

**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298**Advice Letter 4409-E, 4409-E-A, 4409-E-B, 4409-E-C**

January 5, 2015

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

**Subject: PG&E's First Quarter 2014 Procurement Transactions Compliance Filing**

Dear Ms. Allen:

On April 30, 2014, Pacific Gas and Electric Company (PG&E) filed a Tier 2 Advice Letter (AL) 4409-E to comply with D.02-10-062, D.03-12-062, D.04-07-028, D.04-01-050, D.04-12-048 and D.07-12-052. Contained in the Advice Letter filing was the Procurement Transaction Quarterly Compliance Report (QCR) for the period January through March 2014 (Q1 2014). The AL is a compliance filing seeking to demonstrate that PG&E's electric and gas procurement transactions for the first quarter of 2014 are in conformance with PG&E's Bundled Procurement Plan approved in D.12-01-033 and D.12-04-046.

On May 20, 2014, the Cogeneration Parties filed a protest to AL 4409-E, raising two broad objections to the AL: 1) the Commission should "enforce existing orders in a consistent, systematic, and non-discriminatory manner for the public release of [confidential procurement] data", and 2) data reported public elsewhere should not be redacted here.<sup>1</sup>

On May 28, 2014, PG&E filed a reply to the Cogeneration Parties' protest, stating that "the protest should be rejected because: 1) the policy issues raised by the Cogeneration Parties regarding the public disclosure of confidential procurement data is outside the scope of this advice letter filing; 2) PG&E's claim regarding confidential periods for certain specific data is appropriate; and 3) PG&E has not publicly released the specific information that the Cogeneration Parties argue has been released elsewhere."

<sup>1</sup> The Cogeneration Parties consist of the California Cogeneration Council, the Cogeneration Association of California, and the Independent Energy Producers Association.

On June 27, 2014, Energy Division suspended the AL to allow additional time to complete the review.

On August 8, 2014, PG&E filed a supplement to the Advice Letter, 4409-E-A, to include the public Independent Evaluator (IE) report for PG&E's second Combined Heat and Power (CHP) Request for Offer (RFO) as a public attachment to AL 4409-E.

On October 15, 2014, PG&E filed an additional supplement to the Advice Letter, 4409-E-B, to correct certain information included in PG&E's original filing (AL 4409-E).

On December 12, 2014, at Energy Division's request, PG&E filed a supplement to the Advice Letter, 4409-E-C to include a public version of new contracts and amendments in Attachment H, where counterparty, location, name of facility, size and length of contracts are disclosed.

### **Disposition**

Energy Division has reviewed the filings by PG&E and concluded that PG&E's Advice Letter 4409-E, 4409-E-A, 4409-E-B, and 4409-E-C are in compliance with PG&E's Bundled Procurement Plan approved in D.12-01-033 and D.12-04-046. Energy Division has reviewed the protests and concluded one issue raised in the protest has merit. Energy Division requested PG&E to file a supplemental to address the issue, and PG&E complied. The other bases for protests are without merit or not based on proper ground for protest of an Advice Letter (see General Order 96-B, Sections 7.6.1 and 7.4.2). These other protests do not demonstrate that PG&E's actions would violate CPUC orders, therefore, PG&E's Advice Letter should be approved.

The Cogeneration Parties oppose PG&E's filing based on three objections. First, the protestant objects to the disparate implementation of the disclosure of Renewable Portfolio Standard (RPS) and conventional procurement data. The protestant requested a delay in the approval of AL 4409-E and an investigation into the feasibility of regular utility updates to an Excel workbook containing conventional generation resource information available on the Commission's website. The review of the QCR filing and the confidentiality issues should be separated from the substance of the subject AL because the confidentiality issues fall outside the scope of permissible bases for protest of an Advice Letter. The protestant can request conventional generation information for which the confidentiality period has expired through the Public Records Act at any time. They can request any document that is not privileged, confidential, or otherwise protected. Energy Division is not legally obligated to post all data that is no longer confidential. The question of whether Energy Division should update its process for posting material that is no longer under the protection of D.06-06-066 can be considered separately, and is outside of the scope of this AL.

Second, the protestant argues that PG&E's request for indefinite confidential treatment of Attachment B counterparty information contravenes Commission policy. Under G.O. 66-C, the Commission allows the protection of information if revelation of this information would place the company at an unfair business disadvantage. PG&E is seeking protection for counterparty credit information under G.O. 66-C. Therefore, PG&E's request to keep Attachment B confidential is granted.

Meredith Allen  
January 5, 2015  
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The protestant also argues that certain information such as counterparty, location, name of facility, size and length of contract in Attachment H, New and Amended Contracts Executed should not be redacted. According to D.14-02-040 and D.06-06-066, pricing and terms and conditions of contracts are confidential for three years. Other information such as counterparty, name of facility, size and length of contract is public immediately. The protestant's argument that PG&E should treat such information as public has merit. Energy Division requested PG&E disclose counterparty, location, name of facility, size and length of contracts in Attachment H. On December 12, 2014, PG&E filed supplemental Advice Letter 4409-E-C to comply with this request.

Third, the protestant objects to PG&E's request for confidential treatment of electric transaction data to the extent that the data is publicly reported to the Federal Energy Regulatory Commission (FERC). For data that has been publicly reported to the FERC, PG&E should disclose such data publicly in the QCR. PG&E has not reported any wholesale electric sales data to FERC in Q1 of 2014; therefore, PG&E has no such data to disclose in the Q1 QCR AL.

One of the Cogeneration Parties' protested issues has been addressed by PG&E. The other issues are without merit or are not the proper basis for a protest to this Advice Letter. Therefore, the protest is denied and PG&E's Advice Letter is approved.

Sincerely,



Edward Randolph  
Director, Energy Division

Cc: Beth Vaughn, California Cogeneration Council  
Michael Alcantar, Counsel to the Cogeneration Association of California  
Nora Sheriff, Counsel to the Cogeneration Association of California  
Steven Kelly, Independent Energy Producers Association



**Meredith Allen**  
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San Francisco, CA 94177

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August 8, 2014

**Advice 4409-E-A**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Supplemental: Procurement Transaction Quarterly Compliance Filing (Q1, 2014)**

Pacific Gas and Electric Company ("PG&E") is submitting this advice letter to the California Public Utilities Commission ("Commission" or "CPUC") related to its Procurement Transaction Quarterly Compliance Report ("QCR") for record period January 1, 2014, through March 31, 2014, ("Q1-2014") to provide supplemental public documentation that should have been included in the original submittal ("Advice 4409-E").

**Background**

PG&E submitted its QCR for Q1-2014 on April 30, 2014 in accordance with Decision ("D.") 03-12-062, Ordering Paragraph 19, which requires that the Quarterly Procurement Plan Compliance Reports be submitted within 30 days of the end of the quarter.

PG&E's Q1-2014 QCR included a discussion of PG&E's second Combined Heat and Power ("CHP") Request-For-Offer ("RFO") in the public narrative and confidential documentation supporting the RFO process and resulting transactions in Confidential Appendix G.

Confidential Appendix G also included the public and confidential versions of the Independent Evaluator ("IE") Report. The public IE report associated with the second CHP RFO should have been included as a public attachment to Advice 4409-E.

**Compliance Items**

Attachment 1 to this supplemental advice letter includes the public IE report associated with the second CHP RFO which was inadvertently excluded from the public version of

PG&E's QCR submittal. The confidential version of this attachment was included in PG&E's original QCR submittal, Advice 4409-E, Confidential Attachment G.

### **Protests**

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than August 28, 2014, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division  
ED Tariff Unit  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, California 94102

Facsimile: (415) 703-2200  
E-mail: EDTariffUnit@cpuc.ca.gov

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

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

Meredith Allen  
Senior Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, California 94177

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

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



# 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:

ELC       GAS  
 PLC       HEAT       WATER

Contact Person: **Shirley Wong**

Phone #: **(415) 972-5505**

E-mail: **slwb@pge.com and PGETariffs@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) #: **4409-E-A**

Tier: **2**

Subject of AL: **Supplemental: Procurement Transaction Quarterly Compliance Filing (Q1, 2014)**

Keywords (choose from CPUC listing): **Compliance, Procurement**

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: **Decision 03-12-062**

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: **No**

Confidential information will be made available to those who have executed a nondisclosure agreement: **N/A**

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: \_\_\_\_\_

Resolution Required?  Yes  No

Requested effective date: **September 7, 2014**

No. of tariff sheets: **N/A**

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

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

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

Tariff schedules affected: **N/A**

Service affected and changes proposed: **N/A**

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

CPUC, Energy Division

ED Tariff Unit

505 Van Ness Ave., 4<sup>th</sup> Floor

San Francisco, CA 94102

E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Pacific Gas and Electric Company

Attn: Meredith Allen, Senior Director, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

Advice 4409-E-A  
August 8, 2014

**ATTACHMENT 1**  
**IE REPORT FOR SECOND CHP RFO**  
**PUBLIC VERSION**

***Pacific Gas and Electric Company  
Combined Heat and Power Request for Offers for Second  
Solicitation  
2013  
Public Version***

***Independent Evaluator  
Bid Evaluation and Selection Process  
Final Report on Ripon Cogeneration LLC Contract***

***April 4, 2014***

***Prepared by  
Merrimack Energy Group, Inc.***



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Appendix A – Detailed Description of the CHP Evaluation Methodology and Process

## I. Introduction

### A. Overview

PG&E entered into a short-term Tolling Power Purchase Agreement (“PPA”) with Ripon Cogeneration LLC (“Ripon”) for 45.6 MW of contract capacity from the Ripon Cogeneration facility,<sup>1</sup> which is an existing Combined Heat and Power (“CHP”) facility.<sup>2</sup> The PPA is for a term of 41 months beginning on January 1, 2015<sup>3</sup> and terminating on May 31, 2018. The PPA replaces an existing Standard Offer 4 Qualifying Facility (“QF”) PPA that was to expire on May 22, 2018. The PPA was executed by the parties on January 29, 2014. Under the new agreement, Ripon will convert from a CHP facility to a fully dispatchable facility. Ripon submitted a proposal to PG&E in response to PG&E’s 2013 CHP Request for Offers (“CHP RFO 2”) issued by PG&E on February 20, 2013.

While the new PPA will not count toward PG&E’s MW targets under the CHP program due to the termination date of the existing contract beyond the Transition Period, PG&E estimates that the conversion of the facility from a traditional CHP unit to a dispatchable facility will produce approximately 11,275 MT of GHG emission reductions toward PG&E’s GHG targets as established by the QF/CHP Settlement. Also, since the proposed contract will be lower cost than the existing SO4 PPA, consumers are expected to benefit from the lower cost replacement contract. [REDACTED]

[REDACTED]

On February 20, 2013, PG&E issued its second Combined Heat and Power Request for Offers Protocol (“CHP RFO 2” or “CHP RFO”). PG&E issued the CHP RFO to achieve its megawatt (“MW”) and Greenhouse Gas (“GHG”) Emissions Reduction Targets, established in the QF/CHP Program Settlement Agreement (“Settlement Agreement” or “Settlement”) which 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. Offers were received on May 2, 2013.

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<sup>4</sup> and about 2.2

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<sup>1</sup> The Veresen Ripon Cogeneration facility is located in Ripon, California. The Facility name is Ripon CHP LM5000.

<sup>2</sup> The Ripon facility has been in operation since 1988 and is under contract with PG&E through May 22, 2018. Ripon reports a nameplate capacity of 49.5 MW in its proposal to PG&E for the CHP RFO 2 solicitation. Ripon is a power generation facility whose principal components include a GE LM5000 engine, ancillary equipment, and a HRSG. Ripon has an existing electrical interconnection at the Tesla 115kv substation. Ripon has provided thermal energy in the form of intermediate pressure steam to a water distillation operation adjacent to Ripon (the host). [REDACTED]

<sup>3</sup> The Expected Initial Delivery Date shall be the earlier of January 1, 2015 or the first day of the month directly following satisfaction of the Conditions Precedent.

<sup>4</sup> The initial program period ends four years after the Settlement Effective Date of November 23, 2011.

million metric tons (“MMT”) of GHG reductions during the Second Program Period.<sup>5</sup> Through this second of three CHP RFOs required during the Initial Program Period, PG&E seeks offers to meet its second CHP MW target of 376 MW.<sup>6</sup>

As noted in the CHP RFO 2 Protocol, 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 CHP 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
- Existing CHP Facilities Converting to Utility Prescheduled Facilities (referred to as Utility Tolling Facilities)
- CHP Capacity Only (“RA Capacity”)<sup>7</sup>

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 2 procurement process.<sup>8</sup>

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 (Short Form), subject to adjustments in requirements to reflect the unique nature of this solicitation.

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<sup>5</sup> The Second Program Period commences from the end of the Initial Program Period and concludes on December 31, 2020. GHG targets change yearly based on the load served by each IOU. A final 2020 GHG Target for PG&E will be set in 2015 pursuant to section 6.4 of the QF/CHP Settlement Term Sheet.

<sup>6</sup> 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”). Prior to issuance of CHP RFO 2, PG&E procured and the CPUC approved 1,013.25 MW toward its CHP MW targets. [REDACTED]

[REDACTED] In addition, the contracts executed and approved via the first CHP RFO total up to 436.25 MW, including 296 MW for the Kern River Cogeneration Company (“KRCC”) agreement and 140.25 MW for the Calpine Los Medanos RA contract. As a result of the contracts executed and approved, PG&E has a requirement to contract for at least 363 MW to reach its target of 1,387 MW of eligible CHP capacity. This does not include any agreements attributable to the CHP RFO 2 solicitation. In addition, PG&E procured 1,1 MMT of the total 2.16 MMT target requirement for GHG emission reductions prior to issuance of CHP RFO 2.

<sup>7</sup> [REDACTED] In Resolution E-4529 (July 31, 2013) which rejected PG&E’s Confirmation for Resource Adequacy Capacity Product with the Los Medanos Energy Center, the CPUC directed that for the second CHP RFO and any subsequent CHP RFO’s no RA-only bids shall be accepted.

<sup>8</sup> Merrimack Energy also served as IE for PG&E’s first CHP RFO solicitation.

## **B. 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, D.09-06-050 and D.10-07-042.

In addition, Section 4.2.5 of the CHP 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.

The role of the IEs in California IOU procurement processes has evolved over the past ten years. 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.<sup>9</sup> 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. This was extended to any long-term contract for new generation in D.06-07-029 (July 21, 2006). 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.

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<sup>9</sup> 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 2007, the use of an IE was required for any competitive solicitation seeking products for a term of more than three months in D.07-12-052 (December 21, 2007). Also, the process for retaining IEs was modified substantially, with IOUs developing a pool of qualified IEs subject to feedback and any recommendations from the IOU's PRG and the Energy Division, an internal review process for IE candidates, and final approval of IEs by the Energy Division.

In 2008, in D.08-11-008, the CPUC changed the minimum term requirements from three months to two years, and reiterated that an IE must be utilized whenever an affiliate or utility bidder participates in the RFO, regardless of contract duration.

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.

In D.10-07-042 issued on July 29, 2010, the Commission reaffirmed the role of the IE and required the Energy Division to revise the IE Template to ensure that the IEs focus on their core responsibility of evaluating whether an IOU conducted a well-designed, fair, and transparent RFO for the purpose of obtaining the lowest market prices for ratepayers, taking into account many factors (e.g. project viability, transmission access, etc.).

This IE report is submitted in conformance with the above requirements and is generally consistent with the requirements outlined in the CPUC's Short Form IE Report Template. As noted by the CPUC, the short form template should be used for transactions that do not require submission of an application for CPUC approval, including those transactions that are documented in the IOU's Quarterly Compliance Report and/or are submitted to the Commission for approval via advice letter.

### **C. Background to the QF/CHP Settlement Agreement**

The Combined Heat and Power Program Settlement Agreement is an extensive agreement that contains a number of requirements and directives for affected utilities. The CHP Settlement, which was negotiated over an extended period by the California IOUs, representatives of California's QFs/CHPs, and ratepayer advocates to replace California's QF PURPA Program, is embodied in the CHP Program Settlement Agreement Term Sheet dated October 8, 2010 ("Settlement Agreement"). The Settlement Agreement requires that the three major California IOUs enter into new power purchase agreements ("PPAs") with eligible facilities under the Settlement in specified MW amounts (subject to various qualifications) with an objective of achieving certain target levels of CHP MWs and greenhouse gas ("GHG") emission reductions.

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. Subsequently, 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.

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.<sup>10</sup> 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.

Specifically, in the Initial Program Period, starting with the Settlement Effective Date, and concluding 48 months afterwards, November 22, 2015, each IOU is required to conduct three Requests for Offers (“RFOs”) with the goals of entering into new PPAs with either CHP facilities or existing CHP facilities that have changed operations to convert to utility pre-scheduled dispatchable facilities (referred to as “Utility Prescheduled Facilities” or “UPFs”). As noted, PG&E’s target for the Initial Program Period is 1,387 MW, with a target of approximately 2.2 MMT in GHG emission reductions to be procured by the end of the Second Program Period. During the Second Program Period, IOUs will procure any portion of the MW targets not procured in the Initial Program Period plus additional CHP capacity to meet GHG emission reduction targets as established by the CPUC in the Long Term Procurement Planning proceeding (“LTPP”).<sup>11</sup>

This new statewide CHP program has a number of goals and objectives which are set forth in Section 1 of the Settlement Agreement. Among them are the retention of existing efficient CHP, support for changes in operations and upgrades of inefficient CHP to provide greater benefits, providing an orderly exit for CHP Facilities that cannot

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<sup>10</sup> 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.

<sup>11</sup> There is also a Transition Period, beginning on the Settlement Agreement effective date and ending on July 1, 2015, a period largely consistent with the Initial Program Period, during which owners of existing CHP Facilities under existing QF contracts or contracts under extension can enter into standard Transition Period power purchase agreements with their existing IOU-buyers (“Transition PPAs”) at standard capacity rates and standard energy rate formulas, with the ability to negotiate rates and terms and conditions for what is called “Additional Dispatchable Capacity” at “a competitive market price.” Settlement Agreement §§ 3.2.3.3 and 3.4.1.2. A seller under a Transition PPA is entitled to terminate it if it is successful in obtaining a new contract through a CHP RFO.

participate, or are unsuccessful, in the new CHP program, retaining existing CHP GHG emissions reductions benefits and incrementally reducing GHG emissions through new or repowered CHP or changes in operations in existing CHP Facilities, and the resolution of long-standing disputes and litigation regarding California's prior QF PURPA Program.

#### **D. Issues Addressed in this Report**

This report addresses Merrimack Energy's assessment regarding the following issues associated with the execution of the replacement Short-Term Tolling PPA ("Replacement PPA") with Ripon Cogeneration LLC. The issues addressed in this report are consistent with the CPUC Independent Evaluator Short Form Report Template.

1. Describe in detail the role of the IE throughout the solicitation (if applicable) and negotiation process;
2. How did the IOU conduct outreach to bidders and was the solicitation robust?
3. Description of PG&E's Least Cost Best Fit methodology consistent with the type of resource evaluated. Evaluate the strengths and weaknesses of the methodology, including a thorough analysis of the RFO results;
4. Evaluate the fairness of the IOU's bidding and selection process (i.e. quantitative and qualitative methodology used to evaluate bids, consistency of evaluation methods with criteria specified in bid documents, etc.);
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 utility to compare affiliate bids or UOG ownership proposals. If a utility selected a bid from an affiliate or a bid that would result in utility asset ownership, explain and analyze whether the utility's selection of such bid(s) was appropriate;
7. Based on the complete bid process, is the IOU contract the best overall offer 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 or 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 the overall market, does the contract merit Commission approval? Explain.

## II. Description of the Role of the IE throughout the Negotiation Process

In compliance with the above requirements, PG&E selected Merrimack Energy to serve as IE for the second CHP RFO in December, 2012. The overall 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 consistency of PG&E’s evaluation methodology and processes with the CPUC Decision 10-12-035 and the Settlement Agreement;
- Review and comment on the fairness, appropriateness, and implementation of:
  - PG&E’s solicitation process;
  - PG&E’s evaluation methodology;
  - PG&E’s selection process.
- Evaluate PG&E’s methodology for evaluating offers to the Solicitation, and analyze the results of PG&E’s evaluation of offers;
- Review and report on whether the outreach that PG&E conducted to potential industry participants (“Participants”) in the solicitation was adequate and robust;
- Identify whether any Participant in the Solicitation received undue information or failed to receive information, that advantaged or disadvantaged a Participant unfairly;
- Provide to PG&E, PG&E’s Procurement Review Group (“PRG”), Cost Allocation Mechanism Group (“CAM”), and the Energy Division of the CPUC presentations of the Consultant’s findings;
- Participate, as needed, in any PRG, CAM and/or supplier meetings and/or teleconferences and/or bidder conferences concerning the Solicitation;
- Review and comment on the draft Solicitation documents and bid evaluation methodology. The draft documents to be reviewed include the protocol document, associated contracts and other data forms and related documents. Review and comment on the fairness of the project-specific negotiations and the reasonableness of the resulting executed contracts, and whether they merit CPUC approval;
- Monitor communications between PG&E and Participants and participate in meetings with Participants, as required;

- Independently evaluate each executed offer and comment on whether the selected contracts are the best overall offers received;
- Be available to testify as an expert witness in any CPUC proceeding regarding review of potential transactions arising from the Solicitation; if appropriate, prepare direct and rebuttal testimony, respond to data requests, and perform other activities required to testify as an expert witness;
- Prepare the IE reports for inclusion in any Advice Letter filings, if necessary;

With regard to the role of the IE, the 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 and in the best interest of consumers. This role generally involves a detailed review and assessment of the evaluation process and the results of the quantitative and qualitative analysis.

### **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 process including providing comments on the protocol documents, monitoring communications between PG&E and the Participants, reviewing internal RFO Evaluation Protocol documents, 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, participating in calls with Participants after receipt of offers, communicating with PG&E's Project Manager on a regular basis to discuss RFO issues, participating in meetings with the PRG, PG&E's Evaluation Committee and PG&E's Steering Committee, and monitoring the contract negotiation process with shortlisted Participants. 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.

Merrimack Energy's role during the contract negotiation process included the following:

- Reviewed contract terms exchanged between the counterparties, term sheets, and emails regarding contract issues and discussed the contract negotiation process and status with PG&E's contract negotiations team;
- Monitored contract negotiation sessions between PG&E and Ripon Cogeneration LLC throughout the negotiation process;
- Participated in the presentation regarding the contract negotiation status regarding the Ripon contract with the PRG on January 14, 2014;

- Conducted assessment of the reasonableness of the PPA provisions relative to the QF/CHP Settlement and other offers submitted in response to PG&E 2013 CHP RFO 2 process;
- Prepared the final IE Report for filing with PG&E's Compliance Filing.

### III. Outreach Activities

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.

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 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 nearly [REDACTED] 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 2 process and the issuance of the CHP RFO Protocol. [REDACTED]

[REDACTED] 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 public website for distribution of information to prospective Participants. The website also included contact information for PG&E should prospective Participants wish to ask any questions or request follow-up information. The website contained all the pertinent solicitation documents, time tables, and a list of questions and answers related to the solicitation. PG&E maintained a website that focuses on the QF/CHP Settlement Agreement and related documents that is accessible to prospective Participants. PG&E held two public webinars for the 2013 CHP RFO prior to submission of offers. A total of 48 questions and answers were posted on the website, including questions from the Participants Webinar. 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.

As noted above, the outreach activities of PG&E can be classified as "active" given that emails about the solicitation process were directly sent to prospective Participants and PG&E held webinars for Participants to seek information and ask any follow-up questions. The only complaint received regarding outreach efforts by PG&E based on discussions with prospective Participants was that PG&E was slow in responding to some questions.



Overall, the IE was of the opinion that the documents and follow-up information presented by PG&E were clear and concise and reflected changes made as a result of the CHP RFO 1 solicitation process. The IE also felt that the documents and follow-up webinars provided detailed information for Participants to decide if they wanted to participate and to understand the requirements for competing.<sup>13</sup> Prospective Participants had multiple opportunities to ask questions and participate in interactive discussions with PG&E staff regarding the Offer Forms, Attachments and contracts.

As noted, PG&E held a CHP RFO Participant’s Webinar on March 14, 2013 followed by the General Participants Offer Form Webinar on March 28, 2013. The Participants Webinar 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.

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.

#### **IV. Description of PG&E’s Least Cost Best Fit Methodology**

For evaluation of offers received in response to its CHP RFO’s, PG&E has stated that it will primarily use a Portfolio Adjusted Value (“PAV”) methodology to evaluate and rank Offers received. PG&E will also evaluate and consider the following criteria:

- Market Valuation (i.e. Net Market Value or NMV);
- GHG Emission Reductions;
- Credit;
- Project Viability;
- Project Technical Reliability;
- Adherence to applicable form PPA; and
- Supplier Diversity.

PAV is intended to represent the value of a resource or Offer in the context of PG&E’s portfolio and contrasts with Market Valuation, which is intended to represent the value of a resource or Offer regardless of PG&E’s portfolio.

Actually, for presenting the results of the evaluation and ranking of offers for the CHP RFO processes, PG&E presents three metrics for consideration:

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<sup>13</sup> As noted in the previous section, feedback from actual Participants was very favorable regarding the clarity of the CHP RFO Protocol documents.

- [REDACTED];
- [REDACTED];
- [REDACTED].

The starting point or primary component of the Least Cost Best Fit methodology is Market Valuation. Market Valuation considers how an Offer's (or contract's) costs compared to its benefits, from a market perspective. [REDACTED]

[REDACTED]

[REDACTED] Both costs and benefits are calculated annually and discounted for the entire contract period back to 2013 dollars per kW. PG&E applies its input assumptions to the projected pricing formulas and operations of the project to calculate benefits for capacity and energy.

Costs and benefits are each quantified and expressed in terms of present value (2013 dollars) per kW-year for contract kW. Net Market Value is Benefits minus Costs. Positive values reflect a situation where net benefits exceed net costs while a negative value reflects a case where costs exceed benefits. The vast majority of the Offers received through the two CHP solicitations have had market values that are negative, reflecting a situation where the costs of the Offer exceed the benefits attributed to the Offer.

In the Solicitation Protocol for the 2013 CHP RFO it is stated that "PG&E will primarily use Portfolio Adjusted Value" ("PAV") to evaluate and rank Offers received in the CHP RFO." Augmenting measures are also considered such as the value of GHG emission reductions as measured by PAV in [REDACTED].

Portfolio Adjusted Value is determined by making adjustments to Market Valuation. [REDACTED]

[REDACTED]

A more detailed description of the CHP evaluation methodology is included as Appendix A.

**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 2013 (and previous) 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. PG&E began the planning for development of the bid evaluation methodology early on in the development of the 2011 CHP RFO (“CHP RFO 1”) 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 in CHP RFO 1 to assess the best approach for evaluating and ranking the expected resources to be submitted by Participants. There have been several lessons learned from the implementation of the two CHP RFO processes which highlight the strengths and weaknesses of the evaluation and ranking methodology. Furthermore, many of the weaknesses identified by Merrimack Energy in its Report on the CHP RFO 1 process have been addressed by PG&E. 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 CHP Offers submitted into the CHP RFO processes. 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 any undue biases 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 PG&E solicitations and have undergone testing and evaluation in previous processes such as the ITRFO’s undertaken by PG&E using the same option pricing model as used for dispatchable offers in this solicitation;

- PG&E has developed and maintained detailed documentation for each of the models used to evaluate CHP projects;
- PG&E uses consistent input assumptions for undertaking the evaluation of all offers;
- [REDACTED]
- The use of Portfolio Adjusted Value (PAV) as the basis for undertaking this evaluation 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 reviewer 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 by resource type or product to allow for a more effective comparison of offers;
- [REDACTED];
- [REDACTED];

**Weaknesses of the Evaluation and Ranking Methodology**

The following reflects the views of the IE with regard to the weaknesses of the bid evaluation and ranking methodology.

- [REDACTED] These adjustors need to be reassessed over time as new information becomes available;

- [REDACTED];
- Given the nature of the QF/CHP Settlement, including the specific targets specified, the evaluation methodology is effective for evaluating and ranking similar resources or product types through a specific solicitation process but may not fully assess the system-wide impacts of a resource or portfolio of resources on PG&E’s overall system resource portfolio. [REDACTED];
- Qualitative factors have proven not to be very significant in the final evaluation and selection of resources in each of the two CHP RFOs.

**Bid Evaluation Results and Selection of the Short List**

The offers received were evaluated based on the above methodology. [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]<sup>14</sup>

While the bid evaluation output results prepared by PG&E included all eligible offer alternatives (including the required alternatives where the bidder absorbs the GHG risk and the case where the GHG risk is flowed through to PG&E), for purposes of presenting the results, PG&E has presented the summary results of the evaluation [REDACTED]<sup>15</sup>.

In addition, for Participants which offered a hybrid option (i.e. a combination of units which are traditional CHP units and those which are converted to utility dispatchable

<sup>14</sup> [REDACTED]  
<sup>15</sup> [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]





[Redacted text block]

<sup>16</sup> According to Section 4.8.1.2 of the CHP Settlement Agreement, “New PPAs with Utility Prescheduled Facilities (not Legacy PPA Amendments) count towards the MW Targets if the existing QF expires before the end of the Transition Period.

<sup>17</sup> [Redacted text block]



[REDACTED]

**Exhibit 2: PG&E Proposed Short List**

[REDACTED]

The IE also presented its observations with regard to the CHP RFO 2 process to the PRG/CAM [REDACTED].

**Fairness of the Bid Evaluation and Selection 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.

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 fully engaged in 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, to 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. Furthermore, as previously noted, at the IE's request [REDACTED]

This allowed the IE to review the evaluation results for each project in a timely manner and identify any perceived inconsistencies in the evaluation results. All issues and questions raised by the IE relative to the evaluation of offers was resolved by PG&E prior to selection of the shortlist.

[REDACTED]

[REDACTED]

After review of the bid evaluation methodology and testing of the results, the IE concluded 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 and results. Although dispatchable products or offers with dispatchable components generally ranked higher in the evaluation, the IE does not view that result to be attributed to any bias in the models but to the value of dispatchability for resources of this type since dispatchable resources can be “run” when the variable cost of power from the facility is below the market price. On the other hand, standard CHP options are generally forward contracts that provide power to the market when available. [REDACTED]

[REDACTED]

Based on the IE's involvement, the IE concludes 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 Manager and in the IE's 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. The IE 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. The discussions with Participants who were not selected focused on upcoming opportunities for the counterparty to compete in and also solicited feedback on which PG&E could improve its process. The IE concludes that all participants were treated fairly and equitably.

PG&E implemented the evaluation criteria and methodologies as outlined in the RFO and the internal RFO Evaluation Protocols in a fair and consistent manner. PG&E followed its Least Cost Best Fit methodology as described in the CHP RFO protocols and Participants Webinar. PG&E's bid evaluation criteria did not change after bids were received.

## **V. Contract Negotiations Process**

As noted, during the contract negotiation process Merrimack Energy had the opportunity to review mark-ups of the contracts exchanged between PG&E and Ripon Cogeneration LLC, emails exchanged by the parties outlining each parties position and attend negotiation sessions between the parties. The Agreement is for the purchase and sale of Capacity, Energy and all other products that are available from the Facility. The PPA is based upon PG&E's Tolling Agreement contained in the CHP RFO 2 protocol.

Ripon Cogeneration has been under contract with PG&E under a Legacy QF PPA which was executed in 1988. The Legacy QF PPA is a Standard Offer Four ("SO4") PPA. The key provisions of the SO4 PPA are provided in Exhibit 3 below.

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<sup>20</sup> While it is typical for a new power project to secure financing over a 15 to 20 year terms, the contract term for new CHP is only 12 years.

**Exhibit 3: Provisions of Legacy PPA**

<b>PPA Provision</b>	<b>Description of Provision</b>
Type of Contract	Standard Offer Four Power Purchase Agreement
Facility	The Facility has a nameplate rating of 49.5 MW
Contract Term	Contract is effective until 5/22/2018
Energy Payment	Short-run Avoided Cost (currently 8.125 MMBtu/MWh) plus \$3.05/MWh as Variable Operation and Maintenance Costs (“VOM”).
Capacity Pricing	Firm (with Performance Bonus Factor): 42 MW at \$194.50/kW-year.  As-Delivered: 42 -44.5 MW: \$188/kW-year; standard above 44.5 MW (\$47/kW-year)  [REDACTED] [REDACTED]
Performance Bonus Factor	Maximum of 1.17  [REDACTED]
Performance Requirements	Demonstrate firm capacity at 80% of Peak and Partial Peak hours in each month to earn full Capacity Payment (PBF determined in June – August time frame)
Operating Hours	[REDACTED]

Ripon submitted two proposals in response to PG&E’s CHP RFO 2.

1. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED];
  
2. [REDACTED]  
[REDACTED].

The first proposal above is the offer selected for the short list in this solicitation. Ripon’s original proposal included a capacity price of [REDACTED]  
[REDACTED]. Ripon also proposed a Variable Operations and Maintenance charge of [REDACTED]. In addition, the proposal contained a Fired-hour charge per unit of [REDACTED]

[REDACTED]. The proposed heat rate of the unit under ISO conditions [REDACTED].

As part of its process to contact all Participants who submitted offers shortly after receipt of offers, PG&E held a conference call with Veresen Ripon on [REDACTED] to discuss its offer. [REDACTED]

As illustrated on Exhibits 1 and 2, [REDACTED]

After notifying Ripon that its [REDACTED] had been selected for the shortlist, Ripon and PG&E first executed a non-disclosure agreement. PG&E then initiated a call with Ripon on July 8, 2013 to discuss the short listed offer and the next steps in the process. [REDACTED]

The parties had follow-up communications the following week. [REDACTED]

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<sup>21</sup> This initial estimate of GHG emission reductions was based on data for 2011 and 2012, which was the last two years of data available at the time the offer was submitted.

[Redacted text block]

[Redacted text block]

- [Redacted text];
- [Redacted text].

[Redacted text block]

**Exhibit 4: Revised Offer Analysis Based on October 18, 2013 Forward Curves**

[Redacted content area]

[Redacted]

[Redacted]

1. [Redacted]
2. [Redacted]
3. [Redacted]
4. [Redacted]
5. [Redacted]
6. [Redacted]
7. [Redacted]
8. [Redacted]
9. [Redacted]
10. [Redacted]
11. [Redacted]
12. [Redacted]
13. [Redacted]

[Redacted]

[Redacted]

**Exhibit 5: Revised Offer Analysis Based on November 1, 2013 Forward Curves**

[Redacted]

[Redacted]

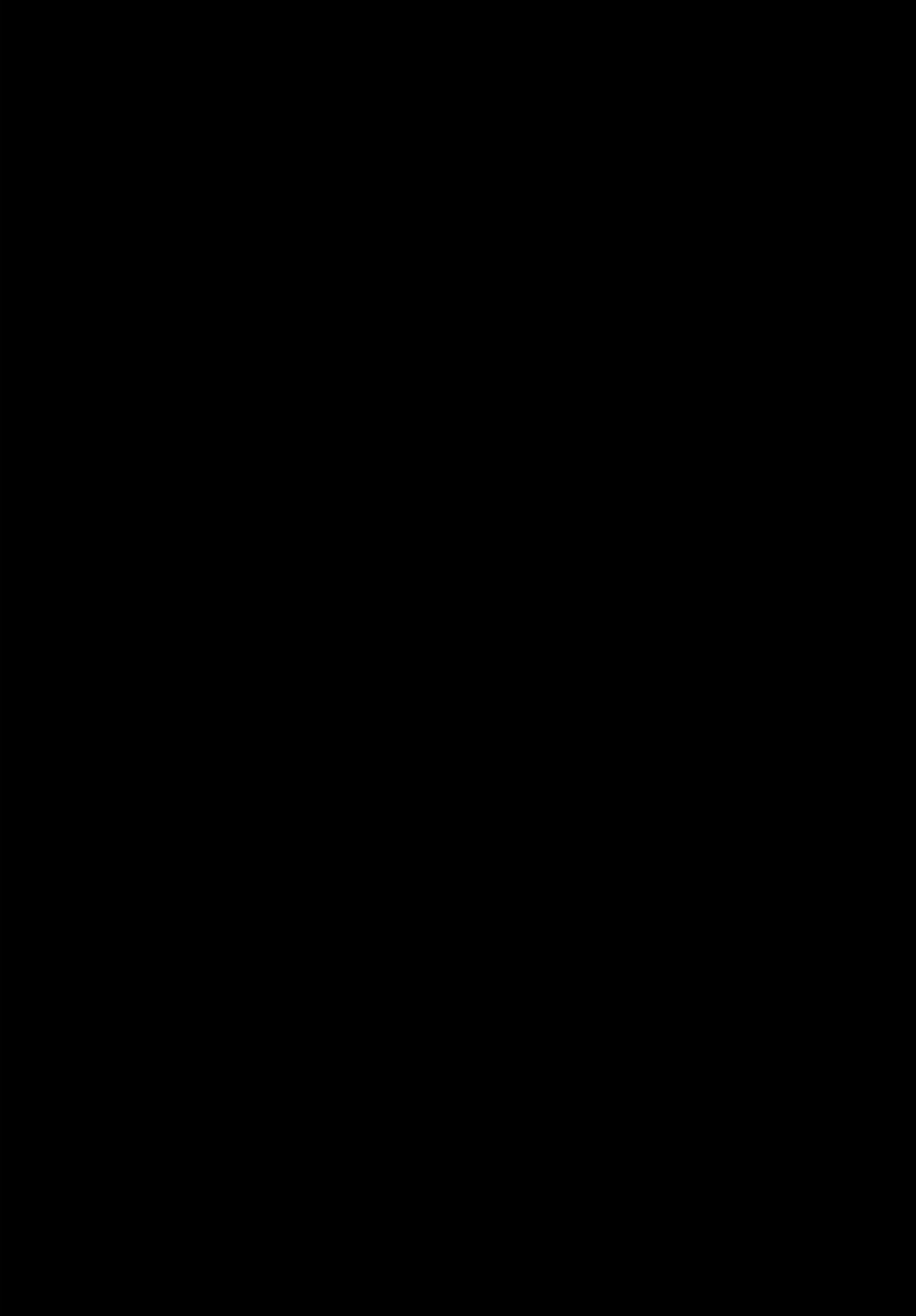
[Redacted]

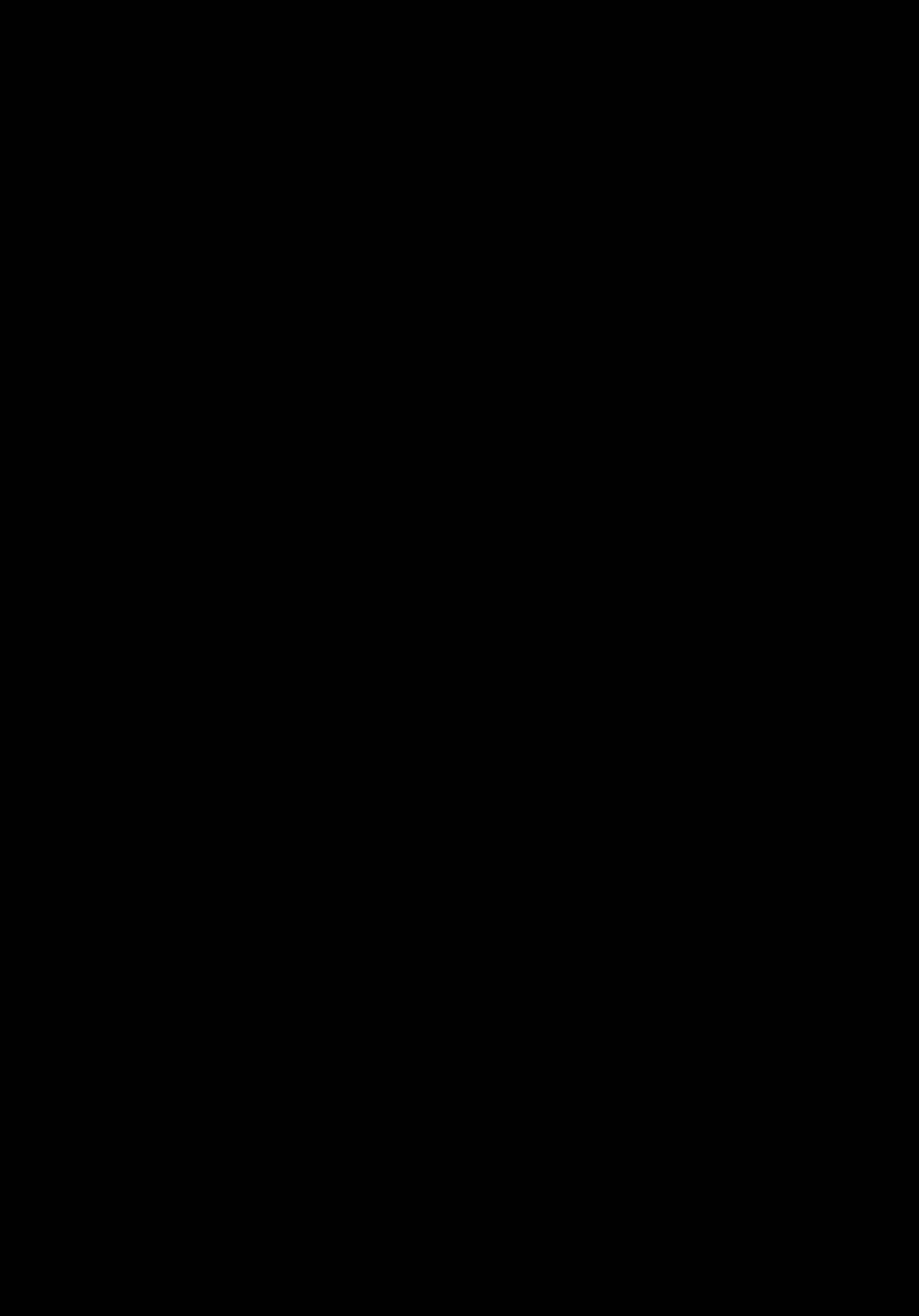
[Redacted]

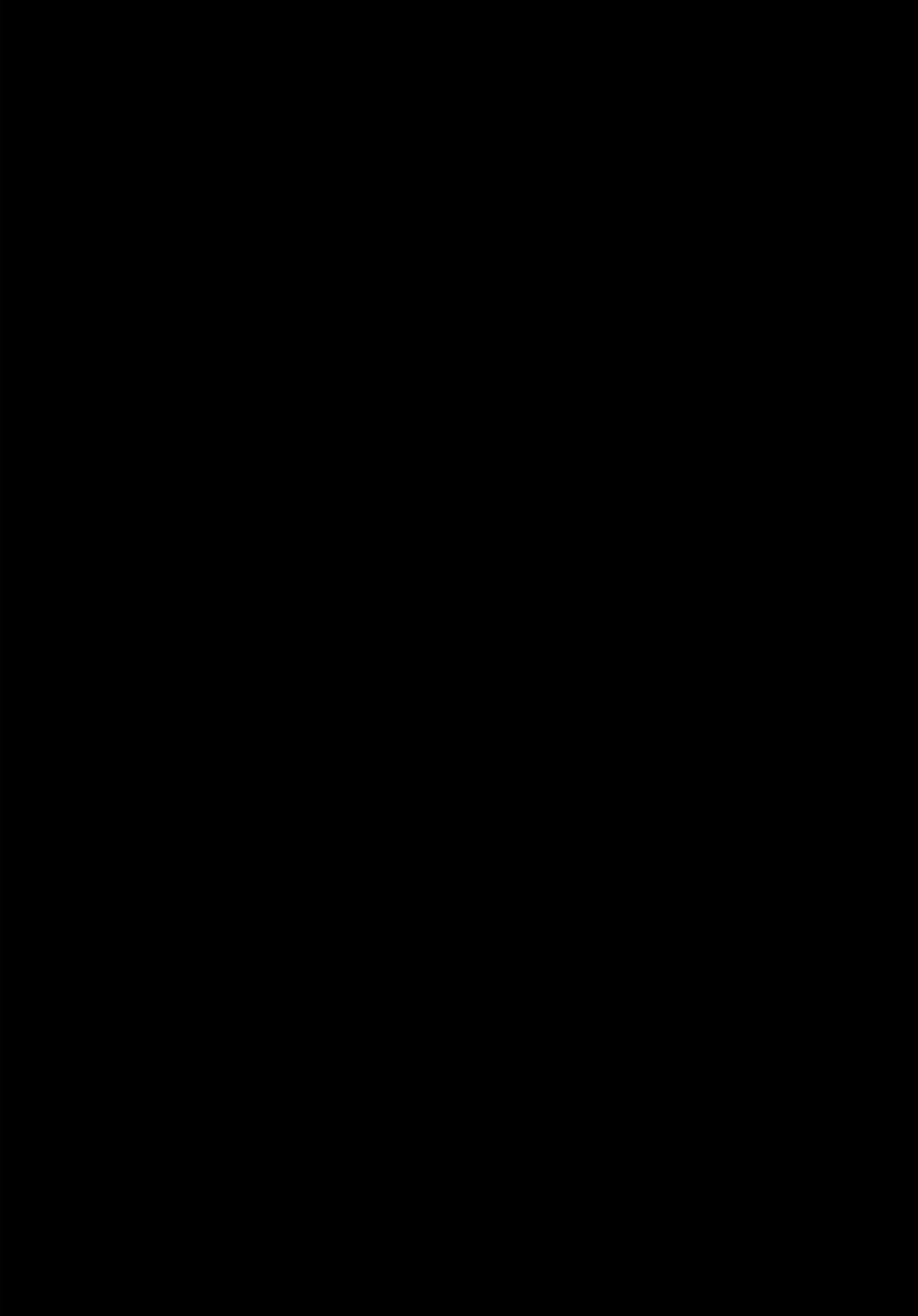
**Exhibit 6: Final Contract Provisions**

[Redacted]

22 [Redacted]





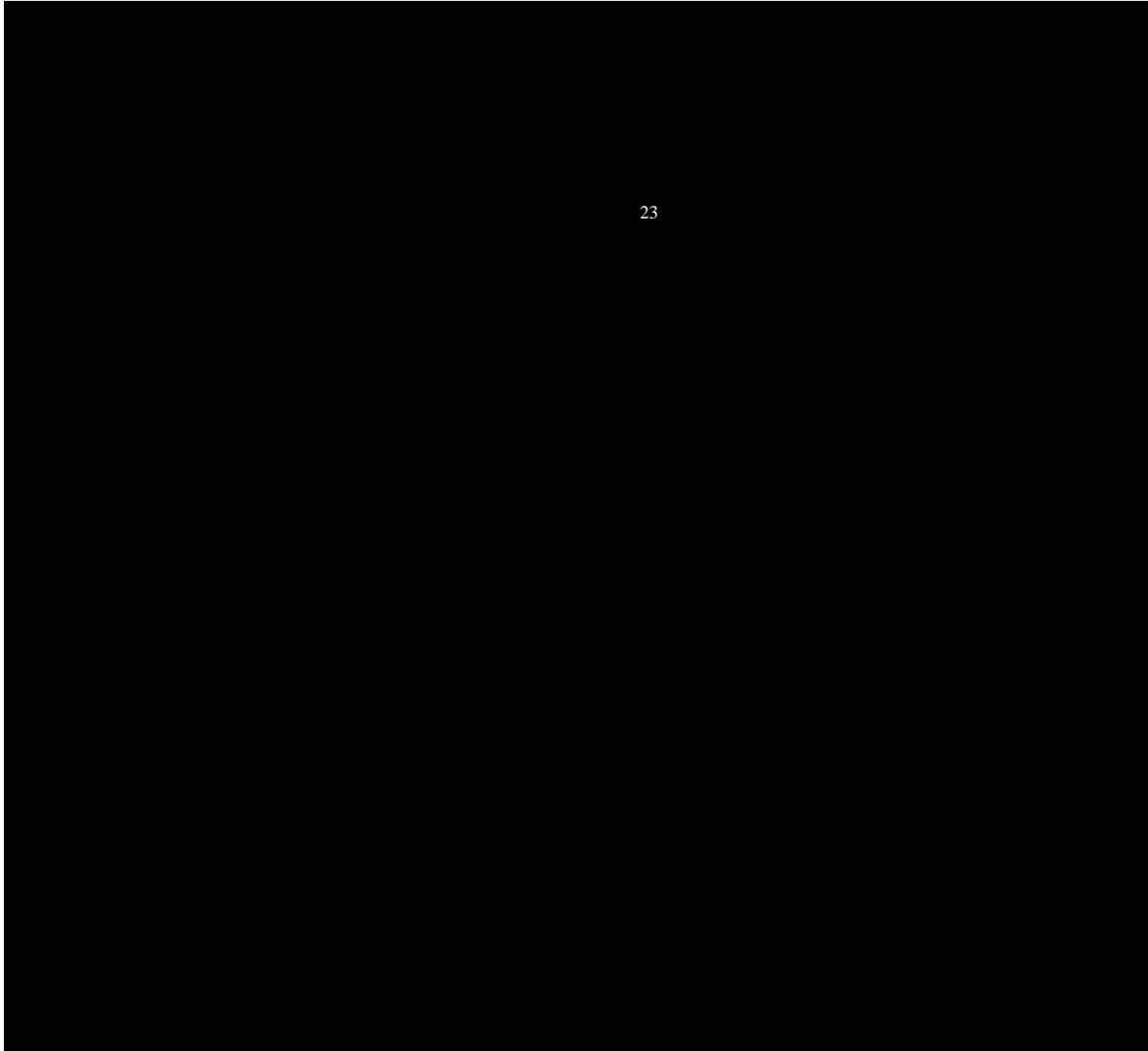




In addition to the contract provisions described above, the Agreement also includes Appendix II which provides a description of the facility, unit and operational limitations. Exhibit 7 below is designed to provide relevant information regarding the operational

characteristics of all units, including data from Appendix II of each Agreement as well as information provided with the Offer.

**Exhibit 7: Summary of PPA Appendix II for Each Project**



23

In conclusion, the IE is of the opinion based on review of the communications between the counterparties and monitoring of contract negotiations that the negotiation process was a fair and equitable process. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

---

23 [REDACTED]  
[REDACTED]

## **VI. Safeguards to Compare Affiliate Bids or Utility Owned Generation Options**

This section is not applicable since this is a third-party non-affiliate transaction.

## **VII. Recommendation For Contract Approval**

The CPUC has issued Resolutions approving several contracts between the IOU's in California and CHP facilities under the QF/CHP Settlement. The Resolutions have addressed the criteria used by the Energy Division to assess and evaluate the PPAs. The criteria include:

- Consistency with D.10-12-035, which approved the QF/CHP Program Settlement including:
  - Consistency with the Definition of CHP Facility and Qualifying Cogeneration Facility;
  - Consistency with CHP Request for Offers (“RFO”);
  - Consistency with MW Counting Rules;
  - Consistency with GHG Accounting Methodology;
  - Consistency with Cost Recovery Requirements.
- Need for Procurement;
- Contract Pricing/Cost Reasonableness;
- Public Safety;
- Project Viability;
  - Technology
  - Bidder Experience
  - Credit and collateral
  - Permitting, site control and other site-related matters
  - Fuel Status
  - Transmission upgrades
- Consistency with Emissions Performance Standard;
- Consistency with D.02-08-071 and D.07-12-052 which require Procurement Review Group (“PRG”) and Cost Allocation Mechanism (“CAM”) Group participation.

In this section of the Report, the IE addresses the relevant criteria identified in the IE Template relative to the contracts as submitted in this Advice Letter filing.

### **A. Consistency with D.10-12-035 which approved the QF/CHP Program Settlement**

The project underlying the contract which is the subject of this Compliance filing is an existing CHP facility which has operated as a qualifying facility since 1988. The facility has provided thermal energy in the form of intermediate pressure steam to a water distillation operation adjacent to Ripon (the “Host”). The project operated as a Qualifying Cogeneration Facility and met the definition of “cogeneration” under the Public Utilities



are approved and will provide 154,186 MT<sup>24</sup> of GHG reductions, while Midway Sunset is approved and is expected to contribute a total of 160,642 MT of GHG emission reductions. Also, the Chevron Richmond contract is expected to provide 39,644 MT, Ripon will contribute no CHP MW's toward PG&E's target. However, the additional GHG emission reductions of 11,275 MT [REDACTED].

### C. Cost Reasonableness

The pricing and contract term agreed to by the parties is contained in the PPA which is the subject of this Compliance filing. As noted in this report, the pricing and contract term for the Ripon project has changed over the course of the RFO process. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] the highest value of any project.<sup>25</sup>

### D. Project Viability

The Ripon project is an existing project with an existing PPA with PG&E. The project went into service in 1988, is fully permitted and has site control. Ripon has an existing electrical interconnection at the Tesla 115 kV substation. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## VIII. Bid Selection Recommendation

The IE was in general agreement with PG&E's overall shortlist selection, as well as the initial focus on the priority group of projects for which PG&E would initiate contract negotiations, including the Ripon offer. PG&E's shortlist was fairly inclusive and represented most of the eligible products requested.

## IX. Conclusions and Recommendations

### A. Conclusions and Observations

Merrimack Energy has the following conclusions and observations about the 2013 CHP RFO solicitation process based on its role of IE in this process:

<sup>24</sup> The IE requested that PG&E provide the detailed methodology and inputs for each of the projects for review and assessment. PG&E provided the back-up information requested by the IE and the IE was then able to verify the results prepared by PG&E to support the GHG emission reductions requested.

<sup>25</sup> The Ripon project does not have a PAV/CHP kW value since the project will provide no countable CHP MW.

- The contract with Ripon Cogeneration provides an excellent balance in risk between the counterparties and provides relative value for PG&E and its customers in terms of positive Net Market Value and GHG emission reductions.

██  
██

██████████ While the project provides no CHP MWs to meet PG&E's target, it does provide GHG emission reductions of 11,275 MT through a change in operations from CHP to a Utility Prescheduled project. PG&E has also negotiated additional value through negotiation of lower prices and more operational flexibility than originally offered. Based on the totality of project value relative to other projects on the short list as well as GHG emission reductions, the IE therefore concludes that the contract warrants CPUC approval;

- Both parties negotiated diligently and methodically to complete a contract that is favorable to both parties. PG&E's project team was aggressive with regard to pricing throughout the negotiations, continuously reminding all shortlisted counterparties that the process was a very competitive process with more MW on the shortlist than PG&E intended to acquire. Although it appeared on several occasions that contract negotiations would be permanently terminated, the parties sought solutions to keep the negotiation process moving and eventually reached agreement on the contract;
- The Ripon facility is an operating project that has been in operation since 1988. The facility is interconnected to the CAISO grid, have a reliable record of operations, and are viable projects based on site control, status of permits, and access to fuel supply;
- 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 design and implementation of the solicitation process. As IE, one of Merrimack Energy's objectives was to ensure the solicitation requirements conformed to the directives in the Settlement. The IE concludes that PG&E's solicitation process does conform to Settlement requirements;
- Based on the IE's assessment of the evaluation process relative to the criteria outlined, it is the IE's 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, follow-up contacts, and contract negotiations;

- 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 and the Participants Offer Form Conference call to review and explain how to complete the Offer Form. For this solicitation PG&E contacted all Participants subsequent to submission of offers to discuss the details of the offer and to ensure PG&E had a clear understanding of the offer for purposes of accurately accounting for all required offer information prior to beginning the evaluation process. PG&E also debriefed the Participants who did not make the shortlist and were interested in participating in a debriefing session. While the PG&E project team refused to get into specifics about the exact reasons for lack of success, the project manager identified in a general way the reasons for failure of the project to be successful. PG&E and the IE also used the opportunity for discussion with the counterparties regarding input into future solicitations. Several counterparties provided general feedback, the vast majority of which was very positive. However, the counterparties were not very specific about ways to improve the process;
- The CHP RFO Protocol and associated documents were generally clear and concise and were not overly burdensome. In the IE's view, the solicitation materials were sufficiently clear to communicate to perspective Participants what was required by PG&E to conduct its evaluation. 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. The evaluation results led to a shortlist ranking that included a range of project types, including traditional CHP offers, offers converting to UPF options, and hybrid facilities. [REDACTED], the IE views this outcome as being based on the higher cost of these options rather than any biases in the evaluation process. Based on the results of the evaluation, the IE also concludes that the evaluation methodology treats all types of products/resources fairly with no undue benefit to one type of product or resource. 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 consistent set of inputs and assumptions and reflected a complete offer;
- PG&E generally followed its protocols with regard to the ranking and selection of offers. PG&E did not deviate from the stated protocol information with regard to the application of factors described in the evaluation protocols;

- 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. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED];
- From a qualitative perspective, all qualitative factors that would be used in the evaluation process were clearly identified and described in the CHP RFO protocol;
- PG&E was very active and diligent in attempting to uncover value and opportunities for additional CHP MW and GHG emission reductions within several projects. These activities were positive and beneficial for attempting to meet QF/CHP Settlement objectives;
- The PRG and CAM 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 CAM group to provide an update on PG&E’s status toward meeting its CHP and GHG reduction targets and to identify PG&E’s plan to issue CHP RFO 2 [REDACTED]; provide a review of the offers received and describe the CHP RFO 2 evaluation methodology and criteria [REDACTED]  
[REDACTED]; present the results of the CHP RFO 2 evaluation and ranking and discuss PG&E’s proposed shortlist [REDACTED]; provide an update on the transaction status with regard to the shortlisted offers selected for the shortlist from CHP RFO 2 [REDACTED]; and provide an update on the status of negotiations with [REDACTED];
- 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.

## Appendix A

### Detailed Description of the CHP Evaluation Methodology and Process

This Appendix to the report provides a more in-depth discussion of the components of the evaluation methodology and process utilized by PG&E to evaluate CHP offers received in response to PG&E's 2013 CHP RFO and describes how each eligible product in the 2013 CHP RFO process is evaluated. In addition, this section includes a description of the input assumptions utilized for evaluation purposes.

#### 1. Market Valuation

Market Valuation assessment is the starting point for PG&E's bid evaluation methodology for the CHP RFO process, 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 and offer ranking process. PAV represents adjustments to Market Valuation 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. [REDACTED]

[REDACTED]

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Costs and Benefits are each quantified and expressed in terms of present value (2013 dollars) per kW-year for contract kW's. Net Market Value is Benefits minus Costs. Positive values reflect a situation where benefits exceed costs while a negative value reflects a case where costs exceed benefits. The majority of the Offers received through the 2013 CHP RFO solicitation have market values that are negative reflecting a situation where costs of the offer exceed the benefits attributed to the Offer.<sup>27</sup>

[REDACTED]

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

26 [REDACTED]  
27 [REDACTED]

**Pro Forma PPA Offers – [REDACTED]**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Utility Pre-scheduled Offers – [REDACTED]**

[REDACTED]

[REDACTED]

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<sup>28</sup> [REDACTED]

<sup>29</sup> [REDACTED]

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

Hybrid Offers: part pro forma, part utility pre-scheduled offer – [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## 2. Input Assumptions

The input assumptions are integral to the evaluation of the offers received since the input assumptions are used not only to model the offer pricing structures proposed but also the benefits associated with each project for purposes of assessing the costs and benefits of each offer.

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

[REDACTED]  
[REDACTED]  
[REDACTED]

[Redacted text block]

### 3. Portfolio Adjusted Value (PAV)

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 independent of PG&E's portfolio.

[REDACTED]

As noted above, the starting point for PAV is Market Valuation. Market Valuation

[REDACTED]

1. **Location** – [REDACTED]

a. **SP15**

**Energy** – [REDACTED]

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<sup>30</sup> [REDACTED]

[Redacted text block]

**Capacity** – [Redacted text block]

[Redacted text block]

[Redacted text block]

**b. Other Locations within CAISO Footprint**

Energy – [REDACTED]  
[REDACTED]  
[REDACTED]

Capacity – [REDACTED]  
[REDACTED]  
[REDACTED]

**2. Energy Firmness**

Energy – [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Capacity – [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**3. Renewable Energy Credit (REC) Value**

[REDACTED]  
[REDACTED]

4. **Curtailment** – [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

- [REDACTED]  
[REDACTED]  
[REDACTED]
- [REDACTED]  
[REDACTED]  
[REDACTED],
- [REDACTED]  
[REDACTED]  
[REDACTED],
- [REDACTED]  
[REDACTED]  
[REDACTED].

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

5. **Adjusted Transmission Cost Adder**

- a) [REDACTED]  
[REDACTED]

- b) [REDACTED]  
[REDACTED]

[Redacted]

**6. CHP MW**

[Redacted]

[Redacted]

[Redacted]

**7. Final PAV**

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

**GHG Emission Protocol**

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.<sup>31</sup> For an existing 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 at a time differentiated heat rate. For an existing CHP facility with no change in operations, GHG emissions reduction is zero. [REDACTED]

[REDACTED]

### Technical Reliability and Project Viability

This evaluation protocol specifies how PG&E will govern the evaluation process for Technical Reliability and Project Viability. The evaluation criteria will have six components:

- (1) Plant Configuration and Construction – [REDACTED]  
[REDACTED]  
[REDACTED];
- (2) Plant performance – [REDACTED]  
[REDACTED];
- (3) Plant operations – [REDACTED]  
[REDACTED];
- (4) Plant Financing – [REDACTED]  
[REDACTED];
- (5) Plant Emissions – [REDACTED]  
[REDACTED]  
[REDACTED]
- (6) Environmental Assessment – [REDACTED]  
[REDACTED].

<sup>31</sup> 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.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[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, or the RA Confirmation, including an assessment of the major changes to the CHP RFO PPA, Utility Tolling PPA, and RA confirm, 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. For this criterion, PG&E is maintaining the same three point rating system of plus, zero and minus and have pre-specified the conditions under which each ranking is achieved.

**Credit**

An Offer's credit evaluation score 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. [REDACTED]

[REDACTED]

[Redacted]

**Supplier Diversity**

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). The evaluation methodology will use the information provided by the Participant. [Redacted]

[Redacted]

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32 [Redacted]

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

AT&T	Douglass & Liddell	Occidental Energy Marketing, Inc.
Alcantar & Kahl LLP	Downey & Brand	OnGrid Solar
Anderson & Poole	Ellison Schneider & Harris LLP	Pacific Gas and Electric Company
BART	G. A. Krause & Assoc.	Praxair
Barkovich & Yap, Inc.	GenOn Energy Inc.	Regulatory & Cogeneration Service, Inc.
Bartle Wells Associates	GenOn Energy, Inc.	SCD Energy Solutions
Braun Blaising McLaughlin, P.C.	Goodin, MacBride, Squeri, Schlotz & Ritchie	SCE
CENERGY POWER	Green Power Institute	SDG&E and SoCalGas
California Cotton Ginners & Growers Assn	Hanna & Morton	SPURR
California Energy Commission	In House Energy	San Francisco Public Utilities Commission
California Public Utilities Commission	International Power Technology	Seattle City Light
California State Association of Counties	Intestate Gas Services, Inc.	Sempra Utilities
Calpine	K&L Gates LLP	SoCalGas
Casner, Steve	Kelly Group	Southern California Edison Company
Center for Biological Diversity	Linde	Spark Energy
City of Palo Alto	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
City of San Jose	Los Angeles Dept of Water & Power	Sunshine Design
Clean Power	MRW & Associates	Tecogen, Inc.
Coast Economic Consulting	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
Commercial Energy	Marin Energy Authority	TransCanada
Cool Earth Solar, Inc.	McKenna Long & Aldridge LLP	Utility Cost Management
County of Tehama - Department of Public Works	McKenzie & Associates	Utility Power Solutions
Crossborder Energy	Modesto Irrigation District	Utility Specialists
Davis Wright Tremaine LLP	Morgan Stanley	Verizon
Day Carter Murphy	NLine Energy, Inc.	Water and Energy Consulting
Defense Energy Support Center	NRG Solar	Wellhead Electric Company
Dept of General Services	Nexant, Inc.	Western Manufactured Housing Communities Association (WMA)
Division of Ratepayer Advocates	North America Power Partners	