STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

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

July 19, 2010

Advice Letter 3481-E

Jane K. Yura
Vice President, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10B
P.O. Box 770000
San Francisco, CA 94177

Subject: Withdrawal of AL 3481-E – Contract between PG&E and Alpine Suntower, LLC for Procurement of Renewable Energy Resources Resulting from PG&E's 2007 RPS Solicitation

Dear Ms. Yura:

Advice Letter 3481-E is withdrawn as requested in your letter dated May 11, 2010.

Sincerely,

Julie A. Fitch, Director
Energy Division

Pacific Gas and Electric Company®

Brian K. Cherry
Vice President
Regulatory Relations

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

Fax: 415-973-7226

June 25, 2009

Advice 3481-E
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: **Contract between PG&E and Alpine Suntower, LLC for Procurement of Renewable Energy Resources Resulting from PG&E's 2007 Renewables Portfolio Standard Solicitation**

I. INTRODUCTION

A. Purpose and Overview

Pacific Gas and Electric Company ("PG&E") seeks California Public Utilities Commission ("Commission" or "CPUC") approval of a power purchase agreement ("PPA") that PG&E has executed with Alpine Suntower, LLC ("Alpine Suntower"). PG&E submits the PPA for CPUC review and approval to establish PG&E's ability to recover the cost of payments made pursuant to the PPA through its Energy Resource Recovery Account ("ERRA").

The Commission's approval of the PPA will authorize PG&E to accept deliveries of Renewables Portfolio Standard ("RPS")-eligible energy for 92 megawatts ("MW") from two new solar thermal units with a capacity of 46 MWs each (the "Project"), located near Lancaster, California, for a term of 20 years.[1] When completed in 2012, the Project is expected to deliver approximately 192 gigawatt hours ("GWh") per year over the term of the PPA, which will contribute toward PG&E's 20 percent RPS goal through the use of flexible compliance mechanisms.

The PPA resulted from PG&E's 2007 RPS Solicitation. Consistent with the protocol used for review of RPS contracts resulting from the 2007 RPS Solicitation, PG&E has included Confidential Appendices A through H, which demonstrate the reasonableness of

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[1] eSolar will provide its solar thermal technology to the Project.

the PPA. As discussed below, PG&E requests confidential treatment of the information contained in these Appendices.

PG&E requests that the Commission issue a resolution no later than December 3, 2009 approving the PPA and payments to be made by PG&E under the PPA, and containing the findings required by the definition of CPUC Approval adopted by D.07-11-025 and D.08-04-009.[2]

B. Detailed Description of the Project

As mentioned above, the PPA resulted from PG&E's 2007 RPS Solicitation. PG&E previously submitted three advice letters for approval of four power purchase agreements as a result of its 2007 RPS Solicitation.[3] The Alpine Suntower PPA constitutes the fifth contract resulting from PG&E's 2007 RPS Solicitation.

The Project will be developed by NRG Energy, Inc ("NRG"), with eSolar acting as the technology provider. Alpine Suntower, the counterparty to the PPA, is wholly owned by NRG. The PPA involves the development of two new solar thermal units in Lancaster, California, within the California Independent System Operator ("CAISO") control area.

The following table summarizes the substantive features of the PPA:

Owner / Developer	Alpine Suntower, LLC, which is wholly owned by NRG
Technology	Solar Thermal
Capacity (MW)	92 MW
Capacity Factor	23.9%
Expected Generation (GWh/Year)	Approximately 192 GWh/year
Online Date (if existing, the contract delivery start date)	March 31, 2012

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[2] As provided by D.07-11-025 and D.08-04-009, the Commission must approve the PPA and payments to be made thereunder, and find that the procurement will count toward PG&E's RPS procurement obligations.

[3] PG&E submitted its agreements with San Joaquin SOLAR 1 LLC and San Joaquin SOLAR 2 LLC via Advice Letter 3280-E on June 12, 2008. PG&E submitted its agreements with Topaz Solar Farms LLC and High Plains Ranch II, LLC via Advice Letters 3313-E and 3318-E, respectively, on August 14, 2008.

Contract Term (Years)	20
New or Existing Facility	New
Location (include in/out-of-state) and Control Area (e.g., CAISO, BPA)	Lancaster, CA
Price relative to MPR	Below the applicable 2008 MPR[4]

A copy of the PPA is provided in Confidential Appendix G and a contract analysis is provided in Confidential Appendix D.

II. THE PPA IS CONSISTENT WITH THE COMMISSION'S RPS-RELATED DECISIONS

A. Consistency with PG&E's Adopted RPS Plan and Solicitation

PG&E's 2007 renewable procurement plan ("2007 Plan") was conditionally approved in D.07-02-011. As required by statute, the 2007 Plan includes an assessment of supply and demand to determine the optimal mix of renewable generation resources, consideration of compliance flexibility mechanisms established by the Commission, and a bid solicitation setting forth the need for renewable generation of various operational characteristics.[5]

The goal of PG&E's 2007 Plan was to procure approximately one to two percent of its retail sales volume, or between 750 GWh and 1,500 GWh per year, with delivery terms of 10, 15 or 20 years. With expected RPS-eligible energy deliveries of approximately 192 GWh per year for a term of 20 years beginning March 31, 2012, the PPA meets the criteria for renewables procurement contained in the 2007 Plan. The PPA will contribute to PG&E's 2010 RPS target and to PG&E's RPS goals in the years beyond 2010.

The proposed PPA is also consistent with PG&E's 2007 Plan because it was solicited, negotiated and executed through PG&E's adherence to its Solicitation Protocol, which is the primary component of the 2007 Plan. PG&E generally followed the RPS Solicitation schedule set forth in its Solicitation Protocol, but ultimately, the schedule for concluding

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[4] As discussed below under the section entitled "MPR and AMFs," the Time of Delivery ("TOD")-adjusted price under the PPA is below the applicable 2008 TOD-adjusted 2008 MPR.

[5] Pub. Util. Code § 399.14(a)(3).

negotiations was necessarily extended. The resulting 2007 Solicitation schedule is shown below:

Date	Event
March 12, 2007	PG&E issues Solicitation
March 23, 2007	Deadline for Participant to submit non-binding Notice of Intent to Bid and reservation for Bidders Conference
April 3, 2007	Bidders Conference
May 31, 2007	Deadline for Participants to submit Offer(s)
July 16, 2007	PG&E selects Shortlist of Offers and consults with Procurement Review Group ("PRG")
By December 31, 2007	PG&E and Participants negotiate and execute Agreements subject to Regulatory Approval; PG&E submits Agreements for Regulatory Approval
June 12, 2008	PG&E submits first and second power purchase agreements for Commission approval
August 14, 2008	PG&E submits third and fourth power purchase agreements for Commission approval
June 25, 2009	PG&E submits fifth power purchase agreement, the Alpine Suntower PPA, for Commission approval

Using the CPUC-approved bid solicitation protocol and forms of power purchase agreements, PG&E commenced its solicitation on March 12, 2007. PG&E accepted bids until May 31, 2007, consistent with the published schedule. PG&E evaluated and scored the bids in the manner prescribed in the Solicitation Protocol. In particular, evaluation of the offer price took into account PG&E's published TOD factors and imputed the potential cost of transmission adders. PG&E scored the offers pursuant to a methodology that attributed the proper weight to market valuation, portfolio fit, credit and other non-price factors set forth in the Solicitation Protocol.

PG&E ranked the bids according to the Solicitation Protocol, placed them on PG&E's "Short List" and presented them to PG&E's PRG on July 16, 2007. PG&E notified short-listed bidders and commenced negotiations with short-listed bidders once they submitted the required bid deposit.

B. Consistency with PG&E's Long Term Procurement Plan

PG&E's 2006 long-term procurement plan ("LTPP") stated that PG&E would aggressively pursue procurement of RPS-eligible renewable resources. In approving PG&E's 2006 LTPP, the Commission noted that development of renewable energy is "of great importance to the Governor, the State of California, and the Commission."[6] The PPA is consistent with PG&E's 2006 LTPP and with Commission policy regarding renewable energy expressed in the decision approving PG&E's 2006 LTPP.

C. Consistency of Bid Evaluation Process with Least-Cost Best Fit Decision

The RPS statute requires PG&E to procure the least cost, best fit ("LCBF") eligible renewable resources.[7] The LCBF decision directs the utilities to use certain criteria in their bid ranking.[8] It offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. The renewables bid evaluation process focuses on four primary areas:

1. Determination of market value of bid,
2. Calculation of transmission adders and integration costs,
3. Evaluation of portfolio fit, and
4. Consideration of non-price factors.

The initial Project was shortlisted in PG&E's 2007 RPS Solicitation as it satisfied the LCBF criteria for meeting PG&E's RPS targets (based on the Project's ranking among the bids in the 2007 RPS Solicitation). A general discussion of the evaluation process is

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[6] D.07-12-052 at 73.

[7] Pub. Util. Code § 399.14(a)(2)(B).

[8] D.04-07-029.

provided below. A more detailed discussion of PG&E's evaluation of the PPA is provided in Confidential Appendix D.

1. Market Valuation

In a "mark-to-market analysis," the present value of the bidder's payment stream is compared with the present value of the product's market value to determine the benefit (positive or negative) from the procurement of the resource, irrespective of PG&E's portfolio. This analysis includes evaluation of the bid price and indirect costs, such as transmission and integration costs. PG&E's analysis of the market value of the PPA is addressed in Confidential Appendix D.

2. Portfolio Fit

Portfolio fit considers how well an offer's features match PG&E's portfolio needs. As part of the portfolio fit assessment, PG&E differentiates offers by the firmness of their energy delivery and by their energy delivery patterns. A higher portfolio fit measure is assigned to the energy that PG&E is sure to receive and fits the needs of the existing portfolio. The PPA fits PG&E's portfolio in a satisfactory manner. The Alpine Suntower Project offers deliveries by March 31, 2012, which will contribute toward PG&E's RPS goals and would add a significant quantity of solar thermal generation to PG&E's portfolio.

3. Consistency with the Transmission Ranking Cost Decision

Under the transmission ranking cost decision, the total potential cost of accepting energy deliveries from a project must be considered when determining the project's value. PG&E determined the Transmission Ranking Cost Report ("TRCR") cluster at which each shortlisted project would interconnect to the transmission grid. Consistent with Commission decisions, PG&E assigned a transmission adder to each offer for evaluation based on the potential transmission congestion, the associated proxy transmission network upgrades and the associated capital costs that may be needed to accommodate delivery at this cluster.

4. Consistent Application of TODs

Application of the TOD factors is addressed in Confidential Appendix D.

5. Qualitative Factors

PG&E considered qualitative factors, including benefits to low income or minority communities, environmental stewardship, local reliability, and resource diversity benefits, as required by D.04-07-029 and D.07-02-011 when evaluating the PPA. Alpine Suntower anticipates that building the Project will create a total of approximately 250 jobs. Of the 250 jobs, approximately 220 will be for construction and fabrication and the remainder will be permanent positions.

D. PRG Participation and Feedback

PG&E informed its PRG of the transaction on June 21, 2007, April 11, 2008, June 20, 2008, July 25, 2008, October 17, 2008, and January 9, 2009.

The PRG for PG&E consists of: California Department of Water Resources, the Commission's Energy Division and Division of Ratepayer Advocates, Union of Concerned Scientists, The Utility Reform Network, the California Utility Employees, and Jan Reid, as a PG&E ratepayer.

E. RPS Goals

Senate Bill ("SB") 1078 established the California RPS Program, requiring an electrical corporation to increase its use of eligible renewable energy resources to 20 percent of total retail sales no later than December 31, 2017. The legislature subsequently accelerated the RPS goal to reach 20 percent by the end of 2010. In addition, California is actively considering increasing its renewable goals beyond the current 20 percent renewable energy target. Governor Schwarzenegger's Executive Order issued in November 2008 describes a new target for California of 33 percent renewable energy by 2020. The California Legislature is actively considering legislation increasing the overall RPS target to 33 percent. Finally, the California Air Resource Board's Scoping Plan, adopted in December 2008, identifies an increase in the renewables target to 33 percent by 2020 as a key measure for reducing greenhouse gas emissions and meeting California's emission reduction goals. As discussed above, the PPA contributes to RPS goals in 2010 through the use of flexible compliance mechanisms and to RPS goals in the years beyond 2010.

F. Consistency with Adopted Standard Terms and Conditions

The Commission set forth standard terms and conditions to be incorporated into contracts for the purchase of electricity from eligible renewable energy resources in D.04-06-014, D.07-02-011 as modified by D.07-05-057, and D.07-11-025. These terms and conditions were compiled and published by D.08-04-009. Additionally, the non-modifiable term related to Green Attributes was finalized in D.08-08-028. The non-modifiable terms in the PPA conform exactly to the non-modifiable terms set forth in Attachment A of D.07-11-025 and Appendix A of D.08-04-009, as modified by D.08-08-028.

Modifications have been made to terms in the PPA designated as modifiable in D.07-11-025 and D.08-04-009 based upon mutual agreement reached during negotiations. A comparison of the modifiable terms in the PPA against the modifiable terms in PG&E's 2008 RPS As-Available power purchase agreement form[9] dated February 29, 2008 in the Solicitation Protocol is provided in Confidential Appendix H.

Each provision in the PPA is essential to the negotiated agreement between the parties, and the Commission should therefore not modify any of the provisions. The Commission should consider the PPA as a whole, in terms of its ultimate effect on utility customers. PG&E submits that the PPA protects the interests of its customers while achieving the Commission's goal of increasing procurement from eligible renewable resources.

G. Consistency with Minimum Quantity Decision

In D.07-05-028, the Commission determined that in order to count energy deliveries from short-term contracts with existing facilities toward RPS goals, RPS-obligated load-serving entities must contract for deliveries equal to at least 0.25 percent of their prior year's retail sales through long-term contracts or through short-term contracts with new facilities.

The PPA is a long-term contract and thus counts toward PG&E's procurement obligation under D.07-05-028. PG&E has determined that in 2009, it will be in compliance with the minimum quantity requirement in D.07-05-028.

H. Interim Emissions Performance Standard

In D.07-01-039, the Commission adopted an Emissions Performance Standard ("EPS") that applies to contracts for a term of five or more years for baseload generation with an annualized plant capacity factor of at least 60 percent. The PPA is not a covered procurement subject to the EPS because the generating facility has a forecast annualized capacity factor of less than 60% and therefore is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim EPS Rules.

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[9] PG&E has compared the Alpine Suntower PPA to the 2008 RPS power purchase agreement form in its Solicitation Protocol dated February 29, 2008 due to the timing of negotiations.

Notification of compliance with D.07-01-039 is provided through this Advice Letter, which has been served on the service list in the RPS rulemaking, R.08-08-009.

I. MPR and AMFs

The actual price under the PPA is confidential, market sensitive information. As the PPA was executed over 18 months from the close of PG&E's 2007 RPS Solicitation, it is appropriate to compare the PPA price with the most recently approved market price referent ("MPR") and the TOD factors associated with that solicitation year,[10] which are the 2008 MPR established in Resolution E-4214 on December 18, 2008 and PG&E's 2008 TOD factors. The TOD-adjusted price under the PPA is below the applicable 2008 TOD-adjusted 2008 MPR. As the PPA is a long-term contract for a bundled renewable energy product from a new facility that was selected through PG&E's competitive solicitation, the PPA is consistent with SB 1036 and is eligible for above-market funds ("AMFs"). AMFs are not, however, required for the PPA, as the TOD-adjusted price is below the applicable 2008 TOD-adjusted 2008 MPR. PG&E's AMFs analysis is included in Confidential Appendix D.

III. PROJECT DEVELOPMENT STATUS

A. Site Control

The proposed Project site and property is controlled via direct ownership. The Project's electric generating units, mirror fields, and related storm water control structures will be within an area bounded by a natural drainage course on the north, West Avenue C on the south, 210th Street West on the east, and 220th Street West on the west.

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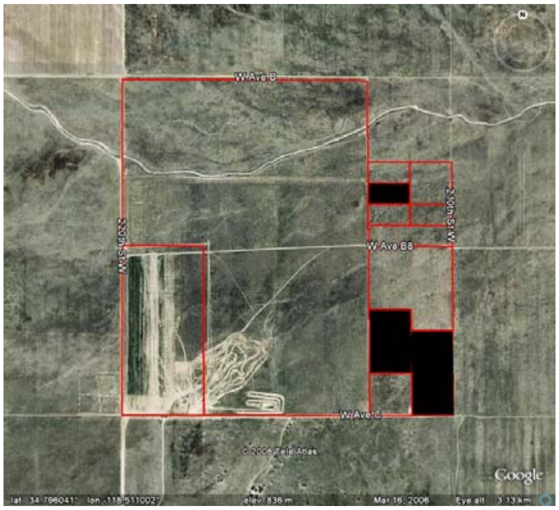
[10] *See* Resolution E-4199 at 36 ("Contracts executed after 18 months from the close of the bid's solicitation should be compared against the most recently approved MPR and the TODs associated with that solicitation year.").



B. Resource and/or Availability of Fuel

The Project's primary fuel is sunlight. The Project does not require a supplemental gas powered electrical generation facility as backup.

C. Transmission

The electric output from each unit is aggregated in a collector line, which will interconnect into the Neenach Substation. Two Interconnection Requests ("IR") will be filed for the Alpine Suntower Project. The first IR was filed in January of 2008 and has been assigned to the Transition Study Cluster with Phase I results expected in August 2009 and Phase II results expected November 2010. Another IR will be filed within one of the next CAISO queue cluster study windows. The currently open study window closes on July 30, 2009, and the next queue cluster study window opens on October 1, 2009. The CAISO study process suggests that the Phase I study for the currently open cluster window would conclude in April 2010 and the Phase II study would conclude in December 2011.

D. Technology Type and Level of Technology Maturity

As noted above, eSolar will provide its solar thermal technology to the Project. The Project will use a concentrating solar thermal technology with a central power tower. The technology utilizes a field of mirrors that tracks the sun through the day, focusing the sun's rays on a solar boiler atop a tower. The sun's rays are highly concentrated at the boiler, generating significant heat. This heat is used to generate steam, which in turn is used to run a steam turbine that generates electricity.

More specifically, eSolar uses a field of dual-axis sun-tracking mirrors, or “heliostats” that reflect and focus sunlight onto a direct water-to-steam thermal receiver mounted atop a tower, together referred to as a “module.” eSolar assembles power modules into a unit. Each module is composed of two heliostat mirror sub-fields and a receiver tower. In a typical unit, the steam generated from sixteen tower modules is routed to a central 46-MW steam turbine-generator. The Project can consist of standalone 46-MW units or can be co-located in multiples of 46-MW. The basic building block of an eSolar power plant is the module, representing the equivalent of approximately 3 MW of electric capacity. Each field consists of a 180-foot tower situated between north and south-facing subfields of heliostat mirrors. These heliostats are mounted on an above-ground frame at a fixed relative distance from one another. The heliostat subfield pair comprises some 12,000 heliostats which are elevated approximately 1 meter (3 feet) from ground level to minimize dust collection and allow for easy access for maintenance.

eSolar’s technology is in the commercialization stage of deployment, and the company has built a 5 MW demonstration project in Lancaster, California called the Sierra facility. The Sierra facility provides a full-scale demonstration of the hardware necessary to build future units, including commercially manufactured heliostats, towers, and thermal receivers. eSolar gathers operating data from the Sierra facility in order to continuously improve plant operations and maintenance procedures. eSolar also gains operational data from this facility to inform the operations and maintenance procedures for future power plants.

Aerial view of eSolar’s Sierra Suntower Power Plant, which will begin production of 5 MW of electricity in summer, 2009.

E. Permitting

The Project is currently anticipated to file for and obtain a California Energy Commission (“CEC”) Application for Certification (“AFC”). The AFC documents have been in preparation for several months. A Phase I environmental study is complete, including all relevant hydrology, biological, and cultural studies. Final permits are expected by December 31, 2010, in accordance with the Project schedule outlined in the PPA.

Permit and Lease Table			
Name of Permit of lease required	**Public or Private?**	**Agency**	**Description of Permit or Lease**
AFC	Public	CEC	General permit for constructing a powerplant
National Pollutant Discharge Elimination System ("NPDES")	Public	Lahontan Regional Water Quality Control Board	Controls water pollution by regulating point sources that discharge pollutants into waters of the United States
Septic System permit	Public	Los Angeles County	Permit for septic systems

F. Developer Experience

As mentioned above, the Project will be developed by NRG, a competitive wholesale provider of electricity.
As of December 31, 2008, NRG had a total global portfolio of 189 active operating fossil fuel and nuclear generation units, at 48 power generation plants, with an aggregate generation capacity of approximately 24,000 MW (including certain international assets), and approximately 550 MW under construction which includes partners' interests of 275 MW. In addition, NRG has ownership interests in two wind farms representing an aggregate generation capacity of 270 MW, which includes partner interests of 75 MW.

The eSolar team, which will provide the solar thermal technology for the Project, has substantial concentrating solar and solar thermal experience. The company has received over $130 million in venture funding for the development and implementation of its technology, with funding backers that include Google.org, Oak Investment Partners, and Idealab.

G. Financing Plan

According to Alpine Suntower, the Project will be financed through a combination of equity and limited recourse debt. The Project will also make use of the Federal Investment Tax Credit ("ITC") for solar projects, Modified Accelerated Depreciation ("MACRs"), and the California Property Tax Abatement for solar facilities. NRG may seek funding through additional state or federal programs as they become available.

H. Production Tax Credit/Investment Tax Credit

Alpine Suntower has indicated that it intends to seek ITCs. Since the ITC has been extended through 2016, the Alpine Suntower Project is expected to receive ITCs. ITCs are discussed further in Confidential Appendix D.

I. Equipment Procurement

Alpine Suntower has informed PG&E that it has a purchase arrangement for the turbines to be used in the Project. Other long lead equipment will be purchased as necessary to support the Project schedule.

IV. CONTINGENCIES AND PROJECT MILESTONES

The PPA includes certain performance criteria and milestones that PG&E includes in its form RPS contracts. These and other contingencies and milestones are addressed in Confidential Appendix D.

V. REGULATORY PROCESS

A. Requested Effective Date

PG&E requests that the Commission issue a resolution approving this advice filing no later than December 3, 2009. Justification for this date is provided in Confidential Appendix D.

B. Earmarking

PG&E intends to earmark deliveries from the PPA, but reserves the right to change its earmarking strategy with respect to the PPA.

C. RPS-Eligibility Certification

The PPA includes the non-modifiable representation and warranty that during the delivery period, the Project will constitute an eligible renewable energy resource certified by the CEC. The Project has submitted its application to the CEC for RPS certification.

D. Request for Confidential Treatment

In support of this Advice Letter, PG&E has provided the following confidential information, including the PPA 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.

Confidential Attachments:

Appendix A – Overview of 2004 – 2008 Solicitation Bids

Appendix B1 – 2007 Bid Evaluations

Appendix B2 – 2008 Bid Evaluations

Appendix C – Independent Evaluator Report

Appendix D – Contract Terms and Conditions Explained

Appendix E – Project Viability

Appendix F – Project's Contribution Toward RPS Goals

Appendix G – Power Purchase Agreement

Appendix H – Standard Terms and Conditions Comparison – Modifiables

Non-Confidential Attachment:

Appendix I – Independent Evaluator Report, Public Version

VI. REQUEST FOR COMMISSION APPROVAL

The continued effectiveness of the PPA is conditioned on the occurrence of "CPUC Approval," as that term is defined in the PPA. Therefore, PG&E requests that the Commission issue a resolution no later than **December 3, 2009** that:

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

2. Finds that any procurement pursuant to the PPA is procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California RPS (Public Utilities Code Section 399.11 et seq.), D.03-06-071 and D.06-10-050, or other applicable law.

3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.14(g), associated with the PPA shall be recovered in rates.

4. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:

    a. The PPA is consistent with PG&E's 2007 RPS procurement plan.

    b. The terms of the PPA, including the price of delivered energy, are reasonable.

5. Adopts the following finding of fact and conclusion of law in support of cost recovery for the PPA:

    a. The utility's costs under the PPA shall be recovered through PG&E's Energy Resource Recovery Account.

    b. Any stranded costs that may arise from the PPA are subject to the provisions of D.04-12-048 that authorize recovery of stranded renewables procurement costs over the life of the contract. The implementation of the D.04-12-048 stranded cost recovery mechanism is addressed in D.08-09-012.

6. Adopts the following findings with respect to resource compliance with the EPS adopted in R.06-04-009:

   a. The PPA is not a covered procurement subject to the EPS because the generating facility has a forecast annualized capacity factor of less than 60% and therefore is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim EPS Rules.

Protests:

Anyone wishing to protest this filing may do so by sending a letter by **July 15, 2009,** 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 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 4005 and Honesto Gatchalian, Energy Division, at the address shown above.

The protest also should 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 Cherry
Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-Mail: PGETariffs@pge.com

Effective Date:

PG&E requests that the Commission issue a resolution approving this advice filing no later December 3, 2009.

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.06-02-012, R.08-02-007 and R.08-08-009. Non-market participants who are members of PG&E's PRG and have signed appropriate Non-Disclosure Certificates will also receive the Advice Letter and accompanying confidential attachments by overnight mail. Address changes should be directed to San Heng (415) 973-2640. Advice letter filings can also be accessed electronically at:

http://www.pge.com/tariffs

Brian K. Cherry /sc

Brian K. Cherry
Vice President - Regulatory Relations

cc: Service List for R.08-08-009
Service List for R.06-02-012
Service List for R.08-02-007
Paul Douglas – Energy Division
Sean Simon – Energy Division

Attachments

Limited Access to Confidential Material:

The portions of this Advice Letter marked Confidential Protected Material are submitted under the confidentiality protection of Section 583 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.

Confidential Attachments:

Appendix A – Overview of 2004 – 2008 Solicitation Bids

Appendix B1 – 2007 Bid Evaluations

Appendix B2 – 2008 Bid Evaluations

Appendix C – Independent Evaluator Report

Appendix D – Contract Terms and Conditions Explained

Appendix E – Project Viability

Appendix F – Project's Contribution Toward RPS Goals

Appendix G – Power Purchase Agreement

Appendix H – Standard Terms and Conditions Comparison – Modifiables

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 Sally Cuaresma Phone #: (415) 973-1082; (415) 973-5012 E-mail: DXPU@pge.com; A2C7@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) #: **3481-E** **Tier:** [**3**]

Subject of AL: **Contract between PG&E and Alpine Suntower, LLC for Procurement of Renewable Energy Resources Resulting from PG&E's 2007 Renewables Portfolio Standard (RPS) Solicitation**

Keywords (choose from CPUC listing): Contracts; Agreements

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: All members of PG&E's Procurement Review Group who have signed nondisclosure agreement 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: Jonathan Forrester, (415) 973-4473

Resolution Required? ☑ Yes ☐No

Requested effective date: **December 3, 2009** 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:

Service affected and changes proposed:

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, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

DECLARATION OF JONATHAN D. FORRESTER SEEKING CONFIDENTIAL TREATMENT FOR CERTAIN DATA AND INFORMATION CONTAINED IN ADVICE LETTER 3481-E (PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)

I, Jonathan D. Forrester, declare:

1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), and have been an employee since 2006. My current title is Principal within PG&E's Energy Procurement Department. In this position, my responsibilities include negotiating PG&E's Renewables Portfolio Standard ("RPS") Power Purchase Agreements. In carrying out these responsibilities, I have acquired knowledge of PG&E's contracts with numerous counterparties. I have also gained knowledge of the operations of such sellers in general and, based on my experience in dealing with facility and contract owners, I am familiar with the types of data and information about their contracts and operations that such owners would 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, B1, B2, C, D, E, F, G and H to Advice Letter 3481-E" submitted on June 25, 2009. By this Advice Letter, PG&E is seeking this Commission's approval of a PPA that PG&E has executed with Alpine Suntower, LLC.

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"), or constitutes information

that should be protected under Public Utilities Code § 583 and General Order 66-C. The matrix also specifies the category or categories in the IOU Matrix to which the data and information corresponds, 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; (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 June 25, 2009 at San Francisco, California.

Jonathan D. Forrester

PACIFIC GAS AND ELECTRIC COMPANY
Advice Letter 3481-E
June 25, 2009

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 3481-E							
2	Appendix A	Y	Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	Y	Y	Y	This Appendix contains bid information and bid evaluations from the 2004, 2005, 2006, 2007 and 2008 solicitations. This information would provide market sensitive information to competitors and is therefore considered confidential. Furthermore, contracts from the 2005, 2006,2007, and 2008 solicitations are still under negotiation, further substantiating why releasing this information would be damaging to the negotiation process.	For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval For information covered under Item VIII B), remain confidential for three years after winning bidders selected
3	Appendix B1 and B2	Y	Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	Y	Y	Y	These Appendices contain bid information and bid evaluations from the 2007 and2008 solicitations. This information would provide market sensitive information to competitors and is therefore considered confidential. Furthermore, contracts from the 2005, 2006, 2007, and 2008 solicitations are still under negotiation, further substantiating why releasing this information would be damaging to the negotiation process.	For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval For information covered under Item VIII B), remain confidential for three years after winning bidders selected
4	Appendix C	Y	Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	Y	Y	Y	This Appendix contains bid information and bid evaluations from the 2007 solicitation. This information would provide valuable market sensitive information to competitors and is therefore considered confidential. Furthermore, contracts from the 2005, 2006, 2007, and 2008 solicitations are still under negotiation, further substantiating why releasing this information would be damaging to the negotiation process.	For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval For information covered under Item VIII B), remain confidential for three years after winning bidders selected

	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 D	Y	Item VII F) Renewable Resource Contracts under RPS program - Contracts with SEPs. 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 analyses and evaluations of the project. Disclosure of this information would provide valuable market sensitive information to competitors. Since negotiations are still in progress with bidders from the 2005, 2006, 2007, and 2008 solicitations, this information should remain confidential. Release of this information would be damaging to negotiations. Furthermore, the counterparty to the PPA have an expectation that the terms of the PPA will remain confidential pursuant to confidentiality provisions in the PPA. I am informed and believe that General Order 66-C provides a basis for confidential treatment. General Order 66-C includes in its category of records not open to public inspection "Information obtained in confidence from other than a business regulated by this Commission where the disclosure would be against the public interest." (Paragraph 2.8). It is in the public interest to treat such information as confidential because if such information were made public, it could have a damaging effect on current and future negotiations with other offers.	For information covered under Item VII F) and Item VII (un-numbered category following VII G), remain confidential for three years For information covered by General Order 66-C, remain confidential
5	Appendix E	Y	Item VII (un-numbered category following VII G) Score sheets, analyses, evaluations of proposed RPS projects.	Y	Y	Y	This Appendix contains information concerning and analyses and evaluations of project viability. If made public, this information could harm the counterparty and adversely affect project viability.	Remain confidential for three years
6	Appendix F	Y	Item VII (un-numbered category following VII G) Score sheets, analyses, evaluations of proposed RPS projects. Item VI B) Utility Bundled Net Open Position for Energy (MWh).	Y	Y	Y	This Appendix contains information that, if disclosed, would provide valuable market sensitive information to competitors and allow them to see PG&E's remaining RPS net open energy position. Since negotiations are still in progress with bidders from the 2005, 2006, 2007, and 2008 solicitations, this information should remain confidential for three years.	Remain confidential for three years
7	Appendix G	Y	Item VII F) Renewable Resource Contracts under RPS program - Contracts with SEPs.	Y	Y	Y	This Appendix contains the PPA. Disclosure of the PPA would provide valuable market sensitive information to competitors. Since negotiations are still in progress with bidders from the 2005, 2006, 2007 and 2008 solicitations, this information should remain confidential for three years. Release of this information would be damaging to negotiations. Furthermore, the counterparty to the PPA has an expectation that the terms of the PPA will remain confidential pursuant to confidentiality provisions in the PPA. I am informed and believe that General Order 66-C also provides a basis for confidential treatment. General Order 66-C includes in its category of records not open to public inspection "Information obtained in confidence from other than a business regulated by this Commission where the disclosure would be against the public interest." (Paragraph 2.8). It is in the public interest to treat such information as confidential because if such information were made public, it could have a damaging effect on current and future negotiations with other offers.	Remain confidential for three years

	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
8	Appendix H	Y	Item VII F) Renewable Resource Contracts under RPS program - Contracts with SEPs.	Y	Y	Y	This Appendix contains certain terms of the PPA. Disclosure of certain terms of the PPA would provide valuable market sensitive information to competitors. Since negotiations are still in progress with bidders from the 2005, 2006, 2007 and 2008 solicitations, this information should remain confidential for three years. Release of this information would be damaging to negotiations. Furthermore, the counterparty to the PPA has an expectation that the terms of the PPA will remain confidential pursuant to confidentiality provisions in the PPA. I am informed and believe that General Order 66-C also provides a basis for confidential treatment. General Order 66-C includes in its category of records not open to public inspection "Information obtained in confidence from other than a business regulated by this Commission where the disclosure would be against the public interest." (Paragraph 2.8). It is in the public interest to treat such information as confidential because if such information were made public, it could have a damaging effect on current and future negotiations with other offers.	Remain confidential for three years

Appendix I

Public Independent Evaluator Report (Public Version)

Pacific Gas and Electric Company

2007 Renewable Resource Solicitation

Fourth Advice Letter Report of the Independent Evaluator On the Bid Evaluation and Shortlist Selection Process

June, 2008

Prepared by
Merrimack Energy Group, Inc.

Merrimack
M
Energy

and

New Energy Opportunities, Inc.

Table of Contents

Executive Summary

On March 12, 2007, Pacific Gas and Electric Company (PG&E) issued the Renewable Portfolio Standard 2007 Solicitation Protocol (Solicitation Protocol or Solicitation) for the procurement of electric energy and associated products from renewable energy resources under long-term contracts to help the company meet its obligations under the California Renewable Portfolio Standard (RPS). In the 2007 Solicitation, PG&E sought to procure approximately 1-2% of its retail sales volume or between approximately 750,000 to 1,500,000 MWh per year. Pursuant to the Solicitation Protocol, PG&E received dozens of offers from renewable energy developers, evaluated the offers, and determined which of those offers to include on a short list for potential negotiations and contracting.

Pursuant to regulatory requirements of the California Public Utilities Commission (CPUC), PG&E retained Merrimack Energy Group, Inc. (Merrimack Energy) as the Independent Evaluator (IE) for the 2007 RPS Solicitation.[1] Following the receipt and evaluation of bids and selection of the shortlist, Merrimack Energy submitted its Report of the Independent Evaluator on the Bid Evaluation and ShortList Selection Process dated July 30, 2007 (IE Shortlist Report) as part of the Shortlist Report submitted by PG&E on the same date. On May 16, 2008, PG&E executed the first group of power purchase agreements (PPAs) associated with the 2007 Solicitation – two 20-year PPAs for the purchase of renewable energy from two 53.4 MW Solar Thermal Hybrid (with biomass) projects with San Joaquin Solar.[2] The contracts were approved by the Commission on December 18, 2008.[3]

On July 1, 2008 PG&E executed a Power Purchase Agreement (PPA) with Topaz Solar Farms LLC, a subsidiary of OptiSolar Inc. This PPA is for the purchase of an average of 1,096 gigawatt hours (GWh) per year from a planned new 550 MW solar photovoltaic facility in Carrizo Plain, San Luis Obispo County, California. The Topaz Solar Farms contract resulted from a bid submitted in response to the 2007 Solicitation. The Commission approved the contract on December 4, 2008.[4].

On July 23, 2008, PG&E executed a PPA with High Plains Ranch II, LLC (High Plains Ranch), a subsidiary of SunPower LLC, for output from a proposed 250 MW solar photovoltaic (PV) power plant planned to be built in Carrizo Plain, San Luis Obispo County, California. The Commission approved the contract with modifications on February 20, 2009.[5]

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[1] New Energy Opportunities, Inc. has served as a subcontractor to Merrimack Energy in this engagement.
[2] The names of the projects have been changed during the contract negotiation process. The proposal was originally submitted by Bethel Energy as part of the 2006 RPS solicitation. The project was rolled over to the 2007 solicitation. The name of the project was originally changed to Eviva California Solar and ultimately to San Joaquin Solar 1 LLC and San Joaquin Solar 2 LLC. In addition, the project was split into two PPAs from the original project size of 99 MW.
[3] Resolution E-4213 (Dec. 18, 2008).
[4] Resolution E-4221 (Dec. 4, 2008).
[5] Resolution E-4229 (February 20, 2009), http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/97784.DOC.

On May 27, 2009, PG&E executed a PPA with Alpine Suntower, LLC (Alpine Suntower), for the output from two proposed new solar thermal units with a capacity of 46 MW each (the Project) for a term of 20 years. The Project is planned to be constructed at a site in Lancaster, California. The Project was initially developed by eSolar, a provider of solar thermal technology, and in February 2009, NRG Energy, Inc. (NRG), acquired the development rights to this and several other eSolar projects. When the Project is planned to be completed in 2012, the Project is expected to deliver approximately 192 GWh per year, which will contribute to meeting PG&E's Renewable Portfolio Standards (RPS) obligations. This report, including the Confidential Appendix, will address the Alpine Suntower contract,[6] and is being filed as part of PG&E's Advice Letter filing seeking approval of this PPA.

The purpose of this report is for the IE to address the following with respect to the Alpine Suntower PPA: (a) whether this contract merits approval by the CPUC; (b) whether PG&E fairly and equitably conducted negotiations leading up to execution of this contract; and (c) to update and summarize the matters addressed in the IE Shortlist Report as to (i) the role of the IE in the process; (ii) the fairness and appropriateness of PG&E's bid evaluation and selection methodology and process; (iii) the reasonableness of the bid evaluation and selection process; and (iv) the adequacy of outreach to potential bidders and the robustness of the solicitation.

As we address in this report, we have spent considerable time and effort in reviewing PG&E's bid evaluation methodology and overseeing its evaluation of offers and shortlist selection, development of a negotiation strategy with the shortlisted bidders, and negotiations with regard to individual projects. Generally, we found that the shortlisting decisions were reasonable based on the requirements and evaluation criteria set forth in the Solicitation Protocol. PG&E erred on the side of inclusiveness in its shortlisting selections. There were no offers left off the shortlist that we felt should have been included. After the shortlisting process, PG&E developed a negotiation strategy to prioritize negotiations based on discussions with the bidders and in consultation with the Procurement Review Group (PRG) and the IE, which we found reasonable.

PG&E's outreach activities, which included contacting over 700 prospective bidders, holding workshops and conferences for bidders, and disseminating substantial information about the solicitation on its website, were effective, as evidenced by the robust response to the solicitation in terms of number of bids and types of resources proposed.

With respect to the Alpine Suntower PPA, we are of the view that the contract merits Commission approval based on the relative pricing of the offer, the expected viability of the project, and the contractual provisions in the PPA.

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[6] Much of this report replicates the First, Second and Third Advice Letter reports submitted by Merrimack Energy, but includes specific discussion and assessment of the Alpine Suntower project and PPA where warranted.

In our July 2007 IE Shortlist Report, we recommended that in the next RPS Solicitation that PG&E consider changes to the Solicitation Protocol to improve the procurement process in the following areas:

- Use of evaluation criteria weights instead of partial ordering
- Modification of the debt equivalence evaluation in light of recent changes in Standard & Poor's evaluation methodology
- Clarification of credit requirements and evaluation criteria
- A more robust project viability analysis that would take into consideration transmission viability and the impact of Supplemental Energy Payments
- Elimination of Portfolio Fit as an evaluation criterion and potential modification of the RPS Goals evaluation criterion
- Make criteria for evaluation of utility ownership options explicit and comparable with those for PPA offers

For its 2008 Renewable Resource RFO, PG&E incorporated a number of changes to the solicitation and evaluation methodology in response to the IE's recommendations with respect to partial ordering, credit requirements and portfolio fit.[7]

While there is always room for improvement, our assessment is that PG&E administered the evaluation and shortlist selection process for the 2007 RPS Solicitation fairly and reasonably and the PPA for the Alpine Suntower Project merits approval, all as more fully explained in this report.

[7] See 2008 Renewable Energy Procurement Plan and Draft Solicitation Protocol of Pacific Gas and Electric Company (U 39 E), http://www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricsuppliersolicitation/2008procurementplanpublic.pdf.at 2. 13-14 (Aug. 1, 2007). Our recommendations on debt equivalence became moot when the Commission determined to discontinue consideration of debt equivalence "bid adders" in future solicitations due to concerns about comparable treatment of PPAs compared to utility-owned projects. Opinion Adopting Pacific Gas and Electric Company's, Southern California Edison Company's, and San Diego Gas & Electric Company's Long-Term Procurement Plans, Decision 07-12-052 (Dec. 20, 2007), http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/76979.pdf, at 161-166.

I. Introduction: Role of the Independent Evaluator

On March 12, 2007, Pacific Gas and Electric Company issued the Renewable Portfolio Standard 2007 Solicitation Protocol for the procurement of electric energy and generation attributes from eligible renewable energy resources (ERR) under long-term contracts to help the company meet the requirements of having 20 percent of its sales supplied by renewable resources by 2010 under the California Renewable Portfolio Standard. In the 2007 Solicitation, PG&E sought to procure approximately 1-2% of its retail sales volume or between approximately 750,000 to 1,500,000 MWh per year. PG&E received a substantial number of offers in response to the solicitation.

PG&E evaluated the Offers received and then created a list of Offers that based on the Solicitation's evaluation criteria merited further discussion and negotiation (the "Shortlist" of Offers or "Shortlisted" Offers). If an Offer was not included on the Shortlist, it meant it is not entitled to further consideration by PG&E for this RPS Solicitation.

Pursuant to regulatory requirements of the California Public Utilities Commission, PG&E retained Merrimack Energy Group, Inc. (Merrimack Energy) as the Independent Evaluator (IE) for this solicitation.

A. Regulatory Requirements For the Independent Evaluator

The requirements for participation by an Independent Evaluator (IE) in RPS solicitations are outlined in decisions D.04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28) and D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8) of the California Public Utilities Commission (Commission or CPUC).

In Decision 04-12-048 (December 16, 2004), the CPUC required the use of an IE by investor-owned utilities (IOUs) in resource solicitations where there are affiliate, IOU-built or turnkey bidders. The CPUC generally endorsed the guidelines issued by the Federal Energy Regulatory Commission (FERC) for independent evaluation where an affiliate of the purchaser is a bidder in a competitive solicitation, but stated that the role of the IE would not be to make binding decisions on behalf of the utilities or administer the entire process.[8]

In Decision 06-05-039 (May 25, 2006), the Commission required each IOU to employ an Independent Evaluator regarding all RFOs issued pursuant to the RPS, regardless of whether there are any utility-owned or affiliate-owned projects under consideration. In addition, the Commission directed the IE for each RFO to provide separate reports (a preliminary report with the shortlist and final reports with IOU advice letters to approve contracts) on the entire bid, solicitation, evaluation and selection process, with the reports

[8] Decision 04-12-048 at 129-37. The FERC guidelines are set forth in Ameren Energy Generating Company, 108 FERC ¶ 61,081 (June 29, 2004).

submitted to the utility, PRG and Commission and made available to the public (subject to confidential treatment of protected information).

B. Issues Addressed in this Report

On July 30, 2007, Merrimack Energy issued its Report of the Independent Evaluator on the Bid Evaluation and Shortlist Selection Process (Shortlisting Report) which provided an assessment of PG&E's RPS Solicitation from shortly before the receipt of offers on May 31, 2007 through the selection of the short list of bidders. In addition to providing an overview of our initial Shortlisting Report as it pertains to the Commission's 2007 Templates, this report will address activities undertaken since the issuance of the Shortlisting Report, notably those activities associated with refinement of the shortlist through negotiations with selected projects.

This Fourth Advice Letter Report of the IE provides an assessment of PG&E's RPS solicitation process from prior to receipt of bids through the contract negotiation process along with confidential Appendix A. The Report is supplemented with discussions about the Alpine Suntower Project, the subject of this Fourth Advice Letter Report. It is organized based on a template provided by the Commission's Energy Division. This report addresses Merrimack Energy's assessment and conclusions regarding the following six questions identified in the Commission's 2007 Template:

1. Did PG&E do adequate outreach to potential bidders, and did its outreach activities result in an adequately robust solicitation to promote competition?

2. Was PG&E's methodology for the RPS offer evaluation and selection designed fairly?

3. Was PG&E's RPS offer evaluation and shortlist selection process fairly administered?

4. Did PG&E make reasonable and consistent choices regarding which offers were rejected and which were shortlisted?

5. Were project-specific negotiations fair?

6. Do the submitted contracts warrant CPUC approval?

The Shortlist Report filed on July 30, 2007 addressed the first four questions. In this report, we provide a summary and update of our prior report. Then we address the last two questions, which involve the process from selection of the shortlist through contract negotiations. The organization of this Report will follow the six questions identified above and as such will be restructured slightly from our July 30, 2007 Shortlist Report. Prior to addressing these six questions, we describe the role we have played in this competitive bidding process.

C. Description of Key IE Roles

In compliance with the above requirements, PG&E retained Merrimack Energy to serve as Independent Evaluator for PG&E's 2007 RPS Solicitation Protocol in late May 2007, shortly before to receipt of offers. Merrimack Energy was retained to provide an independent evaluation of the appropriateness of PG&E's bid evaluation methodology and selection process for its shortlist of offers and to provide PG&E, PG&E's Procurement Review Group (PRG), and the Energy Division with periodic presentations, findings and other reports as requested. The objective of the role of the IE is to ensure that the solicitation process is undertaken in a fair, consistent, unbiased and objective manner and that the best resources are selected and acquired consistent with the solicitation requirements.

With regard to the role of the IE, we view one of our primary tasks to "challenge" the results of the utility's evaluation process. Our objective is to ensure that the utility evaluation team can prove that the results of their evaluation are accurate, reasonable and consistent. This role generally involves a detailed review and assessment of the evaluation process and the results of the quantitative and qualitative (non-price) analysis. While we generally prefer to begin our role as IE prior to issuance of the solicitation to have input upfront into the bid evaluation criteria, methodology and process or at least several weeks prior to the receipt of bids, that was not the case here. Hence, the description of our activities reflects the period from just prior to receipt of bids to selection of the final short-list, and then through the contract negotiation process.

D. Description of IE Oversight Activities

The IE initiated a number of activities in performing its oversight role in connection with PG&E's evaluation criteria, evaluation methodology, evaluation and selection process, and the contract negotiation process. Many of these oversight activities are described in detail on pages 4-11 of our Shortlisting Report (July 30, 2007) and are summarized below. In addition, the IE performed a variety of oversight activities associated with contract negotiations that are described below.

1. Bid Evaluation and Selection of the Shortlist

At the beginning of our involvement in the process, the IE reviewed the 2007 Solicitation Protocol documents and form contracts, background information (relevant CPUC Orders, Guidebooks of the California Energy Commission, the shortlist report from the 2006 PG&E Renewables RFO and relevant legislation) and attended by telephone the Bidders Workshop held by PG&E on May 11, 2007. The IE then reviewed a confidential internal document provided by PG&E that contained a detailed protocol (the Detailed Protocol or Internal Protocol) designed to implement the publicly issued 2007 Solicitation Protocol dated March 12, 2007. Prior to the receipt of bids, the IE interviewed the key PG&E

personnel responsible for developing and implementing the quantitative (i.e. price) and qualitative (i.e. non-price) evaluation and obtained the model and methodology for conducting the quantitative evaluation as well as backup and explanatory information. The information was reviewed: (a) to determine whether the Internal Protocol was consistent with the Solicitation Protocol; and (b) whether the Internal Protocol was otherwise appropriate and objective. The IE also met with the PG&E RFO project team to review and discuss the following issues:

- RFO process for receipt and evaluation of bids
- The quantitative evaluation methodology, including the following factors:
    - Forward price curve development
    - Use of time-of-delivery (TOD) factors in price evaluation
    - Debt equivalence impact methodology
- Qualitative or non-price evaluation methodology
    - Portfolio Fit
    - Credit
- Selection process—partial ordering

The IE also participated in the receipt and opening of offers on May 31, 2007. The IE observed PG&E's bid receipt and opening process and reviewed the documentation developed by PG&E for compiling pertinent information on each of the offers received. We also completed our own database of the offers, which included pertinent information about each offer to not only ensure that all offers were adequately accounted for by both PG&E and Merrimack, but to also provide a complete list of offers upon which to begin our independent assessment. In conclusion, the bid receipt, opening, initial review and distribution process was very well organized and managed. The effective management of this process contributed significantly to the relatively quick evaluation and selection of the proposals received. In addition, PG&E was very responsive to information requested by the IE and provided all data and information sought.

Based on our review of the 2007 Solicitation Protocol and the Detailed Protocol as well as discussions with members of the evaluation teams, the IE developed a "Watch List" of issues (see Exhibit 1 below) as a means of identifying potential issues and factors that could influence the bid ranking and selection process and would warrant monitoring on an ongoing basis.

Exhibit 1
Independent Evaluator Watch List of Issues

Issue	Discussion
Partial Ordering Process	The partial ordering process used by PG&E serves as a key aspect of the ranking and selection of shortlisted bidders. Some of the issues we focused on included: • Implementation of the methodology

	• The application of both objective and subjective criteria in the partial ordering process and timing of the development of the criteria • Process for determining superior, indeterminate, and inferior bids
Price Evaluation Methodology (i.e. Market Valuation)	There are a number of issues generally associated with any quantitative or price evaluation methodology. For PG&E's methodology, these include: • Evaluation of bids with different terms and starting dates • Transparency of the methodology • Review and reasonableness assessment of the key assumptions such as the forward prices and the methodology for developing forward prices • Inclusion and reasonableness of all key cost items such as debt equivalence and transmission costs • Assessment of bids for phased projects
Credit and Security	The issues we have identified with regard to credit and security include: • The extent to which security is a requirement or an evaluation criteria • The extent to which the credit evaluation was consistent with the RPS Protocol • The extent to which bidders were reasonably apprised of the credit evaluation criteria.
Project Viability Analysis	Project viability assessment is key in evaluating the likelihood that renewable resource projects will be successfully developed, financed and constructed. There are a number of factors that affect project viability, including siting considerations, permitting status, and availability of equipment. As a result, the IE was particularly interested in monitoring whether the evaluation process would be consistent, appropriate and fair with regard to assessing projects from a viability standpoint and how this would affect shortlisting decisions and contract negotiations.
Transmission Issues	The IE was particularly interested in how transmission costs (and any substitutes for transmission) would be assessed to ensure that the methodology fairly and consistently assigned transmission costs (and the cost of any substitute arrangements) with no undue bias toward any type of project or projects from different geographical locations.
Timeframe for the Evaluation	PG&E established a very aggressive schedule to arrive at an initial and final shortlist. The goal was to select an initial shortlist and present the shortlist to the PRG approximately 3-4 weeks after receipt of bids. The IE was concerned that the expedited timeframe could lead to a limited deficiency assessment and suboptimal project viability evaluation.
Comparability – PPA vs Bids	One IE task was to review and assess bid options with utility ownership rights against conventional PPA bids to ensure there was no undue bias

Offering Utility Ownership Rights	associated with a particular contract structure (although, in practice, this was not an issue in this RFO since only a few bids offered utility ownership rights and these bids were problematic for reasons independent of comparability with PPAs—project viability and/or price).
Selection of the Shortlist	There were a number of potential issues associated with the process for selection of the shortlist identified by the IE. These include: • The appropriate size/amount of the shortlist given the expected failure rate of proposals and the competition with other utility procurements. • Fairness and consistency of the selection process. • Impact of transmission cost and availability on the selection process.
Consideration of Supplemental Energy Payments/Costs in Excess of Market Price Referent (MPR) in the Project Selection and Contract Negotiation Process	Limits on supplemental energy payments (SEPs), or after the passage of Senate Bill 1036 above-MPR costs in excess of PG&E's cost cap [9] could potentially serve as a constraint. • What are PG&E's unutilized above-MPR cost caps for all projects and out-of-state projects? • Which projects have above-MPR costs? • How does or should above-MPR costs influence the selection of the shortlist, if at all?

After the receipt and opening of bids, the next step in the process was a review of the proposals to ensure the bidders provided complete and consistent information. Bidders who did not provide all the necessary information or provided information that was unclear were notified by the Company via deficiency letters or requests for clarification. The IE received a summary from the Company of the information deficiencies and ambiguities for each bidder and also had the opportunity to review the deficiency letters planned for email delivery to the bidders. PG&E also provided all bidder responses to Merrimack Energy upon receipt from the bidders, which allowed us to monitor all email traffic between the Company and bidders.

The IE also reviewed PG&E's Market Valuation methodology and conducted an independent evaluation of the levelized cost of the majority of proposals. In addition, we reviewed the summary results of the proposals completed by PG&E and compared the ranking of the bid prices. We also ranked each bid based on established pricing ranges determined by the IE. Finally, we compared our results to PG&E's results from the partial ordering process. As will be discussed, the IE's ranking of proposals was generally consistent with PG&E's ranking.

[9] On October 14, 2007, Governor Schwarzenegger signed into law SB 1036, which eliminates the need for allocation of SEPs from the California Energy Commission for above-MPR costs under RPS PPAs. Instead, each utility has a cost cap for long-term RPS PPAs based on the total amount of SEPs that it would have collected (approximately $382 million for PG&E). The import of SB 1036 is that utilities are not required to procure renewables to meet RPS goals to the extent costs exceed the cost cap.

In the first ranking of the market valuation, each project is assumed to deliver its energy to a liquid hub in California or to the California border. To the extent that projects are located outside the California Independent System Operator (CAISO), projects are assigned wheeling costs in order to value the project at the forward curve for the applicable trading hub. The total delivered costs are then used to determine a total market value (negative or positive), which is used in the first ranking process (after consideration of debt equivalence).

Using the results of the first ranking based on the Partial Ordering Protocol, available transmission capacity (if any), i.e., transmission capacity that will be available without the need for system upgrades, will be assigned to the top ranked bids at an applicable cluster or location. Projects will then be assigned a transmission cost adder, if applicable, or, if lower, the cost of alternative commercial arrangements for delivering the energy.[10] The IE reviewed the transmission analysis and requested backup information, which was provided.

With regard to the qualitative or non-price evaluation, the IE's plan was to conduct a parallel evaluation for a reasonable percentage of the bids and to compare the evaluation to PG&E's evaluation. In reviewing the Detailed Protocol, the IE attempted to assess whether the evaluation criteria were sufficiently clear enough to permit a parallel review that would be based on the same detailed criteria employed by the PG&E evaluators. As part of this review, where it was useful and appropriate to make the criteria more quantifiable, the IE suggested changes. Through discussions with PG&E, the detailed evaluation criteria were modified and/or clarified in various respects that were mutually agreeable.

The IE reviewed PG&E's Detailed Protocol for the evaluation of bids proposing ownership by PG&E—either a purchase and sale agreement for a developed project, a power purchase agreement with a buyout, or a site purchase agreement—for consistency with the Solicitation Protocol as well as fairness in comparison to the evaluation of bids seeking agreements for power purchases by PG&E.

Following a meeting attended by the IE to review the status and evaluation of each proposal, the IE participated in the partial ordering process to determine superior, indeterminate, and inferior proposals as the basis for selection of the initial shortlist. To categorize bids into the above categories, PG&E's Project Lead defined the parameters for bid ranking (e.g., an offer (1) had a market value better than $X/MWh, (2) had to score a 3 or better in all categories, (3) could not have a score of 1 or less in more than two categories, etc.).[11] The parameters were revised and the proposals ranked into superior, indeterminate, and inferior categories. The process continued for several hours until a reasonably equal distribution of proposals into the three categories resulted and no proposals were dominated by an inferior proposal. The result of the partial ordering process was the ranking of offers by category as the basis for selection of the initial shortlist.

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[10] This analysis is described in more detail in Section II.B of the July 30, 2007 Short List Report.

[11] This example is illustrative only

After undertaking the partial ordering process, PG&E's evaluation team compiled an initial shortlist and presented the results to the Steering Committee on June 19, 2007. The IE was present at this meeting. The Project Lead summarized the evaluation and assessment of each offer. The Project Lead expressed reluctance to shortlist multiple proposals from the same bidder. Members of the Steering Committee raised a few questions about the initial shortlist. A key issue addressed related to the inclusion on the shortlist of a few proposals that may not have been ranked as high as other proposals but were ranked highly for viability and were offered by financially sound and viable entities with previous experience in project development. The result of this suggestion was a potential expansion of the shortlist to include a broader range of offers. Shortly thereafter, a meeting was held with the PRG in which PG&E presented the results of its evaluation and the IE provided its assessment.

The next step in the process involved the assignment of transmission upgrade costs or the costs of alternative commercial arrangements based on the initial ranking of shortlisted offers associated with the location of projects or their delivery points in or to transmission clusters/locations within the CAISO-controlled grid. For this assessment, the lower of transmission upgrade costs or the cost of alternative commercial arrangements were added to each shortlisted offer. The IE reviewed the results of the assessment and held follow-up discussions with the transmission analysts.

Once the market valuation was revised to take into consideration transmission upgrade costs or the costs of alternative commercial arrangements, the partial ordering process was re-run to generate a revised, second ranking of offers. The IE and PG&E's Project Lead had several discussions during this time to review the status of offers; the IE was also provided with revised spreadsheets with the evaluation results and rankings. The results of the second ranking were not substantially different from the first, with one bid removed from the shortlist and few additional offers added. After receiving some additional input from the PRG and the IE, PG&E made final decisions regarding the shortlist.

Bidders selected for the shortlist were notified in writing by PG&E and requested to post an offer deposit of $3.00 per kW of project contract capacity within five business days after receipt of the notice. Bidders not selected for the shortlist were also notified of their status.

2. IE Involvement After Shortlist Notification Including Contract Negotiations

Shortly after selection of the initial short list, PG&E contacted bidders on the short list to initiate the contract negotiation process. The IE's role in this phase of the process is to:

- Monitor the negotiation process to ensure it is fair, equitable, unbiased and consistent
- Make periodic presentations to the PRG on the negotiation process

- Advise the CPUC in Advice Letter filings whether the proposed contracts warrant approval
- Identify principles used to evaluate negotiations
- Assess whether similar information/options were made available to other bidders

As a means of monitoring the contract negotiations process, Merrimack Energy monitored initial discussions with bidders, reviewed all email traffic between the Company and bidders, participated in many negotiation sessions, reviewed red-lined contracts and issues lists/summaries prepared by PG&E, and participated in regular meetings with the PG&E project team to continually review the status of negotiations.

While the large majority of shortlisted bidders provided the offer deposit required to remain on the short list, several declined to post the offer deposit and were no longer considered for further negotiations. Any issues regarding bid deposits were vetted with the IE. In all cases, the bidders effectively withdrew themselves from short list consideration and no bids were eliminated at the discretion of PG&E.

In light of a large number of shortlisted bidders, Merrimack Energy recommended that PG&E develop a negotiation strategy, develop an issues list with respect to negotiations with each of the counterparties, and develop a set of negotiation priorities. PG&E agreed to undertake these activities, although it took some time to implement these suggestions. One of the outcomes of these discussions was a decision by PG&E, which was endorsed by the IE, to establish a Primary and Secondary list of bidders for short list categorization based on the bidders cost, Net Market Value, and project status from a viability perspective.[12]

Initially, PG&E contacted bidders on the short list and met in person or by telephone to identify issues pertaining to the proposals and issues that had been raised in bidder exceptions to the standard power purchase agreement. The IE monitored and listened in on most of the initial negotiation sessions. Based on the offers received and the preliminary discussions following shortlisting, a primary and secondary group of offers were put together and presented to the Procurement Review Group (PRG), early in the negotiation process. During the negotiation phase, the IE provided input on a variety of issues ranging from those pertaining to above-MPR costs (formerly, Supplemental Energy Payments), risk allocation issues resulting from exceptions, technical and viability issues, credit issues, and RPS qualification issues.

In September 2007, the IE was informed by PG&E that the PG&E Lead on this RFO had accepted a position from one of the bidders. The IE discussed the matter directly with the PG&E Lead to gain a perspective on his role with the bidder. He stated that he had agreed both with PG&E and his new employer that (a) he would keep confidential and not disclose to his new employer any confidential information that he had access to as an employee of PG&E associated with this RFO and (b) he would recuse himself from participation in the RFO on behalf of his new employer. After considering the matter, the

[12] For example, offers that did not have site control were likely to be included in the Secondary list even if their economics were relatively favorable.

IE promptly suggested to a senior person at PG&E that PG&E strongly consider notifying other bidders of these events and the response of PG&E for dealing with this issue. We also suggested that the matter should be discussed at the next PRG meeting, which was planned for the following week. The matter was raised by the IE, and the PRG concurred with our suggestions. Within the next week, bidders were informed that the Project Lead had left the company and had taken a position with one of the bidders and that he had agreed to keep all matters pertaining to the RFO confidential and that he would not work for his new employer with regard to the RFO. To the best of our knowledge, no bidders raised any concerns about the resolution of this issue. We are confident that this incident has had no impact on any substantive decision made by PG&E with regard to this RFO and is highly unlikely to have any impact on any future decisions.

The IE was active in this stage of the RFO process in a number of ways. Regular meetings were held with PG&E by phone to discuss the status of negotiations, negotiation strategy, and issues associated with each proposal. These conference calls were held weekly or every other week and later on an as-needed basis. The IE was also provided access to information provided from PG&E to bidders and from the bidders to PG&E. The IE was provided the opportunity to monitor negotiation sessions between PG&E and the bidder by telephone. We monitored most of the initial negotiation sessions when many key issues were being addressed, and were updated through discussions with PG&E transactors and RFO project staff for negotiation sessions that we did not attend telephonically.

The IE also participated in all PRG meetings and made presentations about the process at a few of these meetings.

The IE also requested that PG&E prepare an issues list for each contract, which identified positions of the parties with regard to each issue for negotiations. The IE has found this process to be of particular value since it allows the IE to track the negotiation process over time and determine how such issues have been resolved through the negotiation process. Furthermore, this process also provides the Company and IE the opportunity to be made aware of remaining outstanding issues. PG&E transactors prepared issues lists for the majority of the contracts being negotiated, including all of the projects involved in active negotiations.

The IE raised issues with PG&E about specific proposals based on our review of the proposals, participation in the negotiations, and based on our industry knowledge. These issues pertained to questions we had about project viability, RPS qualification with respect to a project proposal, the value of contracting with the source relative to its contribution to the cap on above-MPR amounts for PG&E, risk allocation issues, and other matters. We also discussed specific issues that arose with a few projects during the negotiation process as to the appropriate treatment of the bids relative to inclusion in the 2007 RFO or other processes.

In conclusion, the IE was in general agreement with the objectives and direction of the negotiation process undertaken by PG&E. In our view, the Company conducted a fair, unbiased, and consistent process. PG&E was careful to provide the same information about the negotiation process to all bidders and clearly identified the requirements for bidders to qualify for the primary and secondary short list categories. In addition, several bidders were clearly informed that they needed to "sharpen their pencils" to reach a certain price range to remain a viable shortlisted project and were informed of their choices to either remain on the shortlist or to elect to withdraw.

In addition, during the negotiation process PG&E effectively recognized that market and industry forces were presenting challenges for counterparties to maintain their proposals and schedules in the face of uncertainties and demonstrated a willingness to negotiate more flexible contract provisions without adding undue risk and cost to ratepayers.[13] Furthermore, the flexibility afforded by PG&E was consistently and fairly provided to all bidders who sought such flexibility and could demonstrate a clear need for such relief. This served to move projects forward in the contract negotiation process toward execution of several contracts, although the "customization" involved did take a significant amount of time.

II. Was the Outreach Adequate and the Solicitation Robust?

Outreach activities are important to the success of a competitive solicitation process. PG&E's outreach efforts targeted a large number of potential bidders and led to a very robust response in terms of number of bidders and quality of the proposals received. PG&E prepared a list of approximately 700 potential bidders with over 900 contacts (some companies had multiple contract names listed) that serves as the database for bidder contact and outreach. PG&E sent emails to all potential bidders on the list informing them of the solicitation process and the issuance of the Solicitation Protocol.

PG&E also distributed a press release to several renewable industry associations announcing the solicitation process and directing potential bidders to the Company's website address for the solicitation. In addition, it is our understanding that PG&E employees frequently mentioned the issuance of the Solicitation Protocol during speeches or presentations at industry conferences.

PG&E also established a section of the Company website for distribution of information to prospective bidders. The website contained all the pertinent solicitation documents and a list of questions and answers related to the solicitation. The IE found the website easy to access and easy to download information.

In addition, PG&E also held a Bidders Conference for prospective bidders on April 3, 2007 and a technical session for prospective bidders to describe the requirements for

[13] For example, issues associated with uncertainty over the extension of the federal Production Tax Credit and Investment Tax Credit, as well as a variety of other issues emerged during the contract negotiation process.

completing the bid pricing forms and other forms on May 11, 2007. The IE participated in the technical session and found this session to be particularly valuable and informative for bidders. The IE has used this approach in other competitive bidding processes.

The overall result of this outreach activity was a very robust response from bidders. Proposals were received from a diverse set of bidders involving a wide variety of technologies, including wind, solar, geothermal, biomass, qualifying municipal solid waste, and ocean. Information regarding the proposals, MW and MWh bid, types of resources bid, and the type of contract offered was contained in the confidential appendix to our Shortlisting Report.

Moreover, most bidders provided complete and thorough information in their proposals which served to minimize clarification requirements or the need to seek additional information necessary for putting all bidders on an equal footing.

The regularity of RPS solicitations is conducive to robust market participation since bidders are afforded repeated opportunities to develop their projects and obtain PPAs. For example, if a bidder fails to secure a contract in a near term solicitation, the bidder knows there will definitely be other future solicitations. This should encourage bidders to continually develop their projects.

In conclusion, the outstanding response of the market to PG&E's solicitation is evidence that the outreach activities of PG&E were effective and bidders felt they had an adequate opportunity to receive a contract from the process.

III. Fairness and Appropriateness of RPS Bid Evaluation and Selection Methodology and Design

A. Framework and Principles for Evaluating PG&E's Methodology

This section of the report addresses the principles and framework underlying Merrimack Energy's review of PG&E's methodology for RPS bid evaluation and selection. Key areas of inquiry by the IE and the underlying principles used by the IE to evaluate the methodology include the following:

- Was the procurement target large enough to ensure that the utility has a reasonable chance of meeting its 20% target (taking into account contract failures)?

- Were the solicitation targets, principles and objectives clearly defined?

- Were the bid evaluation and selection process and criteria reasonably transparent such that bidders would have a reasonable indication as to how they would be evaluated and selected?

- Did the evaluation methodology reasonably identify how quantitative and qualitative measures would be considered and applied?

- Was the quantitative evaluation methodology reasonably consistent with industry standards and did it adequately account for all reasonable costs identified in the Solicitation Protocol?

- Did the evaluation methodology adequately treat all eligible resources and technologies in a technology neutral manner?

- Does the price evaluation system allow for consistent evaluation of bids of different sizes, in-service dates, and length of contract?

- Did the bid evaluation criteria and evaluation process contain any undue or unreasonable bias that might influence project selection results?

- Was the RFP clear and concise to ensure that the information required by PG&E to conduct its evaluation was provided by project sponsors?

B. Description of PG&E's Least Cost Best Fit Evaluation Methodology

This section of the report provides an overall description of PG&E's Least Cost Best Fit (LCBF) evaluation methodology and criteria. PG&E developed detailed internal protocols that describe each component of the evaluation protocols.[14] There are five key evaluation criteria:

- Market valuation (i.e., price)
- Portfolio fit
- Credit
- Project viability
- RPS goals

Market valuation is designed to assess how an offer's costs compare to its benefits from a market perspective. Market value is defined as Benefits minus Costs. Benefits include the value of energy, capacity (resource adequacy), and ancillary services associated with each bid. Costs included the fixed and variable components associated with each proposal as well as transmission and integration cost adders (including costs associated with network upgrades), and debt equivalency. Market value is expressed in terms of present value per MWh, all in 2007 dollars and 2007 MWh using PG&E's 7.6 percent discount rate, PG&E's weighted average cost of capital.[15]

[14] This document is consistent in nature with similar documents prepared by other utilities we have worked with that provided detailed information with regard to the evaluation criteria and protocols.
[15] In practice, PG&E's market valuation calculated present values as of January 1, 2008. The use of 2008 $ and 2008 MWh using PG&E's discount rate does not affect the integrity or accuracy of the results.

For forward contracts (predominant form of bids), energy benefits are determined based on the quantity of energy delivery for each hour times the forward energy price for that hour. For as-available products, the quantity of energy delivery for each hour is determined by the hourly generation profile of the offer. Annual energy benefit is discounted to units of present value per MWh (in both 2007 dollars and 2007 MWh) and summed across years.

The capacity benefit for each year of availability is determined as the quantity of qualifying capacity times the capacity value (in nominal dollars per kW-year). Annual capacity benefit is then discounted to units of present value per MWh (2007 dollars and 2007 MWh), and summed across years. For as-available products, pursuant to D.05-10-042 (section 7.7), the quantity of qualifying capacity is determined by the annual average of the hourly (noon to 6 pm only) generation profile of the offer. For offers whose location would contribute to PG&E's satisfaction of its Local Capacity Requirement as specified by CAISO and adopted by the CPUC, the capacity value attributable to the offer is to be increased to account for the locational value of the capacity.

Ancillary services benefits are assumed to be zero for offers classified as forwards.

The cost side of the equation is determined by PG&E's payments for each offer based on the bidder's price proposal, plus debt equivalence and transmission and integration cost adders. PG&E's payments for each offer are determined by the offer's pricing multiplied by the appropriate Time of Delivery (TOD) factors, as specified in the RPS Solicitation Protocol. Cost is measured in units of present value per MWh (2007 dollars and 2007 MWh). In the case of offers for a Purchase and Sale Agreement (PSA), PG&E's payments for each offer are replaced by the associated PG&E revenue requirements, fixed and variable operations and maintenance costs, and ownership costs.

Portfolio Fit in the Solicitation Protocol is described as the "fit" between a project's generation profile and PG&E's portfolio needs on an hourly, seasonal, and annual basis. Where PG&E is short generation relative to its load, an offer will provide more value than where PG&E is long generation relative to its load. Dispatchable projects are favored due to their flexibility relative to other projects.

In practice, PG&E used time of delivery and relative firmness as a proxy for "fit" relative to PG&E's portfolio needs. After discussion with the IE, the detailed evaluation criteria were modified to provide a quantified approach on time of delivery and to weigh equally the result of the time of delivery and relative firmness evaluations. Projects that provide more energy during peak periods relative to off-peak periods would score better than other projects based on the time of delivery criterion.

Credit is also considered in the evaluation process, based on the Bidder's financial strength as well as the form and amount of acceptable security offered by the Bidder. The Detailed Protocol provides for scoring of credit on a sliding scale based on the extent to which the bidder provided the requested Delivery Term Security. While the Solicitation

Protocol suggests that PG&E would consider the financial strength of a bidder and credit concentration, if applicable, the scoring inputs into the bid evaluations associated with shortlisting only considered the amount of Delivery Term Security offered relative to the amount of security sought in the RFO. Scoring was on a sliding scale basis.

Project viability is a fourth factor in the evaluation process. In evaluating a project's viability, PG&E considers (a) a project's state of development and likelihood of obtaining required permits and (b) technological feasibility and commercialization risk, resource risk, and participant experience. In the Detailed Protocol, scores for these two subcategories were to be weighted equally.

RPS goals and supplier diversity are the remaining evaluation factors. The Solicitation Protocol provides that PG&E would evaluate (a) the extent to which an Offer supports CPUC and Legislative RPS program benefits and goals, including water quality impacts, creation of new employment activities, and amelioration of air quality problems, and the Governor's biomass energy goals and (b) the extent to which an Offer supports PG&E's supplier diversity goals.[16]

For purposes of ranking bids and selecting a short-list based on the evaluation criteria, PG&E used a mathematical concept known as partial ordering to quantitatively determine which offers were better or inferior to others. The partial ordering concept combines quantitative factors (i.e. market valuation in $/MWh) and qualitative or non-price factors (the qualitative factors identified above with scores of 1 to 5) to produce a categorization of the bids for purposes of determining a shortlist. The qualitative factors were evaluated by team members with expertise in the specific category. Offers were ranked from 1 to 5 with higher scores a positive indicator for the specific offer. In this process, qualitative or non-price criteria were equally weighted. PG&E used the partial ordering methodology to develop an initial shortlist based on the ranking of bids as superior, indeterminate, or inferior. Superior offers were strongly considered for inclusion on the shortlist and all were included. Indeterminate offers were further reviewed to determine which offers should be shortlisted.

PG&E's stated objective was to err on the side of selecting a robust shortlist as a hedge against bidders' failure to post the required bid deposit, their determination to focus negotiations with another utility, failure of contract negotiations and/or project failure.

Once bids were evaluated based on all the evaluation criteria in the first ranking, the full cost of delivering power to PG&E's customers, including the cost of network upgrades within the CAISO-controlled grid, were considered in a second ranking that factors in Transmission Adders.

C. Strengths and Weaknesses of PG&E's Least Cost Best Fit Methodology

This section of the report provides an assessment of the strengths and weaknesses of PG&E's LCBF methodology.

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[16] See RPS Protocol at 22-23, 38.

Merrimack Energy has assisted utilities and public utility commissions in a number of states with regard to the development of methodologies to evaluate proposals and in the evaluation and selection of conventional and renewable resources. Our experience has indicated that utilities use a variety of methodologies and models to evaluate resources. We will draw upon this experience[17] to address the following areas of PG&E's methodology in particular:

- Market Valuation Methodology
- Quantitative and Qualitative Factors
- Partial Ordering
- Forward Curve Methodology

First, the Market Valuation Methodology utilized by PG&E is methodologically consistent with other methodologies we have seen in other states and Canadian provinces. In particular, the assessment of the benefits associated with a renewable resource in comparison to the costs is a common concept for evaluating renewable resource proposals, particularly those from as-available or intermittent resources. The inclusion of additional costs such as transmission costs and debt equivalence is also consistent among such methodologies. Furthermore, the use of hourly profiles for assessing costs and benefits is typical of utility methodologies in the Pacific Northwest, where pricing at various market points is reasonably transparent. Some utilities we have worked with also include the cost of banking and shaping services in the bid evaluation process itself.[18]

It is also common for utilities and power buyers in other states and Canadian Provinces to include qualitative or non-price factors in the evaluation and selection process. Such factors as project viability and credit are important qualitative factors. The inclusion of factors such as consistency with RPS goals will likely depend on whether the solicitation is guided by the requirement to meet RPS targets or is part of the utility's overall resource planning process. Also, portfolio fit as a resource evaluation criterion appears to be unique when compared to other methodologies.

There are several important areas where PG&E's evaluation methodology differs from that used by other utilities. One area is the use of partial ordering for ranking of bids. This is the first solicitation where we have seen such a methodology applied in the evaluation and ranking process. While partial ordering is an intellectually sound methodology and

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[17] Merrimack Energy has served as Independent Evaluator or Independent Consultant in over 20 competitive solicitation processes. For renewable resources, Merrimack has worked in the states of Washington, Oregon, Texas, and Massachusetts and the provinces of Quebec and British Columbia.

[18] Banking and shaping refers to contractual arrangements whereby energy produced from a seller's power plant is delivered to the buyer at different time periods and frequently with a different profile or shape than the actual production profile of the plant. For example, an equivalent amount of energy from an intermittent wind energy plant produced in one week could be banked and sold to the buyer in a subsequent week at a separate point of delivery in the shape of flat 7x24 hourly deliveries. It is our understanding that PG&E reflects the costs and benefits of such arrangements in the contract negotiation process where appropriate.

provides a fairly rigorous and consistent methodology for ranking bids, we feel it has several shortcomings (addressed below).

A second area where PG&E's process differs from others is in the level of security required of bidders. We have found that other utilities generally require lower levels of security during the operating period and are more focused on development period security, given the importance of ensuring that projects are viable and can be effectively developed, financed and constructed as planned.

Finally, the methodology to determine the forward curve for various delivery points[19] is important given the significant impact the forward curve could have on determining the costs and benefits for each proposal and the overall market value. Based on discussions with representatives from PG&E's Risk Group, it is our understanding that PG&E's forward curve methodology includes a combination of mid-office assessment of the market based on broker quotes for the early years of the assessment and extrapolation beyond a specific point. In later years of the evaluation period, the projected price of natural gas has a major influence on the forward price. We have found this approach to be consistent with the methodologies used by other utilities and it is a preferable approach to relying strictly on third-party forecasts, since actual market quotes are reflected in the development of the forward curve.

Strengths of LCBF Methodology

The LCBF methodology has a number of inherent strengths due to testing and enhancements based on several solicitation processes. First, the market valuation methodology is flexible and is capable of effectively and consistently evaluating a range of resource technologies, project structures, different bid sizes and bid terms. The comparison of the benefits and costs of resource options on a consistent 2007 cost and MWh basis and the hourly resolution used provides for a consistent evaluation of bids, whether the bid terms and sizes vary. As we noted in the Watch List, in other solicitation processes the consistency of the evaluation methodology to effectively address bids of different structures, terms and bid sizes is usually an issue to address. We do not view the methodology as having a bias toward any technology or operating characteristic. We note that the use of Time of Delivery (TOD) factors and the ratios used are favorable from the standpoint of payments to/revenues received by solar generators. However, the value of these payments is appropriately considered in the market valuation, which takes into consideration differences in values based on time of delivery. In sum, PG&E's methodology conceptually takes into appropriate consideration the time of delivery and capacity values associated with solar generation relative to other renewable technologies and is in accord with applicable CPUC rulings.

Second, the qualitative categories included in the evaluation process are generally reasonable and consistent with other solicitations. While we made several comments to PG&E regarding the application of these criteria, overall the criteria are reasonable. In

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[19]PG&E developed forward curves for five specific delivery points accessible to its system.

addition, the evaluation methodology identified in the Protocol how qualitative and quantitative measures would be considered and applied.

Third, the Proposal Project Descriptions and Pricing Forms (Attachment D) appeared to be well understood by the bidders and required little adjustment. Furthermore, the market valuation modeling process was established to directly input this information which served to minimize the time for undertaking the evaluation.

Fourth, the key inputs and assumptions (i.e. forward curves, inflation forecast, capacity value, etc.) were locked down prior to receipt of the offers which serves to minimize any potential evaluation bias.

Fifth, the quantitative and qualitative evaluation methodology adequately treated all eligible resources and technologies in a technology neutral manner with no undue biases toward any technology or resource type.

Finally, the procurement target of 1% to 2% of load (750 to 1,500 GWh per year) was large enough to facilitate PG&E's having a reasonable chance of meeting its 20% RPS target. Moreover, these targets and the company's objectives were clearly defined.

Weaknesses of LCBF Methodology

While PG&E's market valuation methodology has a number of strengths, one of the weaknesses is that it is not easily auditable. Merrimack Energy was not able to directly review the model equations easily and to track through the relationships between the various files used in the evaluation.[20] However, this weakness can be overcome if the IE has additional time to review and test the model in future solicitations.

Another weakness in the LCBF methodology is the equal weighting of the qualitative factors driven by the partial ordering process. Evaluation criteria, such as viability, should be broader and more flexibly applied in the evaluation of bids. As we will note later, the fact that the Steering Committee suggested that offers be included on the shortlist because of the financial strength and experience of the bidders and presumed viability of the projects even though the associated proposals did not rank highly may be an indicator that the objectives of PG&E for selecting various options for the shortlist were not accurately reflected in the evaluation methodology.

Third, the partial ordering methodology actually leads to the development of the key ranking criteria after the bids are received. In most solicitation processes, it is typical that the criteria are locked down before bid receipt. Since, the partial ordering process selects the criteria after evaluation of the bids, bidders are not apprised as to how different criteria will be weighted which would provide information as to how best to structure their proposals to meet utility objectives. As previously noted, there are no identified weights assigned in the partial ordering process for selection of the short-list. However, each qualitative factor has a score of 1 to 5 and, overall, we felt the scoring and ranking

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[20] The model was not Excel-based but was developed in Visual Basic for Applications.

for each criteria were reasonable. We note that PG&E has elected not to use the partial ordering methodology for the 2008 RPS Solicitation.

Fourth, we have found that the role of "portfolio fit" has value with regard to relative firmness of the delivery of the product (e.g. baseload has more value than must take as-available) but the time of delivery aspect of portfolio fit is already accounted for in the market valuation.

Fifth, PG&E's evaluation methodology does not prescribe a specific course of action where a bidder proposes a project commercial online date that is earlier than the online date of a required transmission project or necessary transmission upgrades. In its evaluation, PG&E did not specifically address (a) the impact of potential delays on a project's expected commercial on line date due to the need for transmission upgrades and/or new construction or (b) the likelihood that the transmission projects would be built at all, hence raising concerns about the bid project's viability. Specifically, PG&E did not evaluate whether the project online date would be delayed in its market valuation. With regard to its project viability assessment, PG&E only considered the status of the system interconnection studies for a project. At the time of our shortlist report, PG&E indicated that in the negotiation phase of the RFO process it will seek further clarification regarding these matters and incorporate the results of its due diligence in its negotiation strategy. Further inquiry has subsequently been made, particularly with respect to negotiations where developers have sought additional relief from contractually guaranteed milestone dates.

IV. Did PG&E Fairly Administer the Evaluation Process?

A. Principles Used to Determine Fairness of Process

In evaluating PG&E's performance in implementing its competitive bidding process, Merrimack Energy has applied a number of principles and factors, which incorporate those suggested by the Commission's Energy Division as well as additional principles that Merrimack Energy has used in its oversight of other competitive bidding processes. These include:

- Were bidder questions answered fairly and consistently and the answers made available to all?

- Did the bid evaluation team maintain consistent scoring and evaluation among and across projects, including different types of projects?

- Were the requirements listed in the Solicitation Protocol applied in the same manner to all proposals?

- Was there evidence of any undue bias regarding the evaluation and selection of different type of technologies, project structures, bid sizes, or contract terms that cannot be reasonably explained?

- Were the bids given equal credibility in the economic evaluation?

- Did PG&E ask for "clarifications" that provided the bidder an advantage over others?

- Did all bidders have access to the same information?

- Were all cost factors (e.g. imputed debt, transmission costs) treated in an equitable and consistent manner?

- Did PG&E consistently apply the requirements, procedures and criteria of the evaluation process as identified in the RFP documents to different bids and types of projects?

- Was the evaluation and selection process based on complete information about each proposal and a thorough investigation by PG&E's project team?

B. Description of IE Methodology Used to Evaluate Administration of PG&E's LCBF Process

PG&E provided the IE access to the models used in the evaluation as well as the outputs used for selection of the shortlist. The IE conducted a review and assessment of both the quantitative and qualitative aspects of the proposal evaluation and selection. With respect to the quantitative analysis, the IE:

- Reviewed the pricing formulas and methodologies proposed by each bidder and developed a general ranking of proposals based on the pricing ranges proposed. The results of the rankings generated by the IE are included in the Confidential Appendix.

- Conducted a levelized cost analysis for a large portion of the bids received.

- Conducted a comparison of the rankings of selected bids by PG&E in comparison to the rankings determined by the IE

- Reviewed the output generated by PG&E and reviewed the results of the evaluation with PG&E's quantitative analyst.

- Reviewed PG&E's transmission cost evaluation, including spreadsheets and backup information.

- Tested the reasonableness of the results for several cost items including debt equivalence and transmission cost adders.

For qualitative factors, the IE independently scored most of the bids evaluated by PG&E (including the great majority of high ranking bids) and raised any issues we had with regard to PG&E's non-price evaluation prior to completion of the initial short-list. The IE had several differences with PG&E's rankings and had the opportunity to raise any concerns to PG&E qualitative team. Overall, we viewed the scoring and ranking by PG&E as being reasonable and consistent.

We conclude that PG&E reasonably followed the criteria outlined in the Detailed Protocols. In addition, the evaluation was consistent and equitable across different types of bids and reflected the totality of costs and benefits identified in the Protocol.[21]

In addition, based on our assessment of the evaluation process relative to the above criteria, it is our opinion that all bidders were treated fairly and consistently and all had access to the same amount and quality of information. PG&E maintained a website dedicated to the solicitation and posted all documents and Questions and Answers on the website. As previously noted, the Bidders Workshop held by PG&E provided detailed information to all bidders with regard to the evaluation methodology and the requirements for bidders to provide the information requested. We also observed no difference in the treatment of bidders regarding clarification questions for bidders, correspondence and communications with bidders, and follow-up contacts.

During the evaluation, PG&E developed separate evaluation teams for quantitative and qualitative factors, ensuring that bias did not inherently exist in the evaluation process. Furthermore, PG&E generally implemented the evaluation criteria and methodologies as outlined in the Solicitation Protocol.

C. Did the IOU Fairly Identify Nonconforming Bids and Reasonably Quantify the Cost or Value of Those Deviations?

PG&E viewed as nonconforming bids that failed to offer any Project Development Security or any Delivery Term Security. Bidders that offered to provide Project Development Security and some amount of Delivery Term Security were considered to have conforming bids (if the bids were conforming in other respects). Credit scores were awarded on a sliding scale based on the percentage of the requested Delivery Term Security that the Bidder proposed to provide.

On the whole, our assessment is that PG&E reasonably identified non-conforming bids and took actions to take into consideration the impact of the non-conformities in its bid evaluation or to give bidders the opportunity to rectify the non-conformities.

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[21] However, the credit evaluation as outlined in the Detailed Protocol was not consistent with that summarized in the Solicitation Protocol, a matter addressed in Section II.C.vii of this report.

D. Were the Parameters and Inputs to the Evaluation Criteria Reasonably Determined? What Controls Were in Place?

The parameters and inputs for the quantitative evaluation were largely developed internally and were locked down prior to submission of the bids. For example, the forward prices, underlying volatilities and inflation forecasts were developed by the Risk Group within PG&E. All the forward curves were locked down as of May 4 and would therefore not be influenced by any offer. Other inputs such a TOD factors, transmission adders, etc. were identified in the Solicitation Protocol and were consistently applied in the evaluation. Furthermore, the quantitative methodology was consistently applied to all bidders, with the overall methodology (except for the inputs) changing only slightly from the previous solicitation.

From the qualitative perspective, all qualitative factors and the scoring and ranking criteria were clearly outlined in the Detailed Protocol. Slight revisions were made after receipt of offers to account for comments made by the IE.

The methodology utilized for calculating the PG&E transmission adder is reasonable and PG&E provided examples of utilizing both TRCR adders and alternative commercial arrangements. PG&E reasonably assigned off-system wheeling costs and the cost of large inter-regional transmission upgrades in the bid evaluation process. Wheeling costs to bring off-system power to the CAISO grid were based on the published tariffs of the pertinent transmission providers. Overall, we found the assignment of costs reasonable and in accord with the Solicitation Protocol.

E. For Work That Was Outsourced, What Information Was Communicated to the Third Party and What Controls Did PG&E Exercise Over the Quality of the Work?

PG&E obtained technical advice on an Offer for the purchase of a site from a reputable engineering consulting firm with expertise in renewable energy technologies. PG&E sought the consulting firm's professional judgment regarding the suitability of a potential geothermal site from a resource standpoint. (PG&E also discussed with the consultant the technological feasibility of a fuel cell proposal.) PG&E's personnel were ultimately responsible for the resource risk and technological feasibility aspects of the project viability evaluation. They reviewed the consultant's assessment regarding the suitability of the geothermal site and found the consultant's analysis to be reasonable, and we concurred.

F. Did the Utility Follow Its Transmission Analysis Procedures and Reasonably Include Appropriate Transmission Information

PG&E followed its transmission analysis methodology and procedures in bid evaluation, with a few exceptions that were either corrected or were not material to the evaluation.[22]

[22] For additional information, see the IE Shortlist Report at 33-34.

G. Beyond Any Quantitative Analysis, Describe Any Areas in Which PG&E Exercised Judgment in Creating Its Short List?

There were several areas where PG&E exercised judgment in creating the shortlist. These areas include:

1. PG&E applied a preference for not including multiple bids from the same bidder on the shortlist if a bidder offered several different proposals.

2. The Company exercised judgment that a few offers were not viable, at least at this time (e.g., one offer that was dependent on the successful completion of a PG&E project).

3. PG&E included two proposals that were bid into and were shortlisted in the 2006 solicitation and agreed to be rolled over into the 2007 solicitation.

4. One bidder offered a very large amount of capacity but the bidder's Offers were not deemed viable by PG&E. Similar Offers from the same bidder were characterized as not viable in the 2006 solicitation as well after PG&E completed its due diligence review after shortlisting the Offers.

5. PG&E exercised judgment in developing the parameters for the partial ordering process, as previously discussed.

6. The Steering Committee exercised judgment in encouraging the Project Lead to include several lower ranked offers because they were deemed to be more viable and backed by strong market participants.

While the IE had some questions about the reasonableness of adding some of the projects deemed relatively more viable to the shortlist, other offers were not eliminated from the shortlist as a result. The result was a larger and more robust shortlist. In our Shortlist Report, we indicated that PG&E would need to exercise judgment in the contract negotiation process to prioritize negotiations based on a variety of factors, including pricing, a matter we address in subsequent sections of this Report. With regard to PG&E's exercise of judgment on the other matters summarized above, our view is that the exercise of judgment was reasonable.

H. Was PG&E's Evaluation of the Bids and Short Listing Decisions Fair and Reasonable?

Our assessment is that PG&E's evaluation of the bids and its decisions on short listing were fair, reasonable and consistent in approach. PG&E exhibited considerable care and diligence in the evaluation process. The great majority of its decisions regarding short listing were dictated by both the economic and non-economic evaluation based on the evaluation criteria. As described above, several additional projects were added to the short list that had lower market valuations than the other short listed projects but were evaluated highly for project viability. In this regard, PG&E also gave due weight to suggestions from the PRG and the IE.[23] While we might not have agreed with every individual judgment, PG&E sought to err on the side of inclusiveness, which we found to be reasonable at this stage of the RFO process.

V. Fairness of Contract Negotiations Process

The contract negotiation phase of the assignment has been ongoing since the August/September 2007 timeframe. During that period, Merrimack Energy has monitored PG&E's negotiation process by listening in to a number of negotiation sessions with bidders, following the email traffic between PG&E and the bidders, reviewing various drafts of the contract and participating in regularly scheduled conference calls with PG&E to discuss project status.[24] Internally, the two consultants involved in the project on behalf of Merrimack Energy have each followed a select list of projects and discussed their specific proposals on a regular basis to ensure consistency.

We also encouraged the Company to develop a strategy for prioritizing the negotiation process given the large number of projects on the short list. In addition, we recommended that PG&E maintain an Issues Matrix that identifies the outstanding contracts issues, the positions of both the Company and Bidder, and the status of the issue. The Issues Matrix is a valuable tool to track the status of the resolution of issues during the negotiation process.

A. Principles Identified to Evaluate Negotiations

As an initial step in this stage of the process, Merrimack Energy identified guiding principles on which to evaluate the negotiation process. These principles should be generally consistent with the principles identified for evaluating the other aspects of the solicitation process. These include:

- Were all bidders treated fairly, consistently, and equitably during the negotiation process? That is, if one bidder was allowed to include a specific provision in its contract, were all similar bidders afforded the same opportunity?

- Was the negotiation process flexible enough to adjust to changing market conditions?

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[23] At our recommendation, only one phase of a large multi-phased project was shortlisted and a smaller, equivalently ranked project was incorporated in the shortlist. Another project was incorporated in the shortlist at the recommendation of a PRG member.

[24] Initially, Merrimack Energy participated in PG&E's Steering Committee calls every two weeks. In addition, in the early phases of the negotiation process there were a number of contract negotiation sessions that dealt with a large number of issues, which led us to participate in more calls in this stage of the negotiations to ensure we were familiar with the issues. Within the past several months, we have initiated weekly calls with PG&E RFO staff and transactors for the various proposals.

- Did the negotiation process generally maintain the same or similar risk provisions as contained in the original contract in the RFO?
- Did all bidders have access to the same or similar information?
- Were the transactors consistent in their negotiations with different bidders. In sum, was the process well organized such that all transactors were on the same page regarding acceptable provisions in other contract negotiations?

B. Fairness of the Project Specific Negotiation Process

Overall, Merrimack Energy believes that PG&E conducted a fair, equitable and consistent negotiation process. The negotiation process was affected by changes and uncertainties in the industry that influenced the length of negotiations and specific contract provisions requested by bidders.[25] However, in our view PG&E treated all bidders consistently with regard to the implications of these uncertainties. In addition, the negotiation process was transparent. PG&E clearly informed bidders of their status and suggested that some bidders would have to reduce their price to become competitive.

The overall objective of PG&E was to hold to as many of the provisions of the proforma contracts as reasonably possible. In cases where a bidder negotiated modifications to specific provisions the Company would generally allow other bidders the opportunity to entertain similar provisions in their contract only if the bidder identified the same or similar issue and demonstrated it required such a modification to remain viable. However, PG&E would not specifically identify to bidders during negotiations that it had agreed to a certain provision with another bidder. It was therefore the responsibility of the bidder to identify such contract requirements before PG&E would consider such modifications. In this way, PG&E attempted to maintain the risk allocation included in the proforma contracts unless bidders specifically identified a strong reason for revising contract provisions.

In addition, PG&E exhibited flexibility in the negotiation process designed to balance the interests and requirements of the bidders with the requirement to meet RPS objectives. In particular, PG&E clearly recognized the market uncertainties and worked with bidders to add value to the project without shifting undue risk to the consumer. In cases where PG&E exhibited flexibility to bidders in one area of the negotiation process, the Company attempted to extract concessions from bidders in another area to ensure the totality of contract revisions still led to a balanced contract structure. These specific

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[25] In our view, the length of the negotiation process was influenced primarily by the significant changes and uncertainties occurring in the energy industry, such as generalized increases in construction costs during the 2007-08 timeframe and the inability of Congress to extend the production tax credit and investment tax credit until early 2009, the relative immaturity of some of the shortlisted projects, and the size of the shortlist (and therefore the number of projects subject to negotiation). On a secondary level, the turnover of PG&E transactors may have contributed somewhat to the time required to complete negotiations as new transactors had to get up to speed on contract negotiations and other transactors had to assume additional duties.

trade-offs will be discussed in the Confidential Appendix to the Advice Letters which describes specific aspects of each contract.

PG&E was sensitive to providing the same information to all bidders, particularly during the early stages of negotiations. The Company provided bidders a description of the negotiation process, the regulatory process for contract approval, the expected timing for completing and filing contracts,[26] the key contract provisions, and the general position of the bidder on the short list (i.e. Primary or Secondary). In some cases, depending on the bidders' price, PG&E informed bidders that they would have to lower their price to be competitive. It is also our view that no bidder or technology was favored during this process. All bidders were generally treated the same during this process.

With regard to the role and responsibilities of the transactors, it is our view that all transactors were generally on the same page and conducted the negotiations consistently with company policy. For example, during the early stage of the negotiation process, it was typical that all transactors were involved in weekly discussions between the IE and the Company. This ensured that all transactors were well aware of the issues and the questions of concern to the IEs. The only issue we had was the fairly significant turnover of transactors during this process, which required some additional time for the new transactors to get up to speed with the negotiation process.

While a number of issues emerged during the process, some of the key issues that were dealt with during the negotiation process that affected several projects included:

- Uncertainty over extension of the federal Production Tax Credit and Investment Tax Credit and associated contract rights (this became less of an issue when the tax credits were extended for substantial time periods earlier this year).
- Extension of contractual guaranteed milestones, under specified circumstances.
- Phasing-in of some larger projects.
- Cost and availability of banking and shaping services for out-of-state projects.
- The timing and impacts associated with interconnection and transmission upgrade requirements.
- Credit/security requirements, particularly the level of operating security required

We believe that PG&E has acted reasonably in addressing these and other issues.

VI. Recommendation For Contract Approval

The contract subject to approval in this fourth Advice Letter represents the fifth contract resulting from the 2007 RPS solicitation.[27] A brief summary of the Alpine Suntower PPA follows.

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[26] PG&E originally informed bidders that its objective was to complete the contracts by the end of 2007 and submit the contracts to the Commission at that time.

[27] The previous contracts are described at pp. 1-2 of this report.

A. Contract Summary

The Alpine Suntower – Project and PPA

The PPA for the Alpine Suntower project was executed on May 27, 2009. The contract is for a 20-year term with a planned completion date in 2012 for two new solar thermal units with a capacity of 46 MW each. The Project is expected to deliver approximately 192 GWh per year over the term of the PPA. The project site is located in Lancaster, California. While the price under the PPA is confidential, the price, according to PG&E, is below the applicable MPR. A more detailed discussion of the application of the MPR in the context of the Alpine Suntower PPA is discussed in the Confidential Appendix A.

The original developer of the Project is eSolar, a California-based developer of solar thermal technology. Basically, the Project would use a concentrating solar thermal technology with a central power tower. A field of mirrors would track the sun during the day, concentrating the sun's rays on a solar boiler on top of a tower, generating significant heat which would be used to generate steam, which in turn would be used to run a steam turbine that would generate electricity.[28]

eSolar's technology is in the commercialization stage. The company has a 5 MW demonstration project in Lancaster, California which is scheduled to begin operation this summer. In addition, eSolar has executed a PPA with Southern California Edison Company for a 105-245 MW project near Rosamond, California (Gaskell SunTower, LLC), which has been approved by the Commission.[29] Recently, NRG, in partnership with eSolar, has signed a PPA with El Paso Electric for a 92 MW project in New Mexico, which has also received regulatory approval.[30] In February 2009, NRG and eSolar entered into an agreement pursuant to which NRG acquired equity and associated development rights in various eSolar projects, including the Alpine Suntower project.

B. Fairness of the Negotiations Regarding the Alpine Suntower Project

The contract negotiation process followed with Alpine Suntower (i.e., the bidder) was fair and equitable and consistent with the principles identified for negotiations in the previous section of this report. PG&E afforded the bidder some flexibility in the contract structure to address bidder risk issues but was able to effectively negotiate other provisions which served to balance the contract risk allocation. Furthermore, the flexibility provisions negotiated with the bidder were understandable in the context of project-specific risk issues faced by the project's developer.

C. Does the Alpine Suntower PPA Warrant Commission Approval?

[28] The technology is described in more detail in Section III. D of PG&E's advice letter.
[29] Resolution E-4188 (December 4, 2008) (redacted version)
[30] http://online.wsj.com/article/BT-CO-20090611-710558.html.

An in-depth description of the contracts and specific issues associated with the contract negotiation process is provided in the Confidential Appendix A to this Report. Merrimack Energy concludes that the proposed PPA would contribute significantly toward PG&E's meeting its RPS obligations and that the PPA represents a reasonable product of the competitive bidding and negotiation process. We therefore recommend that the contract should be approved by the CPUC. We believe the contract provides a reasonably competitive price with solar technology from a California-based technology provider that has substantial commercial promise and is being backed by a major national power plant developer.

VII. Conclusions and Recommendations

For the reasons stated herein, Merrimack Energy concludes that the shortlisting decisions by PG&E in the 2007 RPS RFO were reasonable and based on the requirements and evaluation criteria set forth in the Solicitation Protocol. The selection of the shortlist was very inclusive and erred on the side of including more offers in what was a very ample shortlist relative to the procurement target. In the Shortlist Report, Merrimack Energy recommended a number of changes to the RPS procurement process, several of which were adopted by PG&E in the 2008 RPS RFO. Despite recommending certain changes, our assessment is that the PG&E evaluation methodology was appropriate and that it was administered fairly and reasonably.

Consistent with suggestions we had made in and after the Shortlist Report, PG&E developed a negotiation prioritization strategy with shortlisted bidders that created an active group of negotiations based on price and viability factors. The Primary and Secondary tier groups were not static throughout the negotiation process, with some projects moving between groups based on their price or development status. Due to changes in the development status of eSolar's proposed project following being shortlisted by PG&E, the Alpine Suntower project moved on to the priority negotiation list after it secured a viable site.

The PPA submitted for the Alpine Suntower Project that PG&E has submitted for Commission approval with its fourth Advice Letter was negotiated fairly and reasonably. The Company exhibited a reasonable level of flexibility in the negotiation process but with a proper balance regarding risk allocation consistent with the Company's overall negotiation strategy. The Company also conducted reasonable due diligence regarding the technology to be incorporated into the Project, the ability of the project sponsor to develop the Project, including the ability to timely interconnect to the transmission grid through the CAISO interconnection process. Merrimack Energy believes the PPA merits Commission approval.

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

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CAISO
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CSC Energy Services
California Cotton Ginners & Growers Assn
California Energy Commission
California League of Food Processors
California Public Utilities Commission
Calpine
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Cardinal Cogen
Casner, Steve
Chamberlain, Eric
Chevron Company
Chris, King
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Commercial Energy
Consumer Federation of California
Crossborder Energy
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RCS, Inc.
Recon Research
SCD Energy Solutions
SCE
SMUD
SPURR
Santa Fe Jets
Seattle City Light
Sempra Utilities
Sierra Pacific Power Company
Silicon Valley Power
Southern California Edison Company
Sunshine Design
Sutherland, Asbill & Brennan
Tabors Caramanis & Associates
Tecogen, Inc.
Tiger Natural Gas, Inc.
Tioga Energy
TransCanada
Turlock Irrigation District
U S Borax, Inc.
United Cogen
Utility Cost Management
Utility Specialists
Verizon
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
eMeter Corporation