

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4581
August 15, 2013

REDACTED
RESOLUTION

Resolution E-4581. Pacific Gas and Electric Company ("PG&E") requests Commission approval of a tolling agreement with Oroville Cogeneration L.P. ("Oroville") for procurement of combined heat and power ("CHP") product.

PROPOSED OUTCOME: This Resolution approves, without modification, the agreement between Pacific Gas and Electric and Oroville Cogeneration L.P. pursuant to the terms of the Qualifying Facility and Combined Heat and Power Program Settlement Agreement.

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

ESTIMATED COST: Capacity, energy, and variable cost components of the Oroville Agreement are confidential at this time due to its selection through the CHP Request for Offers ("RFO") process, which is a competitive solicitation process.

By Advice Letter 4171-E Filed on December 27, 2012.

SUMMARY

Pacific Gas and Electric Company ("PG&E") seeks California Public Utilities Commission ("Commission" or "CPUC") approval of the Power Purchase Agreement ("PPA"), which PG&E has executed with Oroville Cogeneration, L.P. ("Oroville") for deliveries from an existing 8.4 megawatt ("MW") cogeneration facility ("Oroville") located in Oroville, California. This PPA ("Oroville Agreement") will replace an existing Standard Offer 2 ("SO2") PPA expiring on January 1, 2020 as the result of a successful bid, short listing, evaluation, and selection through the 2011 PG&E CHP RFO process.

On December 27, 2012, PG&E filed Advice Letter (“AL”) 4171-E requesting Commission approval of a Utility Prescheduled Facility Tolling Agreement PPA with the Oroville cogeneration facility 84 months, or seven years. The PPA between PG&E and the Seller will become effective upon the approval of this resolution. Oroville is a 8.4 MW nameplate capacity natural gas topping-cycle combined heat and power facility located in Oroville, California. Oroville was self-certified as a QF in Federal Energy Regulatory Commission (“FERC”) Docket No. QF89-110-001 on July 6, 1989 and is currently an existing CHP QF.

Oroville’s steam host uses the evaporation of naturally occurring brine waste water from oil and gas production and integrates it into the normal power generation process. The evaporation is used as the primary heat rejection process to cool the engines during power generation. This process increases efficiency, avoids the costs and emissions associated with transport of the brine water by truck for off-site disposal. The facility is classified as a zero discharge industrial use by the California Water Resources Board.

The approved Oroville agreement will provide additional benefits relative to the existing SO2 Qualifying Facility contract. The change in operations and replacement of existing contract terms will capture the following savings and benefits for PG&E’s customers:

- Reduced cost of capacity through lower firm capacity payments;
- Improved Resource Adequacy value by increasing the Net Qualifying Capacity (“NQC”) of the facility;
- Reduced greenhouse gas (“GHG”) emissions through a change in operations, per the GHG accounting methodology per the QF/CHP Settlement;
- Improved operational flexibility by converting a must-take QF contract into a tolling agreement by which generation can be economically dispatched into the California Independent System Operator (“CAISO”) markets;
- Retention in California of the unique steam host process that allows Oroville to maintain FERC efficiency standards and Combined Heat and Power status while participating in the CAISO market as a dispatchable generator.

The Oroville agreement will take effect pending Commission approval of Advice 4171-E and the fulfillment of other conditions precedent. The Oroville Agreement term is seven years from the Initial Energy Delivery Date, which will

occur on the first day of the month following the date of final CPUC approval. The Commission finds that the Oroville Agreement contributes to the goals of the CHP Request for Offers (“RFO”) through reasonable terms and conditions and merits the Commission approval.

BACKGROUND

On December 16, 2010, the Commission adopted the Qualifying Facility and Combined Heat and Power Program Settlement Agreement (“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 qualifying facility (“QF”) contracts.

The QF/CHP Settlement establishes Megawatt (“MW”) procurement targets and Greenhouse Gas (“GHG”) Emissions Reduction Targets the investor-owned utilities (“IOUs”) are required to meet by entering into contracts with eligible CHP Facilities, as defined in the Settlement. Pursuant to D.10-12-035, the three large electric IOUs must procure a minimum of 3,000 MW of CHP and reduce GHG emissions consistent with the California Air Resources Board (“CARB”) Scoping Plan, currently set at 4.8 million metric tonnes (“MMT”) by the end of 2020.

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 the Standard Contract for QFs with a Power Rating that is Less than or Equal to 20MW (the “QF Standard Offer Contract”), 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.

In addition, the Commission defined several procurement processes for the IOUs within the Settlement. Per Section 4.2.1, the Commission directs the three IOUs to conduct Requests For Offers exclusively for CHP resources (“CHP RFOs”) as a means of achieving the MW Targets and GHG Emissions Reduction Targets. The Settlement Term Sheet establishes terms and conditions regarding eligibility, contract length, pricing, evaluation and selection and other terms and conditions of the RFOs.

Per Section 5.1.4, the IOUs will conduct three CHP RFOs during the Initial Program Period scheduled at regular intervals, with the first initiated no later than 90 days after the Settlement Effective Date, February 21, 2012. The three RFOs shall solicit CHP resources for an amount no less than the Net MW Target (the MW Target A, B, or C¹ not otherwise procured by the Section 4 procurement processes) for each IOU.

PG&E launched the 2011 CHP RFO for 630 MW on December 15, 2011. PG&E decided to use a two track solicitation for the first RFO to manage the risk related to interconnection costs that would be borne by the IOUs and ratepayers. The First Track solicited Existing CHP Facilities, Utility Prescheduled Facilities (“UPFs”), and New or Repowered CHP Facilities with an existing interconnection and a CAISO Phase I Interconnection Study. If the Offeror had no such study completed the Offeror permitted PG&E to terminate the contract if network upgrade costs based on a future study exceeded a certain amount. The Second Track was for New or Repowered CHP Facilities where the Offeror was unwilling to give PG&E the termination right.

At the 2011 CHP RFO Offeror’s Conference, PG&E outlined “Keys to a Successful Offer” including a preference for competitively-priced offers, optionality by varying the offer’s term length and providing curtailment provisions, a preference to execute Pro-Forma CHP or UPF Documents, and signs of project viability for new, expanded or repowered CHP including progress toward interconnection.

In response to the PG&E RFO, Oroville submitted an offer to convert its existing SO2 must-take agreement to a tolling agreement, thereby changing the facility’s

¹ Per Settlement Term Sheet Section 5.1.2, each IOU allocation of the total 3,000 MW Target is divided into interval MW Targets that correspond to the three RFOs: “A,” “B,” and “C.” PG&E’s 1,402 MW Target is split into 630, 378, and 394 MW for these interval Targets, respectively.

operations to that of a dispatchable cogeneration facility or a utility prescheduled facility. 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 Oroville Cogen that the Oroville offer was on the shortlist and the parties subsequently engaged in negotiations over the terms of the offer. On December 5, 2012, PG&E and Oroville Cogen executed the Oroville Agreement and PG&E submitted Advice 4171-E for Commission approval.

NOTICE

Notice of AL 4171-E was made by publication in the Commission's Daily Calendar. Pacific Gas and Electric states that a copy of the Advice Letter was mailed and distributed in accordance with Section IV of General Order 96-B. Advice Letter 4171-E was served to the service list of R.12-03-014.

PROTESTS

There were no protests filed to Advice 4171-E.

DISCUSSION

On December 27, 2012, PG&E filed Advice Letter AL 4171-E which requests Commission approval of two "Oroville Agreement" with Oroville Cogeneration Company.

Specifically, PG&E requests that the Commission:

1. Approve the Oroville Agreement with Oroville Cogeneration, L.P. 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. Determine that the rates and other terms and conditions set forth in the Oroville Agreement are reasonable.
3. Find that the 3,742 MT per year of GHG emissions reduction resulting from the Oroville Agreement applies toward PG&E's GHG Emissions Reduction Target as established by the QF/CHP Settlement.
4. Find that PG&E's costs under the Oroville Agreement shall be recovered through PG&E's Energy Resource Recovery Account ("ERRA").

5. Adopt the following finding of fact and conclusion of law in support of cost recovery for the Oroville Agreement:
 - a. PG&E shall be entitled to allocate the net capacity costs and associated RA benefits to bundled, DA, CCA, and departing load (to the extent not exempted) customers consistent with D.10-12- 035, as modified by D.11-07-010, and PG&E's Advice 3922-E, approved December 19, 2011.
 - b. The net capacity costs of the Oroville Agreement will be billed via PG&E's CAM rate and recovered through PG&E's New System Generation Balancing Account ("NSGBA") from all benefiting customers.
 - c. Actual Oroville Agreement costs will be recovered through ERRA, since the NSGBA is a credit in the ERRA, bundled, DA, CCA, and other nonexempt departing load.
6. Find that because the expected annualized capacity factor of the facility under the Oroville Agreement is below 60 percent, the Oroville Agreement is not a covered procurement subject to the EPS adopted in D.07-01-039 and is compliant with the EPS for purposes of the Settlement Agreement.

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

- Consistency with D.10-12-035, which approved the QF/CHP Program Settlement including:
 - Consistency with Definition of CHP Facility and Qualifying Cogeneration Facility
 - Consistency with Eligibility Requirements for CHP Requests For Offers ("RFOs")
 - Consistency with MW Counting Rules
 - Consistency with GHG Accounting Methodology
 - Consistency with Cost Recovery Requirements
- Need for Procurement
- Cost Reasonableness
- Public Safety
- Project Viability
- Consistency with the Emissions Performance Standard

- Consistency with D.02-08-071 and D.07-12-052, which respectively require Procurement Review Group (“PRG”) and Cost Allocation Mechanism (“CAM”) Group participation

In considering these factors, Energy Division also considers the analysis and recommendations of an Independent Evaluator as is required for the CHP RFOs per Section 4.2.5.7 of the Settlement Term Sheet.²

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

On December 16, 2010, the Commission adopted the QF/CHP Program Settlement with the issuance of D.10-12-035. The Settlement, among other things, established methodologies and formulas for calculating SRAC to be used in the new QF Standard Offer Contract. Furthermore, the Settlement allows for bilaterally negotiated contracts with CHP QFs to determine 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 a minimum of 3,000 MW of CHP. The IOUs must reduce greenhouse gas emissions consistent with their allocation of the CARB Scoping Plan CHP Recommended Reduction Measure in proportion to the IOUs’ and Energy Service Providers’/Community Choice Aggregators’ current share of statewide retail electricity load. The QF/CHP Settlement became effective on November 23, 2011. The Settlement Term Sheet establishes criteria for contracts with Facilities including:

Consistency with Definition of CHP Facility and Qualifying Cogeneration Facility

The Settlement defines a “CHP Facility” as a facility that meets the definition of a qualifying cogeneration facility under 18 C.F.R. Section 292.205³. FERC regulates the certification of Qualifying Facilities and registers a certified facility by granting it a Docket ID number. Per Section 4.2 of the Settlement Term Sheet, a

² Per Settlement Term Sheet 4.2.5.7: “Each IOU shall use an Independent Evaluator (IE) similar to that used in other IOU RFO processes. It is preferable that the IE have CHP expertise and financial modeling experience.”

³ Settlement Term Sheet Section 17: Glossary of Defined Terms, pp 65, 67, and 62.

CHP facility must meet the State and Federal definitions⁴ for cogeneration and the Emissions Performance Standard.

As a cogeneration facility that meets the state's definition of a CHP facility and a self-certified QF with a QF Docket ID⁵, the Oroville Agreement is consistent with the states definition of a CHP Facility and meets the FERC Qualifying Cogeneration Facility certification requirement per the Settlement.

Consistency with Eligibility Requirements for CHP Requests for Offers ("CHP RFOs")

Per Section 4.2 of the Settlement Term Sheet, the IOUs are directed to conduct Requests for Offers exclusively for CHP resources as a means of achieving their MW and GHG Emissions Reduction Targets. Per Section 4.2.2, CHP Facilities with a nameplate Power Rating greater than 5 MW may bid into the CHP RFOs. The CHP Facility must meet the State and Federal (PURPA) requirements⁶ for cogeneration and the Emissions Performance Standard ("EPS"). A CHP Facility that has met the PURPA efficiency requirements as of September 20, 2007 and that converts to a Utility Prescheduled Facility is eligible to participate in the CHP RFOs whether it is a Qualifying Facility or Exempt Wholesale Generator.

As a self-certified Qualifying Facility, the Oroville Facility has a nameplate Power Rating of greater than 5 MW, and meets the State's definition of cogeneration under P.U. Code § 216.6. As a facility converting into a UPF, Oroville Cogen is an existing qualifying cogeneration facility that complies with the applicable PURPA efficiency standards and therefore is eligible to participate in PG&E's CHP RFO. For the reasons discussed in the Emissions Performance Standard ("EPS") section below, Oroville is compliant with EPS for the purposes of Section 4.10.4.1 of the Settlement Term Sheet.

Oroville meets the eligibility requirements to bid into the PG&E CHP RFO consistent with Section 4.2.2 of the Settlement Term Sheet.

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.

⁵ Oroville Cogen was self-certified as a QF in Federal Energy Regulatory Commission ("FERC") Docket No. QF89-110-001 on July 6, 1989 and is an existing CHP QF.

⁶ State definition of cogeneration per Public Utilities Code Section 216.6. Federal definition of cogeneration per 18 C.F.R. § 292.205 implementing the Public Utility Regulatory Policies Act ("PURPA").

Consistency with Settlement MW Counting Rules

As an efficient Existing CHP Facility, the execution of the Oroville CHP PPA meets several Policy Objectives⁷ of the CHP Program regarding the continued operation of existing CHPs and the maintenance of existing GHG emissions reduction benefits.

Section 4 of the Settlement Term Sheet specifies procurement processes for all CHP facility procurement under the Settlement, specifically Section 4.8.1.2 states that:

“New PPAs with Utility Prescheduled Facilities (not Legacy PPA Amendments) count towards the MW Targets if the existing QF PPA expires before the end of the Transition Period.”

Per Section 4.8.1.2, the Oroville Agreement counts as neutral (“0”) towards the MW target assigned to PG&E under the QF/CHP Settlement because the existing SO2 PPA expires after the end of the Transition Period.

Per section 4.8.1.2 of the Settlement term sheet, the Oroville Agreement counts as neutral (“0”) towards PG&E’s MW procurement Target.

Consistency with Settlement Greenhouse Gas Accounting Methodology

Section 7 of the Settlement Term Sheet specifies accounting principles for all CHP facilities, specifically Section 7.3.1.3 states that a CHP Facility Change in Operations or Conversion to a Utility Prescheduled Facility counts as a GHG Credit (+):

“Measurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing one hundred percent (100%) of the decreased electric generation at a time differentiated Heat Rate. The Baseline year emissions are the average of the previous two (2) calendar years of / operational data.”

As demonstrated in the Semi Annual CHP Report⁸ , per Section 7.3.1.3 of the Settlement term sheet the Oroville Agreement will count, 3,742 MTCO₂e towards PG&E’s GHG Emissions Reduction Target.

⁷ As defined in Sections 1.2.1.3, 1.2.2.2, 1.2.2.7, and 1.2.6.1 of the Settlement Term Sheet.

⁸ <http://www.cpuc.ca.gov/PUC/energy/CHP/> click on the CHP Reports link to access the latest version of the report.

Consistency with Cost Recovery Requirements

Ordering Paragraph 5 of D.10-12-035 orders the three large electric IOUs to recover the net capacity costs from CHP Program contracts on a non-bypassable basis from all bundled service, Direct Access (“DA”) and Community Choice Aggregator (“CCA”), and Departing Load Customers (“DLC”), except for CHP DLC. With this authorization, the Settlement supersedes to the extent necessary D.06-07-029 and D.08-09-012, which established and modified the Cost Allocation Mechanism, respectively. Section 13.1.2.2 of the Settlement Term Sheet requires that the IOU recover CHP contract costs, net of the value of energy and ancillary services provided to the IOU. Non-IOU load-serving entities (“LSEs”) receive Resource Adequacy (“RA”) credits in proportion to the allocation of the net capacity costs that they pay.

On January 17, 2012, the Commission made effective PG&E AL 2645-E as of November 23, 2011, which authorized PG&E to revise its New System Generation Balancing Account to recover the net capacity costs of CHP contracts as it was directed by D.10-12-035. AL 2645-E determines the net capacity costs as the result of a debit and credit, where:⁹

- Debits include: Capacity and energy costs, including QF/CHP Program contracts that are eligible for net capacity cost recovery
- Credits include: Energy revenues for QF/CHP Program contracts that are eligible for net capacity cost recovery

PG&E is authorized to recover costs associated with the Oroville Agreement in accordance with Section 13.1.2.2 of the Settlement Term Sheet and AL 2645-E, consistent with the directives of the QF/CHP Settlement.

Need for Procurement

PG&E’s total MW procurement goal for the CHP Program is 1,402 MW, with 630 MW allocated to Target A. PG&E’s 2020 GHG Emissions Reduction Target is 2.15 MMT. As of the April 1, 2013 CHP Semi-Annual Report, PG&E has

⁹ PG&E Advice Letter 2645-E. <http://www.PG&E.com/NR/sc3/tm2/pdf/2645-E.pdf>.

executed¹⁰ contracts proposed to contribute 1,163 MW and 1,112,692 MT of GHG reductions toward these goals.

Procurement Need to Meet the MW Target and GHG Emissions Reduction Target

As of PG&E's April, 2013 CHP Semi-Annual Report filing, PG&E has procured 1,163 MW¹¹ and approximately 1.11 MT of GHG Reductions towards its targets.

Since Oroville counts as neutral towards PG&E's MW targets there is no immediate need for PG&E to procure Oroville in terms of meeting its MW targets. However, since Oroville will provide 3,742 MTCO₂e reductions towards PG&E's GHG Emissions Reduction Target the procurement need can be justified given PG&E's GHG target of 2.15 MMT of GHG emissions reductions to come from CHP procurement.

The execution of the Oroville CHP PPA contributes 3,742 MTCO₂e toward PG&E's Emissions Reduction Target.

Cost Reasonableness

To determine the robustness of an RFO the Commission may compare the MWs associated with CHP QFs that would be eligible to participate with the RFO, the total MWs received during the RFO, and the MWs an IOU needs to fulfill an interim (A, B, or C) MW Target. Staff approximates that 4,000 MW of CHP facilities could participate in the RFO and would be able to provide electricity to the IOUs and count toward the MW Targets. From this range of potential Offerors, those currently with agreements that end beyond the Transition Period may be less likely to participate. As described in the Confidential Appendix A, PG&E received Indicative Offers from CHP facilities (excluding alternative offers from an individual facility) which total an amount several times greater than their MW Target A of 630 MW. Therefore, the number of Offerors that participated in the initial PG&E CHP RFO provided a highly robust solicitation.

¹⁰ Some of the executed contracts have not yet been approved by the Commission.

¹¹ CHP Program Semi-annual Reports: [ftp://ftp.cpuc.ca.gov/gopher-data/energy_division/CHP/Published Online CHP SARs.zip](ftp://ftp.cpuc.ca.gov/gopher-data/energy_division/CHP/Published%20Online%20CHP%20SARs.zip).

While there is no immediate need for the GHG procurement, staff also finds the initial PG&E CHP RFO robust since the number of Offerors and the amount of GHG offered through the solicitation (excluding alternative offers from an individual facility) was, in total, more than the current PG&E GHG goals to be achieved by December 31, 2020.

The 2011 PG&E CHP RFO received offers from a number of counterparties, providing a variety of projects and robust amount of capacity several times greater than PG&E's MW Target A and GHG reductions beyond PG&E's current GHG goals.

PG&E uses a bid evaluation methodology referred to as Portfolio-Adjusted Value ("PAV"). PAV 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. To calculate PAV, adjustments are made to Market Value calculations, components, and/or resulting values. To develop the PAV of each Offer, PG&E first calculated the levelized Net Market Value ("NMV") in dollars per kilowatt ("kW") of contract capacity per year. Market Valuation consists of the following: Mark-to-Market ("MtM") value of energy, value of RA capacity, fixed cost, curtailment value (if applicable). The components of PAV are Net Market Value (including the effect of GHG reductions), location adjustment, portfolio adjustment, curtailment, delivery pattern, flexibility, and transmission.

To calculate the NMV PG&E used the following formula¹²:

$$\text{NMV} = \text{Energy Benefits} + \text{Capacity Benefits} + \text{Curtailment Value} - \text{Offer's Cost}$$

PG&E further ranked each offer based on a combination of quantitative and qualitative factors. For Quantitative Evaluation PG&E considered the following: Market Valuation including GHG costs; GHG Emissions Reductions the facility provided; Transmission Adders (where applicable). For Qualitative Evaluation PG&E considered the following: project viability; credit; portfolio fit; technical reliability; supplier diversity; adherence to form PPA terms and conditions.

After augmenting all offers NMV with quantitative and qualitative evaluations PG&E derived its initial CHP RFO shortlist.

¹²<http://www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricssuppliersolicitation/CHP/2012CHP%20RFO%20-%20Participants%20Conference%20Presentation.pdf>

Since the Oroville Agreement cannot be counted towards the MW target, the value and cost reasonableness of Oroville was demonstrated by positive market value association with the change in operations that will occur when its existing must-take SO2 PPA is replaced with a tolling, UPF delivery pattern. Since most of the other participants in PG&E's first CHP RFO did not offer utility prescheduled products, there were not enough offers of similar type in the solicitation to provide a robust comparison. However, PG&E evaluated the benefits of the Agreement by comparing the recently executed CHP Program Contracts (within a specified time) with the other considered procurement options from the pool of offered bids. Furthermore, per Section 4.2.12 of the Term Sheet, the IOUs will give preference to Pro-Forma Offers with no options (for specific credit and collateral, voluntary curtailment, and dispatchability terms) relative to non-Pro-Forma offers to the extent that Pro-Forma offers are competitive. Using these criteria, the selection of the Oroville Cogen Facility is a reasonable procurement resulting from PG&E's initial CHP RFO.

Additional information about the terms of the PPA and analysis of the value of the PPA among other bidders is included in the Confidential Appendix A.

Given the robust response to PG&E's 2011 CHP RFO, and the relative cost effectiveness of the Oroville offer as compared to other offers, Oroville's procurement is of reasonable cost.

Public Safety

California Public Utilities Code Section 451 requires that every public utility maintain adequate, efficient, just, and reasonable service, instrumentalities, equipment and facilities to ensure the safety, health, and comfort of the public.

The Oroville Agreement are between Pacific Gas and Electric Company and Oroville Cogeneration Company. The Commission's jurisdiction extends only over PG&E, not Oroville. Based on the information before the Commission and given that the Oroville Cogen is an existing facility; the Oroville Agreement does not appear to result in any adverse safety impacts on the facilities or operations of PG&E.

Project Viability

PG&E evaluated offers based on Project Development, Construction, and Financing feasibility (which includes evaluations of environmental permitting, construction schedule feasibility and cost, and financing during construction and operation of the plant); Environmental Assessment (which includes environmental characteristics and environmental impacts of a project). PG&E

then combines these individual evaluations and tallies the evaluation scores to establish a project viability rating to rank project viabilities across all the bids in the RFO. As an existing CHP facility in operation since 1990, Oroville Cogen scored well on PG&E's project viability.

Based on evaluations done by PG&E, Oroville is a viable CHP facility.

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 Section 4.10.4.1 of the CHP Program Settlement Term Sheet, for PPAs greater than five years that are submitted to the CPUC in a Tier 2 or Tier 3 advice letter, the Commission must make a specific finding that the PPA is 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 ("APCF") greater than 60 percent.

Under the Oroville Agreement, the Oroville facility will operate for seven years starting on the Commission approval date of the Oroville agreement. Therefore this procurement qualifies as a "long term financial commitment" per D.07-01-039. The annualized plant capacity factor for the Oroville facility is expected to be significantly below the 60% baseload threshold. Therefore, the EPS does not apply to the Oroville Facility.

The EPS does not apply to Oroville, whose annualized plant capacity factor is expected to be significantly less than 60 percent.

Consistent with D.02-08-071 and D.07-12-052, PG&E's Procurement Review Group ("PRG") and Cost Allocation Mechanism ("CAM") Group were notified of the CHP PPA.

Term Sheet Section 4.2.5.8 states that each IOU's PRG shall advise the CHP RFO process. PG&E's Cost Allocation Mechanism ("CAM") Group was also

consulted because procurement under the QF/CHP Settlement will be allocated to all benefiting customers in accordance with D.10-12-035, Ordering Paragraph 5. PG&E's CAM includes the Commission's Energy Division and Division of Ratepayer Advocates ("DRA"), The Utility Reform Network ("TURN"), the Coalition of California Utility Employees ("CCUE"), Department of Water Resources ("DWR"), the Union of Concerned Scientists ("UCS"), and Coast Economic Consulting, which comprise the PRG, plus one member representing CCA customers and one member representing Direct Access ("DA") customers.

PG&E presented its CHP RFO to its consultative groups at four meetings: July 12, 2011 to the PRG; November 8, 2011 to the CAM Group; December 13, 2011 to the PRG; and February 28, 2012 to the CAM Group.

On April 25, 2012, PG&E presented its ranked list of CHP RFO offers to the CAM Group. The Oroville transaction was included on the shortlist of offers. Following several months of negotiation, on August 14, 2012, PG&E presented the essential agreed-upon terms of the Oroville Agreement to its CAM Group. Members of the CAM Group did not comment on the Oroville transaction at that time.

PG&E has complied with the Commission's rules for involving the PRG and CAM groups.

Independent Evaluator Review

PG&E retained Wayne Oliver of Merrimack Energy Group, Inc. as the Independent Evaluator ("IE") to oversee the negotiations and transactions pursuant to the CHP Program to evaluate overall merits for Commission approval of the Agreements. These agreements included the 2011 CHP Request For Offers and Transition PPAs. AL 4171-E included a public and confidential Independent Evaluator's report. In its report the IE states that:

- The Oroville Agreement is a beneficial contract to both PG&E customers as well as the Seller.
- The RFO process was conducted consistent with the requirements outlined in the QF/CHP Settlement Agreement.
- PG&E's RFO outreach process was active and inclusive.

- All Participants were treated equitably, consistently and fairly in the process.
- The evaluation and ranking of offers by PG&E was reasonable, consistent and fair to all Participants and consistent with the evaluation protocols.
- The ranking, selection and the application of the evaluation methodology was applied consistently and equitably across different types of products and project structures with different terms and contract start dates.

The Independent Evaluator concludes that PG&E appropriately selected Oroville's qualifying offer and therefore recommends Commission approval of the Oroville Agreement. 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 Oroville Agreement with Oroville and finds that the Agreements merit 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.

Per Public Utilities Rules of Practice & Procedure rule 14.6-C-2 the 30-day comment period for the draft of this resolution is reduced to 15-days. Comments are due 15 days from the mailing of this draft resolution which is August 9, 2013. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 20 days from today.

PG&E timely commented on draft resolution E-4581 and requested minor changes be made for clarity and accuracy. These changes can be seen throughout this resolution.

FINDINGS AND CONCLUSIONS

1. The Oroville Cogen plant is a natural gas fired 8.4 MW cogeneration facility located in Oroville, California.

2. The Oroville Agreement is consistent with the state's definition of a CHP Facility and meets the FERC Qualifying Cogeneration Facility certification requirement per the Settlement.
3. Oroville meets the eligibility requirements to bid into the PG&E CHP RFO consistent with Section 4.2.2 of the Settlement Term Sheet.
4. Per section 4.8.1.2 of the Settlement term sheet, the Oroville Agreement counts as neutral ("0") towards PG&E's MW procurement Target. The Oroville Agreement will count, 3,742 MTCO₂e towards PG&E's GHG Emissions Reduction Target.
5. Per Section 7.3.1.3 of the Settlement term sheet, the execution of the Oroville CHP PPA contributes 3,742 MTCO₂e to PG&E's need to procure additional CHP resources to meet the remaining Emissions Reduction Target.
6. 3,742 MTCO₂e of Oroville's GHG emission reductions shall count towards PG&E's GHG Emissions Reduction Target.
7. The 2011 PG&E CHP RFO received offers from a number of counterparties, providing a variety of projects and robust amount of capacity several times greater than PG&E's MW Target A and GHG reductions beyond PG&E's current GHG goals.
8. Given the robust response to PG&E's 2011 CHP RFO, and the relative cost effectiveness of the Oroville offer as compared to other offers, Oroville's procurement is of reasonable cost.
9. The Oroville Agreement does not appear to result in any adverse safety impacts on the facilities or operations of PG&E.
10. Based on evaluations done by PG&E, Oroville is a viable CHP facility.
11. The Emission Performance Standard does not apply to Oroville, whose annualized plant capacity factor is expected to be significantly less than 60 percent.
12. PG&E has complied with the Commission's rules for involving the PRG and CAM groups.
13. The Independent Evaluator concurs with PG&E's decision to execute the Oroville Agreement with Oroville Cogeneration L.P. and finds that the Agreements merit Commission approval.

14. Rates and other terms and conditions set forth in the Oroville Agreement are reasonable.
15. PG&E shall be entitled to allocate the net capacity costs and associated RA benefits to bundled, DA, CCA, and departing load (to the extent not exempted) customers consistent with D.10-12- 035, as modified by D.11-07-010, and PG&E's Advice 3922-E, approved December 19, 2011.
16. The net capacity costs of the Oroville Agreement will be billed via PG&E's CAM rate and recovered through PG&E's New System Generation Balancing Account ("NSGBA") from all benefiting customers.
17. Actual Oroville Agreement costs will be recovered through ERRRA.
18. PG&E is authorized to recover costs associated with the Oroville Agreement in accordance with Section 13.1.2.2 of the Settlement Term Sheet and AL 2645-E, consistent with the directives of the QF/CHP Settlement.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company's request through Advice Letter 4171-E for approval of the Oroville Agreement with Oroville Cogeneration, L.P. in its entirety, including payments to be made thereunder, is approved without modification.
2. Pacific Gas and Electric Company's costs under the Oroville Agreement shall be recovered through Pacific Gas and Electric Company's Energy Resource Recovery Account.

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 August 15, 2013; the following Commissioners voting favorably thereon:

/s/ PAUL CLANON
Paul Clanon
Executive Director

MICHAEL R. PEEVEY
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
MARK J. FERRON
CARLA J. PETERMAN
Commissioners

Confidential Appendix A

REDACTED