PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION E-4326**
May 6, 2010

REDACTED

R E S O L U T I O N

Resolution E-4326. Pacific Gas and Electric (PG&E) requests approval of a renewable power purchase agreement with Geysers Power Company, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for a PG&E renewable energy power purchase agreement (PPA) with Geysers Power Company, LLC. The PPA is approved with modification.

ESTIMATED COST: Costs of this contract are confidential at this time.

By Advice Letter 3544-E filed on October 30, 2009.

SUMMARY

PG&E's proposed PPA with Geysers Power Company, LLC complies with the Renewables Portfolio Standard (RPS) procurement guidelines and is approved with modification.

PG&E filed Advice Letter (AL) 3544-E on October 30, 2009 requesting Commission review and approval of a renewable energy power purchase agreement (PPA) with Geysers Power Company, LLC (Geysers). The PPA is a bilateral agreement for energy from the Geysers geothermal facilities in Sonoma and Lake Counties, California.

PG&E shall modify the PPA to include the relevant non-modifiable standard terms and conditions required pursuant to Decision 10-03-021.

The following tables summarize the agreement:

Proposed Geysers Agreement

Generating Facility	Technology Type	Term (Years)	Capacity (MW)	Energy (GWh)	Contract Delivery Start Date	Location
Geysers	Geothermal, operating	12	250-425	2,080-3,537	CPUC approval date	Sonoma and Lake Counties, CA

NOTICE

Notice of AL 3544-E 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 3.14 of General Order 96-B.

PROTESTS

Advice Letter 3544-E was not protested.

DISCUSSION

Overview Of RPS Program

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.[1]

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.

[1] *See* Pub. Utils. Code § 399.15(b)(1).

PG&E requests approval of a renewable energy contract with Geysers

On June 17, 2009, PG&E filed AL 3544-E requesting Commission approval of a renewable PPA with Geysers, which was negotiated bilaterally. The PPA provides for geothermal energy from facilities that are currently operating.[2]

The following table summarizes the annual deliveries under the agreement.

Year	New PPA (GWh/yr)
2010 - 2012	2,080
2013 - 2014	2,080
2015 - 2017	3,537
2018 - 2021	2,080

Upon approval of this agreement, the previous PPA with this facility, approved by Resolution E-4046 will terminate.[3] The deliveries under the previous PPA will be subject to the new terms in this agreement. The changes to the existing contract terms include changes in price.

PG&E requests the Commission to issue a resolution that:

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.

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[2] 425 MW are currently under contract in two separate agreements. The Commission approved the agreements in Resolutions E-4046 and E-4164.

[3] The PPA approved by Resolution E-4046 would have expired December 31, 2012.

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 costs 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 pre-approved as meeting the EPS because it is for an existing geothermal facility covered by Conclusion of Law 35(c) of D.07-01-039.

Energy Division reviewed the proposed bilateral PPA on multiple grounds

In D.09-06-050, the Commission determined that bilateral contracts should be reviewed according to the same processes and standards as contracts that are the result of a competitive solicitation.[4] Accordingly, Energy Division reviewed the bilaterally negotiated Geysers PPA using the same standards used to review PPAs resulting from an annual solicitation. <u>The PPA is consistent with the bilateral contracting guidelines established in D.09-06-050.</u>

[4] The current process set forth for seeking Commission approval for an RPS contract is that RPS contracts, of any length greater than one month in duration, must be submitted for approval by advice letter, unless special conditions warrant filing an application (for example, if the PPA does not include the required standard terms and conditions).

Specifically, Energy Division evaluated the PPA for the following criteria:

- Consistency with PG&E's 2008 RPS Procurement Plan
- Consistency with the resource needs identified in PG&E's Plan
- Consistency with RPS standard terms and conditions
- Project viability
- Consistency with the Interim Emissions Performance Standard
- Procurement Review Group participation
- Comparison to the results of PG&E's 2008 solicitation
- Cost reasonableness
- Cost containment

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] The Commission reviews the results to verify that the utility conducted its solicitation according to its Commission-approved procurement plan. 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]

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

Consistency With The Resource Needs Identified In PG&E's Plan

PG&E states that the generation from the PPA will meet the resource needs identified in its Plan. In its Plan, PG&E's goal was to procure approximately 800

[5] Pub. Utils. Code, Section §399.14.

[6] Pub. Utils. Code, Section §399.14(a)(3).

to 1,600 GWh per year. PG&E's Plan also noted that near-term deliveries were more valuable to PG&E. Under the PPA, PG&E will receive deliveries between 2,080 and 3,537 GWh/year. The deliveries from the Geysers facilities will contribute to PG&E's 20 percent goal.

The PPA is consistent with the resource needs identified in PG&E's 2008 Procurement Plan.

Consistency With RPS Standard Terms And Conditions (STCs)

The proposed PPA is based on PG&E's 2008 RPS pro forma which complies with D.08-04-009, as modified by D.08-08-028. On March 11, 2010 the Commission approved D.10-03-021 which established new and revised standard terms and conditions for RPS contracts. The PPA was executed and filed before D.10-03-021 was approved, as a result, the PPA does not include the Commission adopted RPS "non-modifiable standard terms and conditions."[7]

Thus, Commission approval of the PPA is conditioned upon PG&E and Geysers modifying the PPA to include the new non-modifiable standard terms and conditions as required in D.10-03-021. Within 30 days from the effective date of this Resolution PG&E shall file a Tier 1 advice letter compliance filing demonstrating that the Geysers PPA adopted by this Resolution includes all of the relevant non-modifiable standard terms and conditions.

Project Viability

The Geysers geothermal facilities in Sonoma and Lake Counties, California are currently operating. Although the Geysers geothermal resource is declining over time, there is no reason to believe that Geysers will not perform and deliver the energy required under the terms of this agreement.

There is no project viability risk associated with the Geysers PPA because the facilities are operating and generating electricity.

[7] *See* D.10-03-021, page 78 and Ordering Paragraph 35.

Compliance With The 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 power plant. The EPS applies to all energy contracts for baseload generation that are at least five years in duration.[8] Renewable energy contracts are deemed compliant with the EPS except in cases where intermittent renewable energy is firmed and shaped with generation from non-renewable resources.

The EPS does not apply to the PPA because it is for energy from an EPS-compliant renewable technology that does not require firming and shaping.[9]

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

PG&E informed the PRG of the proposed transactions on August 14, 2009.

Although Energy Division participates in the PRG, it reserved judgment on the contract and associated hedging strategy until the AL was filed. Energy Division reviewed the transaction independently of the PRG, and allowed for a full protest period before concluding its analysis.

With regard to this PPA, PG&E has complied with the Commission's rules for involving the Procurement Review Group.

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[8] "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).

[9] *See* D.07-01-039 at Conclusion of Law 35(c).

Comparison To The Results Of PG&E's 2008 Solicitation

Although the PPA was negotiated bilaterally, PG&E conducted a least-cost, best-fit (LCBF) bid evaluation of the PPA to compare it to their 2008 solicitation bids. 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. The LCBF evaluation is generally used to establish a shortlist of proposals from PG&E's solicitation with whom PG&E will engage in contract negotiations. In this case, a LCBF evaluation was conducted for the bilaterally negotiated PPA in order to evaluate its value relative to all of PG&E's other RPS options.

PG&E determined that the PPA is favorable relative to proposals received in response to PG&E's 2008 solicitation because the PPA's market valuations compare favorably with bids from its 2008 solicitation. The PPA also has value to PG&E's ratepayers relative to bids received in their 2008 solicitation because the facilities can deliver in the near-term.

<u>The PPA compares favorably to the results of PG&E's 2008 solicitation.</u>

Cost Reasonableness

The Commission's reasonableness review for RPS PPA prices includes a comparison of the proposed PPA to other proposed RPS projects from recent RPS solicitations and recent Commission approved projects. PG&E filed Confidential work papers with AL 3544-E comparing the Geysers PPA price to offers received in PG&E's 2008 RPS solicitation. Staff also compared the Geysers PPA price to other RPS PPAs recently approved by the Commission as well as offers received in PG&E's 2009 RPS solicitation. Based on this analysis, the Commission determines that the Geysers 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.

<u>The total all-in costs of the PPA are reasonable based on their relation to bids received in response to PG&E's 2008 and 2009 solicitations.</u>

<u>Provided the generation is from an eligible renewable energy resource, or is otherwise compliant with Standard Term and Condition 6, set forth in Appendix A of D.08-04-009 and included in this PPA, 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.</u>

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.[10] Based on a 2010 commercial online date, the proposed PPA may exceed the 2008 MPR[11] for a 15 year contract, and therefore may have above-market costs associated with it.[12]

Contracts that meet certain criteria are eligible for above-MPR funds (AMFs).[13] The proposed Geysers PPA was negotiated bilaterally and is with a facility that commenced commercial operations before January 1, 2005. Therefore, this PPA does not meet the eligibility criteria for AMFs. Additionally, PG&E has exhausted its AMFs provided by statute.[14] Therefore, PG&E will voluntarily incur the above-MPR costs of the PPA.

PG&E is voluntarily entering into this RPS power purchase agreement as permitted by statute.

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

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[10] *See* § 399.15(c)

[11] *See* Resolution E-4214.

[12] 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.

[13] 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-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.

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

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.[15]

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 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."[16]

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 a seller from its obligation to obtain CEC certification or absolve the purchasing utility of its obligation to enforce compliance with Standard Term and Condition 6, set forth in Appendix A of D.08-04-009 and included in the PPA.</u> Such contract enforcement activities shall be reviewed pursuant to the Commission's authority to review the administration of such contracts.

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

[16] *See, e.g.* D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

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.

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.

COMMENTS ON THIS RESOLUTION

Pub. Utils. Code § 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.

We carefully considered comments which focused on factual, legal, or technical errors and made appropriate changes and clarifications to the draft Resolution.

PG&E filed timely comments on draft Resolution E-4263 on April 26, 2010. PG&E requested minor corrections to the draft Resolution's description of annual deliveries under the PPA. The error has been corrected.

FINDINGS

1. The PPA is consistent with the bilateral contracting guidelines established in D.09-06-050.
2. The PPA is consistent with PG&E's 2008 RPS Procurement Plan, approved by D.08-02-008.
3. The PPA is consistent with the resource needs identified in PG&E's 2008 Procurement Plan.

4. The PPA was executed and filed before D.10-03-021 was approved, as a result, the PPA does not include the Commission adopted RPS "non-modifiable standard terms and conditions."
5. There is no project viability risk associated with the Geyser PPA because the facilities are operating and generating electricity.
6. The Interim Emissions Performance Standard does not apply to the PPA because it is for energy from an EPS-compliant renewable technology that does not require firming and shaping.
7. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the PPA.
8. The PPA compares favorably to the results of PG&E's 2008 and 2009 solicitations.
9. The total expected costs of the PPA, as estimated by PG&E, are reasonable based on their relation to bids received in response to PG&E's 2008 solicitation.
10. Provided the generation is from an eligible renewable energy resource or is otherwise compliant with Standard Term and Condition 6, set forth in Appendix A of D.08-04-009 and included in the PPA, 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.
11. PG&E is voluntarily entering into this RPS power purchase agreement as permitted by statute.
12. 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.
13. 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 Standard Term and Condition 6, set forth in Appendix A of D.08-04-009, and included in the PPA.

14. 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.
15. AL 3544-E should be approved with modification effective today.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company's Advice Letter 3544-E, requesting Commission review and approval of a power purchase agreement with Geysers Power Company LLC, is approved with modification.
2. Within 30 days of the effective date of this Resolution, Pacific Gas and Electric Company shall file a Tier 1 advice letter containing a modified power purchase agreement executed by the buyer and seller that includes all of the non-modifiable required standard terms and conditions required pursuant to D.10-03-021.
3. 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 May 6, 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

Contract Summary
[REDACTED]