

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298

REVISED

September 11, 2013

Advice Letter 4074-E

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

**Subject: Approval of PG&E's Agreement with Calpine Energy Services, L.P.
for Combined Heat and Power Resource Adequacy Capacity Product
from the Los Medanos Energy Center**

Dear Mr. Cherry:

Advice Letter 4074-E is rejected per Alternate Resolution E-4529.

Sincerely,

A handwritten signature in black ink that appears to read "Edward F. Randolph".

Edward F. Randolph, 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: 415.973.6520

July 2, 2012

Advice 4074-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: **Approval of Pacific Gas and Electric Company's Agreement with Calpine Energy Services, L.P. for Combined Heat and Power Resource Adequacy Capacity Product from the Los Medanos Energy Center**

I. INTRODUCTION

A. Purpose of the Advice Letter

Pacific Gas and Electric Company (“PG&E”) hereby requests that the California Public Utilities Commission (“Commission” or “CPUC”) approve the Confirmation for Resource Adequacy (“RA”) Capacity Product that PG&E has executed with Calpine Energy Services, L.P. (“Calpine”) for 280.5 MW of combined heat and power (“CHP”) capacity associated with the Los Medanos Energy Center (“LMEC”).¹

Located in Pittsburg, California, LMEC is an existing CHP facility recognized by the California Independent System Operator (“CAISO”) as an RA Resource. This CHP capacity procurement agreement, which is referred to in this advice letter as the “LMEC Agreement,” resulted from PG&E’s first CHP Request for Offers (“RFO”), which was held in compliance with the Qualifying Facility/ Combined Heat and Power Settlement Agreement (“QF/CHP Settlement”). The capacity procured under the LMEC Agreement counts toward PG&E’s QF/CHP Settlement MW Target. The LMEC Agreement achieves the purposes of the CHP RFO through reasonable terms and conditions and merits the Commission’s unconditional approval. PG&E requests that the Commission issue a resolution approving the LMEC Agreement no later than April 15, 2013, to allow

¹ The RA capacity product is an approved product in PG&E’s conformed Bundled Procurement Plan (“BPP”). PG&E’s BPP was approved by the CPUC in Decision (“D.”) 12-01-033 on January 12, 2012. PG&E filed its Conformed BPP in Advice 4026-E on April 11, 2012. PG&E filed a supplemental BPP to comply with D.12-04-046 in Advice 4026-E-A on May 21, 2012.

for final and non-appealable approval by May 15, 2013, containing the findings set forth in Section V below.

B. Background

The operative provisions of the QF/CHP Settlement are largely contained in the “CHP Program Settlement Agreement Term Sheet” (“Term Sheet”). The Term Sheet requires the investor-owned utilities (“IOUs”) to conduct RFOs exclusively for CHP resources.² PG&E seeks to acquire up to a total of 1,387 MW of CHP capacity under power purchase agreements (“PPA” or “Agreements”) through three RFOs and other procurement alternatives during the Initial Program Period, as defined by the Term Sheet.³ On December 7, 2011, PG&E issued its first CHP RFO to procure resources counting toward its MW procurement target and to address its GHG Emissions Reduction Target.

The *Combined Heat and Power Request for Offers -- Protocol for First Solicitation* (“CHP RFO Protocol”) sets forth the terms and conditions of PG&E’s first competitive solicitation for CHP resources.⁴ PG&E requested offers for existing, new, repowered and expanded CHP facilities, Utility Prescheduled Facilities and CHP capacity-only products. Based on comments received following its CHP RFO Bidders’ Conference, PG&E revised its CHP RFO Protocol to accept offers for capacity-only products, provided such capacity comes from an eligible CHP Facility, or from a portion of an eligible CHP facility. Participants submitting a capacity-only offer must have, or would need, an Edison Electric Institute (“EEI”) Master Agreement with PG&E and would use a form of the standard Confirmation under an EEI Master Agreement that PG&E had adapted and posted to its CHP solicitation website (“CHP RA Confirmation”).

In its RFO, PG&E stated a strong preference for offers that are low cost and that are from facilities with efficient operations and either have low associated GHG emissions or provide GHG emissions reductions through changes in operations or technology.

In response to PG&E’s CHP RFO, Calpine submitted an offer to provide a capacity-only product from LMEC. PG&E reviewed the merits of each offer received in the CHP RFO and compiled a shortlist of the most attractive offers. On April 30, 2012, PG&E informed Calpine that the LMEC offer was on the shortlist and the parties engaged in negotiations

² Term Sheet, Section 4.2.1 specifies that each IOU shall conduct RFOs exclusively for CHP resources (CHP RFOs) for achieving its CHP megawatt (“MW”) and Greenhouse Gas (“GHG”) Emissions Reduction Targets.

³ Term Sheet, Section 2.2.2.

⁴ The CHP RFO Protocol is available for public review on PG&E’s website at:
http://www.pge.com/includes/docs/word_xls/b2b/wholesaleelectricsuppliersolicitation/CHP/CHP_RFO_Protocol_Document_rev012612%20CLEAN.doc

over the terms of the offer. On May 30, 2012, PG&E and Calpine executed the LMEC Agreement for CHP capacity from LMEC. Other shortlisted offers are in various stages of negotiation at this time.

C. General Project Summary

Project Name	Los Medanos Energy Center
Owner/Developer	Calpine Energy Services
Technology	Combined Cycle Gas Turbine ("CCGT")
Capacity (MW)	280.5 MW under contract out of 561 MW total *
Expected Generation (GWh/Year)	N/A
Delivery Pattern (As-available, Firm, Utility Prescheduled Facility)	N/A
Delivery Term (number of months)	60 months
Vintage (New / Existing / Repower/Expanded/Utility Prescheduled Facility)	Existing
Location (city and state)	Pittsburg, CA
Source of Agreement (e.g., RFO or Bilateral Negotiations)	RFO

* The RA capacity value associated with this maximum capacity value varies between 270 MW and 280.5 MW, depending on the time of year.

A summary of the LMEC Agreement is attached as Confidential Appendix C. A comparison of the LMEC Agreement with PG&E's Pro Forma CHP RA Confirmation is attached as Confidential Appendix D. The LMEC Agreement is attached as Confidential Appendix E.

D. General Project Description

LMEC has been operating since July 2001 and thus has over ten years of experience operating as a CHP facility. LMEC is a topping-cycle natural gas-fired combined cycle gas turbine ("CCGT") cogeneration facility with a maximum operating capacity of 561 MW. Two combustion turbines are routed to two heat recovery steam generators, which provide steam to one steam turbine. In the aggregate, LMEC provides its two thermal hosts an average of approximately 190 MMBtu/ hour of steam without seasonal

variation. The two thermal hosts, USS-POSCO Industries and Dow Chemical Company (“Dow”), use the steam for process heating at their respective steel mill and chemical processing facilities.

a. Description of Thermal Host's Thermal and Electrical Needs over the Term of the Contract.

The thermal hosts' aggregate thermal demand as described above is expected to remain consistent over the contract term. POSCO Industries and Dow also purchase electricity from LMEC. The electricity sales are unrelated to the sale of the RA product to PG&E under the LMEC Agreement.

E. QF/CHP Settlement Progress

The LMEC Agreement contributes 280.5 MW towards the MW target assigned to PG&E under the QF/CHP Settlement. The MW Counting Rules provided at Section 5.2.3.2 of the QF/CHP Settlement Term Sheet state:

CHP PPAs executed with QFs who formerly sold to the IOUs and are not listed in the July 2010 Semi-Annual Reports will count towards the MW Targets based on the Contract Nameplate (or for PG&E the “operating size”) in the most recent Cogeneration and Small Power Production Semi-Annual Report, if any, in which the CHP was listed. If not listed as contract nameplate, the contract nameplate in the most recent QF or CHP PPA will be counted.⁵

LMEC was self-certified as a QF in Federal Energy Regulatory Commission Docket No. QF01-14-000 on October 31, 2000 and is an existing CHP QF. Although it has sold to IOUs previously, it was not listed in any of the Cogeneration and Small Power Production Semi-Annual Reports of the three IOUs.

LMEC's Reportable Capacity, that is, its power rating minus station use, is 561 MW, which is the facility's maximum operating capacity. PG&E is purchasing 50% of the facility's capacity. In this case, based on the offer, 50% of 561 MW, or 280.5 MW will count toward the MW Target.⁶ Table A, below, shows how LMEC's 280.5 MW compares to the MW target prescribed for PG&E by the QF/CHP Settlement.

⁵ Term Sheet, Section 5.2.3.2.

⁶ Term Sheet, Section 5.2.4.1.1.

Table A
PG&E's MW Target as Prescribed by the QF/CHP Settlement

Project Name:	PG&E's MW Target by the End of the Initial Program Period	MWs Procured from Project to Count towards PG&E's Settlement MW Target	As-Available Average MWs (AMWs) (where applicable)
LMEC	1,387	280.5	N/A

The LMEC Agreement will count as neutral with respect to PG&E's GHG Emissions Reduction Target. Term Sheet Section 7.3.3.1 states that an Existing CHP facility with no change in operations, such as LMEC, "is neutral for GHG accounting purposes." See Table B, below.

Table B
GHG Target as Prescribed by the QF/CHP Settlement

Project Name	PG&E's GHG Target by 2020 (MMTCO ₂ e)	GHG Credit/Debit of Project to Count towards the Settlement GHG Target (MMTCO ₂ e)
LMEC	1.96	0

F. Additional Information

Under the LMEC Agreement, PG&E will purchase the CHP Attributes, RA Attributes, Local RA Attributes, and the Capacity Attributes of the LMEC generating facility. These products will be used for compliance with the Commission's RA program. The RA program ensures the availability of sufficient resources to reliably serve customer load. There are two components of the RA program: system RA requirements and Local RA ("LRA") requirements. The system RA requirements ensure sufficient availability of resources for the peak load of the CAISO system as a whole. LRA requirements ensure sufficient availability for the 10 local areas in California that require in-area generation to meet peak loads reliably. While a resource that counts for LRA will also count for system RA, the converse may not hold. In providing the RA in this agreement, Calpine commits that LMEC's scheduling coordinator will submit Supply Plans confirming LMEC's provision of RA and that LMEC will fulfill all the obligations of a RA Resource as defined in the CAISO Tariff. This RA and LRA capacity will be 270 MW to 280.5 MW, in total, depending on the time of the year. The Capacity Attributes

purchased under the LMEC Agreement requires Calpine to accommodate changes to the RA program, such as the potential adoption of “flexible capacity” being discussed at the CPUC and CAISO.

All LSEs within the CPUC’s jurisdiction, including IOUs, Electric Service Providers (“ESPs”), and Community Choice Aggregators (“CCAs”), have RA and LRA obligations. Compliance with these obligations is shown in each LSE’s month-ahead and year-ahead RA and LRA filings. As this agreement will count toward PG&E’s CHP MW target, a portion of the RA and LRA and the associated contract costs will be allocated to ESP and CCAs pursuant to Commission D.10-12-035. The RA from LMEC will meet both system and local requirements for PG&E and the ESPs and CCAs to whom a portion of the costs and benefits are allocated.

Under the terms of the QF/CHP Settlement Agreement, a variety of products and avenues of procurement are available to PG&E. The CHP capacity product allows PG&E to purchase CHP capacity without the risk of scheduling electricity generation or the risk of above-market electricity costs. At the same time, by accepting the obligation to provide RA and LRA, LMEC must be available to provide electricity to serve both system and local reliability needs even while serving the steam and electricity needs of the thermal hosts. The RA capacity-only product from an eligible CHP facility is consistent with the terms of the QF/CHP Settlement.

II. CONSISTENCY WITH COMMISSION DECISIONS

A. Consistency with PG&E’s Requirements during the Initial Program Period Adopted in the QF/CHP Settlement

PG&E’s obligations under the QF/CHP Settlement are set forth in the Settlement Term Sheet. Specifically, during the Initial Program Period⁷ adopted in the Settlement, the MW Target for PG&E is 1,387 MW.⁸ The MW Targets may be met through any of the CHP Procurement Processes described in Term Sheet Section 4.⁹ PG&E must conduct three RFOs exclusively for CHP resources as a means of achieving its MW Target and its GHG Emissions Reduction Targets.¹⁰ Participants in CHP RFOs must meet specific eligibility criteria,¹¹ CHP RFO PPAs are subject to maximum terms¹² and must be found

⁷ The “Initial Program Period” commenced on the Settlement Effective Date, November, 23, 2011, and will conclude November 22, 2015. Term Sheet, Section 2.2.1.

⁸ Term Sheet, Section 2.2.2.2.

⁹ Term Sheet, Section 5.1.1.

¹⁰ Term Sheet, Sections 4.2.1 and 5.1.2.

¹¹ Term Sheet, Section 4.2.2.

¹² Term Sheet, Section 4.2.3.

to be reasonable when evaluated in accordance with specified criteria.¹³ As part of the offer package for each CHP-Only RFO, each IOU may request offers with specific dispatchability terms that differ from the CHP RFO Pro Forma PPA.¹⁴ While the QF/CHP Settlement included a CHP Form PPA to be used in CHP RFOs, pursuant to Sections 4.2.6 and 4.2.12 of the Term Sheet, IOUs are able to offer and sign other contract options in the CHP RFO. PG&E included its CHP RA Capacity Confirmation in its on-line solicitation protocol to facilitate bids in addition to the pro forma CHP RFO.

PG&E's selection and execution of the LMEC Agreement is consistent with all of these obligations. The LMEC Agreement resulted from the first of the three CHP RFOs that PG&E is required to hold during the Initial Period. As previously discussed, PG&E's agreement with LMEC, an existing CHP QF, is eligible to contribute 280.5 MW toward PG&E's 1,387 MW goal. The five-year maximum contract term does not exceed the maximum seven-year term for contracts with existing CHP facilities.

PG&E's evaluation and selection of the LMEC Agreement is described in Confidential Appendix A.

B. Confidentiality

In support of this advice letter, PG&E has attached materials that describe the LMEC transaction and its benefits. Certain information in these documents, such as the price, terms and conditions of performance, the parties' negotiations, and other factors, could affect the price that PG&E subsequently pays for energy and is deemed to be confidential market sensitive information that should be protected from public disclosure. PG&E submits the following documents, some of which contain confidential information, in support of this advice letter:

Public Appendix 1: Final Independent Evaluator Report of Merrimack Energy Group, Inc. (Redacted)

Confidential Appendix A: Consistency with Commission Decisions and Rules and Project Development Status

Confidential Appendix B: Final Independent Evaluator Report of Merrimack Energy Group, Inc.

Confidential Appendix C: Contract Summary

¹³ Term Sheet, Sections 4.2.5.3-4.2.5.7.

¹⁴ Term Sheet, Section 4.2.12.

Confidential Appendix D:	Comparison of Los Medanos Energy Center CHP RA Confirmation Agreement with PG&E's Pro Forma CHP RA Confirmation Agreement
Confidential Appendix E:	Los Medanos Energy Center CHP RA Confirmation Agreement

This information is being submitted in the manner directed by the *Decision Adopting Model Protective Order and Non-Disclosure Agreement, Resolving Petition For Modification and Ratifying Administrative Law Judge Ruling*, D. 08-04-023 (issued on April 18, 2008), 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. In support of this request for confidential treatment, the *Declaration of Soumya Sastry Seeking Confidential Treatment and the IOU Matrix* is attached as Appendix 2 to this advice letter.

C. Interim Emissions Performance Standard

In D.07-01-039, the Commission adopted a GHG Emissions Performance Standard ("EPS") which is applicable to a contract for baseload generation, as established by Senate Bill ("SB") 1368¹⁵ and defined in D.07-01-039, having a delivery term of five years or more. All combined-cycle natural gas powerplants that were in operation as of June 30, 2007 are deemed to be in compliance with the EPS.¹⁶ LMEC is deemed to be compliant with the EPS, as it is a combined-cycle natural gas facility that was in operation prior to June 30, 2007.

D. Procurement Review Group ("PRG") or Cost Allocation Mechanism Group ("CAM") Participation

The Procurement Review Group ("PRG") for PG&E includes the Commission's Energy Division and Division of Ratepayer Advocates (DRA"), the Utility Reform Network ("TURN"), the Coalition of California Utility Employees ("CCUE"), Department of Water Resources ("DWR"), Union of Concerned Scientists ("UCS"), and Coast Economic Consulting. The Cost Allocation Mechanism ("CAM") Group consists of the PRG plus one member representing CCA customers and one member representing Direct Access ("DA") customers.

PG&E informed its CAM Group of its CHP RFO procurement process because that is one of the means by which PG&E's CHP procurement will address the CHP capacity

¹⁵ Pub. Util. Code § 8340 et seq.

¹⁶ Pub. Util. Code § 8341(d)(1).

procurement obligations of CCA and DA customer groups located within PG&E's service territory. On November 8, 2011, PG&E presented its draft CHP RFO Protocol to the CAM and sought comments and questions. CAM members were also invited to attend the CHP RFO Bidder's Conference, which was publicly held on January 12, 2012. After performing an initial review of the submitted offers, on February 28, 2012, PG&E reported the number and types of offers, in general terms, to the CAM. On February 28, 2012, PG&E also provided an overview of its CHP RFO offer evaluation methodology. PG&E completed its evaluation and ranking of the CHP offers after a number of weeks. PG&E's ranking of offers was presented to the CAM on April 25, 2012.

During each of these information sessions, PRG and CAM members assembled in a group, whether in person or telephonically, for a briefing on PG&E's progress toward the selection of the most valuable offers received in response to its CHP RFO. There was ample opportunity for a complete discussion of the terms and conditions under which the solicitation was undertaken, the features and merits of the offers received, and the methodology and reasons for PG&E's ranking of the offers. Throughout this process, PG&E provided answers in response to any comments or questions from CAM members.

PG&E presented its CHP RFO at four meetings: July 12, 2011 to the PRG, November 8, 2011 to the PRG and CAM Group, December 13, 2011 to the PRG, and February 28, 2012 to the PRG and CAM Group. On April 25, 2012, the LMEC transaction was presented as part of the CHP RFO shortlist to PG&E's PRG and CAM Group. A description of the transaction was subsequently circulated for comment by email to the PRG and CAM Group on May 25, 2012. There were no comments raised by members of the PRG or CAM Group on the LMEC transaction. PG&E further addresses PRG and CAM Group feedback in Confidential Appendix A.

E. Independent Evaluator ("IE")

As required by D.10-12-035 and D.07-12-052, PG&E engages an IE to monitor the integrity of its competitive solicitations, selection, and contracting for electric supply-side resources with a delivery term of two years or more. The IE for the CHP RFO is Merrimack Energy Group, Inc ("Merrimack Energy"). In the course of its CHP RFO evaluation, Merrimack Energy also evaluates the integrity of the means by which PG&E executes an agreement with a participant in the CHP RFO and the merit of the resulting agreement. In this case, Merrimack Energy was represented by Wayne Oliver.

The IE reviews the development of the evaluation criteria and protocols for the evaluation of offers prior to the opening of offers in the CHP RFO. A representative of the IE is present at offer opening, receives a copy of all offer documents, and performs an independent evaluation of the Offers. In addition to participating in the material negotiations between the parties and discussions within PG&E, the IE's representative participated in every PRG meeting related to PG&E's CHP RFO solicitation. Against

this background, Mr. Oliver evaluated the LMEC Agreement and provided his findings on the CHP RFO solicitation, the project bid, and/or contract negotiations in the IE Report. His observations were shared with the PRG and CAM Group on April 25, 2012. He has concluded that the LMEC Agreement merits Commission approval.

The public version of the IE Report on the LMEC Agreement is attached as Appendix 1. The confidential version is attached as Confidential Appendix B.

III. REGULATORY PROCESS

PG&E requests that the Commission issue a resolution approving this advice filing no later than April 15, 2013. Justification for this date is provided in Confidential Appendix C, Section I.G.a.

IV. COST RECOVERY MECHANISM

In its decision approving the QF/CHP Settlement, the Commission determined that it had the statutory authority to require DA, CCAs and departing load customers to bear a portion of the CHP resource costs incurred by the IOUs under the QF/CHP Settlement.¹⁷ The Commission also determined that the utilities should procure “CHP resources on behalf of non-IOU LSEs [i.e., load serving entities] and [allocated the] net capacity costs and associated benefits as described in Section 13.1.2.2 of the Term Sheet.”¹⁸ Section 13.1.2.2 of the QF/CHP Settlement Term Sheet provides:

If the CPUC determines that the IOUs should purchase CHP generation on behalf of DA and CCA customers, then D.06-07-029 (and D.08-09-012 if necessary) shall be superseded to the extent necessary to authorize the IOUs to recover the net capacity costs associated with the CHP Program from all bundled service, DA and CCA customers and all Departing Load Customers except for CHP Departing Load Customers and from Municipal Departing Load (MDL) Customers only to the extent as described below, on a non-bypassable basis. The net capacity costs of the CHP Program shall be defined as the total costs paid by the IOU under the CHP Program less the value of the energy and any ancillary services supplied to the IOU under the CHP Program. No energy auction shall be required to value such energy and ancillary services. In exchange for paying a share of the net costs of the CHP Program, the LSEs serving

¹⁷ *Id.* at pp. 46-50.

¹⁸ D.10-12-035 at p. 56.

DA and CCA customers will receive a pro-rata share of the RA credits procured via the CHP Program.¹⁹

Because the LMEC Agreement is being entered into pursuant to the terms of the QF/CHP Settlement, and to satisfy the QF/CHP Settlement requirements for MW Targets, it is appropriate that its costs be allocated consistent with the QF/CHP Settlement and D.10-12-035, as modified. In particular, PG&E proposes that the net capacity costs associated with the LMEC Agreement be proportionately allocated annually to all bundled, DA, CCA, and specified Departing Load Customers²⁰ and be collected on a non-bypassable basis. Net capacity costs will be billed via PG&E's Cost Allocation Mechanism ("CAM") rate and recovered through PG&E's New System Generation Balancing Account ("NSGBA") from all benefiting customers, i.e., bundled, DA, CCA, and other nonexempt departing load customers. In addition to this proportionate allocation of costs, PG&E will also proportionately allocate all RA benefits associated with the LMEC Agreement to bundled, DA, CCA and other nonexempt departing load customers. Finally, PG&E requests that the costs associated with the LMEC Agreement be recovered through its Energy Resource Recovery Account ("ERRA").

V. REQUEST FOR COMMISSION APPROVAL

PG&E requests that the Commission issue a resolution no later than April 15, 2013, that:

1. Approves the LMEC Agreement with Calpine in its entirety, including payments to be made thereunder, subject only to Commission review of the reasonableness of PG&E's administration of the contract.
2. Determines that the rates and other terms and conditions set forth in the LMEC Agreement are reasonable.
3. Finds that the 280.5 megawatts ("MW") associated with the LMEC Agreement apply toward PG&E's procurement target of 1,387 MW of CHP capacity in the Initial Program Period, as established by the QF/CHP Settlement.
4. Finds that LMEC is neutral towards the GHG Target as it is an existing facility without a change in operations.

¹⁹ Term Sheet, Section 13.1.2.2., as modified by D.11-07-010, OP 3.

²⁰ Departing Load Customers are defined in Section 17 of the QF/CHP Settlement Term Sheet as "CGDL, TMDL, and NMDL [customers] in PG&E's existing E-DCG, E-NMDL and E-TMDL tariff schedules".

5. Finds that PG&E's costs under the LMEC Agreement shall be recovered through PG&E's ERRA.
6. Adopts the following finding of fact and conclusion of law in support of cost recovery for the LMEC Agreement:
 - a. PG&E shall be entitled to allocate the net capacity costs and associated RA benefits to bundled, DA, CCA, and departing load (to the extent not exempted) customers consistent with D.10-12-035, as modified by D.11-07-010, and PG&E's Advice 3922-E, approved December 19, 2011.
 - b. The net capacity costs of the LMEC Agreement will be billed via PG&E's CAM rate and recovered through PG&E's NSGBA from all benefiting customers, that is
 - c. Actual LMEC Agreement costs will be recovered through ERRA, since the NSGBA is a credit in the ERRA, bundled, DA, CCA, and other nonexempt departing load.
7. Finds that the LMEC Agreement is not covered procurement subject to the EPS under Public Utilities Code section 8340, et seq. because the generating facility was in operation as of June 30, 2007 and therefore does not violate the Emissions Performance Standard ("EPS") adopted in R.06-04-009.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **July 23, 2012**, which is 21 days after the date of this filing.²¹ Protests should be mailed to:

CPUC Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Avenue
San Francisco, California 94102
Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

²¹ PG&E requests to extend the protest period by one additional day because twenty days following the submission date of this advice letter is Sunday, July 22, 2012.

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, 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:

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

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

Effective Date

PG&E requests that this advice filing be effective on or before **April 15, 2013**. PG&E submits this request as a Tier 3 advice letter.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.10-05-006. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>

A handwritten signature in black ink that reads "Brian Cherry /IG". The signature is fluid and cursive, with a diagonal slash separating the name from the initials.

Vice President, Regulatory Relations

Attachments:

Appendix 1, Final Independent Evaluator Report of Merrimack Energy Group, Inc. (Redacted)

Appendix 2, Declaration of Soumya Sastry Seeking Confidential Treatment and the IOU Matrix

Confidential Appendix A:	Consistency with Commission Decisions and Rules and Project Development Status
Confidential Appendix B:	Final Independent Evaluator Report of Merrimack Energy Group, Inc.
Confidential Appendix C:	Contract Summary
Confidential Appendix D:	Comparison of Los Medanos Energy Center CHP RA Confirmation Agreement with PG&E's Pro Forma CHP RA Confirmation Agreement
Confidential Appendix E:	Los Medanos Energy Center CHP RA Confirmation Agreement

cc: Service List for R.10-05-006
Andrew Schwartz, Energy Division, CPUC
Jason Houck, Energy Division, CPUC
Cem Turhal, Energy Division, CPUC
Joseph Abhulimen, DRA, CPUC

Limited Access to Confidential Material:

The portions of this Advice Letter marked Confidential Protected Material are submitted under the confidentiality protection of Section 583 and 454.5(g) of the Public Utilities Code and General Order 66-C. This material is protected from public disclosure because it consists of, among other items, the contracts themselves, price information, and analysis of the proposed energy procurement contracts, which are protected pursuant to D.06-06-066 and D.08-04-023. A declaration seeking confidential treatment of the following attachments is being submitted with this advice letter in accordance with D.08-04-023:

- Confidential Appendix A: Consistency with Commission Decisions and Rules and Project Development Status
- Confidential Appendix B: Final Independent Evaluator Report of Merrimack Energy Group, Inc
- Confidential Appendix C: Contract Summary

- Confidential Appendix D: Comparison of Los Medanos Energy Center CHP RA Confirmation Agreement with PG&E's Pro Forma CHP RA Confirmation Agreement
- Confidential Appendix E: Los Medanos Energy Center CHP RA Confirmation Agreement

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

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

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

Utility type: Contact Person: Igor Grinberg
 ELC GAS Phone #: (415) 973-8580
 PLC HEAT WATER E-mail: ixg8@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) #: **4074-E**

Tier: **3**

Subject of AL: **Approval of Pacific Gas and Electric Company's Agreement with Calpine Corporation for Combined Heat and Power Resource Adequacy Capacity Product from the Los Medanos Energy Center**

Keywords (choose from CPUC listing): Agreements, Capacity, Qualifying Facility and Procurement

AL filing type: Monthly Quarterly Annual One-Time Other

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

Does AL replace a withdrawn or rejected AL? 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, Confidential Appendices A, B, C, D, and E

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

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: **Evelyn Lee, (415)-973-2786**

Resolution Required? Yes No

Requested effective date: **April 15, 2013**

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division

Tariff Files, Room 4005

DMS Branch

505 Van Ness Ave.,

San Francisco, CA 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Brian Cherry

Vice President, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

Appendix 1
Final Independent Evaluator Report of
Merrimack Energy Group, Inc. (Redacted)

Pacific Gas and Electric Company
Combined Heat and Power Request for Offers for First
Solicitation
2011 - 2012

Independent Evaluator
Bid Evaluation and Selection Process
Final Report

June 29, 2012

Prepared by
Merrimack Energy Group, Inc.



Table of Contents

I. Introduction.....	2
II. Role of the Independent Evaluator.....	18
III. Adequacy of Outreach to Potential Sellers.....	29
IV. Appropriateness of CHP RFO Evaluation and Selection Methodology.....	34
V. Administration of the Offer Evaluation Process.....	52
VI. Project Specific Contract Negotiations.....	56
VII. Treatment of Affiliate Bids.....	59
VIII. Reasonableness of Achieving CHP RFO Need.....	59
IX. Bid Selection Recommendation.....	59
X. Conclusions and Recommendations.....	60

Appendices

Appendix A: Summary Information for the Offers Received

Appendix B: Additional Summary Information for the Offers Received

Appendix C: Bid Price Information – Buyer Assumes GHG Risk

Appendix D: Bid Price Information – Seller Assumes GHG Risk

Appendix E: Summary of Bid Evaluation Results – Quantitative and Qualitative

I. Introduction

A. Overview

Pacific Gas and Electric Company (“PG&E”) is seeking approval of a power purchase agreement (“PPA”) with Calpine Energy Services, L.P. for the purchase of approximately 280.5 MW of Resource Adequacy Capacity Product for California Independent System Operator (“CAISO”) Resources that Qualify as Combined Heat and Power (“CHP”) Facilities under PG&E’s Combined Heat and Power Request for Offers.¹ As a result of this transaction, PG&E will receive and purchase the CHP Attributes, the RA Attributes, the Local RA Attributes, and the Capacity Attributes from the Los Medanos Energy Center, LLC as either a firm RA Product or a contingent firm RA Product.

On December 7, 2011, PG&E issued its first Combined Heat and Power Request for Offers Protocol (“CHP RFO” or “RFO”). PG&E issued the CHP RFO to achieve its megawatt (“MW”) and Greenhouse Gas (“GHG”) Emissions Reduction Targets, established in the CHP Program Settlement Agreement (“Settlement Agreement” or “Settlement”) that was approved by the California Public Utilities Commission (“CPUC”) Decision 10-12-035. PG&E solicited offers from owners of eligible CHP generating facilities to supply the requested product.

PG&E seeks to acquire a total of up to 1,387 MW of CHP capacity under power purchase agreements (“PPA” or “Agreements”) during the Initial Program Period under the Settlement.² Through this first of three RFOs required during the Initial Program Period, PG&E seeks offers to complete the first CHP MW target of 630 MW.³ This RFO is the first of three CHP RFO’s that PG&E plans to issue during the Initial Program Period.

In this solicitation, PG&E has a strong preference for Offers that are low cost, efficient, and have either low associated GHG emissions or provide GHG emission reductions through changes in operations or technology. A facility that offers operating flexibility will be considered favorably.

In this RFO, PG&E will accept offers for the following resources, as defined in the Settlement Agreement and the CHP RFO:

- Existing CHP
- New CHP
- Repowered CHP
- Expanded CHP

¹ PG&E has a right to all of the CHP Attributes associated with 280.5MW from the Los Medanos unit, or approximately 50% of the total capacity of the unit.

² The initial program period ends four years after the Settlement Effective Date of November 23, 2011.

³ According to Attachment A of the Settlement Agreement, PG&E’s MW Targets are 630 MW for the first solicitation (“Target A”), 376 MW for the second solicitation (“Target B”), and 381 MW for the third solicitation (“Target C”). PG&E has already procured, via bilateral contracts, 487 MW of eligible CHP capacity.

- Existing CHP Facilities Converting to Utility Prescheduled Facilities (referred to as Utility Tolling Facilities)
- CHP Capacity Only (“RA Capacity”)⁴

Pursuant to regulatory requirements of the CPUC and the Settlement Agreement requirements, PG&E retained Merrimack Energy Group, Inc. (“Merrimack Energy”) as the Independent Evaluator (“IE”) for the CHP RFO procurement process.

This IE report is submitted in conformance with the requirements of the CPUC and is designed to be consistent with the requirements outlined in the CPUC’s IE Report Template designed for this CHP solicitation, subject to adjustments in requirements to reflect the unique nature of this solicitation.

B. Background to the CHP Settlement Agreement

The Combined Heat and Power Program Settlement Agreement is an extensive agreement that contains a number of requirements and directives that affect the design and implementation of the utility CHP RFO Protocol or solicitation process.⁵ Given the extensive and complex nature of the CHP Settlement Agreement, Merrimack Energy will attempt to identify several of the major provisions that are associated with the CHP procurement process.

The CHP Settlement process was initiated in May 2009 and encompassed a 16 month process. The Settling Parties submitted the Qualifying Facility (“QF”)/CHP Settlement Agreement for CPUC approval on October 8, 2010. On December 21, 2010, the CPUC issued Decision 10-12-035, in which it approved the QF/CHP Settlement Agreement. Applications for rehearing were filed in January 2011. On March 24, 2011, the CPUC issued Decision 11-03-051, in which some but not all of the challenges were resolved. On October 11, 2011, the CPUC issued Decision 11-10-016, which granted a petition to modify the cost allocation terms of the Settlement Agreement. On October 6, 2011, the CPUC issued Decision 11-10-016, which disposed of one of the remaining issues. On October 24, 2011, the CPUC issued Decision 11-10-043, denying rehearing of D.10-12-035 raised by the City and County of San Francisco. The QF/CHP Settlement Agreement became effective on November 23, 2011 when the decisions granting modification and denying rehearing of D.10-12-035 became final and non-appealable.

⁴ While a CHP Capacity Only product was not explicitly identified in the QF/CHP Settlement Agreement, based on an inquiry from the CPUC to consider the eligibility of a capacity- only product in the CHP RFO as long as the unit is a CHP facility, PG&E responded that an offer to provide a capacity-only product would not be disqualified as long as the generator is an actual CHP facility.

⁵ This solicitation process is unique in that the provisions of the CHP Settlement Agreement have a primary influence on the design and implementation of the CHP procurement process. As a result, the IE views that one of the IE requirements is to ensure that the solicitation process conforms to the requirements of the Settlement Agreement. To provide a basis for assessment of these requirements, the report provides a summary of the major provisions of the CHP Settlement as a means of comparison with the approach used by PG&E for meeting Settlement Agreement requirements.

One of the goals of the Settlement was to resolve existing disputes and future litigated issues associated with QFs that were before the Courts and CPUC. The Settlement was designed to develop a new state CHP program that includes competitive solicitations for CHP projects greater than 20 MW.

One of the primary results of the Settlement was a CHP procurement program that would be implemented through 2020, with established CHP MW targets and GHG reduction targets. The Settlement established a target of 3,000 MW of CHP contracts resulting from the CHP Program Procurement Processes. The Initial Program Period established a target of 2,949 MW for the three Investor-Owned utilities (“IOU”) for a four year period after the effective date of the Settlement.⁶ The Second Program Period, which extends from the end of the Initial Program Period to December 31, 2020, establishes a target of any shortfall from the Initial Program Period Targets as well as any additional amounts established in the Long-Term Procurement Plan (“LTPP”) proceeding at the CPUC.

The Settlement also established a GHG Reduction Target of 6.7 million metric tons of GHG annual reductions from CHP statewide by 2020. The Settlement includes accounting mechanisms based on:

- Avoided GHG emissions assumptions;
- Facility efficiency;
- Must-take status;
- New or existing capacity;
- Repowering;
- Conversion to prescheduled facilities; and
- Shut-downs with or without continuation of thermal application.

The initial IOU GHG Targets are allocated on a proportional share of retail sales.

The Settlement also identifies a number of eligible procurement options under the CHP Program for meeting CHP MW and GHG targets. These include:

- RFOs conducted by IOUs;
- Optional As-Available PPAs;
- PPAs for QFs 20 MW or less;
- AB 1613 PPAs;
- Bilaterally negotiated PPAs and amendments;
- IOU-owned CHP for GHG targets, capped at 10% of GHG targets;
- Utility Prescheduled Facilities;
- New behind the meter CHP facilities

⁶ Based on the Settlement effective date of November 23, 2011, the four year period for the Initial Program Period would end on November 22, 2015. The Settlement Agreement became effective when the decisions granting modification and denying rehearing of D.10-12-035 became final and non-appealable.

As a component of the Settlement, the parties also established a CHP RFO Pro Forma Contract that would be used by the utility for securing traditional CHP projects.

Exhibit 1 provides a summary of the key provisions of the CHP Settlement primarily pertaining to CHP procurement process requirements as a basis for assessing the consistency of PG&E's CHP RFO process relative to Settlement requirements associated with CHP procurement.

Exhibit 1: Summary of QF/CHP Settlement Provisions

Settlement Provisions	Description of Provisions
Section 1 – Settlement Goals and Objectives	
Section 1.1 Settlement Goals and Objectives	<p>Settlement goals and objectives include:</p> <ul style="list-style-type: none"> • Develop a State CHP Program • Create a smooth transition from the existing QF CHP PURPA program to a state-administered CHP Program • Settle all CHP/QF litigation
Section 1.2 State CHP Program Policy Objectives	<p>This section of the Settlement Agreement provides an extensive list of policy and societal goals and objectives for the State CHP Program. Some of the policy objectives that pertain more closely to the procurement aspects of the Program are listed below:</p> <p>The purpose of the State CHP program is to encourage the continued operation of the State's existing CHP Facilities, and the development, installation, and interconnection of new, clean, and efficient CHP facilities.</p> <p>These policies and purposes will be achieved by a State CHP program that procures CHP as set forth in the Settlement, retains existing efficient CHP, supports the change in operations of inefficient CHP to provide greater benefits to the State, and replaces CHP that will no longer be under contract with the IOUs with a new, efficient CHP.</p> <p>In addition, this State CHP program will secure additional Greenhouse Gas (GHG) emission reduction benefits, consistent with the reduction targets of Assembly Bill (AB) 32, by addition of new, efficient CHP.</p>
Section 1.2 CHP Program Objectives	<p>The Settlement identifies a number of Program objectives. These include:</p> <ul style="list-style-type: none"> • Encourage the upgrade of the inefficient CHP facilities in the IOU's electric portfolios into efficient CHP through repowering or change of operations; • Provides an orderly exit strategy for CHP Facilities that cannot participate, or are unsuccessful, in the new CHP Program; • Sustains and enhances reductions in GHG emissions; • Encourages the development of new, clean and efficient CHP.
Section 2. Program Periods	<p>The settlement establishes two Program periods; (1) an Initial Program Period that extends from the Settlement Effective Date until November 23, 2015 and (2) The Second Program Period that commences at the end of the Initial Program Period and ends on December 31, 2020.</p> <p>The Settlement establishes procurement targets for each utility for the Initial Program Period.</p>

Section 3. Transition PPA	A CHP facility currently selling to an IOU under a Legacy PPA or an extension that is expiring during the Transition Period, may sign a Transition PPA with the same IOU-Buyer. The Transition PPA begins upon the expiration of the Legacy PPA or extensions of a Legacy PPA and ends at the election of the Seller but no later than the last day of the Transition Period.
Section 4. – CHP Procurement Targets	
1. Eligibility to Bid	<p>Any CHP Facility with a nameplate larger than 5 MW may bid into the CHP RFO, including CHP facilities seeking firm and as-available capacity PPAs, provided that the CHP Facility meets the California Public Utilities Code Section 216.6 and the federal definition of a qualifying cogeneration facility under 18 CFR Section 292.205 implementing PURPA.</p> <p>A CHP Facility that met the PURPA efficiency requirements as of September 2007 and converts to a Utility Prescheduled Facility is also eligible to participate in the CHP RFOs. After the existing CHP Facility converts to a Utility Prescheduled Facility, it may be either a QF or an Exempt Wholesale Generator if the facility otherwise meets the criteria in this Section 4.2.2.2.</p>
2. Term	<p>Up to 7 years for Existing CHP Facilities or Expanded CHP Facilities, if they do not provide credit and collateral. An existing CHP Facility is one that was operational before the Settlement Effective Date.</p> <p>Up to 12 years for New CHP facilities, Repowered CHP Facilities, or Expanded CHP facilities if they provide credit and collateral as set forth in section 4.2.8. A New CHP Facility is one that becomes operational after the Settlement Effective Date and a Repowered CHP Facility is one that repowers after the Settlement Effective Date.</p>
3. Pricing	Pricing is defined according to the executed PPA.
4. CHP RFO Scope – Evaluation and Selection Criteria	<p>The CHP RFO will recognize that CHP has unique attributes and that CHP offers shall be compared only to other CHP offers within the CHP RFO process.</p> <p>The IOU shall conduct an evaluation process, including an analysis of market value, in its CHP RFO process.</p> <p>When evaluating an offer from an Existing CHP Facility, the IOU should evaluate the energy that is being delivered to the grid from that CHP Facility.</p> <p>CHP offers shall be evaluated on all of the CHP Program goal characteristics, including GHG emissions.</p>
5. CHP RFO Pro-Forma PPA	The CHP Pro-Forma PPA may be modified on a bilateral basis during negotiations for a particular CHP PPA or Utility Prescheduled Facility PPA. The IOU may also offer other contract options in the CHP RFO.
6. GHG Costs Compliance	Seller must offer two options in its proposal: (1) Seller assumes GHG Compliance Cost and (2) Seller elects to pass-through GHG Compliance costs to Buyer. Also, Seller and Buyer may elect a hybrid approach for GHG cost recovery. For example, buyer covers GHG costs up to a certain Heat Rate and Seller assumes additional costs above that heat rate.
7. Credit and Collateral Provisions for New,	Credit and collateral provisions shall apply only to PPAs for new CHP Facilities, Repowered or Expanded CHP Facilities. An IOU may

	<p>Repowered or Expanded Facilities</p> <p>request additional offers for different credit and collateral terms.</p> <p>Credit and collateral provisions for an Existing CHP Facility will not be required in any CHP PPA but may be requested by an IOU in CHP RFOs or bilateral negotiations and will be evaluated by IOUs and Sellers accordingly.</p> <p>Performance Assurance for New or Repowered CHP Facilities shall be established equal to the value from one of the following options and the option is at the election of the Seller:</p> <ul style="list-style-type: none"> • Twelve months of capacity payments • Twelve months of revenues • Five percent of anticipated revenues projected over the term of the PPA • Negotiated performance assurance value and conditions for providing securing for such Performance Assurance.
8. Efficiency Performance Obligations and Compliance	<p>The Efficiency Performance Obligation shall apply as incorporated into the final CHP RFO PPA, and the 60% efficiency in the Optional As-Available PPA. Failure to meet the Efficiency requirement in the CHP PPA throughout the Term shall be, at the Buyer's election, an Event of Default under the PPA.</p> <p>Seller may have up to two cure periods during the term of the applicable PPA for no more than two Efficiency Performance Deficiencies.</p>
9. Curtailment - Economic	<p>The CHP Pro-Forma PPA will contain an Economic Curtailment Option that may be selected by the CHP RFO participant and the participant may bid zero under this option. The Buyer can only instruct the Seller to curtail production in those hours when the CAISO published Day-Ahead Integrated Forward Market (IFM) results indicate there is a negative EZ-Gen Hub Location Marginal Price (LMP) or negative System Marginal Energy Cost.</p> <p>Once a Curtailment Period Cap is reached for any quarterly period (either on-peak or off-peak), no additional economic curtailment is available to the Buyer in that quarterly on-peak or off-peak period. Any MWhs not called by the Buyer in any period cannot be rolled over to another period.</p>
10. Bilaterally Negotiated PPA	<p>Bilaterally negotiated and executed CHP PPAs or Utility Prescheduled Facilities PPAs are part of the procurement options in this CHP Program. Use of an IE shall be required for any negotiations between an IOU and its affiliate and may be used, at the election of either the Buyer or the Seller in other negotiations.</p>
11. IOU-Owned CHP	<p>IOU-owned CHP counts toward the IOU's GHG Emission Reduction Targets for the Second Program Period, but not for the 3,000 MW Target. The counting from these resources is capped at 10% of the IOU's GHG Emission Reduction Target.</p>
12. Utility Pre-Scheduled Facilities - Eligibility	<p>A CHP Facility that met the PURPA efficiency requirements as of September 20, 2007 and converts to a Utility Prescheduled Facility is eligible to participate in a CHP RFO or to obtain a PPA through bilateral negotiations or amend an existing Legacy PPA through bilateral negotiations.</p> <p>New PPAs with Utility Prescheduled Facilities (not Legacy PPA Amendments) count towards the MW Targets if the existing QF PPA</p>

	expires before the end of the Transition Period.
13. Approval of PPAs	<p>IOUs will utilize a Tier 2 Advice Letter for Existing CHP facilities that execute the CHP RFO Pro Forma PPA without material modification.</p> <p>IOUs will utilize a Tier 3 Advice Letter for all other PPAs (new, repowering or existing PPAs that contain any material modification of the PPAs approved in this Settlement.</p> <p>PPAs of less than five years do not require advance CPUC approval according to existing CPUC policy.</p>
Section 5 - MW Targets	
1. CHP RFOs	<p>The IOUs combined target is 3,000 MW;</p> <p>Each IOU shall conduct 3 RFOs during the initial Program Period to seek PPAs for the portion of the MW Targets not procured by other procurement processes;</p> <p>The CHP RFOs during the Initial Program Period shall be scheduled at regular intervals, provided the first CHP RFO is initiated within 90 days of the Settlement Effective Date;</p> <p>The amount of CHP sought in each CHP RFO during the Initial Program Period shall not be less than the Net MW Target for each IOU. For PG&E the target for the initial RFO is 630 MW; 376 for the second RFO and 381 for the third RFO for a total of 1,387 MW.</p>
2. MW Counting Rules	<p>PPAs executed during the period between September 1, 2009 and the Settlement Effective Date count towards the IOUs MW Targets and GHG Emission Reduction Targets.</p> <p>The MWs counted for New PPAs executed with Existing CHP Facilities will be the published Contract Nameplate value, unless otherwise noted in the Settlement.</p> <p>If full output of a facility is offered, only the actual amount procured by a utility will count. If a utility acquires all that the Seller offers but the project is larger, the utility can count the full size of the project.</p> <p>Capacity from repowered and new CHP Facilities will be determined based on a Capacity Demonstration Test.</p>
3. Justification for Failure to Meet MW Targets	<p>Any IOU that is unable to meet its MW Target must make a showing to justify its inability to meet the MW Target. Lack of sufficient offers can be used as a reason to justify failure to procure the MW Targets and GHG Emissions Reduction Targets. The efficiency of the CHP Facility participating in the IOU's procurement programs as compared to the Double Benchmark, offer prices in excess of levels as provided herein, and the amount of GHG emissions reductions may be valid justifications for missing the IOU MW Targets and GHG Emissions Reduction Targets. Lack of need or portfolio fit arguments shall not be used as reasons to justify failure to procure the MW Targets, but are reasons to justify an inability to meet the GHG Emissions Reduction Targets.</p>
Section 6 – GHG Emission Reduction Targets	
1. Objectives/Strategy	The CPUC will adopt a strategy to reduce statewide GHG emissions by the following means:

	<ul style="list-style-type: none"> • Maintain the existing GHG emissions reduction attributable to the efficient existing CHP Facilities and reduce GHG emissions from the inefficient Existing CHP Facilities by encouraging the repower, conversion to Utility Prescheduled Facilities or retirement of such CHP facilities; • Increase the efficiency of the CHP fleet by adding efficient CHP resources to the IOU's electric portfolios to make progress towards the CARB CHP RRM; • Achieve the GHG Emissions Reduction targets by December 31, 2020
2. IOUs GHG Emissions Reduction Targets	<p>Existing: Maintain GHG Emission reductions from existing CHP</p> <p>New GHG Reductions: In addition to existing GHG reductions, the Settlement establishes a GHG target of 4.3 MMT based on the CARB Scoping Plan estimates that, by 2020, the State can add 4,000 MW of additional CHP. These 4,000 MW are estimated to reduce GHG emissions by 6.7 MMT. The CARB CHP RRM does not have specific allocations to the IOUs.</p>
Section 7 – GHG Emission Accounting Methodology	
1. GHG Accounting Principles	<p>Progress toward the IOU's GHG Emissions Reduction Targets will be determined by a GHG Credit or GHG Debit. A “+” counts as a GHG Credit which will count toward the IOU's then-current GHG Emissions Reduction Target from CHP resources. A “-“ counts as a GHG Debit, which will count against the IOU's then-current GHG Emissions Reduction Target.</p> <p>Except as noted in Section 7.3, the parties agree to measure the amount of GHG emissions from CHP Facilities as compared to the current Double Benchmark in place at the time of PPA execution or, for a Utility Prescheduled Facility, execution of a new PPA or a Legacy PPA Amendment.</p> <p>The Double Benchmark is intended to reflect the GHG emissions that would have occurred if the same amount of electricity and thermal output were obtained from conventional generation resources and a stand-alone boiler. The Double Benchmark measures the additional amount of GHG emissions that otherwise would exist if the CHP Facility did not exist.</p> <p>For the purposes of GHG accounting, an “efficient” CHP refers to one that reduces emissions as compared to the Double Benchmark. An “inefficient” CHP refers to one that increases GHG emissions as compared to the Double Benchmark.</p>
2. Double Benchmark	<p>The Double Benchmark is as follows:</p> <ul style="list-style-type: none"> • The Heat Rate for the electricity generated is 8,300 BTU/kWh HHV at the busbar and excluding line losses; • The thermal efficiency of the standard boiler is 80%;
3. Detailed GHG Accounting Methodology to Measure Progress Toward the IOU's GHG Emissions	<p>Projects counted as a GHG Credit (+) include:</p> <ul style="list-style-type: none"> • New CHP Facilities as compared to the Double Benchmark; • Physical change from a Repowered Facility, MW Expansion, or Fuel change. The measurement is the difference between (i) the previous two calendar years of operational data compared to the Double Benchmark in place at the time of PPA

<p>Reduction Targets</p>	<p>execution and (ii) the anticipated change in operations as identified in the PPA compared to the Double Benchmark;</p> <ul style="list-style-type: none"> • CHP Facility Change in Operations or Conversion to a Utility Prescheduled Facility which counts as a GHG Credit. Measurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing 100% of the decreased electric generation at a time differentiated Heat Rate. The Baseline year emissions are the average of the previous 2 calendar years of operational data; • Existing inefficient CHP Facility shuts down – counts as a GHG Credit toward the CARB CHP RRM of the IOU that previously contracted with the CHP. <p>Projects counted as a GHG Debit toward GHG Emission Reduction Targets include:</p> <ul style="list-style-type: none"> • Inefficient New CHP Facilities; • Shutdown or Retirement of an existing, efficient CHP Facility and the thermal need continues; • Physical change, a Repowered CHP Facility, MW Expansion or Fuel Change. <p>Projects counted as Neutral toward GHG Emission Reduction Targets include:</p> <ul style="list-style-type: none"> • Existing CHP with no change in operations; • Efficient existing CHP Facility shuts-down and the thermal need is discontinued; • Inefficient projects required by law to execute (including PURPA <20 MW, as-available, and feed-in tariffs)
--------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

C. PG&E CHP Solicitation Background

PG&E initiated development of its CHP RFO Solicitation process in May 2011 prior to the Settlement Effective Date. Some of the early initiatives implemented by PG&E to undertake the CHP RFO solicitation process included:

- Established an internal Project Team to manage and implement the CHP RFO solicitation process;
- Retained Merrimack Energy to serve as IE very early in the CHP RFO solicitation development process (June 2011);
- Established weekly scheduled meetings/calls with members of the CHP Project Team and IE to discuss the development of the CHP RFO solicitation process and address any outstanding issues;
- Retained an Engineering firm familiar with CHP and cogeneration projects to serve as technical consultant beginning with the RFO development process;
- Established an internal process to seek input and sign-off from senior corporate management through creation of an RFO Steering Committee to evaluate and decide on policy and operational issues and an Evaluation Committee to review and approve the internal protocols and evaluation and selection methodology for evaluation and selection of offers;

- Identified key issues that need to be resolved in the development of the solicitation process and Protocol documents consistent with the Settlement requirements;
- Developed internal evaluation criteria and evaluation protocol documents that define the bid evaluation methodology and selection process;
- Developed several drafts of the CHP RFO Protocol documents and supporting Forms and Attachments;
- Developed Offer Forms and information required from Participants in their offers.

The process and schedule established at the initiation of the solicitation process was generally followed throughout the implementation of every stage of the solicitation process, which provided stability to the process. The schedule was revised based on the uncertainty associated with the Settlement Effective Date. Since this solicitation process was the first of its kind, the process and document development involved a number of revisions and changes to ensure consistency with the CHP RFO requirements.

Given the unique nature of the CHP RFO solicitation process based on the provisions of the CHP Settlement and the fact that the RFO was the first of its kind initiated by PG&E, the consistent involvement of senior management facilitated decisions on primary issues throughout the solicitation process.

D. CHP RFO Procurement Protocol

On December 7, 2011PG&E launched the Combined Heat and Power Request for Offers – First Solicitation and posted the CHP RFO Protocol document on its website.⁷ In the RFO document (i.e. “RFO” or “Procurement Protocol”), PG&E listed a number of requirements and preferences to inform prospective Participants of the requirements for competing in the procurement process. These included:

- PG&E seeks to acquire a total of up to 1,387 MW of CHP capacity under PPAs during the initial program period. For this first solicitation the target is 630 MW;
- PG&E has a strong preference for Offers that are low cost, efficient, and have either low associated GHG emissions or provide GHG emissions reductions through changes in operations or technology. A facility that offers operating flexibility will be considered favorably;
- Eligible CHP offers/products include:
 - Existing CHP facilities – a facility that was operational before the Settlement Effective Date;

⁷ PG&E revised its CHP RFO Protocol on January 26, 2012 to address several issues raised primarily at the Participants Conference and to include the EEI Master Agreement and Confirmation as the applicable contract to address a CHP Capacity-only product. The revisions to the CHP RFO Protocol are described at the end of this section of the Report.

- New CHP facilities – a facility that became or will become operational after the Settlement Effective Date;
 - Repowered CHP facilities – a facility that, on or after the Settlement Effective Date, has had its prime movers replaced or refurbished;
 - Expanded CHP facilities;
 - Existing CHP facilities converting to utility prescheduled facilities – referred to as utility tolling facilities – an existing facility that has changed operations to convert the facility to a utility dispatchable generation facility, including but not limited to an Exempt Wholesale Generator (“EWG”).
- PG&E will consider an Offer that meets the following eligibility requirements:
 - CHP Facility with a nameplate capacity larger than 5 MW;
 - CHP Facility as of September 2007 converting to Utility Tolling Facility;
 - CHP Facility that meets the requirements of Section II.C “Resources” contained in the RFO;
 - CHP Facility that has not waived its rights as a QF with respect to PG&E;
 - New CHP Facilities must be constructed with new equipment. In addition, PG&E is interested in Offers to repower existing generating facilities, as identified in the Settlement Agreement;
 - CHP Facility must be located in California;
 - The Delivery Point must be within the CAISO controlled transmission grid or applicable California IOU distribution grid. Each Participant is required to have the necessary agreements with the CAISO for physical delivery of its generation to a transmission P-Node within the CAISO controlled grid area;
 - Each Participant is encouraged to initiate and submit an interconnection request to PG&E (or other California IOU) for distribution interconnection and to the CAISO for transmission interconnection prior to Offer submittal;
 - Each Participant offering a new or expanded gas facility must initiate an Application for Gas Service. Participants with existing gas interconnection must provide documentation in their Offer submission;
 - As applicable, each Participant accepting a position on the Shortlist must satisfy the Shortlist Offer Deposit requirements listed in the RFO Protocol;
 - Each Participant offering a new or expanded gas-fired facility must demonstrate no later than two weeks after notification of shortlisting that it has control over the proposed site by ownership, long-term lease or an option to control the proposed site through ownership or a long-term lease;
 - Offer shall confer upon PG&E exclusive rights to the Project’s capacity;
 - Each Participant must agree: (i) to schedule and dedicate the contracted amount of electrical output to PG&E, net of station use and electrical losses; and (ii) not to sell, deed, grant, convey, transmit, or otherwise provide any energy, capacity, ancillary services or any other related electricity product, including Green Attributes, or capacity attributes associated with the output to an entity other than PG&E;

- Each Participant must agree to term start dates within the following time periods as applicable: within 24 months of PPA execution for Existing CHP Facility and Utility Tolling Facility; within 36 months of CPUC approval for Expanded CHP Facility; and within 60 months of CPUC approval for New CHP and Repowered CHP Facility;
 - Each entity submitting an Offer in this RFO is a Participant. A Participant may be an individual owner, corporation, partnership or joint venture for a CHP or UPF project.
- Any CHP facility with a nameplate larger than 5 MW may bid into the CHP RFO, including CHP facilities seeking firm and as-available capacity PPAs, provided that: (1) the facility meets the federal definition of a qualifying cogeneration facility under PURPA; (2) the facility meets the definition of cogeneration under California Public Utilities Code; and (3) the facility meets the Emissions Performance Standard established Senate Bill 1368;
- The RFO contains three contract options: (1) CHP RFO Proforma PPA; (2) Utility Tolling PPA; and (3) RA Confirmation (“RA Confirm”). Participants are encouraged not to make changes to the CHP Proforma PPA, Utility Tolling Proforma PPA, or RA Confirm with their offer. Participants seeking material changes to the CHP RFO proforma PPA should consider using PG&E’s form tolling agreement, i.e. Utility Tolling PPA;⁸
- An offer may be for the output of one or more generating units of a facility so long as the unit under consideration meets the definition of “Generating Unit” in the CAISO Tariff, Participant has signed a Participating Generator Agreement with CAISO with respect to such units, PG&E is the Scheduling Coordinator, the energy is separately metered by a CAISO-approved meter, and all of the metered energy is delivered to PG&E. The power deliveries to PG&E may not be subordinate to the operation of any other generating units, any third party options, or the scheduling;
- Participants who require a new gas interconnection with PG&E, or who have an existing gas interconnection with PG&E, but will have a higher peak gas demand, are required to submit a Preliminary Application for Gas Service and an Agreement to Perform Tariff Schedule Work;
- Participants must initiate applicable generation interconnection procedures or provide updated information for existing interconnection, as applicable. For Participants initiating new interconnection procedures, Participants must submit proof of interconnection application with its Offer if the application has been made. If the interconnection application has not been made, Participant must submit proof of application upon acceptance of shortlist position or 5 business

⁸ PG&E’s Utility Tolling Agreement was based on the Tolling Agreement used for PG&E’s Long Term RFOs.

days after the close of the next applicable Generation Interconnection Procedures (“GIP”) cluster window;

- In its pricing proposal, Participants are requested to itemize capacity payments, fixed O&M, variable O&M, and start-up payments. Participants are also required to offer two GHG Compliance Cost options. Participants are required to offer pricing for a case assuming the Seller will pass through GHG Compliance costs to PG&E and assuming that the Seller will bear GHG Compliance costs. Participants can include the costs for the two cases in either the capacity payment or Variable O&M payment or in both;
- Respondents may submit one Offer for each project at a particular site. Each Offer may include two additional Offer variations. A variation may alter such attributes as Term, Price, Term Start Date, or other PPA terms and conditions;
- The maximum delivery term for PPAs resulting from the CHP RFO shall be the following:
 - Up to 7 years for existing CHP
 - Up to 7 years for repowered CHP facilities and expanded CHP facilities not providing credit and collateral as set forth in Section 4.2.8.3 of the Settlement Agreement
 - Up to 7 years for Utility Tolling Facilities providing credit and collateral as set forth in the Utility Tolling PPA
 - Up to 12 years for New CHP facilities, Repowered CHP facilities, and Expanded CHP facilities providing credit and collateral as set forth in Section 4.2.8.3 of the Settlement Agreement.
- The RFO contains a detailed description of each of the above products based on the Settlement Agreement;
- The RFO Protocol identifies and describes the procedures for evaluation of offers. To evaluate Offers, PG&E primarily will consider the factors listed below. The protocol states that in its evaluation of Offers, PG&E may combine Market Value, Portfolio Fit, and other evaluation criteria to determine a Portfolio Adjusted Value (“PAV”). PG&E may also consider the debt equivalence costs of an Offer in its evaluation. The evaluation criteria listed in the Protocol include:
 - Market Valuation
 - Portfolio Fit
 - Credit
 - GHG Emissions
 - Project Viability
 - Project Technical Reliability
 - Adherence to Applicable Form PPA
 - Supplier Diversity

- The RFO provides a description of the information which Participants are required to provide as part of their proposal. This includes:
 - Offer Forms
 - Project Description
 - Credit Information
 - Electric and Gas interconnection information
 - Supplier Diversity information
 - Redline PPA
 - Clean, executed PPA
- For New, Repowered, Expanded and Utility Tolling Facilities, if a Participant is notified that it is eligible for PG&E’s shortlist and accepts the shortlist position, then the Participant shall post a fee (the “Shortlist Offer Deposit”) in the amount of \$3 per kW of contract capacity before the close of business on the 10th business day after receiving such notice. If the Offer Deposit is not posted within the designated time period, Participant’s Offer shall be removed from further consideration in this CHP RFO. Shortlisted offer deposits shall be returned once a PPA has been executed and the Participant has posted Development Security. The Shortlist Offer Deposit is intended to secure the obligation of each Participant during the Offer negotiation period and to ensure each Offer has been carefully considered and represents an exclusive negotiation with PG&E;
- Once a Participant is selected for the Shortlist, the Participant must execute a Confidentiality Agreement contained in the Protocol and return the Agreement within 5 business days of notification of their selection in order to continue to participate in the RFO;
- In terms of interconnection requirements, Participants are required to seek a CAISO finding of Full Capacity Deliverability Status. The Seller must also demonstrate that there is sufficient capacity at the facility interconnection with PG&E’s electric grid to receive the full net output of the Project. This ability and the associated costs are determined from the applicable generator interconnection procedure, i.e. CAISO Tariff for CAISO controlled transmission grid interconnections and PG&E’s Wholesale Distribution Tariff for non-CAISO controlled distribution grid interconnections as applicable. While Participants are encouraged to initiate the applicable request as early as possible, Participants that are shortlisted that have not submitted an interconnection application must apply for interconnection at the next available interconnection open period;
- For those projects that have a current interconnection study (i.e. a Feasibility Study, System Impact Study, Facilities Study, Phase I or Phase II) or Interconnection Agreement, each Offer must include all completed interconnection studies or a copy of the Interconnection Agreement to be considered for selection. The Participant must provide to PG&E the results of any updated CAISO Interconnection studies as those results become available. This information may be used by PG&E in ranking and evaluating Offers.

On January 26, 2012, PG&E revised the CHP RFO Protocol and posted the revised version on its website. Several changes were made to the CHP RFO Protocol documents to include a CHP Capacity-only product as well as to address feedback received from Participants primarily at the Participants Conference. Some of the major revisions to the CHP RFO Protocol included:

- Revised the schedule for receipt of offers by one day to February 27, 2012;
- Included a notice of the Participants Offer Form conference call;
- Eliminated a previous requirement that PG&E had to be the sole off-taker of the net output from the facility;
- Allowed Participants to submit a second variation for each project;
- Revised the provision prohibiting certain communications between Participants in the RFO;
- Changed submission requirements to electronic documents;
- Allowed Participants to include GHG Compliance costs in either capacity pricing or in the variable O&M charge.

E. Issues Addressed in This Report

This report addresses Merrimack Energy's assessment and conclusions regarding the following eleven issues identified in the CPUC's IE Report Template:

1. Describe the role of the IE;
2. How did the IOU conduct outreach to bidders? Was the solicitation robust?
3. Evaluate the fairness of the investor-owned utility's ("IOU's") bidding and selection process (i.e. quantitative and qualitative methodology used to evaluate and select offers, consistency of evaluation and selection methods with criteria specified in bid documents, etc.);
4. Describe the IOU's methodology for evaluating offers. Evaluate the strengths and weaknesses of the IOU's methodology;
5. Describe project specific negotiations. Highlight any areas of concern including unique terms and conditions;
6. If applicable, describe safeguards and methodologies employed by the IOU to compare affiliate bids or utility-owned generation ownership offers;
7. Based on the complete bid process, is (are) the IOU contract(s) the best overall offer(s) received by the IOU;

8. If the contract does not directly reflect a product solicited and bid in an RFO, is the contract superior to the bids received on the products solicited in the RFO? Explain;
9. Is the contract a reasonable way of achieving the need identified in the RFO;
10. Based on your analysis of the RFO bids, the bid process, and overall market, do you agree with the IOU that the contract(s) merit CPUC approval? Explain?
11. Based on the complete bid process, should some component(s) be changed to ensure future RFOs are fairer or provide a more efficient lower cost option?

II. Description of the Role of the IE

A. Regulatory Requirements For the IE

The requirements for participation by an IE in utility solicitations are outlined in Decisions (“D”) 04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28), D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8) of the CPUC, and D.09-06-050.

In addition, Section 4.2.5 of the Settlement Agreement identifies a requirement for an IE in the CHP RFO process. Section 4.2.5.7 of the Settlement Agreement states that each utility shall use an Independent Evaluator similar to that used in other IOU RFO processes. According to the directive, it is preferable that the IE have CHP expertise and financial modeling experience. Also, section 4.2.5.8 requires that the IE review the entire CHP RFO process.

In D.04-12-048 (December 16, 2004), the CPUC required the use of an IE by investor-owned utilities (IOUs) in resource solicitations where there is an affiliated bidder or bidders, or where the utility proposed to build a project or where a bidder proposed to sell a project or build a project under a turnkey contract that would ultimately be owned by a utility. 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.⁹ Instead, the IE would be consulted by the IOU, along with the Procurement Review Group (“PRG”) on the design, administration, and evaluation aspects of the Request for Proposals (“RFP”). The Decision identifies the technical expertise and experience of the IE with regard to industry contracts, quantitative evaluation methodologies, power market derivatives, and other aspects of power project development. From a process standpoint, the IOU could contract directly with the IE, in consultation with its PRG, but the IE would coordinate with the Energy Division.

In D.06-05-039 (May 25, 2006), the CPUC required each IOU to employ an IE regarding all RFPs issued pursuant to the RPS, regardless of whether there are any utility-owned or affiliate-owned projects under consideration. In addition, the CPUC directed the IE for each RFP 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 submitted to the utility, PRG, and CPUC and made available to the public (subject to confidential treatment of protected information). The IE would also make periodic presentations regarding its findings to the utility and the utility’s PRG consistent with preserving the independence of the IE by ensuring free and unfettered communication between the IE and the CPUC’s Energy Division, and an open, fair, and transparent process that the PRG could confirm.

⁹ 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).

In D.09-06-050 issued on June 18, 2009 in Rulemaking 08-08-009, Order Instituting Rulemaking to Continue Implementation and Administration of California Renewable Portfolio Standard Program, the CPUC required that bilateral contracts should be reviewed according to the same processes and standards as contracts that come through a solicitation. This includes review by the utility's PRG and its IE, including a report filed by the IE.

B. Description of Key IE Roles

In compliance with the above requirements, PG&E selected Merrimack Energy to serve as IE for the CHP RFO in June, 2011. 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.

In addition to the requirements identified in CPUC Orders, the Scope of Work included in the Contract Work Authorization between Merrimack Energy and PG&E clearly identifies the tasks to be performed by the IE. These include the following tasks:

- Review and comment on the draft Combined Heat and Power Request for Offers Protocol documents and bid evaluation methodology. The documents to be reviewed include the protocol document, associated contracts and other data forms and related documents. Our comments will focus on the design of the evaluation and selection process relative to the products sought, evaluation criteria, data forms and selection protocols;
- Participate in the Participants Conference;
- Participate in PRG meetings and PG&E internal meetings as required prior to and during the solicitation process;
- Monitor the questions received from prospective Participants and the responses of PG&E to the Participants to ensure all Participants have access to the same information in preparation of their proposals;
- Review and comment on the design of PG&E's evaluation and selection methodology for the CHP solicitation consistent with the products being solicited;
- Review and assess the offers received in response to the RFO to ensure the IE and Company identify and assess the same list of offers and important information for each proposal;
- Review and assess PG&E's evaluation of the offers received through the RFO process for purposes of selecting the preferred resource options for customers from a price and viability perspective. Ensure all Participants are fairly treated in the evaluation and selection process;

- Monitor email traffic between PG&E and the Participants;
- Monitor contract negotiations;
- Participate in meetings with short listed Participants, as required;
- Prepare the IE reports for inclusion in any Advice Letter filings;

With regard to the role of the IE, our objective is to ensure that the process is undertaken in a fair and equitable manner and that the results of the offer evaluation and selection 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 analysis.

C. Description of IE Oversight Activities

In performing its oversight and evaluation role, the IE participated in and undertook a number of activities in connection with the solicitation including providing comments on the protocol documents, reviewing internal RFO Evaluation Protocol, organizing and summarizing the bids received, reviewing the evaluation and selection process and results at each stage in the process, monitoring the status of short-listed offers, monitoring communications with Participants, communicating with PG&E's Project Manager on a regular basis to discuss RFO issues, and participating in meetings with the PRG, PG&E's Evaluation Committee and PG&E's Steering Committee. Merrimack Energy was retained by PG&E prior to the development of the RFO documents and therefore had the opportunity to participate in and assess the development and implementation of the entire process from start to completion. A list of the activities of the IE during the procurement process consistent with the important activities and milestones for the process is described below.

Communicated with PG&E on CHP RFO Issues

Since the CHP RFO process was a specific RFO process which had not been previously developed or implemented by PG&E, one of the first tasks in the process was to review other CHP or Cogeneration RFOs or RFPs initiated by other utilities as an example of any unique requirements that may be applicable for PG&E's process. The IE had served as Independent Consultant for several Call for Tenders issued by Hydro-Quebec which solicited bids for cogeneration resources from conventional gas-fired generation options and biomass resources. Also, Merrimack Energy recently served as a consultant to a consortium of companies bidding on an Ontario Power Authority CHP solicitation. These included Ontario Power Authority Final Request for Proposals for Up to 1,000 MW of Combined Heat and Power Generation in Ontario 2006 and Ontario Power Authority Request for Proposals for 500 MW of Combined Heat and Power Generation in Ontario (CHP II RFP) 2009. The IE also identified other solicitations for cogeneration resources

from the early 1990's period in the US as models for PG&E's RFO and identification of issues.¹⁰

Submitted Comments on RFO Protocol Design

Merrimack Energy submitted multiple rounds of comments on the design of the CHP RFO protocol, with an emphasis on issues such as organization and completeness of the protocol documents, assessment of the information requested by PG&E to evaluate the offers received relative to the evaluation criteria and other issues that may affect the competitive solicitation process based on prior experience serving as IE on similar processes. The IE also discussed the evaluation criteria and evaluation and selection methodology with PG&E's Project Manager and PG&E's Evaluation Committee.

Participated in Several Meetings with CHP Project Team Management and Staff Members for the Purposes of Addressing Issues Associated With RFO and Evaluation Process Design

The IE participated in several conference calls as well as on-site meetings with PG&E's CHP RFO project team to address key issues with the RFO design prior to issuance of the RFO as well as meetings to address the quantitative and qualitative methodologies to be used for the evaluation of the offers. PG&E provided the IE with documentation of the various models to be used for traditional CHP resources as well as utility tolling agreements. The IE also held discussions with members of the quantitative evaluation team to ensure we fully understood the evaluation methodology and input assumptions and to provide input into the development of the evaluation methodology and process.

Some of the issues discussed between the IE and PG&E's CHP project team in the development of the solicitation process included:

- Steam host issues and the implications on contract terms and structure;
- Energy efficiency requirements and measurement verification for projects to meet FERC and California standards;
- Threshold requirements or minimum eligibility requirements for participating projects;
- Project viability criteria by resource type (i.e. existing CHP, new CHP, repowering, project expansion, and conversion to UPF projects);
- Quantitative evaluation methodologies for different types of resources;
- Security requirements;
- Structure of RFO Documents;
- GHG calculations based on the double benchmark;
- Structure of Offer Forms and other information requirements for bidders;
- MW counting rules and basis for assessment

¹⁰ While early competitive bidding solicitations from the 1980's and early 1990's generally included cogeneration projects, recent competitive bidding solicitations generally do not involve strictly cogeneration resources. In fact, our recent experience has been that few cogeneration projects are actually bid into power procurement processes.

Participated in Weekly CHP RFO Team Meetings

The IE participated in weekly Project Team meetings on the CHP RFO. The purpose of the meetings generally involved a discussion of the schedule for the process, status of work activities undertaken during the week, and review of outstanding issues and tasks relative to the schedule for launching the RFO. Team meetings were scheduled every Thursday afternoon beginning in early June 2011 and continuing through bid evaluation and selection.

Participated in the PRG Meeting of July 12, 2011

During the first meeting of the PRG to address the CHP solicitation, PG&E presented a brief overview of the QF/CHP Settlement Agreement, CHP RFO criteria based on the Settlement,



Participated in Meetings of Both PG&E's Steering Committee and the Evaluation Committee for the RFO

PG&E's Senior Management team maintained an active role from the very beginning of developing and implementing the solicitation process. Steering Committee meetings focused on oversight of important policy issues



Also, Senior Management was particularly interested in ensuring the solicitation process and requirements were consistent with the Settlement Agreement requirements. The past involvement of members of the Senior Management team with the negotiations of the Settlement assisted in meeting these objectives.

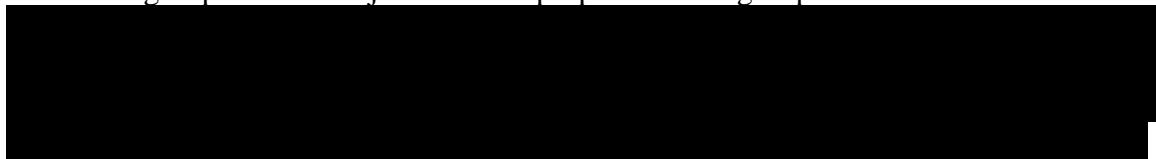
Meetings of the Evaluation Committee focused on the evaluation methodology and criteria to be applied, methods for evaluating bids from a quantitative perspective, and qualitative factors.



Evaluation Committee and Steering Committee meetings were generally held on a monthly basis beginning in August 2011 and extending into April 2012.

PG&E Cost Allocation Mechanism (CAM) and PRG Meeting of November 8, 2011

PG&E held a joint CAM/PRG meeting on November 8, 2011 to provide an overview of the CAM group and the objectives and purpose of the group relative to the CHP RFO.



PRG Meeting of December 13, 2011

PG&E held a PRG meeting on December 13, 2011 that among other agenda items included [REDACTED]

[REDACTED] a bid evaluation approach.

Preparation of Test Bids

The IE prepared two test bids (one CHP and the other a UPF option) for the purposes of assessing the clarity of the Offer Forms and information required of the Participants. The IE also completed the test bids to ensure all necessary information was requested to allow for an evaluation of the offers when received and ensure there were no glitches in the Offer Forms. As a result of this process, the IE did identify some redundancy in the information requested and discussed the findings with PG&E project team member responsible for developing the Offer Forms. The IEs intent was to also prepare test bids for purposes of testing the bid evaluation methodology and ranking and selection process.

While PG&E did not use the offers prepared by the IE, PG&E did create its own test bids based on other projects it was involved with and used the information from those projects to conduct a test evaluation of the methodology. This process proved valuable in assessing and finalizing the bid evaluation methodology.

Attendance at the Participants Conference

The IE attended the CHP RFO Participants Conference held by PG&E on January 12, 2012. The IE also coordinated with PG&E's Project Manager on the issues to address at the Participants Conference and provided comments on the presentation material. For example, based on previous experience, the IE indicated that since each CHP project was uniquely configured and since many of the project sponsors had not participated in a solicitation of this nature previously, that there was a high likelihood that Participants may have difficulty either completing their proposals or doing so in an accurate fashion. The IE suggested that PG&E conduct a separate session for Participants on completion of the Offer Forms included as a component of the CHP RFO protocol. PG&E held a general Participant's Offer Form Conference Call to specifically review the Forms which Participants had to complete as part of their proposal. In particular, the Participants Conference was reasonably well attended based on the limited number of CHP offers.

Participants Offer Form Conference Call

PG&E held an Offer Form Conference Call for prospective Participants on January 20, 2012 entirely focused on walking Participants through the process of completing the Offer Forms and explaining the information required of Participants. Although PG&E

also described the Offer Forms and provided examples and highlights of the Offer Forms during the Participants conference, this conference call went into more detail about the requirements for completing each form and also allowed Participants to ask questions about the forms.

Participants Conference Call for Final Questions

On February 22, 2012 PG&E held another conference call to allow Participants to ask any final questions about the solicitation process and information requirements that Participants are required to provide with their offer. This conference call also provided PG&E the opportunity to provide final guidelines to Participants with regard to their proposals. For example, PG&E's Project Manager reminded the participants to specify any operating constraints associated with their bids and also reviewed the schedule going forward.

Lock-down of Input Assumptions

PG&E's quantitative evaluation team provided the input assumptions to the IE prior to receipt of bids and participated in two discussions with the IE to review the methodology underlying the development of the input assumptions, including the development of forward price curves for power and gas as well as the forecast for capacity or RA costs. The IE also met with the quantitative evaluation team prior to receipt of bids to clarify any final questions the IE had about the bid evaluation methodology prior to receipt of bids. PG&E had provided the IE copies of model documentation for the models that would be used to evaluate each type of resource option. The model documentation was useful for understanding the methodologies and assumptions used for the evaluation of each resource type and the mechanics for completing the evaluation.

Receipt of Offers – February 27, 2012

Bids were received on February 27, 2012. The IE was present at PG&E's offices for bid receipt and opening. All bids were opened and a copy of a flash drive or disks for each offer was provided to the IE for downloading onto the IE's computer. The IE and PG&E conducted their own independent review and summary of the offers received and compared notes to ensure all offers had been accounted for along with categorizing the types of offers received and the products proposed. In total, PG&E received offers from [REDACTED] projects, which offered over [REDACTED] variations representing over [REDACTED] MW [REDACTED]. A summary of the offers received is presented in the Exhibit 2 below. More detailed information on each project/offer is presented in Appendices A and B.

Exhibit 2: Summary of Projects by Project Type

Type of Offers Received	Number of Projects	Total MW
[REDACTED]	[REDACTED]	[REDACTED]

Joint CAM/PRG Meeting – February 28, 2012

PG&E held a joint CAM/PRG meeting on February 28, 2012, one day after receipt of offers.

Monitored Communication with Bidders

Following receipt of offers, PG&E's project team began to review the offers, including the Offer Forms to ensure the information provided by the Bidders was complete and accurate. As the IE had expected given the first time nature of this process, most offers contained inconsistencies or missing information which required PG&E to seek clarification of the bids or ask for addition information. The IE was copied on the communications with bidders and was therefore in a position to monitor all communications with bidders and access any offer updates or clarification.

Review and Evaluation of Bid Evaluation Results

PG&E provided detailed supporting documentation to the IE regarding the quantitative and qualitative evaluation results prepared by PG&E's project teams. The IE undertook a detailed review of the quantitative and qualitative evaluation results and held several follow-up conference calls or exchanged emails with PG&E project team members to ask clarification questions about the evaluation results. In addition, the IE held face-to-face meetings on April 2, 2012 with members of the bid evaluation team to review the modeling of each offer.¹² The IE also developed methodologies to test the reasonableness of the evaluation results as a means of identifying any potential inconsistencies in the

¹¹

In addition to reviewing and evaluating the detailed evaluation results provided by the PG&E quantitative evaluation team, given the unique nature of the CHP resources, the IE wished to meet with members of the team responsible for evaluating each offer to assess the interpretation of the offers and the rationale used by the evaluation team to evaluate each offer and ensure the rationale was consistent with the IEs view of how the bids should be modeled as well as the consistency of the results. PG&E's quantitative evaluation team was able to provide reasonable and consistent responses to the IEs questions.

evaluation. This involved preparing summary of the results of the detailed evaluation sheets completed by PG&E for the CHP options and comparing the results against the final summary results used to compare and rank offers. For the dispatchable facilities, the IE reviewed the detailed evaluation results and assessed the magnitude of the variable fuel and energy commodity costs relative to the project heat rates to assess the level of dispatch. For dispatchable facilities and hybrid facilities, the IE also compared the detailed results in the output spreadsheets submitted by PG&E to the IE relative to the summary results used by PG&E to rank and select projects. The IE also prepared questions for clarification about the results and held discussions with PG&E team members to discuss the evaluation results. PG&E's project team was able to provide reasonable and detailed responses to all the IEs questions in a satisfactory manner.

Steering Committee Meeting – April 6, 2012

A Steering Committee meeting was held by PG&E on April 6, 2012 [REDACTED]

Steering Committee Meeting – April 19, 2012

The Steering Committee Meeting of April 19, 2012 [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

PRG/CAM Group Meeting – April 25, 2012

PG&E presented its proposed short list to the joint PRG/CAM meeting on April 25, 2012.

[REDACTED]

Monitored Contract Negotiations with Shortlisted Bidders

The IE has monitored follow-up contract negotiations with shortlisted bidders. Generally, the process followed by PG&E has been to use the first meeting to discuss the project and its operational parameters and other commercial factors and begin contract negotiations in subsequent calls. In all initial calls, PG&E indicated to bidders that although they were on the short list this is a highly competitive process and there was no guarantee that they will get a contract.

13 [REDACTED]

Follow-up Discussions with Non-Shortlisted Participants

PG&E offered the opportunity for Participants who were not selected for the short list to receive a de-briefing from PG&E about their projects. In addition to providing a reasonable level of information to assist the Participant in future solicitations, PG&E and the IE asked the Participants to identify any issues or suggest ways to improve the process in future solicitations. The response from the non-shortlisted Participants was very favorable with regard to the solicitation process and information requirements. Examples of some of the comment of Participants included:

- The documentation required of bidders was straightforward;
- PG&E generally maintained the schedule proposed;
- The CHP RFO protocol documents represent a good compromise with regard to the details of the solicitation and the information required of Participants;
- One Participant was very appreciative of the opportunity to discuss the offer with the Company;
- PG&E's Project Team has been very good to work with.

While a few Participants suggested some minor improvements, there were no major criticisms leveled at the process even though the IE and PG&E informed the participants that they could contact the IE or submit follow-up comments to the PG&E CHP website with any issues. Some of the key issues of concern raised by the Participants included:

- The period between the issuance of the RFO and the due date for bids was fairly short and presented a competitive disadvantage;
- There was a short window to get the gas studies completed;
- PG&E was slow in getting some responses to questions posted on the website;
- [REDACTED]

III. Did PG&E Do Adequate Outreach to Bidders and Was the Solicitation Robust?

This section of the Report focuses on the adequacy of outreach activities of PG&E and the robustness of the response of bidders with regard to the solicitation process.

A. Were the Solicitation Materials Clear and Concise to Ensure that the Information Required by the Utility to Conduct its Evaluation Was Provided by the Bidders?

The IE was actively involved in the development of the CHP RFO Protocol and associated documents. The IE had the opportunity to review the CHP RFO Protocol document, Bid Forms and other attachments on several occasions during the development of the Protocols and provided multiple rounds of comments as the documents evolved over time. Our comments were designed to ensure the information was consistent and clear to Participants. In addition, given the unique nature of this process, the IE also focused on ensuring that the process was designed consistent with the requirements of the Settlement Term Sheet and that the information requested of Participants was reasonable and consistent with the evaluation criteria established to evaluate CHP projects.

The majority of the IE's primary comments were addressed by PG&E in the preparation and completion of the RFO document. In addition, the IE raised several issues pertaining to the schedule and the conformance of the proposals of Participants to the RFO. For example, while the IE believed that the RFO documents were generally clear and PG&E held several forums for Participants to ask questions about the Offer Forms and other documents, the IE was concerned based on past experience with a new RFO process and unfamiliar Participants that the proposals submitted would be incomplete and/or contain inaccuracies.¹⁴ Overall, the IE was of the opinion that the documents and follow-up information presented by PG&E were reasonably clear and concise for Participants to decide if they wanted to participate and to understand the requirements for competing.¹⁵ Prospective Participants had multiple opportunities to ask questions and participate in interactive discussions with PG&E staff regarding the Offer Forms, Attachments and contracts.¹⁶

PG&E also revised the due date for offers from February 14, 2012 to February 27, 2012 and provided adequate notice to Participants to meet the new deadline.

¹⁴ The IE prepared two test bids, one for a CHP offer and a second as a utility dispatchable option to assess whether the Offer Forms were clear and could reasonably be understood and completed in a concise manner. The IE also used this process to suggest revisions to the Offer Forms prior to completion and posting to the website.

¹⁵ As noted in the previous section, feedback from actual Participants was generally favorable regarding the clarity of the CHP RFO Protocol documents.

¹⁶ PG&E held a QF/CHP Program Implementation Workshop for Sellers on November 8, 2011, a Participants Conference on January 12, 2012 after issuance of the CHP RFO, a Webinar to review and answer questions on the Offer Form on January 20, 2012, and a conference call for any Participants that wished to participate and ask final questions on February 22, 2012.

In addition, PG&E established a website for the program and provided a significant base of information which described the CHP program and contained all documents necessary to complete a proposal. The website contained the following documents:

- CHP RFO Protocol Document and all Appendices
 - Appendix A – Offer Form
 - Appendix B – Project Description
 - Appendix C1 – Electric Interconnection Information
 - Appendix C2 – FERC 717 Waiver
 - Appendix C3 – Transmission Proxy Costs
 - Appendix D1 – Gas Interconnection Information
 - Appendix D2 – CPUC Rule 26 Waiver
 - Appendix D3 – Application for Gas Transmission Service
 - Appendix D4 – Agreement to Perform Tariff Schedule Related Work
 - Appendix E1 – Credit and Finance Information
 - Appendix E2 – Letter of Credit
 - Appendix E3 – Request for Taxpayer ID (W-9) Form
 - Appendix F1 – Supplier Diversity Information
 - Appendix F2 – Supplier Diversity Exhibit
 - Appendix G1 – CHP RFO PPA
 - Appendix G2 – Utility Tolling PPA (redline and clean versions)
 - Appendix G2 – Excel Appendices to the Utility Tolling PPA
 - EEI Master Agreement and Confirmation
 - EEI Cover Sheet Standard Form
 - EEI Paragraph 10 Collateral Annex
 - Appendix H – Confidentiality Agreement
 - Appendix I – CHP Program Settlement Agreement Term Sheet
- Frequently Asked Questions
- CHP RFO Participants Conference Slide Deck
- Conference Q&A
- CHP RFO Audio File
- Email Address for CHP RFO website
- Project Schedule

As noted, PG&E held a CHP RFO Participant's Conference on January 12, 2012 followed by a Participants Offer Form Conference Call on January 20, 2012. The Participants Conference addressed a number of topics including CHP Settlement overview, solicitation overview, offer submittal process, offer form highlights, evaluation methodology, gas interconnection, electric interconnection, and overview of the PPAs. In addition, participants were then able to ask questions. Questions that PG&E could not answer or wished to enhance with a more detailed response were posted on the website as the official response. Finally, PG&E held an optional conference call on February 22, 2012 to allow Participants the opportunity to ask any final questions about the solicitation or Offer Forms and other documents prior to submitting their offers on February 27, 2012.

The IE also found that PG&E's project team was particularly responsive to the needs of prospective Participants and also responded to most questions in a timely and thorough manner.

B. Identify Guidelines Used to Determine Whether the IOU Did Adequate Outreach. Did the IOU Do Adequate Outreach? If Not, Explain How it Was Deficient

There are several criteria generally applied for assessing the performance of the utility in its outreach and marketing activities:

- Did the utility contact a large number of prospective Participants?
- Were the utility's outreach efforts active or passive?
- Did the utility adequately market the solicitation?
- Could prospective bidders easily access information about the RFP?
- Did any prospective bidders complain about the process or access to information?

Outreach activities are important to the success of a competitive solicitation process. PG&E's outreach efforts targeted a large number of potential Participants based on PG&E's contact lists of energy companies and individuals. These efforts likely played a significant role in the robust response to the RFO in terms of number of Participants and specific offers or projects.

PG&E maintains a detailed list of potential Participants with over 1,800 contacts that serves as the database for Seller contact and outreach. PG&E sent emails to all potential Participants on this list informing them of the CHP RFO process and the issuance of the CHP RFO Protocol. In addition, PG&E maintains a QF mailing list of 338 participants and a participants list for ITRFO's of 60 participants. In addition, based on the Settlement Agreement process a list of interested parties was also available. Finally, PG&E maintains a Diverse Supplier list that was also informed via email of the CHP RFO.

As noted above, PG&E also established a section on its website for distribution of information to prospective Participants. The website contained all the pertinent solicitation documents, time tables, and a list of questions and answers related to the solicitation. In addition, PG&E maintained a website that focuses on the QF/CHP Settlement Agreement and related documents that is accessible to prospective Participants. A total of 31 questions and answers submitted to the website as well as questions and answers from the Bidders Conference were posted on the website. The IE found the website easy to access and navigate. All documents associated with the CHP RFO were included on the website and were easy to identify, access, and download.

In summary, the outreach activities of PG&E can be classified as “active” given that emails about the solicitation process were directly sent to prospective Participants. In addition, the only complaint received based on discussions with prospective Participants was that PG&E was slow in responding to some questions.

C. Identify Guidelines Used to Determine Adequate Robustness of a Solicitation. Was the Solicitation Adequately Robust?

With regard to assessing whether the response to the solicitation was adequately robust, there are several criteria to consider:

- Was the response to the solicitation commensurate with the level of outreach?
- Did the solicitation encourage a diverse response from Participants in terms of products requested, project structure, pricing options, etc?
- Was the response large with respect to the number of proposals and megawatts (“MW”) offered?

The overall result of this outreach activity was a robust response from Participants. Offers were also received from a range of eligible Sellers who offered proposals for [REDACTED]

A total of [REDACTED] projects were submitted representing over [REDACTED] MW based on the [REDACTED]. Appendix A of this Report contains a list of the Offers submitted. The IE found the response from the market to be robust [REDACTED]. The amount of MW offered [REDACTED].

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

D. Did the IOUs Seek Adequate Feedback About the Bidding/Bid Evaluation Process From All Bidders After the Solicitation Was Complete?

PG&E’s project team members, particularly PG&E’s Project Manager, were involved in regular communications with prospective Participants, with much of the communications occurring after submission of the offers. Also, as noted, PG&E agreed to debrief Participants who submitted offers that were not selected about the general reasons for non-selection. The IE participated in a number of the calls with Participants who were not selected. In our view, the debriefing sessions were very well handled by the Project

Manager, who provided consistent information to all Participants without unduly providing additional information to certain bidders. In addition, either the PG&E Project Manager or the IE asked the Participants if they had any suggestions for improving future solicitation processes. Participants were invited to provide comments about the process to the Company and IE. The IE found the responses of the Participants who were not selected to the short list to be very favorable with regard to the process. Suggestions for improving the process were few and involved relatively minor issues, such as requesting a quicker response to “some” questions. To date, none of the Participants has provided a written response or comments regarding opportunities for improving the process.

The impression of the IE was that the Participants were very appreciative of PG&E’s efforts to provide information about their project as well as upcoming procurement opportunities and the Participants had a favorable impression of the CHP RFO solicitation process.

E. Any Other Relevant Information or Observations

The CHP RFO solicitation was the first of its kind undertaken in California and represents a break from past practices for many Participants. As we expected, a number of Participants provided incomplete or inconsistent information. PG&E did not eliminate projects for failure to conform their bids to RFO requirements but instead took the approach of being more inclusive and worked with Participants to conform their proposals to the RFO requirements. All Participants had equal access to information as well as PG&E staff, which was generally very responsive to Participant Q&A and information requests, to seek or clarify information about their projects.

IV. Fairness and Appropriateness of the CHP RFO 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 the CHP RFO solicitation process. Key areas of inquiry by the IE and the underlying principles used by the IE to evaluate the methodology include the following:

- Were the procurement targets, products solicited, principles and objectives clearly defined in PG&E's CHP RFO and other materials?
- Were the bid evaluation and selection process and criteria reasonably transparent such that Participants would have a reasonable indication as to how they would be evaluated and selected?
- Was PG&E's bid evaluation based on and consistent with the information requested in the RFO to be submitted by Participants in their proposal documents?
- Did the evaluation methodology reasonably identify the quantitative and qualitative criteria and describe how they would be used to qualify and rank offers?
- Were the bid evaluation criteria consistently applied to all offers?
- Does the quantitative evaluation methodology allow for consistent evaluation of bids of different sizes and in-service dates?
- Did the bid evaluation criteria and evaluation process contain any undue or unreasonable bias that might influence project ranking and selection results or in any way favor affiliate bids?
- Was the RFO clear and concise to ensure that the information required by PG&E to conduct its evaluation was provided by project sponsors?

To address these issues, Merrimack Energy will first present a detailed description of the bid evaluation methodology and process implemented by PG&E to undertake the evaluation. This includes both the quantitative and qualitative criteria used in the evaluation. Next, the bid evaluation results and short list selection process are described. Subsequently, the IE then discusses the strengths and weaknesses of the methodology relative to the issues identified above. The final section addresses potential improvements related to the bid evaluation methodology and process as identified by the IE for consideration in implementing the next solicitation process under the CHP Program.

B. Description of PG&E's Evaluation Methodology

This section of the report provides an overall description of PG&E's bid evaluation procedure, methodology and criteria applicable to the first CHP RFO. The methodology selected is designed to generally conform to the Least Cost Best Fit ("LCBF") procedures applied in other solicitations but also needs to address the unique nature of CHP resources and Settlement requirements. The CHP RFO bid evaluation procedure includes evaluation of both quantitative and qualitative aspects of each proposal to assess its value to PG&E's customers and relative value in comparison to other proposals. PG&E evaluates the offers based on nine evaluation criteria which are discussed in this section.

The Solicitation Protocol for the CHP RFO states that to evaluate offers, PG&E will primarily consider the following factors in the evaluation process:

- Market Valuation¹⁷
- Portfolio Fit
- CHP MW
- GHG Emissions
- Project Viability
- Project Technical Reliability
- Adherence to Applicable Form PPA
- Credit
- Supplier Diversity

In its evaluation of Offers, PG&E stated in the Solicitation Protocol that it may combine Market Value, Portfolio Fit, and other evaluation criteria to determine a Portfolio Adjusted Value ("PAV"). PG&E also stated in the Protocol that it may consider the debt equivalence costs of an offer in its evaluation.¹⁸

As the basis for PG&E's evaluation procedure, [REDACTED]

- [REDACTED]

¹⁷ As is described in this section of the report, PG&E has combined Market Value and Portfolio Fit into Portfolio Adjusted Value for purposes of undertaking this evaluation.

¹⁸ PG&E has developed an internal document describing the evaluation protocol to evaluate each of the evaluation factors in detail. The document was developed prior to receipt of offers. [REDACTED]

1. Market Valuation

Market Valuation assessment is the starting point for PG&E's bid evaluation methodology, although as will be discussed in this section of the report, PG&E has evolved to Portfolio Adjusted Value or PAV as the basis of the quantitative evaluation methodology. PAV represents adjustments to Market Value and as a result this assessment starts with a description of Market Valuation.

Market valuation considers how an Offer's costs compare to its benefits, from a market perspective. Costs include fixed and variable components representing all anticipated significant relevant costs, including Transmission cost adders. Benefits include energy, capacity, and ancillary services. Costs and Benefits are each quantified and expressed in terms of present value (2012 dollars) per kW-year for contract kW. Net Market Value is Benefits minus Costs. Positive values reflect a situation where net benefits exceed costs

while a negative value reflects a case where costs exceed benefits. [REDACTED]

PG&E uses distinct methodologies for each of the following types of Offers eligible for this CHP solicitation:

- A. Pro Forma PPA Offers – [REDACTED]

- B. Utility Pre-scheduled Offers – [REDACTED]

- C. Offers that involve termination of an existing QF contract – [REDACTED]

- D. Hybrid Offers: [REDACTED]

Portfolio Adjusted Value (PAV)

19 [REDACTED]

PG&E now uses a bid evaluation methodology referred to as Portfolio-Adjusted Value (“PAV”). Portfolio-Adjusted Value is intended to represent the value of a resource or offer in the context of PG&E’s portfolio. This approach contrasts with Market Valuation, which is intended to represent the value of a resource or offer regardless of PG&E’s portfolio. To calculate PAV, adjustments are made to Market Value calculations, components, and/or resulting values. The adjustments are described in this section of the report.

[REDACTED]

Market Valuation components include [REDACTED]

[REDACTED]

1. Location

- a. SP15

Energy – [REDACTED]

[REDACTED]

[REDACTED].

Capacity – [REDACTED]

[REDACTED]

There currently exists a constraint on how much RA from SP15 may be counted toward PG&E’s system RA requirement. This constraint may change in the future.

[REDACTED]

[REDACTED]

b. Other Locations within CAISO Footprint

Energy – [REDACTED]
[REDACTED]

Capacity – [REDACTED]
[REDACTED]

c. Locations Outside CAISO Footprint

Energy – [REDACTED]
[REDACTED]

Capacity – [REDACTED]
[REDACTED]

2. Portfolio Position

- a. RPS-eligible energy – The value of energy is adjusted in this step to account for the value of RPS-eligible energy to PG&E.

[REDACTED]

This adjustment is designed to discourage adding RPS-eligible energy to the portfolio when it may not be needed to meet RPS requirements.

3. **Curtailment** – Both physical and economical curtailment values are included in Market Valuation.

4. **Adjusted Value** – [REDACTED]
5. **Energy Delivery Pattern-adjusted Value** – [REDACTED]
6. **Flexibility-adjusted Value** – [REDACTED]
- a. **Regulation** – [REDACTED]
[REDACTED] Regulation is the current CAISO product that can be dispatched through Automated Generation Control (AGC).
- b. **5 Minute Ramping** – [REDACTED]
- c. **30 Minute Ramping** – [REDACTED]

7. Adjusted Transmission Cost Adder

- a. Offer for a project that connects to the CAISO grid – the Adjusted Transmission Cost Adder is calculated by performing the following [REDACTED]

- b. Offer for a project that does not directly connect to the CAISO grid – [REDACTED]

8. Final Portfolio-adjusted Value

- a. [REDACTED]

GHG Emission Reductions

This protocol specifies how each offer received in response to the CHP RFO will be evaluated in terms of GHG emissions.

The GHG emission evaluation protocol measures how an Offer contributes toward the GHG Emissions Reduction Targets specified in the CHP Settlement. One objective of the CHP Program is GHG emissions reductions. GHG emissions reductions are measured in metric tons, per the Settlement Term Sheet.

An Offer's contribution towards the GHG Emission Reduction Targets will be calculated as described in the CHP Settlement Term Sheet. For a new CHP facility or an existing facility with physical changes but no change in operations, the amount of GHG emissions reductions is compared against the Double Benchmark.²¹ For a CHP facility with a change in operations or conversion to a Utility Tolling Offer, the GHG emissions reduction is determined from the expected emission reduction at the facility and the emissions associated with replacing the reduced generation with conventional resources

20 [REDACTED]

The CHP Settlement specifies the Double Benchmark as an alternative configuration whereby the CHP steam requirements and Utility power deliveries are replaced with a package boiler and conventional electrical generation at administratively-determined efficiencies. For the Double Benchmark, electricity is based on heat rate of 8.3 MMBtu per MWh and thermal energy is based on 80% efficient boiler.

at a time differentiated heat rate. For an existing CHP facility with no change in operations, GHG emissions reduction is zero. The GHG emission reduction methodology, consistent with the CHP Settlement Term Sheet, is described in the internal protocol document for the CHP RFO entitled 2011 CHP RFO GHG Emission Protocol.

Project Viability

With regard to Project Viability, Offers are evaluated based on [REDACTED] Project Development, Construction, and Financing feasibility (includes environmental permitting, construction schedule feasibility and cost, and financing during construction and operation of the plant); [REDACTED] Environmental Assessment (including environmental characteristics and environmental impacts of a project).

Each Offer will receive a Project Viability rating [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Technical Reliability

Technical Reliability criteria address four components:

- Plant Configuration – [REDACTED]

- Plant Performance – [REDACTED]

- Plant Operations - [REDACTED]

- Plant Emissions - [REDACTED]

Compliance With Non-Price Terms and Conditions

This criterion considers how closely an Offer complies with the terms and conditions set forth in the CHP PPA, Utility Tolling PPA, and the RA Confirmation and the extent to which a Final Offer alters the allocation of benefits and risks under the Agreements. Substantial revisions to major provisions could provide an indication that it may be difficult to reach agreement on achieving an executed contract.

Credit

An Offer's credit evaluation will be based on the Participant's willingness to post collateral as required under the CHP RFO solicitation. PG&E is interested in executing agreements with creditworthy participants or participants that are willing to post the required credit support to mitigate the financial risk of non-performance under the contracts. The creditworthiness evaluation of a Participant's Offer will be determined by the type and amount of security offered.

Supplier Diversity

²² [REDACTED]

Supplier Diversity addresses how an offer assists PG&E in reaching its enterprise-wide diversity spend goals for Woman, Minority or Disabled Veteran Business Enterprise (WMDVBE). [REDACTED]

Transmission Adder

Transmission availability and transmission related costs will be part of the RFO evaluations. For projects that have not completed and obtained cost estimates from an Interconnection Study, PG&E will use the Transmission Ranking Costs Report (TRCR) that was approved on February 11, 2011. The TRCR table provides guidance to participants on transmission availability and the costs of potential network upgrades. The costs from the TRCR or Interconnection Study will be used to determine the transmission adders.

The Transmission Adders will be applied to the incremental increase of existing QF's seeking to expand their machine capability and new QF's seeking interconnection to the transmission system. No adder will be applied for existing facilities that submit bids for existing capacity with no changes to their machine capability or electrical properties.

The "annual carrying charge" is calculated over a 20 year period as a percentage of the total upgrade costs. The total upgrade cost includes both the Voltage Support Devices and Transmission Upgrades. [REDACTED]

The TRCR Bid Capacity adder is determined by:

C. Bid Evaluation Results and Selection of the Short List

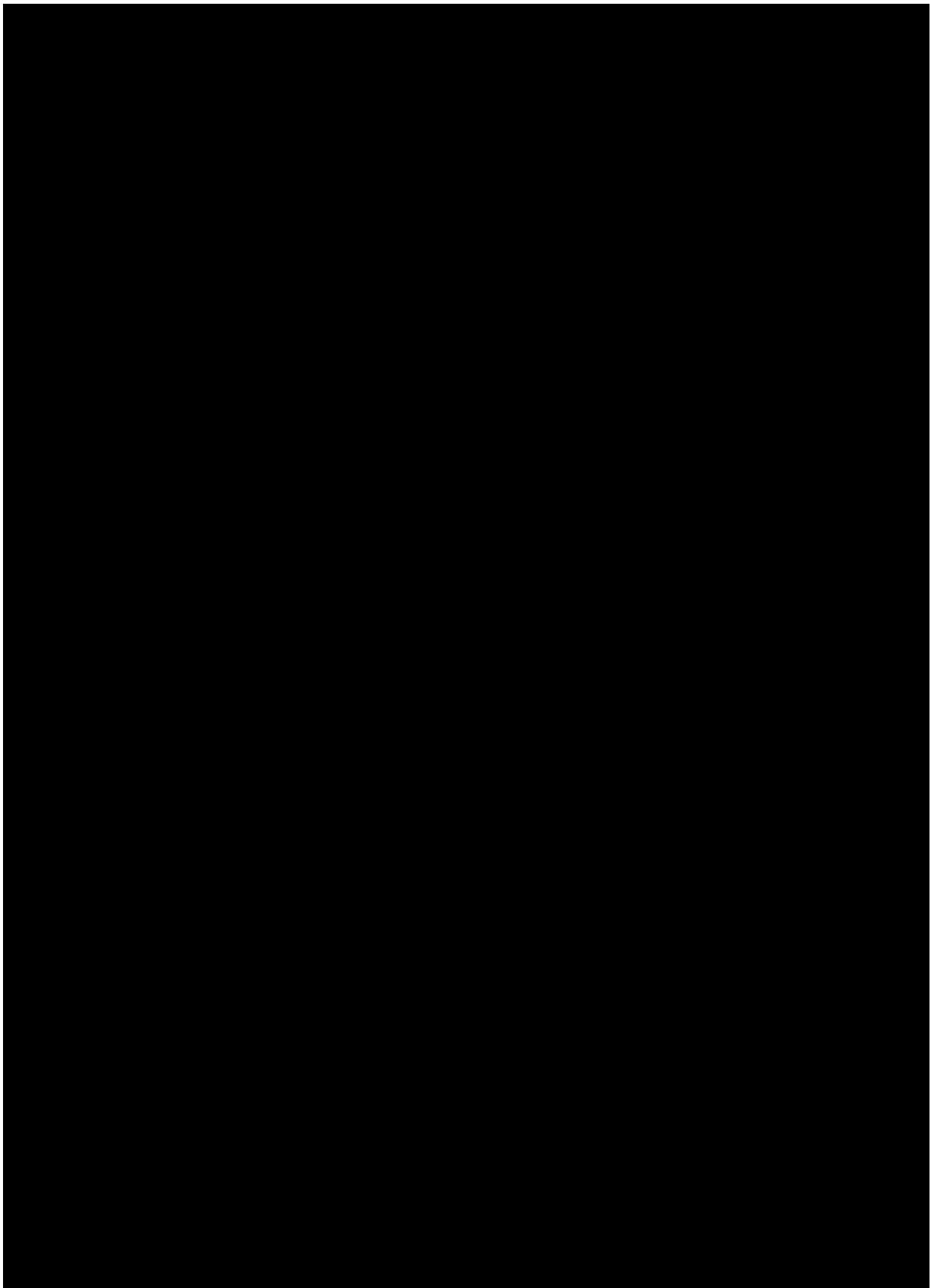
The offers received were evaluated based on the above methodology. [REDACTED]

A black and white photograph showing three horizontal panels of dark material, possibly wood or metal, arranged vertically. The top panel has a small rectangular cutout on its right side. The middle panel has a larger rectangular cutout on its right side. The bottom panel has a very large rectangular cutout on its right side, revealing a white background.

Exhibit 3: Summary of Bid Evaluation Results

the first time in the history of the world, the people of the United States have been called upon to determine whether they will submit to the law of force, or the law of the Constitution. We consider the question to be, whether the Southern Slaveholding States have a right to secede from the Federal Union; and, if so, whether the Federal Government has a right to suppress them by force. The former question is the more important, because it is the only one which can be decided by the people themselves. The latter question is of less importance, because it can only be decided by the Federal Government, and the people have no voice in it.

23



[REDACTED]

[REDACTED]

PG&E evaluates all offers on a qualitative basis as well.

[REDACTED]

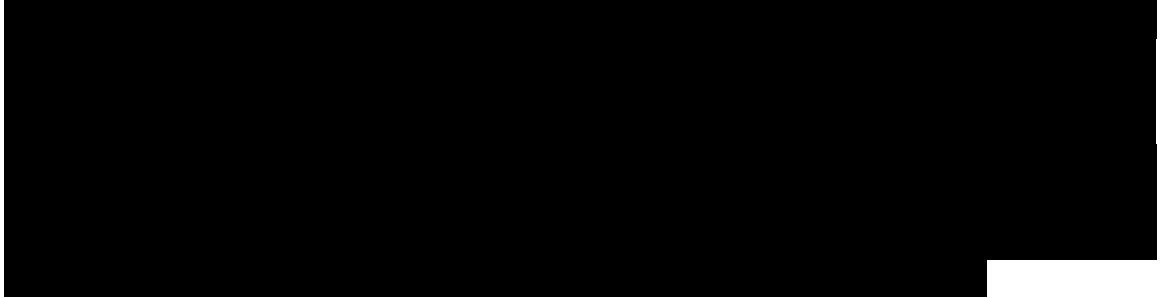
Based on the ranking of the Offers, PG&E selected a short list of Offers [REDACTED] [REDACTED] PG&E presented its proposed short list to the PRG and CAM Group on April 25, 2012.

[REDACTED]

24

[REDACTED]

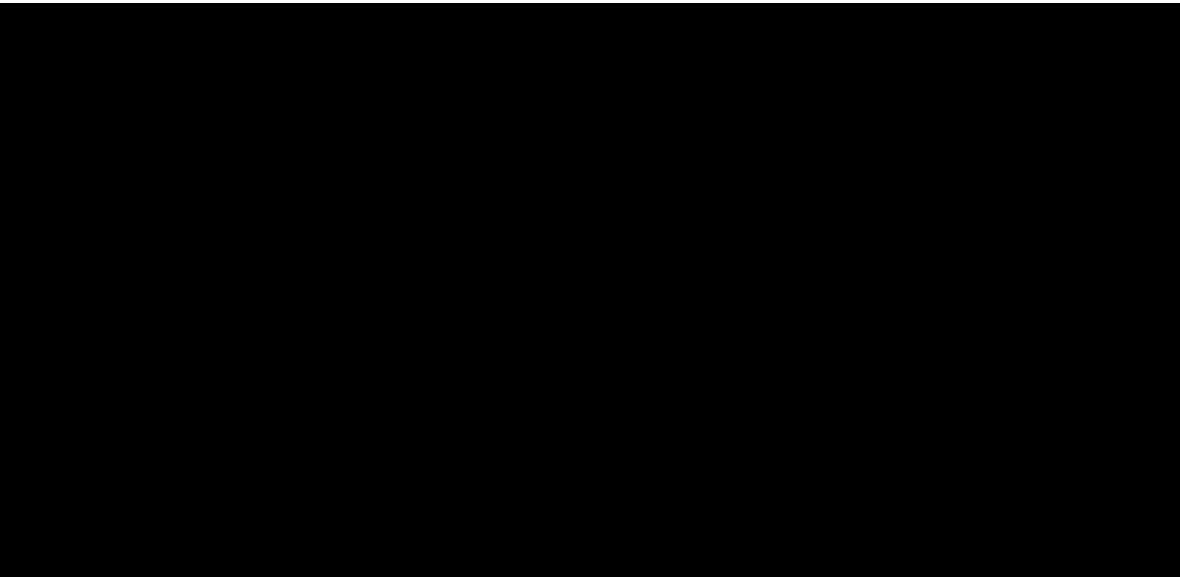
The short list selected by PG&E is presented in Exhibit 4 below.



The IE is in general agreement with the short list and felt that PG&E's approach of selecting a portfolio of options for the short list is reasonable and conforms to the objectives of the Settlement.



Exhibit 4: PG&E Proposed Short List



D.Evaluation of the Strengths and Weaknesses of PG&E's Methodology in This Solicitation

PG&E has implemented a methodology for evaluating offers received in response to the CHP RFO that includes methodologies and models used in previous solicitations as well as revised methodologies and qualitative criteria that apply specifically to the CHP

solicitation. As noted in this Report, PG&E began the planning for development of the bid evaluation methodology early on in the development of the CHP RFO solicitation process and vetted the methodology through PG&E's Steering Committee and Evaluation Committee at numerous stages in the process. In addition, PG&E undertook a test bid process to assess the best approach for evaluating and ranking the expected resources to be submitted by Participants. Given that this is the first of three CHP solicitations, there are several lessons learned which highlight the strengths and weaknesses of the evaluation and ranking methodology. These are discussed in this section of the Report.

Strengths of Evaluation and Ranking Methodology

The following represents the IEs perspective regarding the strengths associated with the evaluation and ranking methodology implemented by PG&E for assessing offers submitted. These include:

- The methodology used by PG&E takes into consideration all reasonable costs and benefits associated with the various types of offers submitted;
- This methodology is capable of effectively and consistently evaluating a range of different types of resources, project structures with different terms, product sizes, and starting dates, different generation profiles and operating parameters. The IE does not view this methodology as having a bias toward any product solicited in this RFO;
- The models used by PG&E for undertaking the evaluation of both CHP options as well as dispatchable options have been used in several other solicitations and have undergone testing and evaluation in previous processes such as the ITRFO's undertaken by PG&E;
- PG&E uses consistent input assumptions for undertaking the evaluation of all bids;
- The use of Portfolio Adjusted Value (PAV) as the basis for undertaking this evaluation, although newly implemented, represents a reasonable next step in the evolution of PG&E's evaluation methodology since the methodology is intended to represent the value of a resource or Offer in the context of PG&E's portfolio;
- PG&E developed a system of "checks and balances" regarding the compilation of bid evaluation results which includes an internal third party within the Quantitative Analysis Group compiling and checking bid evaluation results;
- The ranking and presentation of bid evaluation results was provided to the IE, PRG and CAMS groups [REDACTED]
[REDACTED]

- PG&E prepared detailed internal evaluation protocol documents that clearly described the evaluation methodologies and criteria, which facilitated review by the IE;
- The key inputs and assumptions [REDACTED] were locked down prior to receipt of offers, which serves to minimize any potential evaluation bias;
- PG&E undertook a test bid process for assessing the methodology considered and finalizing the evaluation methodology.

Weaknesses of the Evaluation and Ranking Methodology

The following reflect the view of the IE with regard to the weaknesses of the bid evaluation and ranking methodology.

- The Portfolio Adjusted Value methodology is relatively new and the adjustors are based [REDACTED]. These adjustors need to be adjusted over time as new information becomes available;
- The evaluation methodology is effective for evaluating and ranking similar resources or product types [REDACTED]
- Based on the fact that this was the first CHP RFO and that a number of Participants were not familiar with solicitation processes of this nature, there were issues associated with Participants completing Offer Forms and providing the type of information requested and required for the bid evaluation even though PG&E offered the opportunity for Participants to participate in the Participants Conference, the Participants Offer Form Conference Call and the Participants Conference Call for Final Questions;
- [REDACTED]
- The RFO was not very specific regarding value criteria for PG&E such as intra-day dispatch, assurance of RA credit, and steam host risk;
- [REDACTED]

E. Recommended Future Improvements in the Evaluation and Ranking Process

There are several issues that should be considered as potential future improvements in the evaluation and ranking process. These include:

- Continue to assess the value of the adjustors for undertaking the Portfolio Adjusted Value of offers received;
- Conduct an assessment of whether the methodology used for the first solicitation is a reasonable approach or whether a portfolio optimization process is a reasonable alternative;
- The IE recommends that PG&E consider developing a “term sheet” process with the Participants after receipt of bids whereby the Participant and PG&E are in agreement with the pricing and operational parameters that will be evaluated prior to beginning the evaluation process;
- The IE feels that although the [REDACTED] system to ranking offers on a qualitative basis is reasonable, we feel there should be consideration given to increase the value of qualitative factors [REDACTED]

- The RFO should identify any threshold criteria in the sense that there are specific requirements that Participants must meet. [REDACTED]

F. Additional Information or Observations Regarding PG&E’s Evaluation Methodology

No additional information or observations are provided.

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

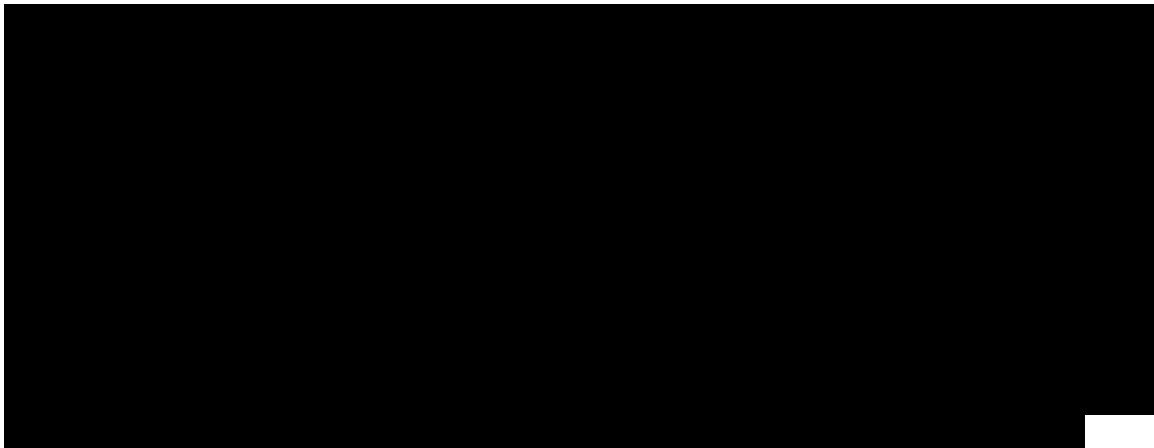
A. Principles and Guidelines Used to Determine Fairness of Process

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

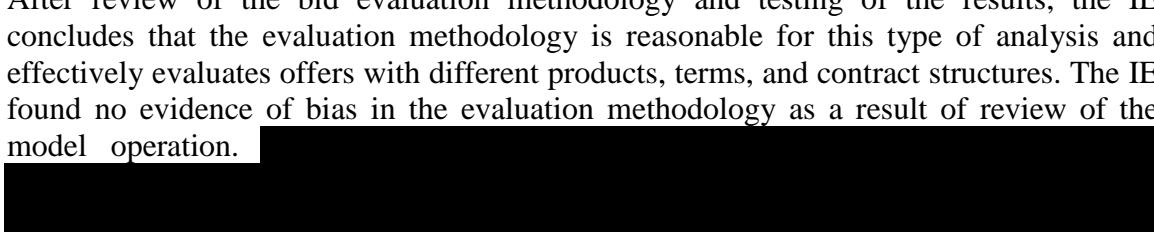
- Were all Participants treated the same regardless of the identity of the Participants?
- Were Participants questions answered fairly and consistently and the answers made available to all?
- Did the quantitative and qualitative methodologies result in a fair and equitable evaluation and selection process?
- Did the bid evaluation team maintain consistent scoring and evaluation among and across projects, including different products and price structures?
- Were the requirements listed in the RFO 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 product, project structures, or bid sizes, that cannot be reasonably explained?
- Did PG&E ask for “clarifications” in a manner that provided the bidder an unfair advantage over others?
- Did all bidders have access to the same information?
- Did PG&E consistently apply the requirements, procedures and criteria of the evaluation process as identified in the RFO 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 CHP RFO Solicitation Process

As previously discussed, the IE was actively involved in all phases of the process. The IE was copied on all emails exchanged between PG&E and Participants including receiving copies of all offers, supporting documents, and contracts. The IE also compiled summaries of all offers and the results of the bid evaluation and was able to follow the progress of the process throughout. In addition, the IE and PG&E's Project Manager had regular conference calls to discuss the progress of the solicitation process and any issues that arose during the process. Also, during the bid evaluation and selection process the IE held several meetings with PG&E's quantitative and qualitative evaluation teams. With regard to the quantitative evaluation team, the IE met on several occasions to discuss the bid evaluation methodology prior to submission of bids. The IE also held several meetings with the quantitative team to discuss the rationale underlying the interpretation and evaluation of each offer, discuss the results generated by the team, and follow-up questions and responses to questions submitted by the IE at the time of IE review of the bid evaluation results. The IE basically had unfettered access to members of the evaluation teams for this solicitation.



After review of the bid evaluation methodology and testing of the results, the IE concludes that the evaluation methodology is reasonable for this type of analysis and effectively evaluates offers with different products, terms, and contract structures. The IE found no evidence of bias in the evaluation methodology as a result of review of the model operation.





Based on our involvement, we conclude that PG&E reasonably followed the criteria outlined in the CHP RFO. Any revisions to the process were fully vetted between the IE and PG&E's Project Manager²⁶ and in our view did not negatively affect the final evaluation and selection process. In addition, the evaluation was consistent and equitable with regard to all offers. PG&E's overall approach for this initial solicitation was to be more inclusive and attempt to work with Participants to ensure they could conform, if reasonably possible.

PG&E maintained a website dedicated to the CHP RFO process and posted all documents and questions submitted by Participants both at the Participant's Conference as well as separately during the solicitation process. The Participant's Conference held by PG&E provided detailed information to all bidders with regard to the solicitation process (i.e. evaluation methodology and the requirements for Participants to provide the information requested) as well as detailed information on the interconnection process. We also observed no difference in the treatment of Participants regarding clarification questions, correspondence and communications with Participants, and follow-up contacts with Participants that were not selected. Finally, PG&E implemented the evaluation criteria and methodologies as outlined in the RFO and the internal RFO Evaluation Protocols.

C. Results Analysis

Identify instances where the IE and the IOU disagreed in the evaluation process

Given that this was the first solicitation under the QF/CHP Settlement Agreement, the IE and PG&E team had different opinions of how the process may evolve and what issues were likely to emerge. For the most part, most of the issues were ultimately settled during the development and implementation of the solicitation process. However, in summary there were four areas of primary disagreement during the process:

1. The IE was concerned that since this was a new process for a number of Participants (i.e. many of the Participants had not previously been involved in a similar solicitation process), the offers would contain a number of errors which would require PG&E to seek clarification or additional information from Participants. The IE suggested PG&E should ensure that there was adequate time in the schedule to address this issue if necessary. The IE also suggested that

²⁶ [REDACTED]

[REDACTED]

PG&E should either initiate calls or have meetings with Participants after receipt of offers to ensure that PG&E fully understood the offer and ensure that both PG&E and the Participant were in full agreement about interpretation of the offer. PG&E did communicate with Participants at this stage and did seek clarification of Participant Offers to ensure PG&E had an understanding of the proposed Offer structure;

2.

- [REDACTED]
- 3. The IE had a number of issues with the initial Offer Forms prepared by PG&E for several reasons. First, participants were asked to provide information that was not included in the evaluation criteria. Second, the IE felt that the information solicited would be onerous and time consuming. After discussions, PG&E reviewed the information requested relative to the criteria and significantly refined and reduced the information requested. The final Offer Forms and Project Description requested a reasonable amount of information to allow for a consistent and thorough evaluation of the offers received;
 - 4. The IE raised [REDACTED] question with regard to short list selection.
- [REDACTED]

D. Administration of the Bid Evaluation Process

The IE has concluded that the bid evaluation process was fairly administered with respect to all Offers.

[REDACTED] The IE felt that PG&E's project team performed their function in communicating with Participants in an exemplary manner, particularly with regard to follow-up conference calls with Participants that were not selected for a contract. PG&E generally provided thorough and informative responses to Participant questions and did so in a timely manner.

E. Any Other Relevant Information

None at this time.

VI. Project Specific Contract Negotiations

PG&E included three contracts in the CHP RFP Protocol document including the Edison Electric Institute (“EEI”) Master Agreement, which governs this transaction. This Confirmation for Resource Adequacy Capacity Product for CAISO Resources That Qualify as CHP Facilities was executed by PG&E and Calpine on May 30, 2012 for 49.97% of the capacity of the Los Medanos facility or approximately 280.5 MW.²⁷ The RA agreement with Calpine for RA from the Los Medanos facility is based on PG&E’s standard resource adequacy confirm, which was included in the CHP RFO. The confirm was modified to reflect the transaction details with Calpine.

[REDACTED]

[REDACTED]

[REDACTED] Through this Confirmation, PG&E will receive and purchase the CHP Attributes, the RA Attributes, the Local RA Attributes, and the Capacity Attributes equivalent to 280.5 MW.

[REDACTED]

| |

[REDACTED]

Participants were required to provide a redline mark-up of the Confirmation or statement that the Participant accepts PG&E’s RA Confirmation without change.

[REDACTED]

[REDACTED]

²⁷ Los Medanos Energy Center is an existing 560 MW natural-gas fired combined cycle cogeneration facility that has been operational since July 2001. Two combustion turbines are routed to two heat recovery steam generators which provide steam to one steam turbine. The facility is located in Pittsburg, California. Los Medanos Energy Center has two thermal hosts – USS-POSCO Industries and Dow Chemical Co. Los Medanos is interconnected at the Pittsburg substation.

²⁸ CPUC approval will be based on a finding that the rates and other terms and conditions in the agreement are reasonable and the capacity will count toward PG&E’s CHP MW.

²⁹ [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

VII. Treatment of Affiliate Bids

PG&E did not have any affiliate bids competing in the CHP RFO solicitation.

VIII. Reasonableness of Achieving CHP RFO Need

The addition of 280.5 MW of eligible CHP RA from the Los Medanos RA Confirmation results in total qualifying CHP MW for PG&E of 767.5 MW. This exceeds the 630 MW required to be solicited under this first CHP MW target and is 619.5 MW short of PG&E's target of 1,387 MW for the Initial Program Period.

IX. Bid Selection Recommendation

The IE is in agreement with PG&E's overall short list selection, [REDACTED]. PG&E's short list represents all eligible products. [REDACTED]

PG&E's selection results are consistent with the approach advocated by the IE.

³⁰ CHP with RA was not included in the Settlement Agreement as an eligible product.

Furthermore, the Los Medanos contract represents one of the highest ranked offers [REDACTED] and therefore merits approval.

X. Conclusions and Recommendations

A. Conclusions and Observations

Merrimack Energy has the following conclusions and observations about the initial CHP RFO solicitation process based on its role of IE in this process:

- The RFO process was conducted consistent with the requirements outlined in the QF/CHP Settlement Agreement. PG&E was very diligent in ensuring that the provisions of the Settlement were adequately addressed and included in the solicitation process. As IE, one of Merrimack Energy's objectives was to ensure the solicitation requirements conformed to the directives in the Settlement;
- Based on our assessment of the evaluation process relative to the criteria outlined, it is our opinion that all Participants were treated equitably, consistently and fairly in the process. All Participants had access to the same amount and quality of information at the same time via PG&E's website dedicated to the CHP RFO process. PG&E posted all RFO information and Questions and Answers on PG&E's CHP RFO website. We also observed no difference in the treatment of Participants regarding clarification questions for Participants, correspondence and communications with Participants, and follow-up contacts;
- PG&E's outreach process was a very active and inclusive process. Not only did PG&E actively inform prospective bidders of the status of the RFO and requirements for participating but PG&E also held several forums for Participants to communicate with PG&E and ask questions to clarify any issues about the process. This included the Participants Conference, Participants Offer Form Conference call to review and explain how to complete the Offer Form and a Final Conference Call with Participants to allow Participants to ask any final questions before submission of offers;
- The CHP RFO Protocol and associated documents were generally clear and concise and were not overly burdensome. Furthermore, the information required of Participants was linked to the evaluation criteria. Participants who were not short listed provided input to PG&E and the IE that the documentation was reasonable and clear;
- Overall, the IE viewed the evaluation and ranking of offers by PG&E as being reasonable, consistent and fair to all Participants and consistent with the evaluation protocols. PG&E did not reject any offers at the initial stage of the evaluation and instead contacted Participants to ensure that all offers were complete and provided the information necessary for evaluation. All offers were

therefore evaluated using a complete set of inputs and assumptions and reflected a complete offer;

- The evaluation methodology used by PG&E was applied consistently and equitable across different types of products and project structures with different terms and contract start dates. There was not obvious bias in the evaluation methodology. [REDACTED]
- PG&E generally followed its protocols with regard to the ranking and selection of offers. [REDACTED]
- Prior to and during the evaluation process, PG&E developed separate evaluation teams for the quantitative and qualitative factors, ensuring that bias did not inherently exist in the evaluation process;
- PG&E's quantitative evaluation methodology was a reasonable methodology for evaluating the value of each offer by taking into consideration the benefits and costs over a consistent period based on a consistent set of inputs and assumptions;
- From a qualitative perspective, all qualitative factors that would be used in the evaluation process were identified in the CHP RFO protocol;
- The PRG and CAMS Group were actively involved in the CHP RFO process via several meetings with PG&E's Project Team. PG&E held meetings with the PRG and CAMS group to discuss the QF/CHP Settlement requirements, describe the development of the CHP RFO Protocol and solicit comments, discuss the evaluation methodology that PG&E intended to use and solicit feedback on any issues, identify the response to the RFO, and meet to discuss the proposed selection of the Short List from the Solicitation;
- The IE's overall assessment is that PG&E's evaluation and ranking of the offers and its decisions on offer ranking and short list selection were fair, reasonable, and consistent. PG&E exhibited considerable care and diligence in the evaluation process. [REDACTED]

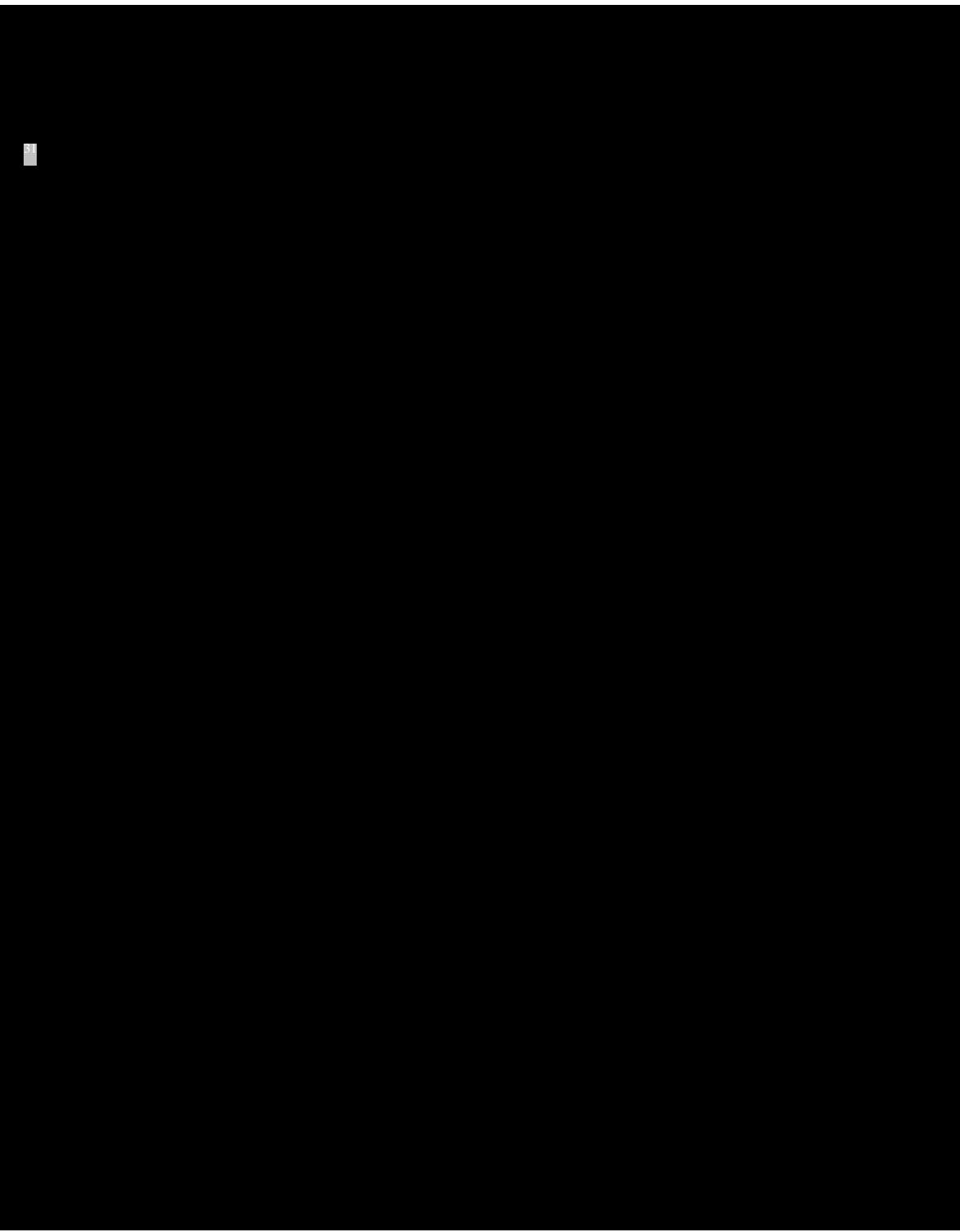
B. Recommendations

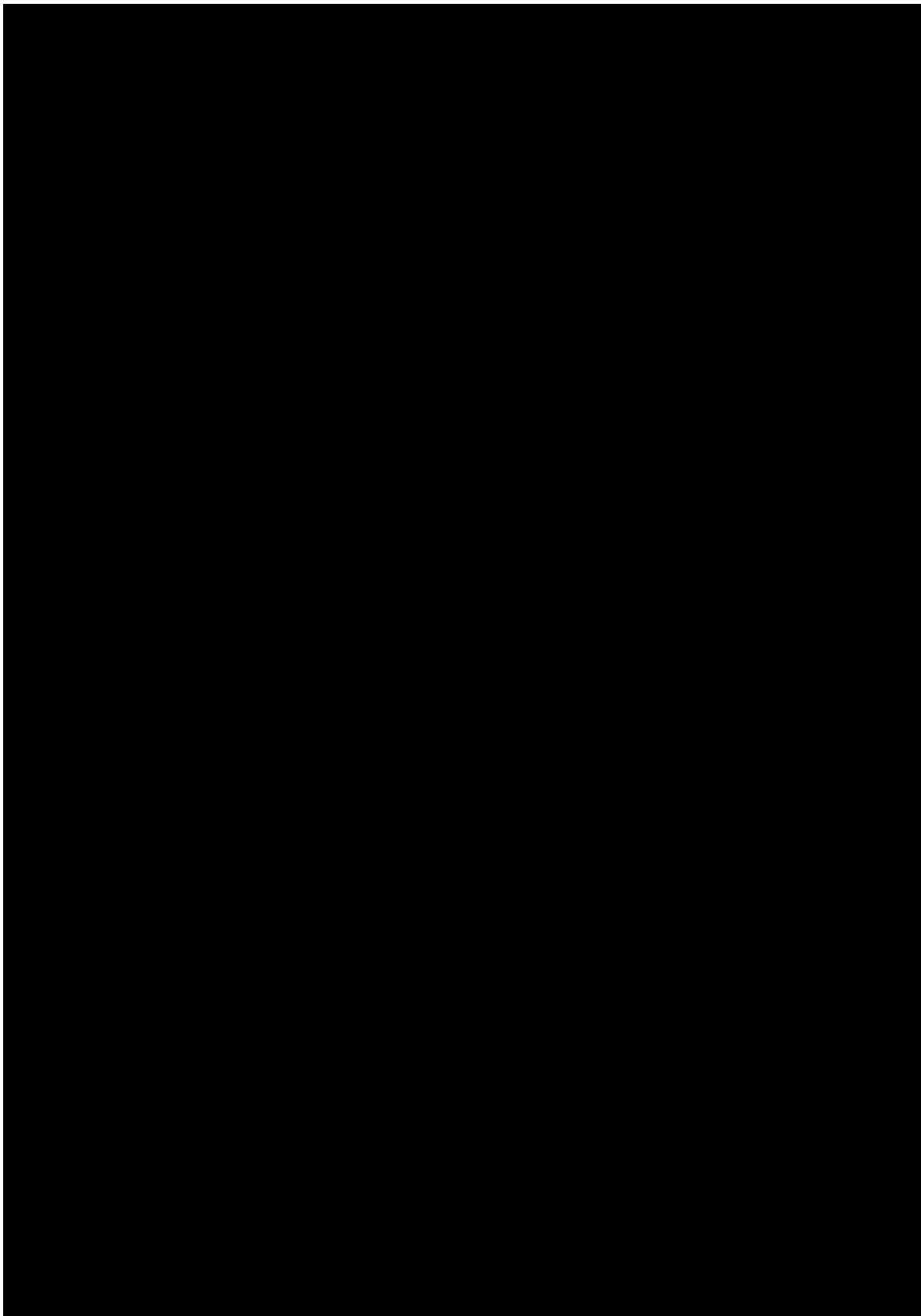
In addition to the recommendations listed by the IE in Chapter IV regarding the evaluation and ranking process, the IE has several recommendations associated with process issues for future solicitations. These include:

- PG&E may want to consider establishing a term sheet or summary sheet process with bid pricing and bid operation parameters and meet or hold conference calls with Participants immediately after submission of offers (during the offer clarification phase) to fully understand the offer and any unique nuances and to reach agreement with the Participant on the pricing and other operational parameters prior to undertaking bid evaluation. We feel this would assist PG&E in minimizing any follow-up efforts with the Participants regarding bid clarification and would also assist in preparing for the contract negotiation phase;
- The IE believes that PG&E should reconsider inclusion of the Exclusivity provision in the Confidentiality Agreement for future solicitations.

- [REDACTED]
- The IE would suggest that PG&E consider establishing face-to-face meetings with short listed bidders (rather than phone conversations) after short list selection to walk through the proposed red-lines of the contracts and provide initial feedback prior to actively begin negotiations. The meeting could also be used to get a better handle on the operational issues associated with the project. The intent would be to speed up negotiations. In addition, combined with this process, we would recommend that PG&E establish a firm schedule for completing negotiations to avoid protracted delays in the negotiation process.

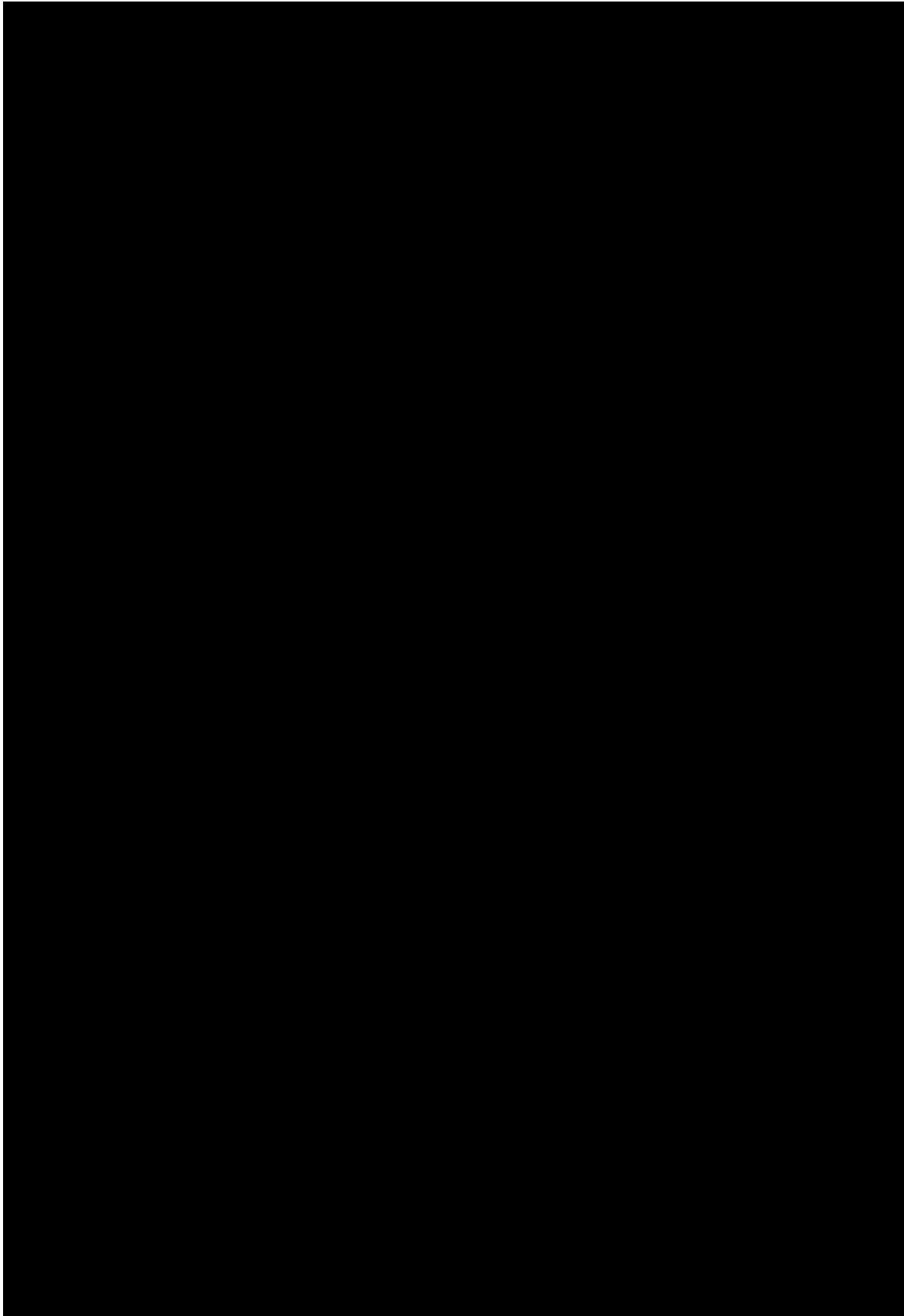
Appendix A: Summary Information for the Offers Received





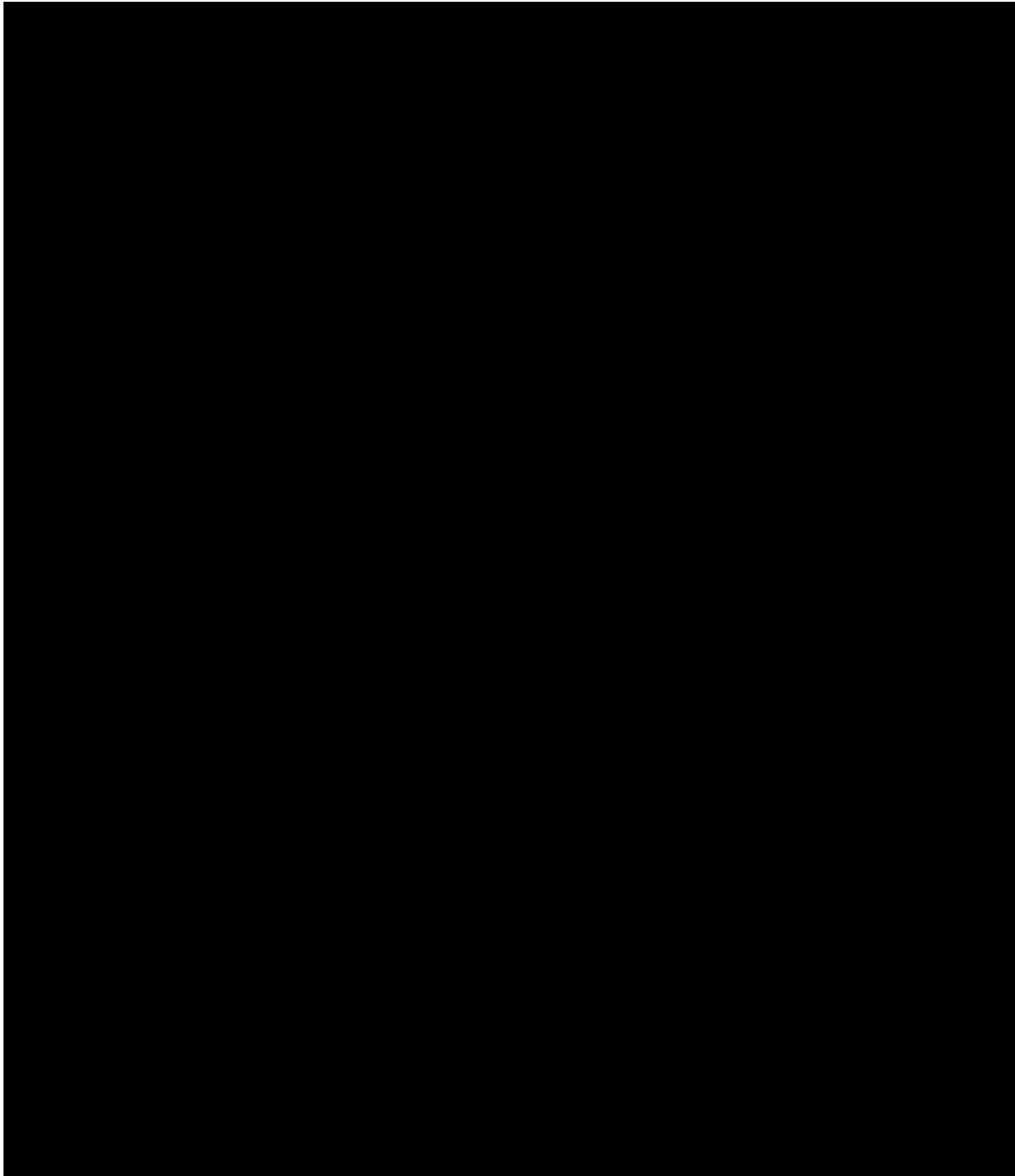
[REDACTED]

Appendix B: Additional Summary Information for the Offers Received

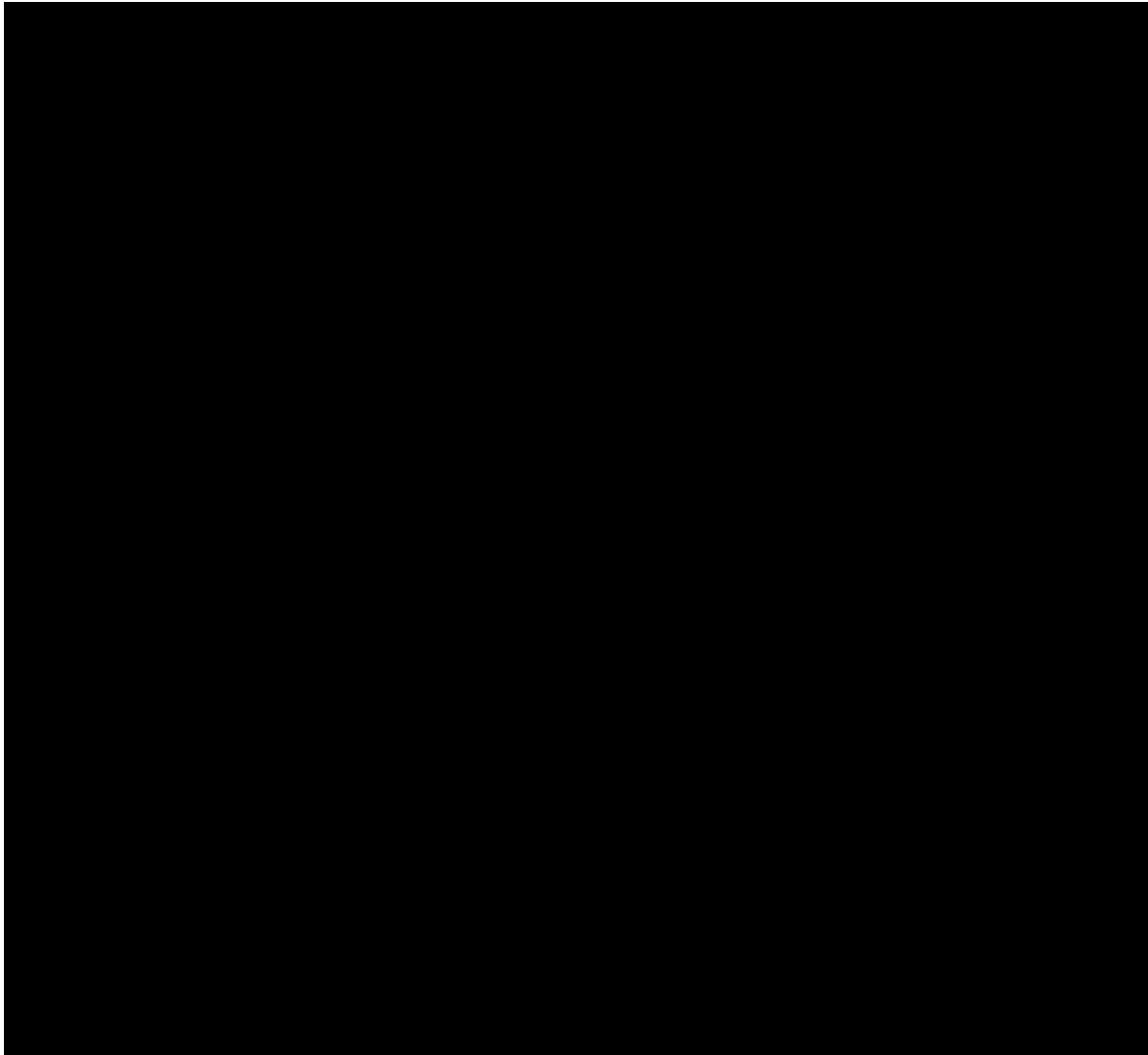




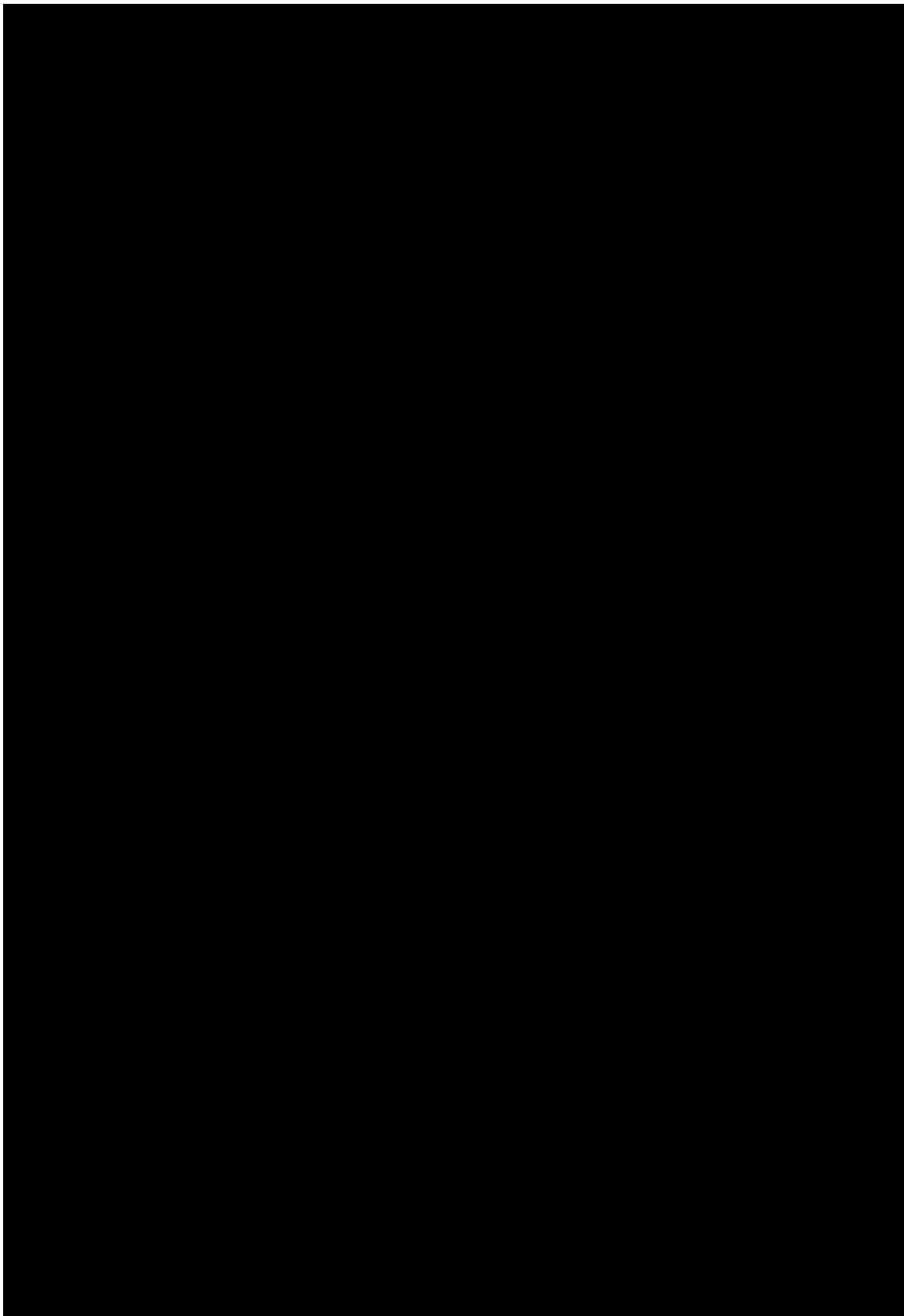
Appendix C: Bid Price Information – Buyer Assumes GHG Risk

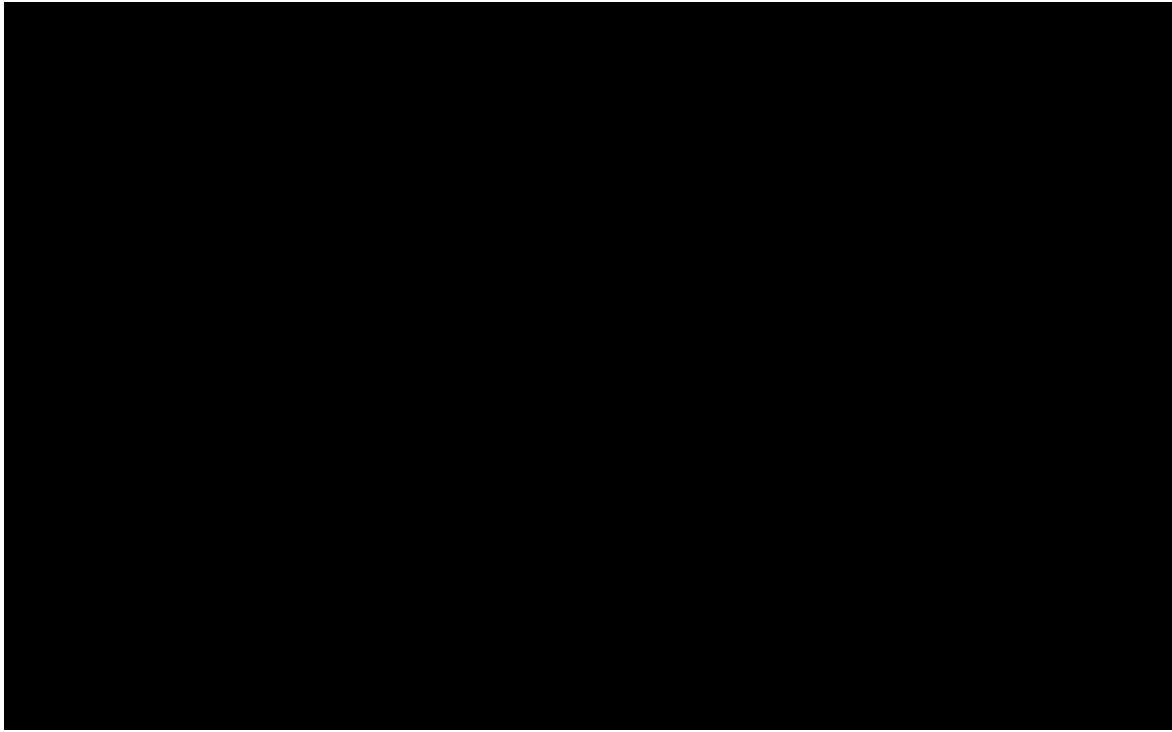


Appendix D: Bid Price Information – Seller Assumes GHG Risk



Appendix E: Summary of Bid Evaluation Results





Appendix 2

**Declaration of Soumya Sastry Seeking Confidential
Treatment and the IOU Matrix**

**DECLARATION OF SOUMYA SASTRY
SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION CONTAINED IN
ADVICE LETTER 4074-E
(PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)**

I, Soumya Sastry, declare:

1. I am presently employed by Pacific Gas and Electric Company (“PG&E”), and have been an employee of PG&E since 2005. I am a principal in the Portfolio Management group in the Energy Procurement department within PG&E. I am responsible for negotiating transactions resulting from PG&E's Combined Heat and Power Request for Offers solicitation and negotiating power purchase agreements with counterparties in the business of producing electric energy. In carrying out these responsibilities, I have acquired knowledge of such sellers in general and, based on my experience in dealing with facility owners and operators, I am familiar with the types of data and information about their operations that such owners and operators consider confidential and proprietary. I can also determine whether buyers and sellers of electricity would consider certain information to be “market sensitive information” as defined by California Public Utilities Commission (“CPUC”) Decision (“D.”) 06-06-066 and D.09-12-020, that is, information that has the potential to materially impact a procuring party’s market price for electricity if released to market participants.

2. Decision 08-04-023, ordering paragraph 8, requires that any advice letter for which confidential treatment is requested must be accompanied by a declaration under penalty of perjury that justifies confidential treatment pursuant to D.06-06-066. I was the primary contract negotiator on behalf of PG&E in the PG&E-Los Medanos Energy Center transaction which is the subject of PG&E Advice Letter 4074-E. Based on my knowledge and experience, I make this

declaration seeking confidential treatment of Appendices A, B, C, D, and E to PG&E's Advice Letter 4074-E, submitted on July 2, 2012 ("Confidential Information").

3. The Appendices are as follows:

- Confidential Appendix A: Consistency with Commission Decisions and Rules and Project Development Status
- Confidential Appendix B: Final Independent Evaluator Report of Merrimack Energy Group, Inc.
- Confidential Appendix C: Contract Summary
- Confidential Appendix D: Comparison of Los Medanos Energy Center CHP RA Confirmation Agreement on PG&E's Pro Forma CHP RA Confirmation Agreement
- Confidential Appendix E: Los Medanos Energy Center CHP RA Confirmation Agreement

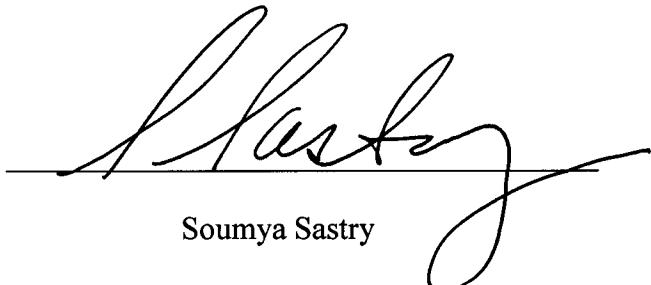
4. Attached to this declaration is a matrix that describes the Confidential Information for which PG&E seeks continued protection against public disclosure, states whether PG&E seeks to protect the confidentiality of the Confidential Information pursuant to D.06-06-066 and/or other authority; and where PG&E seeks protection under D.06-06-066, the category of market sensitive information in D.06-06-066 Appendix I Matrix ("Matrix") to which the Confidential Information corresponds.

5. The attached matrix demonstrates that the Confidential Information (1) constitutes a particular type of confidentiality-protected data listed in the Matrix; (2) corresponds to a category or categories of market sensitive information listed in the Matrix; (3) may be treated as confidential consistent with the limitations on confidentiality specified in the Matrix for that type of data; (4) is not already public; and (5) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure . In the column

labeled, "PG&E's Justification for Confidential Treatment", PG&E explains why the Confidential Information is not subject to public disclosure under either or both D.06-06-066 and General Order 66-C. The confidentiality protection period is stated in the column labeled, "Length of Time."

6. By this reference, I am incorporating into this declaration all of the explanatory text in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that to the best of my knowledge, the foregoing is true and correct. Executed on July 2, 2012, at San Francisco, California.

A handwritten signature in black ink, appearing to read "Sastry", is written over a horizontal line. Below the signature, the name "Soumya Sastry" is printed in a standard font.

Soumya Sastry

**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
LOS MEDANOS ENERGY CENTER ADVICE LETTER
(ADVICE LETTER 4074-E)**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)	2) Data correspond to category in Appendix 1:	3) Complies with limitations of D.06-06-066 (Y/N)	4) Data not already public (Y/N)	5) Lead to partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Document: Confidential Appendix A – Consistency with Commission Decisions and Rules and Project Development Status							
Entire document	Y	Items VIII.B – Specific quantitative analysis involved in scoring and evaluation of participating bids and VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This confidential appendix describes in detail the evaluation methodology and criteria used to evaluate and rank bids in PG&E's Combined Heat and Power (CHP) Request for Offers (RFO). This information is confidential under Item VIII.B of the D.06-06-066 Appendix 1 matrix for 3 years after the winning bidders are selected. It also describes terms and conditions from the Los Medanos RA Confirmation Agreement, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.	3 years
Document: Confidential Appendix B – Final Independent Evaluator Report of Merrimack Energy Group, Inc.							
Redacted portion	Y Also constitutes data protected by GO 66-C, Exclusion 2.8.	Items VIII.A – Bid Information, VIII.B – Specific quantitative analysis involved in scoring and evaluation of participating bids and VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This is the confidential Independent Evaluator Report for the Los Medanos transaction. The redacted portion of this confidential appendix provides the participating bids in PG&E's Combined Heat and Power (CHP) Request for Offers, of which the participating bids, counter-party names, prices and quantities offered are confidential. In addition, the redacted portion of this confidential appendix describes in detail the evaluation methodology and criteria used to evaluate and rank bids in PG&E's CHP RFO. This information is confidential under Item VIII.B of the D.06-06-066 Appendix 1 matrix for 3 years after the winning bidders are selected. It also describes the terms and conditions of the Los Medanos RA Confirmation Agreement, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states deliveries are to begin; or until one	3 years

**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
LOS MEDANOS ENERGY CENTER ADVICE LETTER
(ADVICE LETTER 4074-E)**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)	2) Data correspond to category in Appendix 1:	3) Complies with limitations of D.06-06-066 (Y/N)	4) Data not already public (Y/N)	5) Lead to partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
						year following expiration, whichever comes first. The negotiations between Los Medanos and PG&E constitute information obtained by PG&E in confidence from a party that is not regulated by the CPUC, the disclosure of which would harm the public interest. The exchange of information during contract negotiation is subject to a confidentiality agreement between Los Medanos and PG&E. Its disclosure would violate the contract, discourage counterparties from executing confidentiality agreements to protect the confidentiality of subsequent negotiations, and impair the contract formation process.	
Document: Confidential Appendix C – Contract Summary							
Entire document	Y	Item VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This confidential appendix is a contract summary that describes terms and conditions from the Los Medanos RA Confirmation Agreement, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.	3 years
Document: Confidential Appendix D – Comparison of Los Medanos Energy Center CHP RA Confirmation Agreement with PG&E's Pro Forma CHP RA Confirmation Agreement							
Entire document	Y	Item VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This confidential appendix is a redline of the Los Medanos RA Confirmation Agreement against PG&E's Pro Forma RA Confirmation Agreement. It contains the terms and conditions from the Los Medanos RA Confirmation Agreement, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states	3 years

**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
LOS MEDANOS ENERGY CENTER ADVICE LETTER
(ADVICE LETTER 4074-E)**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)	2) Data correspond to category in Appendix 1:	3) Complies with limitations of D.06-06-066 (Y/N)	4) Data not already public (Y/N)	5) Lead to partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
						deliveries to begin; or until one year following expiration, whichever comes first.	
Document: Confidential Appendix E – Los Medanos Energy Center CHP RA Confirmation Agreement							
Entire document	Y	Item VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This confidential appendix is the Los Medanos RA Confirmation Agreement which contains the terms and conditions of the agreement, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.	3 years

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

AT&T	Defense Energy Support Center	North America Power Partners
Alcantar & Kahl LLP	Department of Water Resources	North Coast SolarResources
Ameresco	Dept of General Services	Northern California Power Association
Anderson & Poole	Douglass & Liddell	Occidental Energy Marketing, Inc.
BART	Downey & Brand	OnGrid Solar
Barkovich & Yap, Inc.	Duke Energy	Praxair
Bartle Wells Associates	Economic Sciences Corporation	R. W. Beck & Associates
Bloomberg	Ellison Schneider & Harris LLP	RCS, Inc.
Bloomberg New Energy Finance	Foster Farms	Recurrent Energy
Boston Properties	G. A. Krause & Assoc.	SCD Energy Solutions
Braun Blasing McLaughlin, P.C.	GLJ Publications	SCE
Brookfield Renewable Power	GenOn Energy, Inc.	SMUD
CA Bldg Industry Association	Goodin, MacBride, Squeri, Schlotz & Ritchie	SPURR
CENERGY POWER	Green Power Institute	San Francisco Public Utilities Commission
CLECA Law Office	Hanna & Morton	Seattle City Light
CSC Energy Services	Hitachi	Sempra Utilities
California Cotton Ginners & Growers Assn	In House Energy	Sierra Pacific Power Company
California Energy Commission	International Power Technology	Silicon Valley Power
California League of Food Processors	Intestate Gas Services, Inc.	Silo Energy LLC
California Public Utilities Commission	Lawrence Berkeley National Lab	Southern California Edison Company
Calpine	Los Angeles Dept of Water & Power	Spark Energy, L.P.
Cardinal Cogen	Luce, Forward, Hamilton & Scripps LLP	Sun Light & Power
Casner, Steve	MAC Lighting Consulting	Sunrun Inc.
Center for Biological Diversity	MBMC, Inc.	Sunshine Design
Chris, King	MRW & Associates	Sutherland, Asbill & Brennan
City of Palo Alto	Manatt Phelps Phillips	Tecogen, Inc.
City of Palo Alto Utilities	Marin Energy Authority	Tiger Natural Gas, Inc.
City of San Jose	McKenzie & Associates	TransCanada
City of Santa Rosa	Merced Irrigation District	Turlock Irrigation District
Clean Energy Fuels	Modesto Irrigation District	United Cogen
Clean Power	Morgan Stanley	Utility Cost Management
Coast Economic Consulting	Morrison & Foerster	Utility Specialists
Commercial Energy	Morrison & Foerster LLP	Verizon
Consumer Federation of California	NLine Energy, Inc.	Wellhead Electric Company
Crossborder Energy	NRG West	Western Manufactured Housing Communities Association (WMA)
Davis Wright Tremaine LLP	NaturEner	eMeter Corporation
Day Carter Murphy	Norris & Wong Associates	