

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Agenda Item#28

Agenda ID 16120

ENERGY DIVISION

RESOLUTION E-4890 (Rev. 1)

December 14, 2017

REDACTED
RESOLUTION

Resolution E-4890. Grants approval of Pacific Gas and Electric Company (PG&E) request for one amendment to an existing power purchase agreement (PPA) with Java Solar, LLC.

PROPOSED OUTCOME:

- This Resolution approves an amendment to a previously approved long-term Renewable Auction Mechanism power purchase agreement between PG&E and Java Solar, LLC. The amendment makes several modifications to the original PPA. The amendment is approved without modification.

SAFETY CONSIDERATIONS:

- The amendment to the PPA does not appear to result in any adverse safety impacts on the facilities or operations of PG&E. The amendment requires the sellers of the generation to continue to comply with all applicable safety requirements relating to the project.

ESTIMATED COST:

- Actual costs of the PPA, as amended, are confidential at this time.

By Advice Letter 5126-E, filed on August 16, 2017.

SUMMARY

Pacific Gas and Electric Company's renewable energy power purchase agreement (PPA), as amended, with Java Solar, LLC complies with the Renewables Portfolio Standard (RPS) procurement guidelines and is approved without modification.

Pacific Gas and Electric Company (PG&E) filed Advice Letter (AL) 5126-E on August 16, 2017, requesting California Public Utilities Commission (Commission) review and approval of an amendment to an existing renewable energy power purchase agreement (PPA) between PG&E and Java Solar, LLC. (Java Solar PPA). The original, approved PPA was a 20-year contract for generation from one new solar photovoltaic facility, Java Solar (Project) that is being developed by Java Solar, LLC in Kings County, California.

Changes to the original PPA pursuant to the proposed amendment include:

1. Shortening of the delivery term;
2. Modification of the commercial operating date (COD) and full capacity deliverability status (FCDS) date; and
3. Reduction of required annual contract quantities.

The amendment to the PPA does not affect contract price or the interconnection point. The amendment to the PPA extends the COD and FCDS date due to delayed PG&E transmission upgrades that affect the Project's ability to be certified by the California Independent System Operator (CAISO) with FCDS. In exchange for an extension of deadlines, PG&E has secured a shorter delivery term from 20 to 17.25 years and reduced annual contract quantities. In AL 5126-E, PG&E asserts that the amendment to the PPA will result in a direct payment reduction for customers due to the shortened delivery term and decreased annual contract quantities. Moreover, PG&E's execution of the amendment is consistent with PG&E's 2016 RPS Procurement Plan, approved in Decision 16-12-044.

This resolution approves the amendment to the Java Solar PPA without modification.

Table 1 below provides a summary of the amended PPA between PG&E and Java Solar, LLC.

Table 1: Summary of the Java Solar PPA

Generating Facility	Technology Type	Original Delivery Term (Years)	Amended Delivery Term (Years)	Capacity (MW)	Amended COD	Location
Java Solar Facility	Solar PV	20	17.25	13.5	10/01/2020	Kings County, 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, SB 2 (1X), and SB 350.¹ The RPS program is codified in Public Utilities Code Sections 399.11-399.32.²

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 On

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); SB 350 (de León, Chapter 547, Statutes of 2015).

² All further statutory references are to the 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 covered in SB 2 (1X) (2011-2013, 2014-2016, and 2017-2020). Note it is 33% of a Load Serving Entity's annual retail sales for 2020 and each year thereafter.

October 7, 2015, SB 350⁴ made further changes to Pub. Util. Code Sections 399.11, et seq. SB 350 requires that the amount of electricity generated and sold to retail customers from eligible renewable energy resources be increased to 50% by December 31, 2030.⁵

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 5126-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 to the R.15-02-020 service list in accordance with Section 4 of General Order 96-B.

PROTESTS

The AL 5126-E was timely and jointly protested by Marin Clean Energy, Peninsula Clean Energy Authority, Silicon Valley Clean Energy Authority, and Sonoma Clean Power Authority (jointly the "CCAs") on September 5, 2017. The CCAs believe the AL should be rejected because ratepayers will benefit more from terminating the Java Solar PPA than they will from the Project's development. The CCAs also recommend in their protest that CCA customers should not be assessed any costs associated with the amended Java Solar PPA.

PG&E replied to the protest on September 12, 2017. In its reply, PG&E recommended the Commission should deny the protest. PG&E believes the CCAs do not provide any substantive reasons for rejecting the Java Solar AL, as they raise issues either already considered by the Commission or outside the scope of the Java Solar AL.

⁴ SB 350 (De León, Chapter 547, Statutes of 2015) effective on January 1, 2016.

⁵ D.16-12-040 established additional procurement requirement quantities for the three compliance periods established by SB 350: 2021-2024, 2025-2027, 2028-2030.

DISCUSSION

PG&E requests approval of a renewable energy power purchase agreement, as amended, with Java Solar, LLC.

The Java Solar project is a 13.5 megawatt (MW) solar photovoltaic (PV) facility located in Kings County, California. On June 17, 2015, the Commission approved Advice Letter 4605-E, which approved the ability for PG&E to contract using the Renewable Auction Mechanism (RAM) 6 procurement process. On December 18, 2015, PG&E and Java Solar, LLC entered into a 20-year PPA for the Java Solar project. On April 7, 2016, the Commission approved the original PPA through AL 4780-E. On August 16, 2017, PG&E filed AL 5126-E requesting Commission approval of an amendment to the original PPA with Java Solar, LLC. PG&E asserts in AL 5126-E that the purpose of the proposed amendment is to avoid project default by extending the COD and FCDS date.

The Amendment modifies the original PPA in several aspects:

1. Modifies the delivery term;
2. Modifies the COD and FCDS date; and
3. Modifies annual contract quantities.

The amendment does not modify contract price or any technical aspects of the Project. However, the reduction of the delivery term from 20 to 17.25 years and lowering the annual contract quantities results in a reduction in customer payments pursuant to the PPA. The estimated reduction in total customer payments is the difference between the costs detailed in the existing PPA and the estimated costs under the amendment.

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

1. Approves the amendment in its entirety, subject to the Commission's review of PG&E's administration of the amendment; and
2. Finds that the terms of the amendment are just, reasonable, and in the public interest.

Energy Division evaluated the amended Java Solar PPA based on the following criteria:

- Consistency with PG&E's 2016 RPS Procurement Plan;
- Consistency with PG&E's Least-Cost, Best-Fit Methodology (LCBF);
- Cost Reasonableness and Net Market Value;
- Procurement Review Group Participation;
- Project Viability Assessment and Development Status;
- Disadvantaged Communities Designation;
- Independent Evaluator Review; and
- Public Safety.

Consistency with PG&E's 2016 RPS Procurement Plan

Pursuant to statute, PG&E's RPS Procurement Plan (Plan) includes an assessment of RPS supply and demand to determine the optimal mix of renewable generation resources, description of existing RPS portfolio, description of potential RPS compliance delays, status update of projects within its RPS portfolio, and an assessment of the project failure and delay risk within its RPS portfolio.⁶ The Commission reviews procurement to verify that the utility is acting in accordance with its Commission-approved procurement plan.⁷

In PG&E's 2016 RPS Plan, PG&E asserts that it is well positioned to meet the current 33% RPS target by 2020, as well as meet its RPS compliance requirements for the second (2014-2016), third (2017-2020), and fourth (2021-2024) compliance periods. Based on that assessment, PG&E stated that it will not have an incremental RPS physical need until at least 2026. As a Commission-approved PPA, the Java Solar facility was assumed in D.16-12-044 as a facility that would contribute to RPS supply in PG&E's portfolio.

Consistent with the procurement projections from its 2016 RPS Plan, PG&E explains through AL 5126-E that the amendment will move the COD closer to when RPS generation is needed (from 2017 to 2020) and reduce the total volume

⁶ Pub. Util. Code § 399.13(a)(5).

⁷ PG&E's 2016 Draft RPS Procurement Plan was approved by D.16-12-044 on December 15, 2016.

of deliveries, resulting in decreased total Project payments for PG&E and its customers. Based on PG&E's assessment of RPS portfolio supplies and demand outlined in both its 2016 RPS Plan and AL 5126-E, the amendment does not change the amount of RPS supply in any significant way.

Therefore, the amended Java Solar PPA is consistent with the RPS portfolio projections from PG&E's 2016 RPS Procurement Plan, as approved by D.16-12-044.

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

In D.04-07-029, the Commission directs the utilities to use certain criteria in their LCBF selection of renewable resources.⁸ 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. As described in its RPS Procurement Plan, PG&E's LCBF bid evaluation includes a quantitative analysis and qualitative criteria. PG&E's quantitative analysis or market valuation includes an evaluation of price, time of delivery factors, transmission costs, congestion costs, and resource adequacy. PG&E's qualitative analysis focuses on comparing similar bids across numerous factors, such as location, benefits to minority and low-income areas, and resource diversity.

The original project was evaluated using the LCBF methodology. The amend PPA between PG&E and Java Solar, LLC was negotiated bilaterally; therefore, it did not compete directly with other RPS projects. The proposed amendment does not change price; it only changes the delivery term, COD, FCDS date, and other non-technical provisions of the PPA. The amended PPA was evaluated using the LCBF methodology and compared reasonably against the original Java Solar PPA.

The amended Java Solar PPA was evaluated consistent with the approved least-cost best-fit methodology.

⁸ See § 399.14(a)(2)(B).

Cost Reasonableness and Net Market Value

The Commission's reasonableness review for RPS PPAs includes a comparison of the proposed PPA's price and net market value (the result of the LCBF calculation) relative to other offers received in recent RPS solicitations and to contracts executed in the 12 months prior to the proposed PPA's execution date. As stated above, the amended Java Solar PPA did not compete directly with other RPS projects. Nonetheless, an LCBF analysis was conducted by evaluating the cost reasonableness and net market values of the amended PPA and original PPA. While the amended PPA does not change the price, it does reduce the delivery term and annual contract quantities resulting in a net reduction of costs to ratepayers. Based on information provided by PG&E in AL 5126-E, the Commission determines that the amended PPA's net market value is superior to the original PPA. See Confidential Appendix A and B for a more detailed discussion of the contractual pricing terms and an LCBF comparison.

The Java Solar PPA, as amended, compares reasonably to the net market value of the original PPA.

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

Procurement Review Group Participation

The Procurement Review Group (PRG) was initially established in D.02-08-071 as an advisory group to review and assess the details of the IOUs' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission.⁹ PG&E asserts that the proposed amendment to the Java Solar PPA was discussed at a PRG meeting on June 27, 2017. PG&E consulted with the PRG and provided their rationale for executing the amendment.

⁹ PG&E's PRG includes representatives from the Commission's Energy Division and the Office of Ratepayer Advocates, The Utility Reform Network, the California Utility Employees, the Union of Concerned Scientists and the Department of Water Resources.

Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the proposed amendment to the Java Solar PPA.

Project Viability Assessment and Development Status

PG&E asserts that the Java Solar project will continue to be viable because the proposed amendment will have avoided an event of default due to PG&E's transmission network delays. PG&E bases its assertion on an evaluation of the project's continued viability given the extended COD, FCDS date, and deliverability finding deadlines. PG&E asserts that the amendment's permitted delay accommodates needed transmission upgrades; otherwise, the project could be constructed consistent with the development deadlines of the original PPA.

PG&E asserts that the Java Solar project is viable and will provide renewable energy according to the terms and conditions of the amended Java Solar PPA.

Disadvantaged Community Goals

Senate Bill 350 (de León, Chapter 547, Stats. 2015) and SB 2 (1X) (Simitian, Stats. 2011, ch.1) contain disadvantaged community goals that are cross-cutting and therefore will be integrated into all policy areas. Thus, the Commission analyzed the Project's location relative to such communities.

The Java Solar project is located in census tract 6031001601, which received a CalEnviroScreen Version 3.0¹⁰ score of 86-90%. Disadvantaged communities are defined as those areas in the highest 75-100th percentile, or the 25% highest scoring census tracts in CalEnviroScreen 3.0.

The Java Solar project is located in a CalEnviroScreen Version 3.0 designated disadvantaged community.

¹⁰ The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) created CalEnviroScreen through a public process in order to help the state identify disadvantaged communities, and the tool "uses environmental, health, and socioeconomic information to produce scores for every census tract in the state." ([https://oehha.ca.gov/calenviroscreen/.](https://oehha.ca.gov/calenviroscreen/))

Independent Evaluator Review

PA Consulting Group, Inc. evaluated the overall merits of the amended Java Solar PPA. The Independent Evaluator (IE) reports that amendment has merit as it provides benefits to PG&E and its ratepayers through a better alignment of renewable needs, reduction in term, and resolves the deliverability issue facing the Project.

Consistent with D.06-05-039, an independent evaluator oversaw PGE&E and Java Solar LLC's negotiations. Additionally, the Independent Evaluator found the amended PPA compares reasonably to the original PPA as it resolves issues related to developer deadlines and lowers costs for ratepayers.

Public Safety

California Public Utilities Code Section 451 requires that every public utility maintain adequate, efficient, just and reasonable service, instrumentalities, equipment and facilities to ensure the safety, health, and comfort of the public. The original PPA, requires Java Solar LLC to comply with all applicable laws relating to project safety, including those related to planning, construction, ownership, decommissioning and/or operation of the projects. As this amendment does not change the original PPA terms related to safety, there are no incremental safety implications associated with approval of this contract beyond the status quo.

While the Commission is not authorized to administer Occupational Safety & Health Administration (OSHA) workplace safety standards, the Commission reviewed historic OSHA records for the parties related to eligible RPS projects in California. The developer, SunPower, was issued one citation for not implementing an injury prevention policy at a solar array facility in Lemoore, California. OSHA and SunPower resolved the March 2016 violation through a formal settlement. The owner, Java Solar, LLC, has no OSHA violations.

Protest to the Java Solar AL is denied

As stated above, the Java Solar AL was protested by the CCAs. The Commission considered factual and legal issues raised in the protest and reply related to the request in the Java Solar AL. Any issues relating to the original Java Solar PPA are not considered, except as described below.

The CCAs recommend that Energy Division should reject the Java Solar AL. First, the CCAs assert that the amendments will not provide significant benefits to customers, and that ratepayers would benefit more from the termination of the PPA because ratepayers' economic interests are not promoted by the high rates in the Java Solar PPA.

Second, the CCAs assert that departing CCA customers should not pay for the high rates in the original contract. Specifically, the CCAs argue that because PG&E is executing this amendment, instead of allowing the PPA to default and then terminating the contract, PG&E is making the choice to continue purchasing power from the Java Solar PPA. The CCAs further argue that by PG&E making this choice, the costs of the Java Solar PPA are avoidable and should therefore not be included in the Power Charge Indifference Adjustment (PCIA) or non-bypassable charge (NBC) and then passed on to future CCA (and other direct access energy provider) customers pursuant to D.04-12-046.

PG&E's reply argues that the issue of cost reasonableness was already decided when the Commission approved the original Java Solar PPA and the amendment does not justify any change to earlier determinations about cost reasonableness or cost responsibility. Furthermore, PG&E asserts that even if there were a basis to declare a default, termination of the PPA could result in a potentially costly dispute with uncertain results.

Simply stated, the amendments modify the COD, FCDS date, annual contract quantities, and delivery term; the amendments do not modify the contract price of the Java Solar PPA, nor increase costs to ratepayers. The costs of the PPA have already been deemed reasonable and this amendment would lower the costs from the Java Solar PPA. The amendments considered in this resolution do not amend the previously approved contract prices of the Java

Solar PPA. Therefore, the amendment does not justify any change to the Commission's earlier determination regarding cost reasonableness or cost responsibility, and the CCA's protest is denied.

The CCAs' protest is denied as the amendments do not justify any change to the Commission's earlier determination regarding cost reasonableness or cost responsibility.

RPS Eligibility and CPUC Approval

Pursuant to Pub. Util. Code § 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS contract, the Commission has required standard and non-modifiable "eligibility" language in all RPS contracts. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an "Eligible Renewable Energy Resource," that the project's output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.¹¹

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."¹²

¹¹ See, e.g. D.08-04-009 at Appendix A, STC 6, Eligibility.

¹² See, e.g. D.08-04-009 at Appendix A, STC 1, CPUC Approval.

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 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 contracts.

Confidential Information

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

The confidential appendices, marked “[REDACTED]” in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

COMMENTS

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 November 13, 2017. No comments were filed.

FINDINGS

1. The amended Java Solar PPA is consistent with PG&E's 2016 RPS Procurement Plan, as approved by D.16-12-044.
2. The amended Java Solar PPA was evaluated consistent with approved least-cost best-fit methodology.
3. The amended Java Solar PPA compares reasonably to the net market value of the original PPA.
4. Payments made by PG&E under the Java Solar PPA, as amended, are fully recoverable in rates over the life of the amended PPA, subject to Commission review of PG&E's administration of the amended PPA.
5. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the amendment to the Java Solar PPA.
6. PG&E asserts that the Java Solar project is viable and will provide renewable energy according to the terms and conditions in the Java Solar PPA, as amended.
7. The Java Solar project is located in a CalEnviroScreen Version 3.0 designated disadvantaged community.
8. Consistent with D.06-05-039, an independent evaluator oversaw PGE&E and Java Solar LLC's negotiations. Additionally, the Independent Evaluator found the amendment had merit.
9. The CCAs' protest is denied as the amendments do not justify any change to the Commission's earlier determination regarding cost reasonableness or cost responsibility.

10. Procurement pursuant to the amended Java solar 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.
11. The immediately preceding finding shall not be read to allow generation from a non-RPS eligible renewable energy resource under this amended PPA to count towards an RPS compliance obligation. Nor shall that finding absolve PG&E of its obligation to enforce compliance with this amended PPA.
12. The confidential appendices, marked "[REDACTED]" in the public copy of this Resolution, as well as the confidential portions of Advice Letter 5126-E, should remain confidential at this time.
13. AL 5126-E should be approved effective today without modification.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company's Advice Letter 5126-E requesting Commission review and approval of an amendment to an existing renewable power purchase agreement with Java Solar, LLC is approved without modification.

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 December 14, 2017; the following Commissioners voting favorably thereon:

TIMOTHY J. SULLIVAN
Executive Director

Confidential Appendix A

Evaluation Summary of the Amended Java Solar PPA

[REDACTED]