Date of Issuance – 6/7/10

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION E-4330**
June 3, 2010

REDACTED

R E S O L U T I O N

Resolution E-4330. Pacific Gas and Electric Company (PG&E) requests approval of a renewable energy power purchase agreement.

PROPOSED OUTCOME: This Resolution approves cost recovery for a power purchase agreement between PG&E and Agua Caliente Solar, LLC., pursuant to California's RPS program. The power purchase agreement is approved without modification.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 3538-E filed on October 15, 2009 and Supplemental Advice Letter filed 3538-E-A on April 19, 2010.

SUMMARY

PG&E's Renewable Contract Complies with the Renewables Portfolio Standard (RPS) Procurement Guidelines and is Approved without Modification

PG&E filed Advice Letter (AL) 3538-E on October 15, 2009, requesting California Public Utilities Commission (Commission) review and approval of a renewable power purchase agreement (PPA) with Agua Caliente Solar, LLC (Agua Caliente or Project) for generation from a new solar photovoltaic (PV) project. The PPA was selected through PG&E's 2008 RPS solicitation. Commission approval of the 25-year PPA authorizes cost recovery for PG&E to procure RPS-eligible energy from the planned 290 megawatt Agua Caliente facility. The Project will be located within Yuma County, Arizona, which is a California Independent System Operator balancing authority area. On April 19, 2010, PG&E filed Supplemental AL 3538-E-A amending the proposed PPA to include new standard terms and conditions, adopted in Decision (D.) 10-03-021, and modified contract terms and conditions related to transmission costs. The supplemental AL did not impact the contract term, capacity, generation, deliveries, commercial operation date or price.

The Agua Caliente PPA is consistent with PG&E's 2008 RPS Procurement Plan. Deliveries under the PPA are reasonably priced and fully recoverable in rates over the life of the contract, subject to Commission review of PG&E's administration of the contract.

The following table summarizes the Project specific features of the agreement:

Generating Facility	**Resource Type**	**Contract Term (Years)**	**Capacity (MW)**	**Expected Deliveries (GWh/yr)**	**Commercial Operation Date**	**Project Location**
Aqua Caliente	Solar PV	25	290	688	12/01/2014[1]	Yuma County, Arizona

NOTICE

Notice of AL 3538-E and supplemental AL 3538-E-A was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section IV of General Order 96-B.

PROTESTS

AL 3538-E was not protested. The protest period was waived for Supplemental AL 3538-E-A because the supplement amended the proposed power purchase agreement pursuant to a Commission decision and made other amendments that did not impact the contract term, capacity, generation, deliveries, commercial operation date or price included in the original advice letter.

[1] This date reflects the final project completion date; however, PG&E will begin taking deliveries of generation earlier as the facility is developed in phases.

BACKGROUND

Overview of RPS Program

The California RPS Program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107 and SB 1036.[2] The RPS program is codified in Public Utilities Code Sections 399.11-399.20.[3] The RPS program administered by the Commission requires each utility to increase its total procurement of eligible renewable energy resources by at least one percent of retail sales per year so that 20 percent of the utility's retail sales are procured from eligible renewable energy resources no later than December 31, 2010.[4] Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm and http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm.

DISCUSSION

PG&E Requests Commission Approval of a New Renewable Energy Contract

On October 15, 2009, PG&E filed Advice Letter (AL) 3538-E requesting California Public Utilities Commission (Commission) review and approval of a renewable power purchase agreement (PPA) with Agua Caliente Solar, LLC (Agua Caliente or Project) for generation from a new solar photovoltaic (PV) project. The Project will be located within Yuma County, Arizona, with its first point of interconnection with the Western Electricity Coordinating Council (WECC) transmission system and within the California Independent System Operator (CAISO) balancing authority.

Generation from the 290 megawatt (MW) Project is expected to contribute an average of approximately 688 gigawatt-hours (GWh) annually towards PG&E's RPS annual procurement target beginning in December, 2014. This equates to

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[2] SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007)

[3] All further references to sections refer to Public Utilities Code unless otherwise specified.

[4] *See* § 399.15(b)(1).

approximately 0.8 percent of PG&E's annual retail sales. The Project will be developed in phases beginning in 2011, and therefore, PG&E may accept deliveries before the contracted 2014 commercial online date.

The Agua Caliente PPA resulted from PG&E's 2008 RPS solicitation. The Project will be developed on private land in Yuma County, Arizona; the land was previously used for agriculture. In the advice letter, PG&E explains that the Project will interconnect to the Hassayampa-North Gila section of the Palo Verde North Gila-Imperial Valley 500 kV transmission line. PG&E explains that although the Project will be located out-of-state, it will be interconnected to the CAISO's transmission system.

On April 19, 2010, PG&E filed supplemental AL 3538-E-A to amend contract terms and conditions related to transmission costs and to include recently adopted RPS standard terms and conditions, pursuant to D.10-03-021. The amendments did not impact the total expected costs to PG&E's customers or the expected performance of the facility under the proposed PPA.

PG&E requests that the Commission issue a resolution containing the following findings:

1. Approves the PPA in its entirety, including payments to be made by PG&E pursuant to the PPA, subject to the Commission's review of PG&E's administration of the PPA.
2. Finds that any procurement pursuant to the PPA is procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.) ("RPS"), Decision ("D.") 03-06-071 and D.06-10-050, or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.14(g), associated with the PPA shall be recovered in rates.
4. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:
    a. The PPA is consistent with PG&E's 2008 RPS procurement plan.

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

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

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

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

6. Adopts the following findings with respect to resource compliance with the Emissions Performance Standard ("EPS") adopted in R.06-04-009:

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

Energy Division Examined the Proposed PPA on Multiple Grounds:

- Consistency with PG&E's 2008 RPS Procurement Plan
- Consistency with PG&E's least-cost, best-fit methodology
- Consistency with RPS standard terms and conditions
- Project viability
- Compliance with the minimum quantity requirement for long-term/new facility contracts
- Consistency with the Interim Emissions Performance Standard
- Procurement Review Group participation
- Cost Reasonableness

Consistency with PG&E's 2008 RPS Procurement Plan

California's RPS statute requires that the Commission review the results of a renewable energy resource solicitation submitted for approval by a utility.[5] PG&E's 2008 RPS procurement plan (Plan) was approved by D.08-02-008 on February 14, 2008. Pursuant to statute, PG&E's Plan includes an assessment of supply and demand to determine the optimal mix of renewable generation resources, consideration of flexible compliance mechanisms established by the Commission, and a bid solicitation protocol setting forth the need for renewable generation of various operational characteristics.[6]

PG&E states that the generation from the PPAs will meet the resource needs identified in its Plan. In its Plan, PG&E's goal was to procure approximately 800 to 1,600 GWh per year.

<u>The PPA is consistent with PG&E's 2008 RPS Procurement Plan, including PG&E's RPS resource needs, approved by D.08-02-008.</u>

Consistency with PG&E's Least-Cost, Best-Fit (LCBF) Requirements

The LCBF decision directs the utilities to use certain criteria in their bid ranking.[7] The decision offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. PG&E's bid evaluation includes a quantitative and qualitative analysis, which focuses on four primary areas: 1) determination of a bid's market value; 2) calculation of transmission adders and integration costs; 3) evaluation of portfolio fit; and 4) consideration of non-price factors.

PG&E's 2008 RPS solicitation protocol included an explanation of its LCBF methodology. The independent evaluator (IE) oversaw the bid evaluation process and concluded in its report that the LCBF evaluation methodology was generally employed consistently and the process was conducted fairly. With regards to the PPA, the IE has verified that the PPA is consistent with PG&E's objectives set forth in its 2008 RPS Plan. The IE also supports PG&E's decision to

[5] Pub. Util. Code, § 399.14

[6] Pub. Util. Code, § 399.14(a)(3)

[7] D.04-07-029

execute the agreement discussed herein and concurs with PG&E that the PPA merits CPUC Approval.[8]

PPA selection is consistent with PG&E's 2008 RPS solicitation least-cost, best-fit cost protocols.

Consistency with RPS Standard Terms and Conditions

On March 11, 2010, the Commission approved D.10-03-021 which established new and revised standard terms and conditions for RPS contracts, which were not included in the proposed PPA in AL 3538-E. On April 19, 2010, PG&E filed supplemental AL 3538-E-A to modify the proposed Aqua Caliente PPA so that it conforms to the Commission's RPS standard terms and conditions pursuant to D.10-03-021. As a result, the PPA contains the required non-modifiable standard terms and conditions.

The PPA includes the Commission adopted RPS "non-modifiable" standard terms and conditions.

Project Viability Assessment and Development Status

PG&E believes the Agua Caliente project is viable and will be developed according to the terms and conditions in the PPA. PG&E's project viability assessment included key criteria for renewable project development.

Project milestones

The PPA identifies agreed upon project milestones, including the construction start date and commercial operation date. The seller's obligations to meet these milestones are supported by performance assurance securities. PG&E believes that the Agua Caliente project development plan allows for all milestones to be achieved.

Developer experience and creditworthiness

Nextlight, the developer of the Agua Caliente project, is a wholly-owned subsidiary of Energy Capital Partners with financing experience in energy generation projects.[9] PG&E explains that Nextlight's project development team

[8] Fifth Advice Letter Report of the Independent Evaluator on the Bid Evaluation and Selection Process. *See* AL 3538-E, Appendix I.

[9] *See* http://www.ecpartners.com; http://www.nextlight.com

has in-depth experience in the electric industry, including transmission, siting, technical and regulatory matters.[10]

Technology

The Project will use commercially proven solar PV technology.

Site control and permitting status

Agua Caliente has full site control. Permitting for the Agua Caliente project is underway and PG&E expects the Project to obtain all necessary permits to achieve commercial operation in a timely matter.

Interconnection and transmission

Agua Caliente will interconnect to the CAISO-controlled transmission system within APS's service territory. Specifically, the proposed Project will interconnect with the Palo Verde - North Gila 500 kV transmission line, which is jointly owned by APS, Imperial Irrigation District and San Diego Gas & Electric. Interconnection requires a new substation at the Project site and a new switchyard[11] in APS' service territory. Agua Caliente will construct and own the substation adjacent to the planned APS Q43 Switchyard and a short gen-tie line will connect the two facilities.

Agua Caliente will participate in the CAISO's large generator interconnection procedures (LGIP) to determine whether network upgrades are necessary for the Project to interconnect and be fully deliverable so that the Project may count towards PG&E's resource adequacy requirements. The results of the CAISO study are not expected until 2011. See Confidential Appendix A for a detailed description of transmission and interconnection related contract terms and conditions.

Contribution to Minimum Quantity Requirement for Long-term/New Facility Contracts

D.07-05-028 established a "minimum quantity" condition on the ability of utilities to count an eligible contract of less than 10 years duration for compliance

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[10] *See* AL 3538-E at 11.

[11] APS Q43 Switchyard http://www.aps.com/general_info/Siting/siting_45.html

with the RPS program.[12] In the calendar year that a short-term contract with an existing facility is executed, the utility must also enter into long-term contracts or contracts with new facilities equivalent to at least 0.25% of the utility's previous year's retail sales.

<u>As a new facility, delivering pursuant to a long-term contract, the PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.</u>

Compliance with Interim Greenhouse Gas Emissions Performance Standard (EPS)

California Pub. Utils. Code §§ 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 EPS that establishes an emission rate quota for obligated facilities to levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine powerplant. The EPS applies to all energy contracts for baseload generation that are at least five years in duration.[13]

Generating facilities using certain renewable resources are deemed compliant with the EPS, although contracts with intermittent resources are subject to the limitation that total purchases under the contract do not exceed the expected output from the facility over the term of the contract.

<u>The PPA is exempt from the EPS because it concerns an RPS-eligible facility with a capacity factor less than 60 percent and whose generation will be delivered into California.</u>

Procurement Review Group (PRG) Participation

PG&E's PRG consists of: the California Department of Water Resources, the Union of Concerned Scientists, the Division of Ratepayer Advocates, the Coalition of California Utility Employees, The Utility Reform Network, Jan Reid

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12 For purposes of D.07-05-028, contracts of less than 10 years duration are considered "short-term" contracts and facilities that commenced commercial operations prior to January 1, 2005 are considered "existing".

13 "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%." Pub. Utils. Code § 8340 (a).

representing Coast Economic Consulting, and the Commission's Energy Division.

PG&E initially informed its PRG of the Agua Caliente negotiations on January 9, 2009 and provided updates on March 23, June 12 and August 14, 2009.

Pursuant to D.02-08-071, PG&E's Procurement Review Group (PRG) participated in the review of the PPA.

Cost Reasonableness

PG&E determined that the PPA compared favorably to proposals received in response to PG&E's 2008 solicitation because the PPA's market valuation was reasonable relative to other bids. The Commission's reasonableness review for RPS PPA prices also includes a comparison to other proposed RPS projects from recent RPS solicitations, as well as Commission approved projects. Using this analysis, and the confidential analysis provided by PG&E in AL 3538-E, we determine that the PPA price is reasonable. Confidential Appendix A includes a detailed discussion of the contractual pricing terms, including PG&E estimates of the total contract costs under the PPA.

The PPA compares favorably to the results of PG&E's 2008 solicitation. The total all-in costs of the PPA are reasonable based on their relation to bids received in response to PG&E's 2008 solicitation and other comparable PPAs.

Payments made by PG&E under the PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

Cost Containment

Pursuant to statute, the Commission calculates a market price referent (MPR) to assess above-market costs of individual RPS contracts and the RPS program in general.[14] Contracts that meet certain criteria are eligible for above-MPR funds (AMF).[15] Based on a 2014 guaranteed commercial online date for the Project, the

[14] *See* § 399.15(c)

[15] SB 1036 codified in § 399.15(d)(2) the following criteria: the contract was selected through a competitive solicitation, the contract covers a duration of no less than 10 years, the contracted project is a new facility that will commence commercial operations after January 1, 2005, the contract is not for renewable energy credits, and the above-

Footnote continued on next page

25-year PPA exceeds the 2008 MPR[16] and therefore has above-market costs associated with it.[17]

The PPA meets the eligibility criteria for AMFs. However, PG&E has exhausted its AMFs provided by statute.[18] Therefore, PG&E will voluntarily incur the above-MPR costs of the PPA.

<u>Because there are above-market costs associated with this contract, which is subject to the cost limitation of Pub. Utils. Code § 399.15(d), and PG&E has exhausted its above-MPR funds, PG&E is voluntarily entering into this RPS power purchase agreement as permitted under the Pub. Utils. Code.</u>

RPS ELIGIBILITY AND CPUC APPROVAL

Pursuant to Pub. Utils. Code § 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS contract, the Commission has required standard and non-modifiable "eligibility" language in all RPS contracts. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an "Eligible Renewable Energy Resource," that the project's output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller use commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.[19]

The Commission requires a standard and non-modifiable clause in all RPS contracts that requires "CPUC Approval" of a PPA to include an explicit finding

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market costs of a contract do not include any indirect expenses including imbalance energy charges, sale of excess energy, decreased generation from existing resources, or transmission upgrades.

[16] *See* Resolution E-4214.

[17] The $/MWh portion of the contract price that exceeds the MPR, multiplied by the expected generation throughout the contract term, represents the total "above-market costs" for a given PPA.

[18] On May 28, 2009, the Director of the Energy Division notified PG&E that it had exhausted its AMF account.

[19] *See, e.g.* D. 08-04-009 at Appendix A, STC 6, Eligibility.

that "any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (*Public Utilities Code Section 399.11 et seq*.), Decision 03-06-071, or other applicable law."[20]

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, nor can the Commission determine prior to final CEC certification of a project, that "any procurement" pursuant to a specific contract will be "procurement from an eligible renewable energy resource."

Therefore, while we include the required finding here, <u>this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS eligible resource to count towards an RPS compliance obligation. Nor shall such a finding absolve the seller of its obligation to obtain CEC certification or the utility to pursue remedies for breach of contract.</u> Contract enforcement activities shall be reviewed pursuant to the Commission's authority to review the utilities' administration of contracts.

CONFIDENTIAL INFORMATION

The Commission, in implementing Pub. Utils. Code § 454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS contracts. Such information, such as price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

<u>The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.</u>

[20] *See, e.g.* D. 08-04-009 at Appendix A, STC 1, CPUC 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 April 29, 2010.

No comments were submitted.

FINDINGS

1. The PPA is consistent with PG&E's 2008 RPS Procurement Plan, approved by D.08-02-008.
2. The PPA is consistent with the resource needs identified in PG&E's 2008 Procurement Plan.
3. On April 19, 2010, PG&E filed a supplemental advice letter to bring the PPA into conformance with the Commission adopted RPS "non-modifiable" standard terms and conditions.
4. The PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.
5. The PPA is exempt from the EPS because it concerns an RPS-eligible facility with a capacity factor less than 60 percent, whose generation will be delivered into California.
6. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the PPA.
7. The total expected costs of the PPA are reasonable based on their relation to bids received in response to PG&E's 2008 solicitation and other comparable PPAs.
8. Payments made by PG&E under the PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

9. All payments made or received under PPA Section 4.1(b) shall be made through PG&E's Energy Resource Recovery Account.
10. Because there are above-market costs associated with this contract, which is subject to the cost limitation of Public. Utilities Code § 399.15(d), and PG&E has exhausted its above-market funds, PG&E is voluntarily entering into this RPS power purchase agreement as permitted under the Public. Utilities Code.
11. Procurement pursuant to the PPA is procurement from eligible renewable energy resources for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), D.03-06-071 and D.06-10-050, or other applicable law.
12. The immediately preceding finding shall not be read to allow generation from a non-RPS eligible renewable energy resource under the PPA to count towards an RPS compliance obligation. Nor shall that finding absolve PG&E of its obligation to enforce compliance with this PPA.
13. The confidential appendices, marked "[REDACTED]" in the public copy of this Resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
14. AL 3583-E and supplemental AL 3583-E-A should be approved effective today without modifications.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company's Advice Letter 3583-E and supplemental Advice Letter 3583-E-A, requesting Commission approval of power purchase agreements with Agua Caliente, LLC, is approved without modification.
2. 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 3, 2010; the following Commissioners voting favorably thereon:

/s/ PAUL CLANON
PAUL CLANON
Executive Director

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
TIMOTHY ALAN SIMON
NANCY E. RYAN
Commissioners

Confidential Appendix A

Summary of PPA terms and conditions

[REDACTED]