

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**RESOLUTION E-4320  
APRIL 8, 2010**

REDACTED

**R E S O L U T I O N**

Resolution E-4320. Pacific Gas and Electric Company (PG&E).

PROPOSED OUTCOME: This resolution approves cost recovery for a power purchase agreement (PPA) resulting from bilateral negotiations between PG&E and Big Creek Water Works, Ltd., pursuant to California's renewables portfolio standard (RPS) program. The PPA is approved with modification.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 3575-E filed on December 11, 2009.

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**SUMMARY**

**PG&E's renewable contract complies with the Renewables Portfolio Standard (RPS) procurement guidelines and is approved with modification.**

PG&E filed Advice Letter (AL) 3575-E on December 11, 2009, requesting California Public Utilities Commission (Commission) review and approval of a PPA with Big Creek Water Works, Ltd. (Big Creek). The 20-year PPA was negotiated bilaterally. PG&E's request is granted with modification.

PG&E shall modify the PPA to include the new and revised non-modifiable standard terms and conditions required for RPS contracts as adopted in Decision (D.) 10-03-021. The proposed PPA is consistent with PG&E's 2008 RPS Procurement Plan, which the Commission approved in D.08-02-008, and because the cost of the PPA is reasonable. Payments made under the PPA between PG&E and Big Creek are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA. The energy acquired pursuant to the PPA will count towards PG&E's RPS requirements.

The following table summarizes the agreement:

Generating Facility	Big Creek
Technology	Small Hydro
Capacity	4.8 megawatts (MW)
Expected Deliveries	8 gigawatt hours per year (GWh/yr)
Contract Term	20 years
Commercial Operation Date	First Quarter, 2010
Project Location	Hyampom, CA

## **NOTICE**

Notice of AL 3575-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 IV of General Order 96-B.

## **PROTESTS**

Advice Letter 3575-E was not protested.

## **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.<sup>1</sup> The RPS program is codified in Public Utilities Code Sections 399.11-399.20.<sup>2</sup> 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

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<sup>1</sup> SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007)

<sup>2</sup> All further references to sections refer to Public Utilities Code unless otherwise specified.

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.<sup>3</sup>

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 renewable energy contract**

On December 11, 2009, PG&E filed AL 3575-E requesting Commission approval of a long-term RPS PPA. Pursuant to the bilaterally negotiated agreement, Big Creek will generate up to 8 GWh annually towards PG&E's Annual Procurement Target (APT).

Big Creek is an existing, but not operational, 4.8 MW run-of-the-river small hydroelectric generation facility. The Project is located near Hyampom, CA, within the California Independent System Operator's balancing authority. The Big Creek facility interconnects to the Cedar Flat transmission line and, according to PG&E, no network upgrades are required. The facility is run-of-the-river and therefore, the level of power generation is dependent on the water flow level of Big Creek, which is seasonal with peak flow December through May and little or no flow August through September.

The Big Creek facility has a long operating history. From 1987 to 1999, Big Creek delivered energy to PG&E under a Qualifying Facility (QF) Standard Offer Contract. From 1999 until February 2006 Big Creek operated as a merchant facility. PG&E explains that in 2006 Big Creek shut down due to damage to the facility from earth movement. The facility has been certified as RPS-eligible by the California Energy Commission (CEC) and is expected to achieve commercial operation in the first quarter of 2010.

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<sup>3</sup> See § 399.15(b)(1).

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 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 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 review of 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.<sup>4</sup> Accordingly, Energy Division reviewed the bilaterally negotiated Big Creek PPA using the same standards used to review PPAs resulting from an annual solicitation. The PPA is consistent with the bilateral contracting guidelines established in D.09-06-050.

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

- Consistency with PG&E's 2008 RPS Procurement Plan
- Consistency with PG&E's Least-Cost Best Fit (LCBF) requirements
- Consistency with RPS standard terms and conditions (STC)
- Contribution to minimum quantity requirements for long-term contracts
- Consistency with the Interim Emissions Performance Standard
- Procurement Review Group (PRG) participation
- Cost reasonableness
- Cost containment

### **Consistency with PG&E's 2008 RPS 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.<sup>5</sup>

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<sup>4</sup> 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).

<sup>5</sup> See § 399.14(a)(3)

PG&E states that deliveries from the PPA will help it 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. PG&E's Plan also noted that near-term deliveries were more valuable to PG&E. Beginning in 2010, Big Creek will annually deliver up to 8 GWh to PG&E, which will contribute to PG&E's 20 percent RPS goal.

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.

### **Consistency with PG&E's Least-Cost Best-Fit (LCBF) requirements**

The RPS statute requires that PG&E procure generation using LCBF principles.<sup>6</sup> The Commission's LCBF decision directs the utilities to use certain criteria in their bid ranking.<sup>7</sup> 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. 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.

PG&E explains that, based on its LCBF evaluation, this project ranks favorably against other bids received in its 2008 RPS Solicitation, particularly based on cost and the fact that the project is highly viable and expected to deliver in the near term.

The PPA is consistent with least-cost, best-fit procurement principles.

### **Consistency with RPS standard terms and conditions**

The proposed Big Creek PPA is based on PG&E's Commission-approved standard contract pursuant to Assembly Bill (AB) 1969 rather than PG&E's 2008 RPS pro forma contract. PG&E explains that the AB 1969 standard contract is used here because it is easier to implement and manage for a project of this size. However, the Big Creek PPA contains the required non-modifiable standard terms and conditions, as compiled in D.08-04-009 and modified by D.08-08-028.

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<sup>6</sup> See § 399.14(a)(2)(b)

<sup>7</sup> D.04-07-029

In addition, PG&E further explains that other provisions were added to protect PG&E and its customers.

On March 11, 2010, the Commission adopted D.10-03-021, which established, in part, new and revised standard terms and conditions for RPS contracts. Since the PPA was executed prior to D.10-03-021, the PPA does not include the Commission required RPS “non-modifiable” standard terms and conditions for RPS contracts.

Therefore, Commission approval of the PPA is conditional upon PG&E and Big Creek 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 Big Creek PPA includes all the relevant non-modifiable standard 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 with the RPS program.<sup>8</sup> 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.

Because PG&E has entered into a long-term contract with Big Creek, which is an existing facility, the PPA will contribute to PG&E’s minimum quantity requirement established in D.07-05-028.

### **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.

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<sup>8</sup> 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”.

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.<sup>9</sup> Certain 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.

Because the RPS-eligible Big Creek facility is not baseload generation, the PPA meets the conditions for EPS compliance established in D.07-01-039.

### **Procurement Review Group (PRG) participation**

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

PG&E informed its PRG of the Big Creek agreement on August 14, 2009. Although Energy Division participates in the PRG, it reserved judgment on the contract 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.

PG&E's Procurement Review Group participated in the review of the Big Creek PPA.

### **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 3575-E comparing the Big Creek PPA price to offers received in PG&E's 2008 RPS solicitation. Staff also compared the Big Creek 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

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<sup>9</sup> "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).



Commission determines that the Big Creek 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 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.

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.

### **Cost containment**

Pursuant to statute, the Commission calculates a market price referent to assess above-market costs of individual RPS contracts and the RPS program in general.<sup>10</sup> Based on a 2010 commercial online date, the 20-year PPA does not exceed the 2008 MPR<sup>11</sup> and therefore this PPA is considered not to have above-market costs associated with it.<sup>12</sup>

### **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,

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<sup>10</sup> See § 399.15(c)

<sup>11</sup> See Resolution E-4214.

<sup>12</sup> 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. However, pursuant to § 399.15(d)(2), bilaterally negotiated contracts are not eligible for above-market funds or subject to the cost limitation.

and that the seller use commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.<sup>13</sup>

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."<sup>14</sup>

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, 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 the Standard Term and Condition 6, set forth in Appendix A of D.08-04-009, and included in the PPA. Such contract enforcement activities shall be reviewed pursuant to the Commission's authority to review the administration of such 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

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<sup>13</sup> See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.

<sup>14</sup> See, e.g. D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

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**

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 2, 2010.

No comments were submitted.

## **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 does not include the Commission required RPS "non-modifiable" standard terms and conditions.
5. The PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.
6. The PPA complies with the EPS because it meets the conditions established in D.07-01-039.
7. PG&E's Procurement Review Group participated in the review of the PPA.
8. The PPA compares reasonably to the results of PG&E's 2008 RPS solicitation.

9. 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 RPS solicitations.
10. The total all-in price of the PPA does not exceed the applicable 2008 market price referent adopted in Resolution E-4214.
11. 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.
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 3575-E should be approved effective today with modification.

**THEREFORE IT IS ORDERED THAT:**

1. Pacific Gas and Electric Company's Advice Letter 3575-E, requesting Commission approval of power purchase agreements with Big Creek Water Works, Ltd., 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 standard terms and conditions required for RPS contracts, 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 April 8, 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]**