

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

**RESOLUTION E-4266
August 20, 2009**

REDACTED

R E S O L U T I O N

Resolution E-4266. Pacific Gas & Electric Company (PG&E).

PROPOSED OUTCOME: This Resolution approves cost recovery for two power purchase agreements (PPAs) resulting from bilateral negotiations between PG&E and BrightSource Energy, Inc., pursuant to California’s renewables portfolio standard program. Any proceeds from the Royalty Agreement entered into by PG&E and BrightSource Energy, Inc. in connection with these PPAs will be credited to PG&E’s Energy Resource Recovery Account for the benefit of PG&E’s ratepayers.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 3458-E filed on May 13, 2009.

SUMMARY

PG&E’s proposed power purchase agreements comply with the Renewables Portfolio Standard (RPS) procurement guidelines and are approved.

PG&E filed Advice Letter (AL) 3458-E on May 13, 2009, requesting California Public Utilities Commission (Commission) review and approval of two PPAs with BrightSource Energy, Inc. (BrightSource). PG&E included with its AL 3458-E a Royalty Agreement between PG&E and BrightSource. Pursuant to the proposed PPAs, PG&E will procure generation from two new solar thermal projects (Ivanpah 1 & 3, or Projects). PG&E’s request is granted because the PPAs are consistent with Decision (D.) 08-02-008, which approved PG&E’s 2008 RPS Procurement Plan and because the costs of PPAs are reasonable. Payments made under the PPAs between PG&E and BrightSource are fully recoverable in rates over the life of the PPAs, subject to Commission review of PG&E’s

administration of the PPAs. The energy acquired from the Projects will count towards PG&E's RPS requirements.

Contract Summary

Generating Facilities	Technology	Contract Term (Years)	Capacity (MW)	Expected Deliveries (GWh/yr)	Commercial Operation Date	Project Location
Ivanpah 1	Solar Thermal	25 years	110 MW	284 GWh/yr	July, 2012	Ivanpah, CA
Ivanpah 3	Solar Thermal	25 years	200 MW	516 GWh/yr	July, 2013	Ivanpah, CA

Confidential information about the contract should remain confidential

This resolution finds that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583, General Order (G.O.) 66-C, and D.06-06-066 should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

Pursuant to D.06-06-066 and the decision's Appendix I "IOU Matrix", this Commission adopted a "window of confidentiality" for individual contracts for RPS energy or capacity. Specifically, this Commission determined that RPS contracts should be confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their own affiliates, which should be public.

BACKGROUND

The RPS Program requires each utility to increase the amount of renewable energy in its portfolio

The California RPS Program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107 and SB 1036.¹ The RPS program is set

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

forth in Public Utilities (Pub. Util.) Code §§ 399.11-399.20. An RPS is a market-based policy mechanism that requires a retail seller of electricity purchase a certain percentage of its electric portfolio from electricity generated by Eligible Renewable Energy Resources (ERR). Under the California RPS, each utility is required to increase its total procurement of ERRs by at least one percent of annual retail sales per year so that twenty percent of its retail sales are supplied by ERRs by 2010.²

In response to SB 1078 and SB 107, the Commission has issued a series of decisions that establish the regulatory and transactional parameters of the investor owned utility (IOU) renewables procurement program.³

- On June 19, 2003, the Commission issued its “Order Initiating Implementation of the Senate Bill 1078 Renewable Portfolio Standard Program,” D.03-06-071.
- In D.02-08-071, the Commission required each utility to establish a Procurement Review Group whose members, subject to an appropriate non-disclosure agreement, would have the right to consult with the utilities and review the details of each utility’s: overall interim procurement strategy; proposed procurement processes including, but not limited to, requests for offers; and proposed procurement contracts before any of the contracts are submitted to the Commission for expedited review.
- Instructions for utility evaluation of each offer to sell ERRs requested in an RPS solicitation were provided in D.04-07-029, as required by Pub. Util. Code §399.14(a)(2)(B). The bid evaluation methodology is known as ‘least-cost, best-fit.’
- The Commission adopted standard terms and conditions (STCs) for RPS power purchase agreements in D.04-06-014, as required by Pub. Util. Code

² On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, which established a 33 percent PRS target to be met by 2020.

³ RPS decisions are available on the Commission’s RPS website:
<http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>

§399.14(a)(2)(D). These STCs are compiled in D.08-04-009, as modified by D.08-08-028, and as a result there are now thirteen STCs of which four are non-modifiable.

- In D.06-05-039, the Commission required participation of an Independent Evaluator (IE) in the IOU's competitive RPS procurement process. The IE's role is to ensure that the IOU's RPS solicitation is undertaken in a fair and consistent manner. The IE also provides additional oversight during contract negotiations.
- D.06-10-050, as modified by D.07-03-046, outlined the RPS reporting and compliance methodologies and rules. In this decision, the Commission established methodologies to calculate a load serving entities' (LSE) initial baseline procurement amount, annual procurement target (APT) and incremental procurement amount (IPT).
- The Commission adopted its market price referent (MPR) methodology in D.04-06-015 for determining the utility's share of the RPS seller's bid price (the contract payments at or below the MPR), as defined in Pub. Util. Code §399.14(a)(2)(A) and 399.15(c). The Commission refined the MPR methodology in D.05-12-042 and D.08-10-026. Resolutions adopted MPR values for the 2005, 2006, 2007, and 2008 RPS solicitations.⁴
- In D.07-05-028, the Commission established a minimum quota for contracting with new facilities or executing long-term contracts for RPS-eligible generation. Specifically, in order for an LSE to count for RPS compliance, deliveries from contracts of less than ten years' duration with RPS-eligible facilities that commenced commercial operation prior to January 1, 2005 must in each calendar year enter into contracts of at least ten years' duration and/or short-term contracts with facilities that commenced commercial operation on or after January 1, 2005 for energy deliveries equivalent to at least 0.25% of that LSE's prior year's retail sales.
- The Commission established guidelines for a utility and a generator to enter into bilateral contracts outside of the competitive solicitation process (D.03-06-071 and D.06-10-019). More recently, in D.09-06-050, this Commission determined that bilateral RPS contracts should be evaluated

⁴ MPR resolutions are available here:

<http://www.cpuc.ca.gov/PUC/energy/Renewables/mpr>

using the same methods and criteria that are used to review contracts that result from a competitive solicitation.

PG&E requests Commission approval of two new renewable energy contracts

On May 22, 2009, PG&E filed AL 3458-E requesting Commission approval of renewable procurement contracts with BrightSource Energy, Inc., which were negotiated bilaterally. The Commission's approval of the PPAs will authorize PG&E to fully recover in rates, payments made pursuant to the PPAs.

PG&E requests that the Commission issue a resolution containing the findings necessary for "CPUC Approval" as defined by this Commission in D.08-04-009. In addition, PG&E requests that the Commission issue a resolution that does the following:

1. Approves the PPAs in their entirety, including payments to be made by PG&E pursuant to the PPAs, subject to the Commission's review of PG&E's administration of the PPAs.
2. Finds that any procurement pursuant to the PPAs 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 PPAs are consistent with PG&E's approved 2009 RPS procurement plan.
 - b. The terms of the PPAs, 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 PPAs:

- a. The utility's cost of procurement under the PPAs shall be recovered through PG&E's Energy Resource Recovery Account.
 - b. Any stranded costs that may arise from the PPAs 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 PPAs are not a covered procurement subject to the EPS because they are a new contract commitment with a baseload generating facility. However, because these Projects would not generate power through the combustion of fossil fuels and would not produce any greenhouse gas as a direct byproduct of their conversion of solar energy into grid-ready renewable electricity, these Projects meet the EPS.
 - b. PG&E has provided the notice of procurement required by D.06-01-038 in its Advice Letter filing.

NOTICE

Notice of AL 3458-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

On June 3, 2009, the Division of Ratepayer Advocates (DRA) filed a timely protest, public and confidential versions, with the Commission. PG&E filed a timely response, public and confidential versions, with the Commission on June 10, 2009.

DISCUSSION

The following table summarizes the substantive features of the PPA. See Confidential Appendix D for a detailed discussion of contract terms and conditions.

Generating Facilities	Technology	Contract Term (Years)	Capacity (MW)	Expected Deliveries (GWh/yr)	Commercial Operation Date	Project Location
Ivanpah 1	Solar Thermal	25 years	110 MW	284 GWh/yr	July, 2012	Ivanpah, CA
Ivanpah 3	Solar Thermal	25 years	200 MW	516 GWh/yr	July, 2013	Ivanpah, CA

PG&E’s bilateral negotiations with BrightSource began in 2006. On April 1, 2008, PG&E filed AL 3243-E seeking Commission approval of five PPAs and a Royalty Agreement with BrightSource. During the time that Energy Division staff was reviewing AL 3243-E, BrightSource notified PG&E that the proposed PPAs would require amendments. At the request of PG&E, staff suspended its review of AL 3243-E. On May 13, 2009, PG&E withdrew and replaced AL 3243-E with AL 3458-E and AL 3459-E seeking Commission approval for a total of seven PPAs and a Royalty Agreement with BrightSource. This Resolution concerns only AL 3458-E (Ivanpah 1 & 3), the remaining projects filed in AL 3459-E will be addressed in a subsequent Resolution.

BrightSource’s development team includes the technical expertise of Luz International, Ltd., the company that built nine separate solar thermal facilities at three different sites in California's Mojave Desert during the 1980s.⁵ Since then, BrightSource has refined the Luz technology, has developed a 6 megawatt (MW) pilot project, and has executed PPAs to develop 2,600 MWs of solar thermal capacity in California and Nevada.⁶

Through its PPAs with BrightSource, PG&E will procure RPS-eligible energy from two new solar thermal projects proposed for development in Ivanpah,

⁵ <http://www.osti.gov/accomplishments/NRELprofiles.html#luz>

⁶ PG&E ALs 3458-E (310 MW), AL 3459-E (1,000 MW), and Southern California Edison Company AL 2339-E (1,300 MW).

California. Deliveries are expected to commence from Ivanpah 1 & 3 in July 2012 and July 2013, respectively.

PG&E's AL 3458-E also included a Royalty Agreement, wherein PG&E has negotiated for royalty payments that are based on BrightSource's and its affiliates' world-wide sales of power generation equipment using its proprietary technology and on license fees and related revenues received from licenses of the technology. The Royalty Agreement is expected to provide financial benefits for PG&E and its customers. Any payments made pursuant to the Royalty Agreement will be recorded to PG&E's Energy Resource Recovery Account for the benefit of PG&E's customers.

Energy Division has reviewed the proposed PPAs pursuant to Commission decisions

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

- Consistency with PG&E's 2008 RPS procurement plan
- Consistency with bilateral contracting guidelines
- Consistency with RPS standard terms and conditions (STC)
- Reasonableness of the levelized all-in price
- Project viability assessment
- Consistency with Interim Emissions Performance Standard

PPAs are consistent with PG&E's Commission adopted 2008 RPS Plan

California's RPS statute requires that the Commission review the results of a renewable energy resource solicitation submitted for approval by a utility.⁷ 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

⁷ Pub. Util. Code, Section §399.14

solicitation protocol setting forth the need for renewable generation of various operational characteristics.⁸

The PPAs are based on the pro forma contracts which were approved in D.08-02-008. Also, collectively the proposed Projects are expected to deliver 800 gigawatt hours (GWhs) per year by the end of 2013, and therefore are consistent with PG&E's Plan to procure one to two percent of PG&E's retail sales volume (between 750 and 1,500 GWhs per year). Deliveries from the Projects will contribute to PG&E's 20 percent goal under the flexible compliance rules.

PPAs fit with PG&E's identified renewable resource needs

PG&E represents that the Projects will meet the resource needs more recently identified in its 2009 RPS Plan. In its 2009 Plan, PG&E assumes that solar will provide approximately 70 percent of its long-term renewable generation but that projects selected through the 2009 solicitation will likely experience a four to six year development timeframe.⁹ The proposed solar thermal projects considered herein meet the identified resource need and are expected to achieve commercial operation in the relatively near term.

The PPAs compare favorably to PG&E's 2008 solicitation

Although the PPAs were negotiated bilaterally, PG&E conducted a least-cost, best-fit (LCBF) bid evaluation of the PPAs to compare them 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 but was conducted for the PPAs in order to evaluate the Projects' value relative to PG&E's other RPS options.

⁸ Pub. Util. Code, Section §399.14(a)(3)

⁹ AL 3458-E, page 5

PG&E determined that the Projects are reasonable relative to proposals received in response to PG&E's 2008 solicitation because i) the market valuation compares favorably with bids from its 2008 solicitation; ii) the Projects' on peak delivery profile provide "superior portfolio fit"; and iii) the technology's relatively low water needs and high efficiency results in projects that are "less taxing on the environment" than most projects with a similar delivery profile."¹⁰

PG&E's Procurement Review Group (PRG) participated in review of the PPAs

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

PG&E most recently informed its PRG of the BrightSource transactions on March 23, 2009. The PRG feedback, as described in the confidential information provided with the advice letter, did not provide a basis for disapproval of the PPAs.

PPAs are consistent with RPS bilateral contracting guidelines

The BrightSource PPAs are consistent with the bilateral contracting guidelines in D.06-10-019.

1. The PPAs will not be applied to PG&E's cost limitation.¹¹
2. Pursuant to D.06-10-019, the PPAs were submitted by advice letter.¹²
3. The PPAs are at least one month in duration.¹³

¹⁰ AL 3458-E page 9.

¹¹ The PPAs are ineligible for the cost limitation because it did not result from a competitive solicitation. (PU Code §399.15(d)(2))

¹² "For now, utilities' bilateral RPS contracts, of any length, must be submitted for approval by advice letter." (D.06-10-019, p.31)

¹³ "All RPS-obligated LSEs are also free to enter into bilateral contracts of any length with RPS-eligible generators, as long as the contracts are at least one month in duration, to enable the CEC to verify RPS procurement claims." (D.06-10-019 p. 29)

4. The PPAs are reasonably priced.¹⁴

Also, in D.09-06-050, this Commission determined that bilateral contracts should be reviewed according to the same processes and standards as contracts that come through a solicitation. Specifically, D.09-06-050 found that:

“In order to promote consistency of evaluation of all RPS procurement contracts, it is reasonable to authorize Energy Division staff to review bilateral RPS contracts using the same methods and criteria, including those for reviewing price reasonableness, as are used to review contracts that result from the utilities' annual RPS solicitation, using the MPR as a price reasonableness benchmark for long-term bilateral contracts.”¹⁵

This requires, for example, review by the utility's PRG and its Independent Evaluator.¹⁶ This also includes a comparison of the proposed agreement to RPS opportunities received in its annual solicitations and other RPS-eligible procurement options.

The proposed PPAs considered herein comply with this Commission's bilateral contracting guidelines. Specifically, PG&E filed the PPAs for approval by Tier 3 advice letter, which provides for a full protest period and requires disposition by Resolution. Also, to the extent that the PPAs are above the MPR, PG&E is not requesting that the PPAs qualify for above-MPR funds.¹⁷

Consistency with RPS standard terms and conditions

The proposed PPAs conform to the Commission's decisions requiring STCs for RPS contracts.

¹⁴ The contract price of bilaterals must be deemed reasonable by the Commission. (D.06-10-019, p. 31)

¹⁵ D.09-06-050, Findings of Fact 15

¹⁶ Because D.09-06-050 was adopted after PG&E negotiated and executed its PPAs with BSE, we don't require validation from PG&E's Independent Evaluator.

¹⁷ Pursuant to Pub. Util. Code § 399.15(d), bilateral contracts are not eligible for above-market funds. See also, D.06-10-019 and Resolution E-4199.

“May Not be Modified” Terms

The PPAs do not deviate from the non-modifiable standard terms and conditions.

“May be Modified” Terms

During the course of negotiations, the parties identified a need to modify some of the modifiable standard terms in order to reach agreement. The changes were based upon mutual agreement reached during negotiations.

PPA prices are reasonable and recoverable in rates

Based on expected online dates of 2012 and 2013 for 25-year contracts, the expected levelized price for the projects do not exceed the 2008 MPR.¹⁸ The MPR is used by the Commission to evaluate the reasonableness of prices of long-term PPAs for RPS-eligible generation.

The proposed PPAs provide that PG&E will pay a higher price if BrightSource does not obtain a DOE Loan Guarantee, although this is not explicitly stated in AL 3458-E.¹⁹ In this case, the PPA prices would exceed the relevant MPRs.

The Commission’s reasonableness review for RPS contract also includes a comparison of the proposed PPAs to other proposed RPS projects from recent RPS solicitations, as well as, Commission approved projects.²⁰ Using this analysis, we determine that the PPA prices without the DOE Loan Guarantee are reasonable. (See Confidential Appendix B for a detailed discussion of the PPA pricing terms and conditions)

Project viability assessment and development status

PG&E believes Ivanpah 1 & 3 are viable projects that will be developed according to the PPAs because:

¹⁸ See Resolution E-4214.

¹⁹ Detailed price information was included in confidential appendices of AL 3458-E.

²⁰ For example, see Resolution E-4222 and Resolution E-4240.

Project milestones

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

Developer experience

PG&E explains that BrightSource Energy, Inc. was founded as Luz II, Inc. in 2004 by the CEO of Luz International Ltd. (Luz International). Luz International was the solar technology company that successfully designed, financed, and built nine solar energy plants in Southern California between 1984 and 1991. This development resulted in 350 MW Solar Electricity Generating Stations (SEGS) projects in the Mojave Desert, which are still in operation today. Fifteen of the key members of the Luz International engineering and commercial team are now key members of BrightSource.

Seller's creditworthiness and financing experience

PG&E believes that BrightSource has a reasonable likelihood of obtaining financing for the Projects. BrightSource has raised in excess of \$160 million,²¹ and as mentioned above, BrightSource is pursuing a DOE Loan Guarantee which is expected to significantly increase the likelihood of obtaining additional financing.

Given the current credit crisis, new renewable energy projects face financing risk. We believe that the milestones achieved to date on its DOE Loan Guarantee application and BrightSource's project development experience will put it at an advantage when seeking financing. Nevertheless, financing is still a potential source of risk.

²¹ http://www.brightsourceenergy.com/images/uploads/press_releases/Release5-14-08.pdf

Technology

The Projects will employ new, proprietary technology based on BrightSource's experience with the SEGS facilities. Specifically, BrightSource will develop solar thermal facilities using Luz Power Tower (LPT) technology. PG&E recounts the following benefits of LPT technology to include: more efficient steam production due to two-axis tracking; more efficient generation of electricity due to higher temperature steam production; less 'parasitic' energy usage for plant operation due to reduced movement of thermal mass; higher capacity factor; lower capital costs due to commodity-based inputs, no concrete foundations, and fewer pipes and cabling; and less water usage.²²

In June 2008, BrightSource opened the Solar Energy Development Center SEDC in Israel's Negev Desert, a solar demonstration facility used to test equipment, materials and procedures as well as construction and operating methods.²³ BrightSource reports that a four to six MW facility utilizing its LPT technology has been tested and verified by an independent engineering firm, and found to produce the world's highest temperature and pressure solar steam. PG&E states that commercial scale development is not expected to present any issues that have not been successfully resolved during the demonstration phase. However, we note that there is risk in that the technology has never been employed at the scale provided under the PPAs.

Investment Tax Credit (ITC)

Section 48 of the Internal Revenue Code provides an ITC for certain types of commercial energy projects, including solar technologies. In general, the ITC is currently available to qualified projects that are placed in service prior to the end of 2016, and the ITC is realized in the year in which the project begins commercial operation.²⁴

²² <http://www.brightsourceenergy.com/technology>

²³ <http://www.brightsourceenergy.com/projects/sedc>

²⁴ <http://eetd.lbl.gov/EA/EMP/reports/lbnl-1642e.pdf>

On February 17, 2009, The American Recovery and Reinvestment Act of 2009 (ARRA 2009) was signed into law by President Obama. ARRA 2009 seeks to substantially impact the market for renewable energy technologies. As a whole, ARRA 2009 focuses in two areas: (i) appropriations for government programs; and (ii) tax-based incentives. Most significant for these Projects, the ARRA 2009 allows projects to forego the ITC and instead elect a cash grant of equivalent value. To qualify for a cash grant in lieu of the Investment Tax Credit, a project must begin construction by December 31, 2010. BrightSource's Projects are eligible for the ITC or a cash grant in lieu of the ITC.

DOE Loan Guarantee

BrightSource has applied for a DOE Loan Guarantee under the program created by the Energy Policy Act of 2005, as modified by the ARRA 2009. The DOE Loan Guarantee offers significant financial advantages over conventional financing. PG&E states that the issuance of the DOE's Conditional Commitment to lend, pursuant to the DOE Loan Guarantee, is conditioned upon Commission approval of the PPAs discussed herein.

Interconnection and transmission

Delivery from the projects is dependent on upgrades to the existing 115-kv transmission line between the El Dorado substation and the recently proposed Ivanpah substation.²⁵ PG&E believes that the transmission network upgrades will be completed in time for the Projects to deliver pursuant to the PPAs.

Permitting Status

The Projects concern solar thermal facilities (greater than 50 MW) that will be located on federal land. Therefore, the key permitting agencies are the California Energy Commission (CEC) and the Bureau of Land Management (BLM). The BLM and the CEC have executed a Memorandum of Understanding concerning their intent to conduct a joint environmental review of the facilities in a single National Environmental Policy Act (NEPA)/California Environmental Quality

²⁵ On May 28, 2009 SCE filed Application 09-05-027 requesting a Certificate of Public Convenience and Necessity to permit SCE to construct the Eldorado-Ivanpah Transmission Project (EITP).

Act (CEQA) process.²⁶ BrightSource filed its Application for Certification with the CEC on August 31, 2007.²⁷

Under federal law, the BLM is responsible for processing requests for rights-of-way to authorize the proposed project and associated transmission lines and other facilities to be constructed and operated on land it manages. In processing applications, the BLM must comply with the requirements of NEPA, which requires that federal agencies reviewing projects under their jurisdiction consider the environmental impacts associated with the proposed project construction and operation. The CEC is the lead agency under the California Environmental Quality Act (CEQA) and has a certified regulatory program under CEQA. As the lead agency under CEQA, the CEC is responsible for reviewing and ultimately approving or denying all applications to construct and operate thermal electric power plants, 50 MW and greater, in California. The CEC's facility certification process carefully examines public health and safety, environmental impacts and engineering aspects of proposed power plants and all related facilities such as electric transmission lines and natural gas and water pipelines.²⁸

Contribution to minimum quota requirement for long-term/new facility contracts

As new facilities, delivering pursuant to long-term PPAs, deliveries from Ivanpah 1 & 3 will contribute to PG&E's minimum quota requirement under D.07-05-028, as described above.

Consistency with Interim Emissions Performance Standard

In D.07-01-039, the Commission adopted an Emissions Performance Standard (EPS) that applies to contracts with a term of five years or more for baseload generation with an annualized capacity factor of at least 60%. The PPAs are not covered by the EPS because they concern in-state RPS-eligible facilities with an expected capacity factor under 60%.

²⁶ <http://www.energy.ca.gov/sitingcases/ivanpah/index.html>

²⁷ <http://www.energy.ca.gov/sitingcases/ivanpah/index.html>

²⁸ *Ibid.*

DRA's protest is denied

DRA filed a protest to AL 3458-E with the Commission, which included public and confidential materials. We address the majority of DRA's protest here and the confidential portion in Confidential Appendix A.

DRA recommends that the Commission approval of AL 3458-E be conditioned on BrightSource obtaining a DOE Loan Guarantee. DRA also recommends that the Commission require that PG&E (i) amend misleading statements in AL 3458-E about the PPA prices; (ii) file supplemental testimony illustrating the impact of the DOE Loan Guarantee on the PPAs; and (iii) file supplemental data comparing the PPA prices, without the support of a DOE Loan Guarantee, to bids from its most recent RPS solicitation.

Commission denies DRA's protests that the BrightSource PPAs should be conditionally approved, based on receipt of a DOE Loan Guarantee

DRA argues that the PPAs filed in AL 3458-E are reasonable only at the price that assumes BrightSource obtains a DOE Loan Guarantee. In support of its protest, DRA states that Southern California Edison Company (SCE) executed PPAs with the same developer for, "...the same technology, the same siting, and similar size..." facilities which are priced below the MPR and are, "...not contingent on BrightSource obtaining a DOE Loan Guarantee."²⁹

In their response, PG&E states that DRA's argument should be rejected because it is unrealistic to expect that price should be the same in different PPAs because, "...each agreement is based on a complete set of negotiated terms and conditions for each particular transaction."³⁰ Moreover, PG&E asserts that the PPAs are reasonably priced, "...regardless of whether the DOE Loan Guarantee is available to minimize customer costs."³¹

²⁹ DRA protest, page 3.

³⁰ PG&E reply to protest, page 2.

³¹ *Ibid.*

Based on the careful review of DRA's protest and PG&E's protest response, as well as PG&E's response to a data request from Energy Division staff, we determine the PPAs are reasonably priced. The PPAs are reasonable because Ivanpah 1 & 3 are competitive relative to PG&E's 2008 shortlist, are highly viable, and comply with CPUC decisions. See Confidential Appendix A for further discussion of DRA's confidential protest and Confidential Appendix C for a detailed price analysis. Accordingly, we do not require that PG&E amend its filing or provide supplemental data and testimony as recommended by DRA.

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 July 20, 2009.

No comments were filed.

FINDINGS

1. PG&E filed Advice Letter (AL) 3458-E on May 13, 2009 requesting Commission review and approval of two renewable energy resource power purchase agreement (PPAs) with BrightSource Energy, Inc.
2. The RPS Program requires each utility, including PG&E, to increase the amount of renewable energy in its portfolio to 20 percent by 2010, increasing by a minimum of one percent per year.
3. On November 17, 2008, Governor Schwarzenegger issued Executive Order S-14-08, which sets a target for energy retailers to deliver 33 percent of electrical energy from renewable resources by 2020.
4. The Commission requires each utility to establish a Procurement Review Group to review the utilities' procurement process and selected contracts.

5. The PPAs are consistent with PG&E's approved 2008 RPS Procurement Plan, which was approved by D.08-02-008.
6. The PPAs fit with PG&E's identified renewable resource needs.
7. D.04-06-014 and D.07-11-025 set forth standard terms and conditions to be incorporated into each RPS PPA. Those terms were compiled and published by D.08-04-009, as modified by D.08-08-028.
8. The PPAs include the Commission adopted RPS standard terms and conditions deemed "non-modifiable".
9. The PPAs are not covered by the EPS because they concern in-state RPS-eligible facilities with an expected capacity factor under 60%.
10. A protest to AL 3458-E was filed by DRA on June 3, 2009, and PG&E responded to the protest on June 10, 2009.
11. DRA's protest is denied for the reasons stated above.
12. Any stranded costs that may arise from the PPA are subject to the provisions of D.08-09-012 that authorize recovery of stranded renewables procurement costs over the life of the contract.
13. Procurement pursuant to the PPAs 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.), D.03-06-071 and D.06-10-050, or other applicable law.
14. The payments made under the PPAs between PG&E and BrightSource Energy, Inc. are reasonable and in the public interest; accordingly, the payments to be made by PG&E are fully recoverable in rates over the life of the projects, subject to Commission review of PG&E's administration of the PPAs.
15. PG&E included with its AL 3458-E a Royalty Agreement between PG&E and BrightSource Energy, Inc.
16. Certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should not be disclosed. Accordingly, the confidential appendices, marked "[REDACTED]" in the redacted copy, should not be made public upon Commission approval of this resolution.

17. The PPAs are reasonable and should be approved.
18. AL 3458-E should be approved effective today.

THEREFORE IT IS ORDERED:

1. Pacific Gas and Electric Company's Advice Letter 3458-E, requesting Commission review and approval of two power purchase agreements with BrightSource Energy, Inc., is approved.
2. Any proceeds from the Royalty Agreement between Pacific Gas and Electric Company and BrightSource Energy, Inc. will be credited to Pacific Gas and Electric Company's Energy Resource Recovery Account for the benefit of Pacific Gas and Electric Company's ratepayers.

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 20, 2009; the following Commissioners voting favorably thereon:

/s/ PAUL CLANON
PAUL CLANON
Executive Director

MICHAEL R. PEEVEY
PRESIDENT
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

Confidential Appendix A

Disposition of Confidential Protest from the
Division of Ratepayer Advocates

[REDACTED]

Confidential Appendix B

Price Terms and Conditions;
Royalty Agreement

[REDACTED]

Confidential Appendix C

Price Reasonableness Analysis and Justification

[REDACTED]

Confidential Appendix D

Summary of Permitting and Interconnection Status; PPA Terms and Conditions

[REDACTED]