the likely viability of proposed projects. PG&E does not routinely score existing projects using the Calculator under the assumption that if they are already operating they are highly viable.

PG&E modified the Energy Division's final version of the Calculator by including a criterion for Engineering, Procurement, and Construction (EPC) experience, and reweighting the calculation to accommodate an twelfth criterion. This is consistent with a thesis that a project will be likelier to achieve commercial operation on schedule if the external contractor engaged by the developer to design, engineer, procure components for, and construct the project has had significant prior experience providing these services for other projects of similar size and technology.

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

---

[12] California Public Utilities Commission, Decision 09-06-018, "Decision Conditionally Accepting 2009 Renewables Portfolio Standard Procurement Plans and Integrated Resource Plan Supplements", June 8, 2009, page

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 scoring attributes of the proposal and calculating a weighted-average numerical score. 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 twice in the process of market valuation. In the first ranking of Offers by market value, projects whose delivery points are outside the control area of the California Independent System Operator (or "CAISO") (such as projects interconnecting to other utilities' grids in the Pacific Northwest or the desert Southwest, or those within California that interconnect to the grids of utilities that are not CAISO members) are loaded with a proxy estimate of cost to transmit power from the delivery point to the border of the CAISO for firm delivery.

In the second step, 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 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 either a TRCR adder or an estimate of the cost of alternative commercial arrangements in evaluating the Mount Lassen Power contract amendment; the facility is already interconnected to the grid and operating, and continued operation will likely require no network upgrades.

UTILITY OWNERSHIP ALTERNATIVES AND SITES FOR DEVELOPMENT

PG&E has developed protocols for evaluation of proposals to sell the utility a site 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, or to undertake joint development and/or joint ownership of a new facility. The evaluation of such Offers includes both an analysis of the economics of the project generation under utility ownership, analogous to the valuation of PPAs, as well as a consideration of the extent to which ownership of such a project is compatible with the utility's core competencies.

COUNTERPARTY CONCENTRATION

In the 2009 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 2009 solicitation protocol stated two preferences regarding selection of Offers. In section III regarding Solicitation Goals, the section on contract term states that "Earlier deliveries are preferred to later deliveries." Arroyo views this as a reasonable preference to take into account when making a short list. PG&E has a legal obligation to meet near-term targets for RPS deliveries as a percent of total retail sales. [13]

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 IID and Southern California Edison territories.

[13] With some offers, however, the reverse may be true: an earlier proposed commercial operation date may be indicative of an inexperienced developer who is unaware of the barriers to achieving successful interconnection agreements, transmission development, local permitting, etc.

3. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

This chapter gives an independent review of the extent to which PG&E's negotiations with Mount Lassen Power to enter into a contract amendment to the existing QF contract 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 Mount Lassen Power and other entities that have brought competing proposals for renewable energy to 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?

B. INDEPENDENT EVALUATOR'S OBSERVATIONS OF NEGOTIATIONS BETWEEN MOUNT LASSEN POWER AND PG&E

Arroyo observed several negotiation sessions between PG&E's and MLP's staffs over the course of about nine months. Arroyo was also able to review several draft versions of the contract amendment in order to identify specific proposals and counterproposals the two parties made regarding terms in the course of discussion.

Based on this review, Arroyo did not identify any situations where PG&E provided MLP with concessions in contract terms that Arroyo considered to be materially unfair to ratepayers. At this point in time, Arroyo believes that information provided to MLP has generally been made available to other competing counterparties that are renewable QF generators actively seeking contract amendments. Arroyo's opinion is that MLP has not been unfairly advantaged by PG&E providing unique confidential information that has not been provided to these others.[14] Arroyo believes that PG&E stands open to pursue discussions with other renewable QFs with issues similar to those of MLP, with the qualification that Arroyo is not directly involved in all contacts the utility has with all owners of renewable QFs.

The executed amendment provides ratepayers with several specific protections not provided in the existing QF contract. The QF contract as amended shifts certain risks towards MLP from ratepayers that the project does not bear in the existing contract. Arroyo believes that the QF 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 contract amendment suggests that in most respects the contract amendment does not provide MLP with terms and conditions that are materially more advantageous to the seller than could have been the case had the parties used the short-term version of PG&E's RPS Form Agreement. However, the executed contract amendment omits one standard provision of the RPS Form Agreement that has generally been included in contract amendments with other parties. Arroyo regards the omission of this provision as less than fully fair to the competing projects and developers who have accepted it.

At this point in time Arroyo is not aware of proposals for QF contract amendments from other projects, providing comparable value to ratepayers, that have arrived at materially worse outcomes for ratepayers due to contract terms and conditions. A discussion of comparisons is provided in the confidential appendix.

Overall, Arroyo concludes that the negotiations between PG&E and Mount Lassen Power to arrive at the executed contract amendment were conducted fairly. More details about which specific terms and conditions underwent changes in the course of negotiation, and a detailed narrative of the negotiation, are provided in the confidential appendix to this report.

[14] Arroyo did not observe every single negotiation session between parties so this is a qualified opinion.

4. MERIT FOR CPUC APPROVAL

This chapter provides an independent review of the merits of the amendment to the contract between PG&E and Mount Lassen Power against criteria identified in the Energy Division's 2009 RPS IE template.[15]

A. CONTRACT SUMMARY

On May 26, 2011, PG&E and Mount Lassen Power 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 unincorporated community of Westwood in Lassen 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 four months. The amendment sets a contract quantity of 74 GWh annually.

B. NARRATIVE OF EVALUATION CRITERIA AND RANKING

The 2009 template for IEs provided by the Energy Division calls for a narrative of the merits of the proposed project on the categories 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 Mount Lassen Power contract amendment to relevant peer groups of previously and currently offered competing sources of renewable energy, using both PG&E's LCBF methodology and the simpler but independent IE model. Based on those comparisons, Arroyo opines that the market value of the MLP contract 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 value of the contract ranks as moderate among competing alternatives.

PORTFOLIO FIT

Arroyo ranks the Mount Lassen Power contract amendment's fit with PG&E's supply portfolio needs as moderate. The existing facility generally operates as a baseload generator.

[15] While the MLP contract amendment is an amended QF contract for power delivery from an eligible renewable resource and not strictly an RPS agreement, Arroyo regards the 2009 RPS IE template as the most applicable approach to discussing the amendment's merits, rather than a non-RPS template.

While PG&E does not have an immediate need for more baseload generation, removing Mount Lassen Power's production from the portfolio might create or accelerate such a need at some point in time. The project's specific baseload profile ranks somewhat below median when compared to Offers from the 2009 renewable solicitation on a quantitative measure of portfolio fit.

PROJECT VIABILITY

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

RPS GOALS

The Mount Lassen Power 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 this contract amendment will significantly increase the likelihood that MLP will continue to provide PG&E customers with its biomass-fueled generation over the term of the amendment, as opposed to seasonally curtailing or ceasing its production.

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 the employment base of the MLP facility. Lassen County has a significantly higher proportion of households living below the poverty level than the state as a whole.

C. REVIEW OF CASH FLOW MODEL

Mount Lassen Power's management provided PG&E and Arroyo with a cash flow model representing forecasted performance of the project over a time horizon including the maximum term of the contract amendment (with extensions)[16]. Arroyo independently reviewed the inputs to the model and its results. Overall, Arroyo's opinion is that MLP's selection of inputs to the model is generally reasonable. Given the volatility of markets and uncertainty of cost factors affecting the performance of this generating plant, one would expect a substantial margin of error around forecasted inputs and results.

Based on this review, Arroyo's opinion is that a contract price amendment in a range around what PG&E and MLP have negotiated is justified, in the sense that such price relief

[16] MLP and Covanta do not have an original cash flow model reflecting the original price of the existing QF agreement; that agreement was executed by a prior owner of the project in the 1980s.

would be needed to create some likelihood that the project may continue operations at break-even cash flow. In the absence of price relief Arroyo would expect that, assuming the inputs to the cash flow model and likely outlooks for SRAC pricing, MLP would cease operations for the foreseeable future.

D. DISCUSSION OF MERIT FOR APPROVAL

Arroyo concurs with PG&E management that the Mount Lassen Power contract amendment merits CPUC approval, although Arroyo has some reservations about the amendment, described in greater detail in the confidential appendix to this report. In Arroyo's opinion the contract offers moderate net value, moderate contract price, and high project viability. It would contribute to PG&E's efforts to meet its short-term RPS Goals under flexible compliance rules. 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 Mount Lassen Power contract amendment's support of RPS program goals outweigh the IE's modest reservations about the contract amendment. However, any individual decision-maker's judgment about the merits of this contract amendment may depend on the policy-maker's relative emphasis placed on the cost impact of the amendment upon ratepayers vs. the contribution of MLP's 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

AT&T
Alcantar & Kahl LLP
Ameresco
Anderson & Poole
Arizona Public Service Company
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Bloomberg
Bloomberg New Energy Finance
Boston Properties
Braun Blaising McLaughlin, P.C.
Brookfield Renewable Power
CA Bldg Industry Association
CLECA Law Office
CSC Energy Services
California Cotton Ginners & Growers Assn
California Energy Commission
California League of Food Processors
California Public Utilities Commission
Calpine
Cardinal Cogen
Casner, Steve
Chris, King
City of Palo Alto
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
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