

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

ITEM 29
ID #12148 (Rev.1)
RESOLUTION E-4596
June 27, 2013

REDACTED

R E S O L U T I O N

Resolution E-4596. Pacific Gas and Electric Company requests approval of two power purchase agreements with ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for the power purchase agreements between Pacific Gas and Electric Company and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC.

SAFETY CONSIDERATIONS: The power purchase agreements between PG&E and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC have terms which require ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC to comply with all relevant safety and permitting requirements.

ESTIMATED COST: Costs are confidential at this time.

By Advice Letter 4193-E filed on February 14, 2013.

SUMMARY

Cost recovery for Pacific Gas and Electric Company's renewable energy power purchase agreement (PPA) with ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC is approved.

Pacific Gas and Electric Company (PG&E) filed Advice Letter (AL) 4193-E on February 14, 2013 requesting approval of two power purchase agreements (PPAs) with ABEC Bidart-Stockdale, LLC (Stockdale) and ABEC Bidart-Old River, LLC (Old River). ABEC is a wholly-owned subsidiary of the developer of the Stockdale and Old River projects, California BioEnergy, LLC (CalBio).

CalBio proposes to develop the two facilities in Bakersfield, CA which will use biomethane from dairy-waste to generate electricity. The Stockdale project is proposed to be 0.6 megawatts (MW), with forecasted annual generation of 1.4 gigawatt hours (GWh), and is contracted to deliver over a 10-year term beginning April 1, 2013. The Old River project is proposed to be 1.84 MW, with forecasted annual generation of 12.95 GWh, which is contracted to be delivered over a 15-year term in two phases. The first phase of delivery begins February 28, 2014 and the second phase of delivery begins June 15, 2014.

The Stockdale and Old River PPAs are the result of bilateral negotiations between PG&E and the project developer, CalBio. PG&E filed Advice Letter 4193-E on February 14, 2013 requesting CPUC approval of the Stockdale and Old River PPAs.

This resolution approves without modification cost recovery for the Stockdale and Old River PPAs between PG&E and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC.

The following table summarizes the project-specific features of the agreements:

Generating Facility	Type	Term Years	MW Capacity	Annual Deliveries	Online Date	Project Location
Stockdale	Dairy-waste Biomethane	10	0.6	1.4 GWh	4/1/2013	Bakersfield, CA
Old River	Dairy-waste Biomethane	15	1.84	12.95 GWh	Phase I: 2/28/2014 Phase II: 6/15/2014	Bakersfield, CA

BACKGROUND

Overview of the Renewables Portfolio Standard (RPS) Program

The California RPS program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036, and SB 2 (1X).¹ The RPS

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); SB 2 (1X) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

program is codified in Public Utilities Code Sections 399.11-399.31.² Under SB 2 (1X), the RPS program administered by the Commission requires each retail seller to procure eligible renewable energy resources so that the amount of electricity generated from eligible renewable resources be an amount that equals an average of 20 percent of the total electricity sold to retail customers in California for compliance period 2011-2013; 25 percent of retail sales by December 31, 2016; and 33 percent of retail sales by December 31, 2020.³

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>.

NOTICE

Notice of AL 4193-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

PG&E's Advice Letter 4193-E was timely protested on March 6, 2013 by the Division of Ratepayer Advocates (DRA). PG&E responded to the protest on March 13, 2013.

DISCUSSION

PG&E requests Commission approval of two renewable energy contracts between PG&E and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC.

PG&E filed AL 4193-E on February 14, 2013 requesting approval of two PPAs with ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC. ABEC is a

² All further references to sections refer to Public Utilities Code unless otherwise specified.

³ D.11-12-020 established a methodology to calculate procurement requirement quantities for the three different compliance periods set forth in Section 399.15 (2011-2013, 2014-2016, and 2017-2020).

wholly-owned subsidiary of the developer of the Stockdale and Old River projects, CalBio.

CalBio proposes to develop the two facilities in Bakersfield, CA which will use biomethane from dairy-waste to generate electricity. The Stockdale project is proposed to be 0.6 MW, with forecasted annual generation of 1.4 GWh, and is contracted to deliver over a 10-year term beginning April 1, 2013. The Old River project is proposed to be 1.84 MW, with forecasted annual generation of 12.95 GWh, which is contracted to be delivered over a 15-year term in two phases. The first phase of delivery begins February 28, 2014 and the second phase of delivery begins June 15, 2014.

The Stockdale and Old River PPAs are the result of bilateral negotiations between PG&E and the project developer, CalBio. PG&E filed Advice Letter 4193-E on February 14, 2013 requesting CPUC approval of the Stockdale and Old River PPAs.

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

1. Approves the PPAs in their entireties, 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 PPAs 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 RPS (Public Utilities Code Section 399.11 et seq.), D.03-06-071, D.06-10-050, D.11-12-020, D.11-12-052 or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.13(g), associated with the PPAs 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 2011 and 2012 RPS procurement plans.
 - 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 costs under the PPAs shall be recovered through PG&E's Energy Resource Recovery Account.
 - b. Any stranded cost that may arise from the PPAs is 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 EPS adopted in R.06-04-009:
 - a. The PPAs are pre-approved as meeting the EPS because they are for a biomass facility covered by Conclusion of Law 35(d) of D.07-01-039.
 - b. PG&E has provided the notice of procurement required by D.06-01-038 in its Advice Letter filing.
7. Adopts a finding of fact and conclusion of law that deliveries from the PPAs shall be categorized as procurement under the portfolio content category specified in Public Utilities Code Section 399.16(b)(1)(A), subject to the Commission's after-the-fact verification that all applicable criteria have been met.

Energy Division Evaluated the Amended PPA on these Grounds:

- Consistency with Bilateral Contracting Rules
- Consistency with PG&E's 2012 RPS Procurement Plan⁴
- Consistency with Least-Cost Best-Fit Requirements
- RPS Portfolio Need

⁴At the time the PPAs were executed, PG&E's 2012 RPS Procurement Plan had been recently approved by the Commission, however PG&E had not yet conducted its 2012 RPS Solicitation. Thus, the PPAs are reviewed for consistency with PG&E's 2012 RPS Plan, but compared for price and value reasonableness relative to its most recent RPS solicitation, which was its 2011 RPS solicitation

- Price and Net Market Value Reasonableness
- Independent Evaluator (IE) Report
- Consistency with RPS Standard Terms and Conditions
- Consistency with Portfolio Content Categories Requirements
- Procurement Review Group Participation
- Contribution to Minimum Long Term Contracting Requirement
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard
- Project Viability Assessment and Development Status

Consistency with Bilateral Contracting Rules

The Stockdale and Old River PPAs resulted from bilateral negotiations between PG&E and CalBio. PG&E characterizes these projects as a pilot opportunity to support the accumulation of financing and operational experience in the dairy-waste bioenergy sector. PG&E states that due to the characteristics of the projects as pilots, they are not well-suited to compete in the annual RPS Solicitation against projects with more commercially-deployed technologies, more experienced development teams, and lower costs of capital. PG&E also states that the projects are not able to participate in PG&E's existing Feed-in Tariff (FIT) program because the tariff that would be applicable to these projects is fully subscribed, and the expanded Section 399.20 FIT program has not yet been implemented by the Commission. For these reasons, PG&E asserts that bilateral procurement, rather than direct competition through a solicitation, was necessary to realize the benefits of the technology and to facilitate appropriate contract terms for the Stockdale and Old River PPAs.

The Commission developed guidelines pursuant to which utilities may enter into bilateral RPS contracts. In D.03-06-071, the Commission authorized entry into bilateral RPS contracts, provided that such contracts did not require Public Goods Charge funds and were "prudent." In D.06-10-019, the Commission established additional rules pursuant to which the IOUs could enter into bilateral RPS contracts. In D.09-06-050, the Commission determined that bilateral agreements should be reviewed according to the same processes and standards as projects that come through a solicitation.

PG&E adhered to these bilateral contracting rules because the PPAs are longer than one month in duration, the PPAs were filed by advice letter, and the contracts are reasonably priced based on the pilot nature of the projects, as discussed in more detail in the “Price and Net Market Value Reasonableness” section below. Accordingly, as described in this resolution, the Stockdale and Old River PPAs were compared to other RPS offers received in PG&E’s 2011 RPS solicitation; the proposed agreements were reviewed by PG&E’s Procurement Review Group; and an independent evaluator oversaw the project evaluations and PPAs negotiations.

The Stockdale and Old River PPAs are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.

Consistency with PG&E’s 2012 RPS Procurement Plan

California’s RPS statute requires the Commission to direct each utility to prepare an annual RPS Procurement Plan (Plan) and then review and accept, modify, or reject the Plan prior to the commencement of a utility's annual RPS solicitation.⁵ The Commission must then accept or reject proposed PPAs based on their consistency with the utility’s approved Plan.

PG&E’s stated goal in its 2012 RPS Plan is to procure up to 1,000 GWh in long-term projects that allow it to address its ongoing 33% mandate post-2020. The Stockdale and Old River PPAs are long-term PPAs. The Stockdale and Old River facilities will begin delivering energy under the PPAs in the first (2011- 2013) and second (2014 - 2016) compliance periods and continue delivering energy in the third (2017 - 2020) compliance period and beyond. While the first and second compliance periods are periods in which PG&E has a net-long compliance position, the RECs associated with the generation delivered under the PPAs are bankable, so they may be banked to meet compliance requirements in the third compliance period or towards later RPS compliance requirements.

PG&E’s 2012 solicitation protocol also expressed a preference for bundled in-state resources located in PG&E’s service territory. These projects are consistent with that preference.

⁵ §399.13.

The PPAs are consistent with PG&E's 2012 RPS Procurement Plan, as approved by D.12-11-016.

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

D.04-07-029 directs the utilities to use certain criteria in their bid ranking. 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 LCBF bid evaluation includes a quantitative and qualitative analysis, as well as each proposal's absolute value to PG&E's customers and relative value in comparison to other proposals. The basic components of PG&E's LCBF evaluation and selection criteria and process for RPS contracts were established in the Commission's LCBF decisions D.03-06-071 and D.04-07-029.

Consistent with these decisions, the five main LCBF steps undertaken by PG&E are: (1) determination of market value of bid; (2) evaluation of portfolio fit; (3) evaluation of project viability; (4) consistency with RPS goals, and; (5) calculation of transmission adders. PG&E applied these criteria to the proposals received in the 2011 solicitation in order to establish a shortlist of proposals from bidders with whom PG&E would engage in contract discussions.

PG&E negotiated the Stockdale and Old River PPAs bilaterally. Therefore, the PPAs did not compete directly with other RPS projects. In AL 4193-E, PG&E explains that it examined the reasonableness of the bilaterally negotiated Stockdale and Old River PPAs using the same LCBF evaluation methodology that it used to evaluate RPS offers received in its 2011 RPS solicitation.⁶ See the "Price and Net Market Value Reasonableness" section of this resolution for a discussion of how the Stockdale and Old River PPAs compare to PG&E's 2011 RPS Solicitation Shortlist and recently executed contracts.

The Stockdale and Old River PPAs were evaluated consistent with the LCBF methodology identified in PG&E's 2011 RPS Procurement Plan.

⁶ PG&E's 2011 RPS solicitation was the most recent solicitation at the time that the Stockdale and Old River PPAs were negotiated and executed.

RPS Portfolio Need

The California RPS Program was established by Senate Bill (SB) 1078 and has been recently modified by SB 2 (1X), which became effective on December 10, 2011. SB 2 (1X) made significant changes to the RPS Program.⁷ SB 2 (1X) established new RPS procurement targets such that retail sellers must procure "...from January 1, 2011 to December 31, 2013...an average of 20 percent of retail sales...25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020."⁸

PG&E's forecasted RPS portfolio need begins in the third compliance period (2017 - 2020). Thus, PG&E is forecasted to not need any incremental renewable energy to meet its RPS compliance needs in the first (2011 - 2013) and second (2014 - 2016) compliance periods. Although the facilities will deliver generation beginning in the first and second compliance periods, when PG&E does not have a compliance need, they will continue to deliver in the third compliance period and beyond, when PG&E has a need to procure generation for compliance. Additionally, because these are long-term PPAs, the RECs associated with any generation delivered in excess of PG&E's compliance need in the first and second compliance periods may be banked to help meet PG&E's RPS compliance need in the third compliance period or towards later RPS compliance requirements.

Generation from the Stockdale and Old River facilities is a moderate fit for the portfolio need requirements of PG&E's RPS portfolio.

Price and Net Market Value Reasonableness

The Commission's reasonableness review for RPS PPAs includes a comparison of the proposed PPA price and net market value relative to other RPS offers received in recent RPS solicitations and to contracts executed in the 12 months prior to the proposed PPA's execution date. The most recent cohorts to compare the price and value of the Stockdale and Old River PPAs against are shortlisted

⁷ The Commission opened Rulemaking (R.) 11-05-005 (May 5, 2011) to implement the new RPS law.

⁸ See § 399.15(b)(2)(B), SB 2 (1X)

bids from PG&E's 2011 RPS solicitation and RPS contracts executed by PG&E in the 12 months prior to the execution of the two PPAs.

PG&E evaluates the attributes of each PPA both quantitatively and qualitatively, first based on NMV, and then applies a secondary ranking using portfolio adjusted value (PAV)⁹. PG&E stated in AL 4193-E that although the Stockdale and Old River PPAs did not compare favorably to its 2011 RPS Solicitation Shortlist, PG&E entered into the PPAs for the following reasons:

- 1) The projects offer a pilot demonstration opportunity; and
- 2) The dairy-waste biomethane combustion technologies employed for the projects provide technology diversity to PG&E's RPS portfolio.

The Stockdale and Old River PPAs compared poorly against other offers based on price and value. See Confidential Appendix A for a price, value and viability comparison.

Although the price and value of the PPAs compare poorly against shortlisted offers from PG&E's 2011 RPS RFO, and dairy-waste biomethane-fueled generators are a commercially-proven technology in the United States, approval of these PPAs will provide financing and utility-scale operational experience for a sector with limited commercial deployment in California. In addition, these dairy-waste biomethane projects are baseload resources that help diversify PG&E's mix of RPS-eligible renewable resources, provide firm energy delivery, and offer operational flexibility in PG&E's portfolio through options in the PPAs for economic curtailment in excess of standard curtailment requirements.

Though in this instance the approval of these pilot projects is reasonable, going forward, PG&E should not submit bilaterally negotiated pilot project RPS contracts to the Commission for approval via advice letter. PG&E should instead direct projects under three megawatts to participate in the revised Feed-in Tariff program or the SB 1122 bioenergy Feed-in Tariff program once implemented.

⁹ The Portfolio Adjusted Value methodology uses the Net Market Value results as an initial valuation and then makes additional adjustments that take into account the impact a transaction will have on PG&E's portfolio, many of which are elements of portfolio fit.

Alternatively, PG&E could propose to the Commission a pilot program through which these types of projects may be properly evaluated and valued.

Although the price and net market value of the Stockdale and Old River PPAs compare poorly to shortlisted offers from PG&E's 2011 RPS solicitation and other RPS contracts executed around that time, the price and net market value of the PPAs are reasonable based on the opportunity that they provide to support the accumulation of financing and operational experience and information in the dairy-waste bioenergy sector.

The CPUC approves cost recovery for the Stockdale and Old River PPAs between PG&E and ABEC Bidart-Stockdale and ABEC Bidart-Old River.

The California 2012 Bioenergy Action Plan encourages bioenergy development

The 2012 Bioenergy Action Plan was developed with the input of the Bioenergy Interagency Working Group and outlines strategies, goals, objectives and actions that California state agencies will take to increase bioenergy development in California. Among the policy goals outlined were the "development of diverse bioenergy technologies that increase local electricity generation," the improvement of "air and water quality," and the reduction of "emissions of potent GHG emissions such as methane that would otherwise be released into the atmosphere from animal waste and decomposing organic material." The Stockdale and Old River PPAs represent an opportunity for the Commission to support the aforementioned policy goals as identified in the Bioenergy Action Plan.

Independent Evaluator Report (IE)

PG&E retained Arroyo Seco Consulting as the Independent Evaluator (IE) for the PPAs. The IE conducted activities to review and assess PG&E's processes as the utility evaluated and negotiated the contracts. The IE's opinion is that the negotiations conducted between PG&E and CalBio for the PPAs were conducted in a manner that resulted in less than fair treatment of ratepayers and competing developers due to two specific concessions granted CalBio during the course of negotiations. See Confidential Appendix B for additional detail on specific concessions.

Arroyo opined that the contracts rank low in value and high in price when compared to relevant peer groups of proposals. Arroyo also ranked the projects

as moderate in viability and portfolio fit. Based on these findings, the IE concluded that the contracts do not particularly merit Commission approval, but acknowledged that the Commission may find value in the societal benefit of encouraging wider deployment of dairy-waste-based biogas-fueled generation in California.

Consistent with D.06-05-039 and D.09-06-050, an Independent Evaluator oversaw PG&E's negotiations with CalBio. See Confidential Appendix B for the Independent Evaluator's summary of comments on the PPAs.

Consistency with RPS Standard Terms and Conditions (STCs)

The Commission adopted a set of standard terms and conditions (STCs) required in RPS contracts, four of which are considered "non-modifiable." The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. The Commission further refined these STCs in D.10-03-021, as modified by D.11-01-025.

The Stockdale and Old River PPAs include the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

Consistency with Portfolio Content Category Requirements

In D.11-12-052, the Commission defined and implemented portfolio content categories for the RPS program and authorized the Director of Energy Division to require the investor-owned utilities to provide information regarding the proposed contract's portfolio content category classification in each advice letter seeking Commission approval of an RPS contract. The purpose of the information is to allow the Commission to evaluate the claimed portfolio content category of the proposed RPS PPA and the risks and value to ratepayers if the proposed PPA ultimately results in renewable energy credits in another portfolio content category.

In AL 4193-E, PG&E states that procurement resulting from the Stockdale and Old River PPAs meet the upfront showing required for Portfolio Content Category One because the projects are in-state RPS-eligible renewable energy resources that expect to have their first point of interconnection with the electricity distribution system used to serve end-user customers within the metered boundaries of a California Balancing Authority area. Therefore, the RPS-

eligible procurement from the projects satisfies the criteria for Portfolio Category One adopted in D.11-12-052.

Consistent with D.11-12-052, PG&E provided information in AL 4193-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the Stockdale and Old River PPAs.

In this resolution, the Commission makes no determination regarding the Stockdale and Old River PPAs' portfolio content category classifications or whether they satisfy the conditions of Pub. Util. Code §399.16(d). The RPS contract evaluation process is separate from the RPS compliance and portfolio content category classification process, which requires consideration of several factors based on various showings in a compliance filing. Thus, making a portfolio content category classification determination in this resolution regarding the procurement considered herein is not appropriate. PG&E should incorporate the procurement resulting from the Stockdale and Old River PPAs and all applicable supporting documentation to demonstrate portfolio content category classification in the appropriate compliance showing(s) consistent with all applicable RPS program rules.

Procurement Review Group Participation

The Procurement Review Group (PRG) process was initially established in D.02-08-071 to review and assess the details of the investor-owned utilities' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission as a mechanism for procurement review by non-market participants.

According to PG&E, participants in the PRG include representatives from the Commission's Energy Division, the Division of Ratepayer Advocates, the Department of Water Resources, the Union of Concerned Scientists, The Utility Reform Network, the California Utility Employees, and Jan Reid, as a PG&E ratepayer. PG&E presented the projects to the PRG on November 8, 2011 after previously being discussed at the June 14, 2011 PRG meeting.

Pursuant to D.02-08-071, PG&E complied with the Commission's rules for involving the Procurement Review Group.

Contribution to Minimum Quantity Requirement for Long-Term PPAs

In D.12-06-038, the Commission established a long-term contracting requirement that must be met in order for retail sellers to count RPS procurement from contracts less than 10 years duration for compliance with the RPS program.¹⁰ In order for the procurement from any short-term contract signed after June 1, 2010 to count for RPS compliance the retail seller must execute long-term contracts in the compliance period in which the short-term contracts are signed representing sufficient generation to cover the volume of generation from the short-term contract(s).¹¹

Because the Stockdale and Old River PPAs are 10 years or greater in length, the PPAs will contribute to PG&E's long-term contracting requirement established in D.12-06-038.

Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)

California Public Utilities Code Sections 8340 and 8341 require the Commission to consider emissions 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 for obligated facilities at 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.¹² Generating facilities using certain renewable resources are deemed compliant with the EPS.¹³ Because the Stockdale and Old River facilities will be fueled by

¹⁰ For the purposes of the long-term contracting requirement, contracts of less than 10 years duration are considered "short-term" contracts. (D.12-06-038)

¹¹ Pursuant to D.12-06-038, the methodology setting the long-term contracting requirement is: 0.25% of Total Retail Sales in 2010 for the first compliance period; 0.25% of Total Retail Sales in 2011-2013 for the second compliance period; and 0.25% of Total Retail Sales in 2014-2016 for the third compliance period.

¹² "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. Util. Code § 8340 (a).

¹³ D.07-01-039, Attachment 7, p. 4

biomass that would otherwise be disposed of by open burning, forest accumulation, landfill, spreading or composting, the PPAs meet the conditions for EPS compliance established in D.07-01-039.¹⁴

The Stockdale and Old River PPAs are compliant with EPS because they meet the conditions established in D.07-01-039.

Project Viability Assessment and Development Status

The Stockdale project is operational and is therefore considered viable and the Old River project is considered moderately viable. PG&E provided the following information about the project developer and the projects' development statuses.

Project Developer Experience

CalBio has completed construction and brought online one dairy-waste biogas project, the Stockdale project considered herein. The principals of CalBio have significant experience in industries other than power generation, such as dairy and other agriculture ownership and operation, management consulting and venture capital.

Ownership/O&M Experience

CalBio does not have previous power plant operational experience. CalBio has engaged the US subsidiary of Germany-based MT-Energie GmbH as contractor to engineer and construct the Old River project. This firm has experience constructing about 500 biogas-fueled generators, particularly in Europe.

Technology

According to PG&E, the developer is expected to employ commercially-proven technologies, including: anaerobic digesters of animal waste and biogas-fueled internal combustion engines for electricity generation. Both the Stockdale and Old River projects will use a double-lined lagoon digester, and the Old River Project will also use two above-ground stir tank reactors.

¹⁴ See D.07-01-039, COL 35.

The Stockdale lagoon is double-lined and meets the Water Board's Tier 1 guidelines, their strictest protocol. The 0.6 MW engine for the Stockdale Project is a rebuilt engine with a Caterpillar 398 core, specially designed to handle dairy biogas. It deploys an exhaust gas recirculation system designed to limit the emissions of nitrogen oxides (NOx), and a standard three-way catalyst.

The Old River Project will be a hybrid digester, integrating both a double-lined lagoon and two Complete Stir Tank Reactors ("CSTR") from MT-Energie, a German company that, according to the developer, has built over 500 projects in Europe. The Old River Project will use two 1.2 MW Caterpillar CG170 engines that are manufactured by MWH GmbH, which was recently acquired by Caterpillar. The engines will be equipped with a selective catalytic reduction system for NOx reduction.

The equipment for the Stockdale facility is already in place, and PG&E does not anticipate contingencies or delays for the Old River project due to equipment procurement issues, given that both the liner and engine vendors are large manufacturers, but these could result if financing is not secured for the Old River Project or equipment suppliers go out of business.

Resource Quality

PG&E states that the fuel for the two projects will originate from dairy waste from the cows employed at the two Bidart Dairies, and that the projects each have feedstock agreements for the fuel that extend beyond the terms of the PPAs. PG&E does not anticipate any production shortfall, but disruptions at the dairies are a risk factor, as they could disrupt the projects' operations and ability to generate energy. PG&E also states that the Projects will use onsite water and will not require additional water beyond what is already used for dairy operations.

Interconnection

Both projects will interconnect at the distribution-level and have applied for interconnection through PG&E's independent study process. The Stockdale and Old River projects both have executed Interconnection Agreements.

Transmission Requirements

For information on transmission requirements, see Confidential Appendix A of this resolution.

Reasonableness of COD

The Stockdale project reached commercial operation in April 2013. It is the IE's view that the Old River project faces only modest hurdles to meeting its phased online dates of February and June 2014. For additional information on reasonableness of COD, see Confidential Appendix A of this resolution.

Permit Status

The Stockdale project has been constructed and is operating, and according to PG&E has received all major permits and authorizations necessary for development and operation. As of April 30, 2013, the Old River project had received its authority to construct from the San Joaquin Valley Air Pollution Control District, and had not yet received its wastewater discharge permit from the California Regional Water Quality Control Board (Central Valley Region). In Kern County, dairies are not required to obtain a use permit to construct and operate digesters.

Financing

CalBio successfully financed construction of the Stockdale project. PG&E states the developer will be closing both construction and term financing for the Old River project, which will include debt and equity capital. The Stockdale project received a Section 1603 Treasury Cash Grant Award in October 2012. The Old River Project needs to be placed into service by December 31, 2013 to qualify for the Section 1603 Treasury Cash Grant. Old River bears the risk if it is unable to obtain the cash grant. For additional information on financing, see Confidential Appendix A of this resolution.

Site

The projects both have 100% site control via their leases that extend multiple years beyond the PPA terms. The leases do not contain exercisable extension options, but the dairy owner is a partner in the projects.

It is reasonable to expect the Stockdale and Old River projects will meet the terms and conditions of their PPAs. Confidential Appendix A includes additional discussion about other project development milestones that are confidential.

Safety Considerations

The power purchase agreements between PG&E and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC include terms and conditions which require ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC to comply with all relevant safety and permitting requirements.

DRA's protest to Advice Letter 4193-E is denied

DRA submitted both public and confidential versions of its protest to Advice Letter 4193-E. In the public version of its protest to Advice Letter 4193-E, DRA recommends that the Commission reject Advice Letter 4193-E for the following reasons: (1) The contract prices and net market values of the PPAs are not competitive compared to other offers available to PG&E; (2) The value of the PPAs as pilot opportunities is unclear; (3) The Commission is considering how to implement the bioenergy program under SB 1122 and the PPAs should be reoffered in future solicitations that meet the requirements of SB 1122; and (4) Concessions were made during contract negotiations that result in weakened ratepayer protections. In the confidential version of its protest to Advice Letter 4193-E, DRA includes a comment regarding the valuation criteria for these projects. DRA's confidential comments are discussed in Confidential Appendix A of this resolution.

PG&E submitted both public and confidential versions of its response to DRA's protest. In the public version of PG&E's response to DRA's protest, PG&E recommends that the protest be denied and addresses DRA's concerns as follows: (1) The projects should be distinguished from other bids because dairy-waste biogas technologies have not benefitted from the economies of scale achieved by other mature technologies with significant deployment in California; (2) The pilot-scale nature of the PPAs offer an opportunity to test the scalability of the technology and ability to deliver long-term benefits to ratepayers; (3) It would be inappropriate for the Commission to delay or deny approval of these transactions because another procurement program with uncertain implementation rules will be established at an uncertain future date; and (4) The terms of the PPAs are necessary in light of the pilot nature of the projects as well as to preserve the overall customer value of the transactions. In the confidential version of PG&E's response, PG&E addresses the comments from DRA's confidential protest. PG&E's confidential response to DRA's confidential protest comments are discussed in Confidential Appendix A of this resolution.

As identified in the “Price and Net Market Value Reasonableness” section of this resolution, the cost ratepayers would bear for energy delivered under these PPAs is reasonable based on the opportunity these projects provide to support the accumulation of financing and operational experience in the dairy-waste bioenergy sector. In addition, the concessions made to the terms of the PPAs are reasonable due to the pilot nature of the projects and are similar to concessions made to projects in previous PPAs. Therefore, DRA’s protest recommending rejection of Advice Letter 4193-E is denied.

RPS ELIGIBILITY AND CPUC APPROVAL

Pursuant to Public Utilities Code Section 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 uses 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.), D.11-12-020 and D.11-12-052, 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

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.

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 finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract enforcement activities shall be reviewed pursuant to the Commission’s authority to review the utilities’ administration of such contracts.

CONFIDENTIAL INFORMATION

The Commission, in implementing Public Utilities Code Section 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, including price, is confidential for three years from the date the contract states that energy deliveries begin, or until one year following contract expiration, 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 and comments were timely received by the Division of Ratepayer Advocates (DRA) on June 17, 2013.

In the confidential version of its comments on the draft of this resolution, DRA provides comments with regard to how individual contract terms should be structured to allocate potential future greenhouse gas offset revenues, and recommends that the Commission reject the Stockdale and Old River PPAs and require that PG&E and CalBio renegotiate the terms of the PPAs. DRA's confidential comments, discussed in Confidential Appendix A, do not change this resolution's determination that the PPAs, as negotiated between the parties, are reasonable in their current form.

FINDINGS AND CONCLUSIONS

1. The Stockdale and Old River PPAs are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
2. The PPAs are consistent with PG&E's 2012 RPS Procurement Plan, as approved by D.12-11-016.
3. The Stockdale and Old River PPAs were evaluated consistent with the LCBF methodology identified in PG&E's 2011 RPS Procurement Plan.
4. Generation from the Stockdale and Old River facilities is a moderate fit for the portfolio need requirements of PG&E's RPS portfolio.
5. Although the price and net market value of the Stockdale and Old River PPAs compare poorly to shortlisted offers from PG&E's 2011 RPS solicitation and other RPS contracts executed around the same time, the price and net market value of the PPAs are reasonable based on the opportunity that they provide to support the accumulation of financing and operational experience and information in the dairy-waste bioenergy sector.
6. Consistent with D.06-05-039 and D.09-06-050, an Independent Evaluator oversaw PG&E's negotiations with CalBio.
7. The Stockdale and Old River PPAs include the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.
8. Consistent with D.11-12-052, PG&E provided information in AL 4193-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the Stockdale and Old River PPAs.

9. Pursuant to D.02-08-071, PG&E complied with the Commission's rules for involving the Procurement Review Group.
10. Because the Stockdale and Old River PPAs are 10 years or greater in length, the PPAs will contribute to PG&E's long-term contracting requirement established in D.12-06-038.
11. The Stockdale and Old River PPAs are compliant with EPS because they meet the conditions established in D.07-01-039.
12. It is reasonable to expect that the Stockdale and Old River projects will meet the terms and conditions of their PPAs.
13. DRA's protest recommending rejection of Advice Letter 4193-E is denied.
14. Any procurement pursuant to these Agreements 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.*), D.11-12-020 and D.11-12-052, or other applicable law. 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 finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract.
15. 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.
16. Advice Letter 4193-E should be approved effective today without modification.
17. Payments made by PG&E under the PPAs are fully recoverable in rates over the life of the PPAs, subject to Commission review of PG&E's administration of the PPAs.

THEREFORE IT IS ORDERED THAT:

1. The power purchase agreements between Pacific Gas and Electric Company and ABEC Bidart-Stockdale, LLC and ABEC Bidart-Old River, LLC as proposed in Advice Letter 4193-E are approved without modifications.

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 27, 2013; the following Commissioners voting favorably thereon:

PAUL CLANON
Executive Director

Confidential Appendix A

Price/Value Reasonableness, Portfolio Need,
Viability, and Confidential Protest and Comments

[REDACTED]

Confidential Appendix B

Independent Evaluator Conclusions and Recommendations

[REDACTED]

Confidential Appendix C

PPA Terms and Conditions

[REDACTED]