PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

I.D. # 11951
RESOLUTION E-4529 (Rev.2)
June 27, 2013

R E D A C T E D
R E S O L U T I O N

Resolution E-4529. Pacific Gas and Electric Company ("PG&E") requests the Commission approve the Confirmation for Resource Adequacy Capacity Product that PG&E has executed with Calpine Energy Services, L.P.

PROPOSED OUTCOME: This Resolution approves, without modification, PG&E's Confirmation for Resource Adequacy ("RA") Capacity Product, which is an Agreement for Combined Heat and Power Resource Adequacy Capacity Product for 280.5 MW of combined heat and power resource adequacy capacity associated with the Los Medanos Energy Center.

SAFETY CONSIDERATIONS: As an existing and operational facility, there are no incremental safety implications associated with this contract beyond the status quo.

ESTIMATED COST: The contract costs are confidential at this time, because the Los Medanos Energy Center Agreement for Combined Heat and Power Resource Adequacy Capacity Product contains competitive pricing terms for capacity. As this is a capacity-only transaction, there are no pricing components for energy deliveries, ancillary services, or other variable costs.

By Advice Letter 4074-E filed on July 2, 2012.

SUMMARY

Pacific Gas and Electric Company's ("PG&E's") Confirmation for Resource Adequacy ("RA") Capacity Product, which is a capacity-only Power Purchase Agreement ("PPA") with Calpine Energy Services, L.P. ("Calpine" or "Seller") for 280.5 megawatts ("MWs") of capacity associated with the Los Medanos

Energy Center ("LMEC Agreement"), complies with the requirements of the Combined Heat and Power Request for Offer ("CHP RFO") competitive solicitation under the Qualifying Facility and Combined Heat and Power Program Settlement Agreement ("QF/CHP Settlement") and is approved without modification.

On July 2, 2012, PG&E filed Advice Letter ("AL") 4074-E requesting Commission approval of a new capacity-only PPA with the Los Medanos Energy Center ("LMEC") for sixty months, or five years. The PPA between PG&E and the Seller will become effective upon the approval of this resolution. LMEC is a 561 MW nameplate capacity natural gas topping-cycle combined heat and power facility located in Pittsburg, California. LMEC was self-certified as a Qualifying Facility ("QF") in Federal Energy Regulatory Commission Docket No. QF01-14-000 on October 31, 2000 and is an existing CHP QF. In total, 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, use the steam for process heating at their respective steel mill and chemical processing facilities.

Under the LMEC Agreement, PG&E contracted for 280.5 MWs of LMEC's available 561 MWs of total capacity. PG&E's LMEC Agreement thus contributes 280.5 MW towards the MW target assigned to PG&E under the QF/CHP Settlement. The MW accounting rules that apply to LMEC can be found in Section 5.2.3.2 of the QF/CHP Settlement Term Sheet ("Term Sheet"). The LMEC facility will count as neutral (0) with respect to PG&E's Greenhouse Gas ("GHG") Emissions Reduction Target of 1.96 MMTCO2e. The calculation metrics behind the LMEC facility's GHG accounting can be found in the Term Sheet Section 7.3.3.1, which states that an Existing CHP facility with no change in operations, such as LMEC, "is neutral for GHG accounting purposes."

LMEC has been operating since July 2001 and thus has over ten years of experience operating as a CHP facility. Although it has sold to Investor Owned Utilities ("IOUs") previously, it was not listed in any of the Cogeneration and Small Power Production Semi-Annual Reports of the three IOUs. This is the first capacity-only CHP contract Calpine has signed with PG&E. Under the PG&E-LMEC Agreement, PG&E will purchase the CHP Attributes, RA Attributes,

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.

In filing Advice 4074-E, PG&E provided multiple confidential appendices detailing the pricing terms and conditions for the LMEC facility's capacity-only power purchase agreement. Upon reviewing the Independent Evaluator's ("IE's") report, staff found the PG&E-LMEC Agreement just and reasonable. A summary of the capacity-only PPA, pricing details, and an analysis of the benefits can be found in the Confidential Appendix A of this Resolution.

BACKGROUND

On December 16, 2010, the Commission adopted the Qualifying Facility and Combined Heat and Power Program Settlement Agreement ("QF/CHP Settlement") with the issuance of Decision ("D.") 10-12-035. The QF/CHP Settlement resolves a number of longstanding issues regarding the contractual obligations and procurement options for facilities operating under legacy and new QF and CHP contracts.

The QF/CHP Settlement establishes MW procurement targets and GHG emissions reduction targets the investor-owned utilities are required to meet by entering into contracts with eligible CHP facilities, as defined in the QF/CHP Settlement. Pursuant to D. 10-12-035, the three large electric IOUs must procure a minimum of 3,000 MW of CHP and reduce 4.8 million metric tonnes ("MMT") of GHG emissions consistent with the California Air Resources Board ("CARB") Scoping Plan.

Among other things, D. 10-12-035 updates methodologies and formulas for calculating the Short Run Avoided Cost ("SRAC") energy price for QFs to be used in certain pro forma PPAs for QFs under 20 megawatts ("MW"), Transition PPAs, amendments to existing QF PPAs, and Optional As-Available PPAs. The SRAC methodology under the QF/CHP Settlement includes:

(1) By January 1, 2015, transitioning SRAC pricing from a formula that is based in part on administratively-determined heat rates to a formula that solely uses market heat rates;

(2) IOU-specific time-of-use ("TOU") factors to be applied to energy prices to encourage energy deliveries during the times when the energy is most needed by customers;

(3) A locational adjustment based on California Independent System Operator ("CAISO") nodal prices; and,

(4) Pricing options based on whether a cap-and-trade program or other form of GHG regulation is developed in California or nationally.

Per Section 4.2.1 of the Term Sheet, the IOUs are required to conduct RFOs exclusively for CHP resources. Under the QF/CHP Settlement's purview, PG&E will need to acquire a minimum of 1,387 MW of CHP capacity[1] under power purchase agreements through three RFOs and other procurement alternatives during the Initial Program Period, as defined by the Term Sheet. 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.

In its first CHP RFO solicitation, 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. PG&E made it a mandatory requirement for the participants submitting a capacity-only offer to have, or 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.

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 over the terms of the offer. On May 30, 2012, PG&E and Calpine executed the LMEC Agreement for CHP capacity from LMEC.

[1] QF/CHP Settlement Term Sheet Section 5.1.

NOTICE

PG&E declared that a copy of the Advice Letter 4074-E was mailed and distributed in accordance with Section IV of General Order 96-B. PG&E sent the Advice Letter electronically and via U.S. mail to the parties on the service list for R.10-05-006, which was the Commission's Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.

PROTESTS

Advice Letter 4074-E was timely protested by Shell Energy North America (US), L.P. ("Shell Energy"), the Marin Energy Authority ("MEA"), and the Alliance for Retail Energy Markets ("AReM"), collectively ("Joint Parties") on July 23, 2012. PG&E filed a response to the protest of the Joint Parties on July, 30, 2012.
The Joint Parties protested the LMEC Advice Letter for two reasons: (1) the QF/CHP Settlement Agreement does not contemplate or permit "capacity-only" contracts with CHP facilities; (2) PG&E's proposed allocation of a portion of the Resource Adequacy ("RA") capacity (and associated RA capacity costs) from the LMEC Agreement to direct access ("DA") and community choice aggregation ("CCA") customers through the cost allocation mechanism ("CAM") was not approved in D.10-12-035,[2] which adopted the QF/CHP Settlement.

<u>Joint Parties' First Claim: the QF/CHP Settlement Agreement does not contemplate or permit "capacity-only" contracts with CHP facilities.</u>

In their protest the Joint Parties stated that the QF/CHP Settlement did not contemplate or permit capacity-only contracts. The Joint Parties also stated that LMEC should not have been a part of PG&E's CHP RFO and instead should have bid into PG&E's all source solicitation, competing with other RA capacity-only products. In addition, the Joint Parties indicated that PG&E revised its CHP RFO protocol to accept offers for capacity-only products, and that procurement of capacity-only product provides no CHP energy deliveries or GHG emissions reduction benefits. Due to the various reasons mentioned above, the Joint Parties respectfully requested the Commission to reject AL 4074-E.

[2] D.10-12-035, as modified by D. 11-03-051 and D.11-07-010.

In its response to the Joint Parties, PG&E stated that because the QF/CHP Settlement provided each IOU with multiple procurement pathway options to meet their respective MW and GHG targets, PG&E included a capacity-only product in the scope of its CHP RFO. PG&E also stated that the LMEC Agreement for RA capacity is a resource that can be procured through PG&E's CHP RFO to meet its CHP MW target; accordingly, the QF/CHP Settlement requires PG&E to allocate its RA benefits and costs to DA and CCA customers through a CAM-like ratemaking mechanism. PG&E added that the fact that the net capacity cost of a capacity-only contract is equal to the contract price does not obviate the need or undermine the ability to allocate the contract costs to DA and CCA customers. For all the reasons mentioned above, PG&E asked that the Joint Parties protest be rejected.

We address the Joint Parties' first claim in the "Discussion" section below.

Joint Parties' Second Claim: CAM treatment cannot be afforded to a capacity–only contract

The Joint Parties stated that unless a contract includes costs for both energy and capacity-related products, a "net capacity cost" cannot be calculated and cannot be subject to the CAM to which CCAs and ESPs are subject. The Joint Parties claim that PG&E may not use the CAM for allocating the cost of the LMEC Agreement because there is no way to determine if the capacity costs to be imposed under this contract reflect a reasonable netting of energy and ancillary services.

In its response PG&E defined the net capacity costs of the CHP Program as "the total costs paid by the IOU under a contract less the value of energy and ancillary services supplied to the IOU under the contract". PG&E further explained that under the LMEC Agreement, it receives no energy or ancillary services; therefore, the value of energy and ancillary services supplied is zero. As a result, the net capacity costs of the LMEC agreement are equal to the total costs of the contract.

We discuss the Joint Parties' second claim in the "Discussion" section below.

DISCUSSION

On July 2, 2012, PG&E filed Advice Letter AL 4074-E requesting Commission approval of the Confirmation for Resource Adequacy Capacity Product, which is a capacity-only PPA for 280.5 MWs of capacity associated with the Los Medanos Energy Center ("LMEC Agreement").

Specifically, PG&E requests that the Commission:

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 Emissions Reduction Target

5. Finds that PG&E's costs under the LMEC Agreement shall be recovered through PG&E's Energy Resource Recovery Account ("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

b. The net capacity costs of the LMEC Agreement will and recovered through PG&E's New System Generation Balancing Account ("NSGBA") from all benefiting customers.

c. Actual LMEC Agreement costs will be recovered through ERRA, less net capacity costs recovered in the NSGBA.

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.

Energy Division evaluated the LMEC PPA based on the following criteria:

- Consistency with D.10-12-035 which approved the QF/CHP Settlement including:
  - Consistency with CHP RFOs, eligibility requirements
  - Consistency with MW accounting
  - Consistency with GHG accounting
  - Consistency with cost recovery requirements
- The need for LMEC's procurement
- Cost reasonableness
- Project viability
- Consistency with the Emissions Performance Standard
- Consistency with D.02-08-071, which requires Procurement Review Group (PRG) participation

In considering these factors, Energy Division also considers the analysis and recommendations of an Independent Evaluator, if available.[3] In this case, we have reviewed and weighed the conclusions from the IE report in determining the outcome of this resolution.

[3] Per Settlement Term Sheet 4.3.2: "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."

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

On December 16, 2010, the Commission adopted the QF/CHP Settlement with the issuance of D.10-12-035. The Settlement resolves a number of longstanding issues regarding the contractual obligations and procurement options for facilities operating under legacy and new QF contracts. Among other things, it establishes methodologies and formulas for calculating SRAC to be used in new QF Standard Offer contracts. Furthermore, the Settlement allows for bilaterally negotiated contracts with QFs to determine alternative energy and capacity payments mutually agreeable by relevant parties and subject to CPUC approval. Finally, the Settlement establishes a MW and GHG target for the IOUs. The IOUs must procure 3,000 MW of CHP and 4.8 MMT of greenhouse gas emission reductions in proportion to the load of the IOU and non-IOU Load Serving Entities. The QF/CHP Settlement became effective on November 23, 2011. In evaluating the consistency of the LMEC agreement, we have considered consistency with the CHP RFO eligibility requirements, MW accounting, GHG accounting and cost recovery.

Consistency with CHP Requests for Offers (CHP RFOs) - Capacity-Only PPA

Per Section 4.2 of the Settlement Term Sheet, the IOUs are directed to conduct Requests for Offers for CHP resources as a means of achieving their respective MW and GHG Emissions Reduction Targets. Per Section 4.2.2, CHP facilities with a nameplate Power Rating of greater than 5 MW may bid into the CHP RFO. In addition, the CHP facility must meet the State and Federal definitions[4] for cogeneration and the Emissions Performance Standard.

The LMEC facility is eligible to participate in the CHP RFO per the Term Sheet Section 4.2.2.1 for the following reasons: With an operating capacity of 561 MW, LMEC exceeds the 5 MW threshold; LMEC satisfies the definition of "CHP Facility" in the LMEC Agreement; LMEC self-certified itself as a QF with FERC.

[4] State definition of cogeneration per Public Utilities Code Section 216.6. Federal definition of qualifying cogeneration per 18 C.F.R. §292.205 implementing PURPA.

As a condition of the LMEC Agreement, Calpine covenants that LMEC is a CHP Facility, as defined, as of the agreement's Effective Date; the LMEC Agreement also provides that if LMEC is unable to maintain Qualifying Cogeneration Facility status because it has lost its steam host, PG&E will have the option to terminate the agreement.

As an eligible QF CHP resource per Section 4.2.2 of the Term Sheet, LMEC successfully bid into PG&E's CHP RFO as a qualifying CHP facility, was shortlisted and selected as a successful bid in PG&E's competitive CHP solicitation. For these reasons, we find the LMEC agreement consistent with the requirements for CHP eligibility, granting LMEC the ability to participate in the utility's CHP requests for offers.

In their protest, the Joint Parties raise a number of arguments for why RA-only contracts are ineligible under the QF/CHP Settlement. Each of these arguments is identified below along with a response.

Joint Parties' Claim #1: The settlement does not expressly indicate that capacity-only contracts are allowed. Capacity only contracts should not be considered under the Settlement because this type of contract was never anticipated.

The failure of the Settlement to expressly identify RA-only contracts as eligible is not tantamount to a prohibition on RA-only contracts as the Joint Parties suggest. As noted above the facility appears to be eligible under Section 4.2.2.1 of the QF/CHP Settlement Term Sheet. Additionally, to the degree the intent of the Settlement is to create a robust market for CHP and provide revenue generating opportunities that facilitate its deployments and operation, we find this contract consistent with that objective. Compensation for RA provides an additional revenue stream which will enhance the economics of operating a CHP facility, all else equal. We further note that the goals of the Settlement include goals that are explicitly denominated in units of capacity, specifically megawatts. This is at least suggestive that capacity procurement is not inconsistent with the objectives the Settlement was intended to achieve. <u>An RA capacity-only product is one of several contract options that the IOUs may offer in the CHP RFO, in accordance with Settlement Term Sheet Section 4.2.6. Capacity-only procurement is consistent with the goals and objectives of the QF/CHP Settlement.</u>

Joint Parties' Claim #2: As a capacity-only contract, the project does not provide any GHG benefits and so is inconsistent with the Settlement given the GHG reduction targets the IOUs are required to meet. Joint Parties are correct that the Settlement includes both MW and GHG targets, however the fact that a given contract does not contribute toward the GHG goals does not render a project ineligible to participate in, or inconsistent with the Settlement. The Settlement specifically includes projects that do not contribute toward the GHG targets because one of the goals is to ensure the continued operation of existing CHP facilities. Section 7.3.3 of the QF/CHP Settlement Term Sheet enumerates the project types/circumstances whereby a given project is treated as neutral for GHG accounting purposes under the Settlement. The underlying facility in the instant case would be treated as neutral for GHG accounting purposes as an existing CHP facility with no change in operations, pursuant to Section 7.3.3.1 of the Term Sheet, irrespective of whether the contract included the sale of energy and/or ancillary services. In other words, even if the contract included sale of energy or ancillary services, it would have been neutral for purposes of GHG accounting under the Settlement.

Joint Parties' Claim #3: CAM treatment, involving the allocation of Net Capacity Costs, cannot be applied to an RA only contract because these contracts offer no energy or ancillary service value.

The fact that the energy value and ancillary service value under the contract are equal to zero does not mean the net capacity cost cannot be calculated. Rather it simply means the net capacity cost equals the contract cost. Pursuant to the QF/CHP Settlement, the net capacity costs of this contract should be allocated pursuant to the cost allocation rules defined in Section 13.1.1 of the QF/CHP Settlement Term Sheet.

This argument seems to suggest that 1.) The ability to calculate a "net" value requires that any elements that are being netted out to have non-zero values. This argument appears to fly in the face of basic algebra. In the case of the Net Capacity Cost calculation, Section 13.1.2.2 of the Term Sheet states, "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". Mathematically, this would be represented as follows:

$$NCC = TCC - E - AS$$

Where:

NCC = Net Capacity Cost
TCC = Total Contract Cost
E = Energy Value
AS = Ancillary Service Value

If the Energy Value and the Ancillary Service Value are both equal to zero, this equation resolves to:

NCC = TCC

In other words, the Net Capacity Cost can be calculated, it just happens to be equal to the Total Contract Cost in this instance.

Consistency with MW accounting - Capacity-Only PPA

Per Section 5.2.3.2 of the Term Sheet, the MW accounting for CHP PPAs executed with QFs who formerly sold to the IOUs and were never listed in any QF Semi-Annual Report will be based on the contract nameplate in the most recent QF or CHP PPA. On October 12, 2006, PG&E and Calpine executed a previous RA Confirmation Agreement for LMEC listing the contract quantity, though not the contract nameplate, as 560 MW. Pursuant to this 2006 Confirmation Agreement, Calpine formerly sold a Resource Adequacy Capacity Product to PG&E between 2008-2011. While LMEC's gross nameplate is 620.3 MW, the maximum operating capacity, or "PMax," is 561 MW. LMEC's Reportable Capacity, based on the facility's maximum operating capacity, is 561 MW. Since PG&E is only purchasing 50% of the facility's capacity, 280.5 MW (i.e., .5x 561 MW= 280.5 MW) of this CHP-eligible facility will count toward PG&E's MW Target.

After reviewing PG&E's LMEC entry into the QF/CHP reporting template, staff determined that the MW accounting for the LMEC facility is consistent with the MW accounting methodology set forth by the QF/CHP Settlement.

<u>Pursuant to the QF/CHP Settlement Term Sheet Section 5.2.3.2, 280.5 MW from the LMEC facility shall count toward PG&E's CHP MW targets.</u>

Consistency with Greenhouse Gas accounting - Capacity-Only PPA

As noted above, Section 7.3.3.1 of the QF/CHP Settlement Term Sheet states: "Existing CHP Facility with no change in operations: Regardless of contract status (i.e., a new PPA with an Existing CHP Facility or one that sells to the market) the CHP Facility is considered neutral for GHG accounting purposes." As an existing CHP facility, LMEC would be counted as a "GHG neutral" CHP facility for GHG accounting purposes under the QF/CHP Settlement. In accordance with the QF/CHP reporting template, the LMEC facility does not count towards PG&E's GHG goals as set forth by the QF/CHP settlement.

<u>This contract does not contribute to PG&E's GHG Emissions Reduction Target because the underlying facility is an existing CHP facility with no change in operations, which, under the Settlement is counted as GHG neutral.</u>

Consistency with cost recovery requirements

In D.10-12-035, Ordering Paragraph 5, the Commission ordered the IOUs to purchase CHP resources on behalf of the Electricity Service Providers and Community Choice Aggregators. Given this, Section 13.1.2.2 of the Term Sheet, directs the IOUs to QF/CHP Settlement 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 on a non-bypassable basis. Section 13.1.2.2 goes on to define how Net Capacity Costs are calculated and directs that LSEs serving DA and CCA load should receive a pro-rata share of the RA credits procured via the CHP Program.

It is also worth noting that ESP and CCA customers will be allocated RA credits commensurate to the proportion of the net capacity costs that they pay as required by the terms of Section 13.1.2.2.

Because the LMEC Agreement is being entered into pursuant to the terms of the QF/CHP Settlement, and in order to satisfy the QF/CHP Settlement requirements for MW Targets which includes procurement on behalf DA and CCA customers, it is appropriate that the costs associated with this agreement be allocated consistent with Section 13.1.2.1 of the QF/CHP Settlement Term Sheet.

In its AL filing 4074-E, PG&E proposed that the net capacity costs associated with the LMEC Agreement be proportionately allocated annually to all bundled, DA, CCA, and specified Departing Load Customers and be collected on a non-bypassable basis. Staff finds this reasonable as the net capacity costs incurred will be billed via PG&E's CAM rate and recovered through PG&E's 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. This appears consistent with the requirements of Section 13.1.2 of the Term Sheet.

In AL 4074-E, PG&E requested that all costs associated with the LMEC Agreement be recoverable through its Energy Resource Recovery Account ERRA. This request appears consistent with AL-3922-E, approved by the Commission in November, 2011, which authorized PG&E to establish the New System Generation Balancing Account ("NSGBA") to recover the net capacity costs of CHP contracts as it was directed by D.10-12-035.

PG&E's request to recover costs in accordance with Section 13.1.2.2 of the Term Sheet and AL-4074-E is consistent with the directives of the QF/CHP Settlement.

Need for Procurement

Per the Settlement Term Sheet Section 5.1.2, PG&E's MW procurement goal for Target A is 630 MW. As of PG&E's October, 2012 CHP Semi-Annual Report filing, PG&E has procured 783 MW[5] and 814,817 MT of GHG Reductions towards its targets. While PG&E will be over-procured by 153 MW beyond its Target A goal of 630 MW, after reviewing the bids in PG&E's CHP RFO, staff recognizes that while there is no immediate need to procure LMEC for PG&E's Target A goals, given the overarching 1,387 MW target for PG&E the procurement of LMEC can be justified as reasonable. Importantly, nothing

[5] The 783 MWs of CHP includes non-CPUC approved contacts, since the Settlement Term Sheet Section 8.2.2 states that the reporting template includes all executed contacts with the IOU.

precludes the IOUs from exceeding their Target A capacity amounts and there may be strategic value in procuring in excess in the initial RFO to the extent lower cost projects are available.

Cost reasonableness

Upon the approval of this resolution, 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. Although LMEC 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. Therefore, comparison to a previous PPA is not applicable in ascertaining the cost reasonableness of the LMEC agreement. The LMEC offer was one of the most competitive bids received in PG&E's CHP RFO in terms of ratepayer benefit. Based on this comparison, the LMEC Agreement costs are determined to be reasonable. However, we have reviewed all the bids that PG&E received in their first CHP RFO and found the LMEC Agreement's capacity costs to be reasonable.

Similarly the IE concludes that the evaluation methodology used to evaluate the cost and benefits of the LMEC agreement 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.

Since the LMEC Agreement does not provide any GHG value towards PG&E's GHG targets, staff's cost reasonableness evaluation did not include the GHG element that may have been included with the PPA. However, as discussed in detail in the confidential appendix, when compared to other bids in PG&E's CHP RFO, the LMEC agreement is reasonable and ranks amongst the highest value bids that were submitted.

The PG&E CHP RFO Protocol identifies and describes the procedures for evaluation of offers. To evaluate offers, PG&E considered 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. PG&E also considered 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

Upon receiving the bids in its CHP RFO, PG&E ranked the values based on its specific evaluation metrics. Based on their relative ranking, selected offers were shortlisted, and offers were awarded to the facilities as a result of the competitive solicitation.

After reviewing and evaluating all the bids that entered into PG&Es CHP RFO, we agree with PG&E's selection of the LMEC facility. Given the targets set forth by the QF/CHP Settlement, PG&E's agreement with Calpine was one of the best offers for the ratepayers out of all the bids that participated in PG&E's competitive solicitation. For additional information on the contract cost reasonableness, please refer to Confidential Appendix A.

The CHP settlement specifies that when facilities are contracted via non-RPS contracting vehicles available in the settlement, the costs and benefits of those contracts are to be allocated to all benefitting customers. This in general refers to the Cost Allocation Mechanism (CAM) process that the Commission uses when contracting for system capacity that will help overall system reliability.

This procurement contract (between PG&E and Los Medanos Energy Center) complicates the allocation of costs and benefits, given the nature of Los Medanos Energy Center and it's location outside of SCE's service area. As a Local RA resource in PG&E's territory, SCE (or any customer in SCE's territory) are unable to capture that Local RA value yet are paying for it. Likewise, PG&E's customers are unable to capture that value since they are not receiving allocation of costs and benefits. In addition, it is unclear whether SCE's customers would be able to use system RA capacity from the plant given the restrictions on transfers over Path 26 (the Path 26 counting constraint adopted in D.07-06-029).

In light of these difficulties, the Commission finds that allocation of this contract via the CAM process is unworkable and unlikely to result in equitable or efficient cost and benefit allocation and do not adopt it for this contract.

<u>The terms of the LMEC Agreement for a capacity-only PPA will provide the CHP Attributes, the RA Attributes, the Local RA Attributes, and the Capacity</u>

Attributes equivalent to 280.5 MW associated with the LMEC Agreement to the ratepayers.

Project Viability

Los Medanos Energy Center is an existing qualifying facility and has operated since 2001 and is interconnected to the CAISO-controlled grid at the transmission level. As an existing QF, the project faces minimal to no project development risk. According to PG&E, no project development is expected or planned since the LMEC is an existing facility.

Los Medanos Energy Center is an existing CHP facility with a proven history of performance and therefore is a viable project.

Consistency with the Emissions Performance Standard

California Public Utilities Code Sections 8340 and 8341 require that the Commission consider emissions costs associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers. D.07-01-039 adopted an interim Emissions Performance Standard ("EPS") that establishes an emission rate for obligated facilities to levels no greater than the greenhouse gas emissions of a combined-cycle gas turbine power plant.

Pursuant to Sections 4.10.4.1 of the CHP Program Settlement Term Sheet, PPAs greater than five years that are submitted to the CPUC in a Tier 2 or Tier 3 advice letter must be compliant with the EPS. The EPS applies to all energy contracts that are at least five years in duration for baseload generation, which is defined as a power plant that is designed and intended to provide electricity at an annualized plant capacity factor greater than 60 percent.

In D.07-01-039, the Commission adopted a GHG EPS which is applicable to a contract for base load generation, as established by SB 1368 and defined in D.07-01-039, having a delivery term of five years or more. All combined-cycle natural gas power plants that were in operation as of June 30, 2007 are deemed to be in compliance with the EPS.[6] The LMEC facility is "deemed to be in

[6] D.07-01-039, pp. 4-5.

compliance" with the EPS per D.07-01-039 Finding of Fact 16, as it is a combined-cycle natural gas facility that was in operation prior to June 30, 2007.

The capacity-only LMEC PPA is not subject to the EPS under D.07-01-039 as it was 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.

Consistent with D.02-08-071, PG&E's Procurement Review Group ("PRG") was notified of the Capacity-Only PPA.

PG&E's PRG consists of representatives from: the Division of Ratepayer Advocates, The Utility Reform Network, California Department of Water Resources, Coalition of California Utility Employees, PG&E's Independent Evaluators, and the Commission's Energy and Legal Divisions.

Negotiations on the LMEC PPA between Seller and PG&E began in April 30, 2012 and were completed on May 30, 2012. 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 has complied with the Commission's rules for involving the PRG.

Independent Evaluator Review

PG&E retained Independent Evaluator (IE) Merrimack Energy Group, Inc ("Merrimack Energy") to oversee the filing of Advice 4074-E and to evaluate the overall merits for Commission approval of the LMEC Agreement. AL 4074-E included a public and confidential Independent Evaluator's report. In its report, the IE determined that[7]:

[7] Pacific Gas and Electric Company Combined Heat and Power Request for Offers for First Solicitation 2011 - 2012, June 29,2012 , p.1.

1. PG&E provided adequate outreach to potential sellers,
2. The CHP RFO evaluation and selection methodology was appropriate,
3. Administration of the offer evaluation process was just and fair,
4. Treatment of affiliate bids were handled properly,
5. The need for procurement was reasonable in achieving the settlement goals

IE concludes that PG&E selected the appropriate bids from the CHP RFO and acted without prejudice and therefore, recommends Commission approval of LMEC PPA. While the IE's non-confidential observations and commentary are interspersed across the relevant portions of the public version of the resolution, more information on the findings of the IE Report is included in Confidential Appendix A.

The Independent Evaluator concurs with PG&E's decision to execute the LMEC Agreement with Calpine Energy Services, L.P. and finds that the LMEC PPA merits Commission approval.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on March 4, 2013. Comments on the draft were due March 25, 2013.

There were a total of seven comments to the publicly circulated draft resolution E-4529. The parties that commented on the circulated draft resolution are as follows:

1. Pacific Gas and Electric ("PG&E")
2. California Cogeneration Council ("CCC")
3. Shell Energy North America (US), L.P. ("Shell Energy"), the Marin Energy Authority ("MEA"), and the Alliance for Retail Energy Markets ("AReM"), collectively ("Joint Parties")

4. Independent Energy Producers ("IEP")
5. Southern California Edison ("SCE")
6. Marin Energy Authority ("MEA")
7. Cogeneration Association of California ("CAC")

Below staff identifies and summarizes each issue that the parties have raised in their respective comments and further discusses staffs position if it had not been addressed in the publicly circulated draft resolution.

1. Pacific Gas and Electric ("PG&E") Comments

PG&E commented on the draft resolution and further revised its comments by filing a secondary "corrected" version. In its comments PG&E strongly supported the draft resolution in general, endorsed IEP's comments and urged the Commission to reject the CAC, CCC and Joint Parties comments. PG&E also requested to have some clerical errors fixed in the circulated draft resolution. Staff has made a number of non-substantive changes to the draft resolution to correct for minor errors and enhance clarity.

Specifically PG&E stated the following comments:

A. RA-Only CHP transactions may be procured through a CHP RFO and be counted toward PG&E's CHP Settlement MW Target.
B. LMEC facility eligible to participate in the CHP RFO.
C. The Commission should reject attempts to disqualify CHP RA procurement by the unilateral addition of eligibility criteria.
D. CHP RA capacity meets the objectives of the CHP Program.
E. FERC's Termination of the mandatory PURPA purchase obligations provides no support for rejecting RA-only contributions toward CHP MW Targets.
F. LMEC Agreement is Eligible for Cost Recovery and that Net Capacity Costs of the LMEC Agreement Should be Allocated Pursuant to the Ratemaking Mechanisms Defined in Section 13.1.2.2 of the Term Sheet.

Since PG&E did not raise any new issues and because the resolution covers all the areas that the PG&E comments pertain to staff did not make any substantive changes based on PG&E's comments.

2. California Cogeneration Council ("CCC") Comments

The CCC timely commented on the draft resolution. In its comments the CCC asks the Commission to keep RA-only procurement separate from the CHP program and reject PG&E's request to count the LMEC RA Contract against its MW Targets. The bases for CCC's request for rejection are as follows (staff response to each argument can be found directly below the comment summary):

A. The Commission should reject circumvention of its RA program policies by making clear that the CHP program may not be used for RA-only procurement.

   a. Staff has already addressed this issue in the publicly circulated draft resolution. The counting rules to meet MW target are set forth in Settlement Term Sheet Section 5.3. The eligibility criteria for participating in a CHP RFO are set forth in Term Sheet Section 4.2.2. Since the LMEC facility meets the eligibility requirements of the Settlement, as well as the MW counting rules of the Settlement the LMEC facility can be counted towards PG&E's MW targets as well as participate in the CHP program as an eligible facility.
   b. Simply because there is a separate RA Program does not mean that RA can only be purchased pursuant to that program. Furthermore, there are other programs such as California's RPS Program with which CHP procurement overlaps. Renewable CHP facilities are eligible to participate in both programs and count towards the CHP goals; it would not stand to reason that MWs procured from a renewable CHP facility could not count towards the Settlement goals. Likewise, that argument does not stand for RA-only contracts.

B. Section 4.2.2.1 of the term sheet cannot be determinative as to whether RA-only contracts count against CHP program MW targets. The CCC further commented that: (1) counting RA-only contracts against PG&E's MW target is contrary to the commission's reasoning in Decision 10-12-035; (2) other provisions of the Settlement Term Sheet and the IOU's failure to identify the LMEC facility make clear that RA-only contracts were not intended to count against the MW targets.
   a. Section 4.2.2.1 of the Term Sheet to determine the eligibility of entities to participate in the CHP RFOs. The title of Section 4.2 is "CHP RFOs." Thus, the purpose of that section is to outline the CHP

RFOs' procurement method. The title of Section 4.2.2 is "Eligibility." Therefore, the purpose of that section is to determine what facilities are eligible to participate in the CHP RFOs. Section 4.2.2.1, under the "Eligibility" header, indicates that the following CHP Facilities are eligible to participate in a CHP RFO:

i. "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 definition of cogeneration under California Public Utilities Code §216.6 and the Emissions Performance Standard established by Public Utilities Code §8341 (Senate Bill 1368). A CHP Facility must meet the federal definition of a qualifying cogeneration facility under 18 CFR §292.205 implementing PURPA."[8]

b. This argument is unsupported as the Term Sheet does not specify capacity types for any other type of contract besides a long-term contract. Given this inconsistency, a product type's absence from Section 4.2.2 is of no consequence in terms of the CHP Facility's eligibility to participate in the CHP RFO. PG&E incorporated the EEI Confirm into its CHP RFO following the CHP RFO Bidders' Conference, as authorized by Term Sheet Section 4.2.6.6. Since the bidders were all aware of the possibility to bid into the solicitation as an RA Confirmation only resource PG&E is within the bounds of the Settlement Term Sheet and therefore, can procure LMEC as an RA-only resource.

c. Since the Settlement Term Sheet was approved by Decision 10-12-035, and for the reasons mention throughout the resolution, the RA-only LMEC confirmation can count towards PG&E's MW targets and is not contrary to Decision 10-12-035.

C. The creation of viable contracting opportunities through the CHP program was a key component of FERC's termination of the mandatory purchase obligation.

[8] Section 4.2.2.1of the Settlement Term Sheet.

Staff has closely examined CCC's comments and believes that the resolution adequately covers each of the issues raised by the CCC in its public comments.

3. Shell Energy North America (US), L.P. ("Shell Energy"), the Marin Energy Authority ("MEA"), and the Alliance for Retail Energy Markets ("AReM"), collectively ("Joint Parties")

The Joint Parties repeated some of their original comments that staff has already resolved in its draft resolution and further introduced the following issues in their comments:

A. The MW targets should constitute "CAPs" on net capacity cost allocation.

a. The Settlement was agreed upon by multiple settling parties and the Settlement was ultimately adopted by the Commission where the Joint Parties were able to participate and raise such issues. Regardless, the Joint Parties are concerned that if the Commission allows for RA procurement, ESPs and CCAs will be constrained in their ability to purchase lower-priced RA capacity, or different RA capacity products, in order to compete with PG&E for customer share. However, if the IOU's continue to procure RA-only MW's they will not be able to meet their respective GHG goals set forth by the Settlement and therefore the IOU's cannot continue to only procure the MW's associated with the RA-only contracts. The need for GHG beneficial CHP procurement will counterbalance the cheap MW's PG&E procured in its first CHP RFO. Therefore, the Commission rejects the Joint Parties suggestion to set a limit on the IOU's RA procurement.

B. The Commission should allow ESP's and CCA's to count capacity purchases from the facilities against their Net Capacity Cost Allocation.

a. The LMEC Agreement is eligible for cost recovery and net capacity costs of the LMEC agreement are allocated pursuant to the ratemaking mechanisms defined in Section 13.1.2.2 of the Term Sheet. The adopted cost allocation methodology is not contingent on the type of capacity or GHG reduction procured, so long as it is procurement in compliance with the CHP Program. Therefore, the CPUC rejects the Joint Parties' request to count capacity purchases from the facilities against their Net Capacity Cost Allocation.

4. Independent Energy Producers ("IEP") Comments

IEP supports the publicly circulated draft resolution E-4529. Given that the MW's associated with the LMEC Agreement are eligible per the QF/CHP Settlement eligibility requirements; that the QF/CHP Settlement clearly provides multiple procurement pathway options to meet PG&E's MW and greenhouse gas targets; and that no nexus exists between the MW counting and actual cogeneration energy production, IEP requests Commission approval of Draft Resolution E-4529.

5. Southern California Edison ("SCE") Comments

SCE also entered into an agreement with LMEC for 280.5 MW (the other half of the PG&E's 280.5 MWs) of RA-only product which Draft Resolution E-4569, set for consideration at the Commission's June 7, 2013 meeting. In its comments SCE broadly supports the draft resolution E-4529.

6. Marin Energy Authority ("MEA") Comments

Although listed as a part of Mr. John Leslies "Joint Parties", MEA also filed its separate comments to the draft resolution E-4529. Some of MEA's comments have already been addressed in the publicly circulated version of the draft resolution E-4529. MEA requested the Commission to begin a stakeholder process related to the implementation of the Settlement to ensure the involvement of all parties in the decision making process. In particular MEA wants to discuss: (1) the RA-only contracts eligible under the Settlement; (2) whether the investor-owned utilities are authorized to procure in excess of their targets, and if so, whether such excess procurement can receive CAM treatment. In addition MEA mentions the following:

A. The Commission is required to make a determination that the resource meets a system or local area reliability need if it is granted CAM treatment.
    - **a.** Staff determines that PG&E will have both local and system RA associated with the LMEC facility.

B. The Commission is required to maximize the ability of CCAs to determine the generation resources used to serve their customers.
    - a. This issue has already been addressed by the publicly circulated draft resolution. The settlement requires the IOU's to procure CHP

> on behalf of the CCA's and other ESPs; since the PG&E LMEC confirmation was one of the most competitive bids in PG&E's initial CHP RFO it will benefit the CCAs as a whole.

Staff recognizes that MEA was not a Settling party in the Settlement process, and that the DA and CCA customer interests are represented in PG&E's CHP RFO selection process by non-market participant DA and CCA representatives in PG&E's CAM Group. These individuals provided no comment when the CAM Group was presented with the evaluation and ranking of this transaction as compared to other offers in the CHP RFO. The DA/CCA Parties should be supportive of the value represented in the LMEC Agreement for all customers, including DA and CCA customers, as compared to other possible CHP contracts.

The Settlement Term Sheet was approved by Decision 10-12-035 which involved public comments and public reply comments where MEA could have voiced these concerns. The CHP RFO, from which LMEC was awarded an RA Confirmation Agreement, was reviewed by CPUC Staff, an independent evaluator, the peer review group as well as the CAM group. MEA also participated in the protests to PG&E's Advice 4074-E as well as the comments for draft resolution E-4529. Staff finds there to be adequate public review process for the issues raised by MEA to be heard and therefore does not agree with MEA's request of holding a stakeholder process related to the implementation of the Settlement. Staff finds there to be multiple existing processes to ensure the involvement of all parties in the decision making process.

7. Cogeneration Association of California ("CAC") Comments

In its comments CAC contemplates the acceptability of RA-only capacity products in the Settlement Term Sheet. CAC opposes the counting of the LMEC capacity as part of the CHP Program, specifically to meet the MW Targets under the Settlement. CAC argues that, since the issue it raises is an issue of policy, it is not an issue that the Energy Division, who is limited in its assessment of the Settlement to specific implementation actions under the Settlement, can address.

The publicly circulated version of the draft resolution broadly answers all of the issues CAC raises in it comments. To reiterate, LMEC is a legitimate CHP facility under the letter of the settlement: it has two legitimate steam hosts; is a facility larger than 5 MWs; meets the definition of cogeneration under California Public Utilities Code §216.6 and the Emissions Performance Standard established by Public Utilities Code §8341; Meet the federal definition of a qualifying cogeneration facility under 18CFR §292.205 implementing PURPA; has previously sold to an IOU. For the reasons explained throughout this resolution,

nuances in Term Sheet do not impose eligibility criteria above and beyond the criteria in the term sheet section 4.2.2.1. The goals and objectives of the Commission's CHP Program are clearly outlined in the term sheet Section 1.1. Therefore, staff finds the LMEC confirmation in compliance with, and in alignment with the goals and objectives of the QF/CHP Settlement.

The Energy Division in its assessment of the Settlement has to abide by the specific implementation actions under the Settlement to reject or approve the PG&E-LMEC Confirmation. In the implementation of the Settlement, staff cannot find a reason to reject the PG&E-LMEC Confirmation per the language set forth by the QF/CHP Settlement Term Sheet. If, however, PG&E's LMEC Confirmation is rejected by the Commission, it would be due to an issue of policy for which the Energy division is, as Mr. Alcantar put it, limited.

Still, with its limited assessment of the Settlement staff recommends the Commission to adopt the draft Resolution and allow the counting of LMEC capacity under the CHP Program.

After careful review and consideration of the filed comments to the publicly circulated draft resolution 4529-E, staff has made non-substantive changes to the resolution.

FINDINGS AND CONCLUSIONS

1. The LMEC facility is an eligible CHP resource with two steam hosts; is a CHP with a nameplate capacity larger than 5 MW; meets the definition of cogeneration facility under California Public Utilities Code §216.6; meets the federal definition of a qualifying cogeneration facility under 18 CFR §292.205 implementing PURPA; and meets the Emissions Performance Standard established by Public Utilities Code §8341 (Senate Bill 1368).

2. Pursuant to the QF/CHP Settlement, PG&E is permitted to select and execute the LMEC capacity-only PPA per Section 4.2.2 of the QF/CHP Settlement.

3. As a Qualifying Facility, LMEC has previously sold a resource adequacy capacity product to PG&E between 2008 and 2011.

4. PG&E contracted 280.5 MWs of LMEC's available 561 MW's of total capacity. PG&E's LMEC Agreement contributes 280.5 MW towards the MW target assigned to PG&E under the QF/CHP Settlement.
5. As an existing CHP Facility, per QF/CHP Settlement Term Sheet Section 7.3.3.1, LMEC does not contribute towards PG&E's GHG Targets and is neutral for GHG accounting purposes.
6. The LMEC facility is an existing CHP facility and therefore, is a viable project.
7. An RA capacity-only product is one of several contract options that the IOUs may offer in the CHP RFO, in accordance with Settlement Term Sheet Section 4.2.6. Capacity-only procurement is consistent with the goals and objectives of the QF/CHP Settlement
8. Pursuant to the QF/CHP Settlement, Seller's contract capacity under the RA only PPA does not count toward PG&E's GHG Emissions Reduction Target because existing CHP facilities are counted as GHG neutral facilities per the settlement procurement process.
9. PG&E's request to recover costs in accordance with Section 13.1.2.2 of the Term Sheet and AL-4074-E is consistent with the directives of the QF/CHP Settlement.
10. The terms of the LMEC agreement for a capacity-only PPA will provide the CHP Attributes, the RA Attributes, the Local RA Attributes, and the Capacity Attributes equivalent to 280.5 MW associated with the LMEC agreement to the ratepayers.
11. The capacity-only LMEC PPA is not subject to the EPS under D.07-01-039 as it was 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.
12. PG&E shall 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.
13. 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.

14. Actual LMEC Agreement costs will be recovered through ERRA, less net capacity costs recovered in the NSGBA.

15. PG&E has complied with the Commission's rules for involving the PRG.

16. The Independent Evaluator concurs with PG&E's decision to execute the LMEC Agreement with Calpine Energy Services, L.P. and finds that the LMEC PPA merits Commission approval.

THEREFORE IT IS ORDERED THAT:

1. The request of Pacific Gas and Electric Company in Advice Letter E-4529 for Commission approval of the Los Medanos Energy Center Agreement with Calpine in its entirety is granted.

2. Pacific Gas and Electric Company is authorized to recover the costs associated with this power purchase agreement through the cost recovery mechanisms set forth in D.10-12-035 (as modified by D.11-07-010), Section 13.1.2.2 of the Qualifying Facility/Combined Heat and Power Settlement Term Sheet, and Pacific Gas and Electric Company's Advice 3922-E.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on June 27, 2013; the following Commissioners voting favorably thereon:

_____
Paul Clanon
Executive Director

Confidential Appendix A

REDACTED