


Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

**SUBJECT: LONG-TERM RENEWABLE
ENERGY AGREEMENT WITH
PACIFIC GAS AND ELECTRIC
COMPANY**

DATE: April 24, 2023

Approved 

Date
5/2/23

RECOMMENDATION

Adopt a resolution authorizing the Director of the Community Energy Department or the Director's designee to negotiate and execute a long-term agreement with Pacific Gas and Electric Company to buy renewable energy for a term of no more than 20 years, from 2023 through 2043, in an amount not to exceed \$7,500,000 annually and \$150,000,000 in aggregate, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds.

SUMMARY AND OUTCOME

This memorandum requests authority to negotiate and execute a long-term agreement with Pacific Gas and Electric Company (PG&E) for renewable energy. Approving the resolution will contribute towards the Community Energy Department (Department) achieving the City of San José's clean power goals and complying with the California Renewable Portfolio Standard (RPS) program in calendar years 2023 through 2043.

BACKGROUND

San José Clean Energy Renewable Content Goal, Requirements, and Progress to Date

On December 6, 2022, City Council adopted a resolution amending San José Clean Energy's (SJCE) rate-setting methodology and service options to maintain the renewable energy content for GreenSource at 60 percent renewable and for TotalGreen at 100 percent renewable. Department staff estimate that the renewable energy bought to date will provide GreenSource customers with 48 percent renewable energy in 2023 and 54 percent in 2024. (TotalGreen will continue to be 100 percent renewable energy.) Thus, the Community Energy Department will have to buy significant additional renewable energy to meet the City Council-approved goals for SJCE renewable energy content.

California law requires SJCE to use long-term agreements (over 10 years) for 65 percent of the renewable energy needed to meet the State RPS requirement.¹ For example, if the State RPS is 60 percent, 65 percent of the 60 percent requirement must be bought pursuant to long-term agreements. As the State RPS requirement increases to 60 percent in 2030², SJCE requires additional long-term agreements for renewable energy to meet this requirement.

The Department issued a solicitation to buy additional renewable energy that can be delivered in 2023 and 2024, but did not receive bids for 2023 and only received one high-priced bid for limited supply in 2024. The Department has continued to monitor offers to sell renewable energy for 2023 and 2024, but supply is limited and prices have continued to increase.

The Department issued a solicitation with East Bay Community Energy to buy long-term renewable energy from new renewable energy projects and has issued another similar solicitation recently. These projects will likely come online in 2025 or 2026 as the new projects must be constructed.

Sales of Renewable Energy by California Investor-Owned Utilities

In 2019 through 2022, the Department bought substantial amounts of renewable energy from the investor-owned utilities (IOUs), as the Department has been building up its portfolio of long-term agreements with new renewable projects. The IOUs have excess renewable energy that they bought for customers that are now customers of community choice aggregators like SJCE. For 2023, the opportunities to buy renewable energy from the IOUs have changed pursuant to a California Public Utilities Commission (CPUC) 2021 decision³.

On May 24, 2021, the CPUC required the three IOUs in California⁴ to implement a voluntary allocation process. This process requires the IOUs to offer to load serving entities (LSEs), including community choice aggregators like SJCE, their proportional share of renewable energy owned by the IOUs at a cost-based market value of this energy determined through a CPUC process. Community choice aggregators' customers pay for above-market costs of these resources through the Power Charge Indifference Adjustment. The CPUC required the IOUs to sell any renewable energy not accepted in the voluntary allocation process through a competitive market offer process. In 2022, SJCE accepted a large portion of the renewable energy available through the voluntary allocation.

Consistent with the CPUC's direction, the three IOUs each released a solicitation on March 7, 2023 to sell the renewable energy that was not accepted by LSEs through the voluntary allocation process. Participants bid to receive a percent of the IOU's renewable energy portfolio; the amount of renewable energy will thus vary depending on how much the IOUs' portfolios produce each year.

¹ California Public Utilities Code, Section 399.13(b).

² California Public Utilities Code, Section 399.15(b).

³ Decision 21-05-030; <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K738/385738144.PDF>

⁴ PG&E; Southern California Edison; San Diego Gas & Electric

The Department participated in the solicitations of all three IOUs and was awarded both the short-term and long-term bids it submitted to PG&E. The Department accepted only the long-term award subject to City Council approval. SJCE has not yet been informed of the outcome of its bids into the solicitations of Southern California Edison and San Diego Gas & Electric.

Risk Oversight Committee Review

On April 6, 2023, the City Manager's Risk Oversight Committee approved SJCE's recommendation to procure renewable energy on a long-term basis from the IOUs through the market offer process, up to a total annual amount for long-term purchases from all three IOUs combined of no more than \$25 million a year. PG&E is not an approved Department counterparty due to its financial condition. Thus, the Department required and obtained approval by the City Manager's Risk Oversight Committee of its recommendation to allow the Department to buy renewable power specifically from PG&E up to a total amount of \$7.5 million per year and a total \$150 million over the 20-year term of the agreement.

ANALYSIS

The California renewable energy market has tightened significantly in recent months. Delays in long-term renewable project in-service dates due to supply chain disruptions, forced labor prevention⁵, and interconnection to the transmission system are causing shortages and high prices for renewable energy. At the same time, many LSEs, including SJCE, are striving to achieve aggressive renewable energy targets beyond the State RPS mandated minimum procurement. The increased demand and reduced supply have driven up the cost of renewable energy and renewable energy credits, as demonstrated in Figure 1 below.

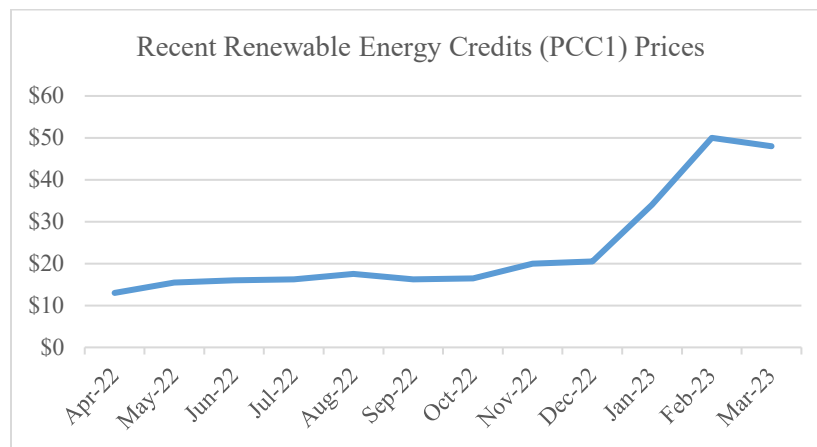


Figure 1.

⁵ Many solar panels are manufactured outside the U.S. and are being held at ports by the U.S. Customs and Border Patrol as part of its enforcement of the Uyghur Forced Labor Prevention Act. Suppliers must demonstrate the panels do not contain materials obtained via forced labor and the document requirements are not transparent.

SJCE recommends accepting the PG&E award for a slice of its portfolio pursuant to a long-term agreement. SJCE's bid for renewable energy pursuant to a long-term agreement was substantially lower than its bid for a short-term agreement since prices for 2023 and 2024 are particularly high. A long-term agreement will assist SJCE in meeting its compliance with the State long-term renewable contracting requirement and it should reduce the Power Charge Indifference Adjustment that community choice aggregators customers pay.

If City Council adopts the resolution, the Department will contract with PG&E for a percent of the output of PG&E's long-term renewable portfolio at the Department's bid price for the next 20 years. The final agreement will be based on PG&E's pro-forma agreement (see Attachment - Master Power Purchase and Sale Agreement – Renewables Portfolio Standard Energy Market Offer Confirmation Letter.) The proposed contract will be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds. PG&E has accepted similar language in other agreements.

Signing this agreement would moderately increase the GreenSource renewable energy mix in 2023 as the agreement will begin delivery potentially as late as the fourth quarter after required CPUC approval. In 2024 and beyond, the agreement will materially increase the renewable content in GreenSource. Final numbers will depend on the actual generation from the projects contracted with PG&E.

Climate Smart San José Analysis

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals, as it would support achieving City Council goals for SJCE renewable power content.

EVALUATION AND FOLLOW-UP

No additional follow-up is expected at this time.

COST SUMMARY/IMPLICATIONS

Entering into the new agreement with PG&E would cost up to \$7,500,000 annually beginning in 2023 (Fiscal Year 2023-2024) for 20 years and would cost up to \$150,000,000 through 2043.

Funding for the long-term renewable energy agreement will be subject to City Council-approved appropriation of funds in the SJCE Operating Fund each fiscal year. The San José Municipal Code requires that SJCE customer rates be set on an annual basis sufficient to meet SJCE's costs, including power costs, considering all its agreements. In addition, the Department will bring forward funding recommendations sufficient to support the anticipated annual costs of the agreements as part of the budget planning process for future fiscal years.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the May 16, 2023 City Council meeting.

COMMISSION RECOMMENDATION/INPUT

No commission recommendation or input is associated with this action.

CEQA

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/

Lori Mitchell

Director, Community Energy

For questions, please contact Lori Mitchell, Director of Community Energy, at (408) 535-4880.

ATTACHMENT: Master Power Purchase and Sale Agreement – Renewables Portfolio Standard
Energy Market Offer Confirmation Letter

ATTACHMENT
MASTER POWER PURCHASE AND SALE AGREEMENT
RENEWABLES PORTFOLIO STANDARD ENERGY MARKET OFFER
CONFIRMATION LETTER

BETWEEN

PARTICIPANT FULL NAME (ALL CAPS) (“PARTY A”)

AND

PACIFIC GAS AND ELECTRIC COMPANY (“PARTY B”)

This confirmation letter (“Confirmation”) confirms the Transaction between

Name, place of formation, and type of entity

(“Party A” or “Buyer”), and Pacific Gas and Electric Company, a California corporation, (“Party B” or “Seller”), each individually a “Party” and together the “Parties”, which becomes effective on the date fully executed by both Parties (the “Confirmation Effective Date”), in which Seller agrees to provide to Buyer Product, as such term is defined in this Confirmation. This Transaction is governed by the Master Power Purchase and Sale Agreement between the Parties, effective as of *Date of EEI Master between Parties*, together with the Cover Sheet, [the Collateral Annex and Paragraph 10 to the Collateral Annex,] and any other annexes thereto (collectively, as amended, restated, supplemented, or otherwise modified from time to time, the “Master Agreement”). The Master Agreement and this Confirmation are collectively referred to herein as the “Agreement”. Capitalized terms used but not otherwise defined in this Confirmation, have the meanings specified for such terms in the Master Agreement, the RPS (defined herein) or the Tariff (defined herein), as applicable. If there is a conflict between the terms in this Confirmation and those in the Master Agreement, this Confirmation shall control. Section references herein are to this Confirmation unless otherwise noted.

[Standard contract terms and conditions shown in shaded text are those that “may not be modified” per CPUC Decisions (“D.”) 07-11-025; D.10-03-021, as modified by D.11-01-025; and D.13-11-024.]

ARTICLE 1
PRODUCT

1.1 Product. “Product” means, following Voluntary Allocation, all remaining RPS Energy and Green Attributes generated and associated with Resources in the Long-Term Resource Pool. Seller shall provide Buyer Product equal to the Total Amount.

1.2 Buyer’s Exclusive Right. Buyer has exclusive right to Product for the Total Amount, including the right to account for or report Product equal to the Total Amount to a Governmental Entity.

ARTICLE 2
TOTAL AMOUNT AND GREEN ATTRIBUTES PRICE

2.1 Total Amount. The “Total Amount” is the sum of all Monthly Amounts in the Delivery Period. For every month in the Delivery Period, the “Monthly Amount” is the product of (i) the Election for the applicable calendar year, multiplied by (ii) following Voluntary

Allocation, the total remaining RPS Energy for that month for every Resource in the Long-Term Resource Pool.

2.2 Election.

- (a) For Products to be delivered in every year over the Delivery Period, the “Election” is XX %.

2.3 Green Attributes Price.

- (a) For Products to be delivered in every year over the Delivery Period, the “Green Attributes Price” is \$ XX /MWh.

2.4 Change in Long-Term Resource Pool. Seller may add or remove a Resource from the Long-Term Resource Pool as allowed under Voluntary Allocation, and as soon as practicable, Seller will provide Notice to Buyer of any changes to the Long-Term Resource Pool. Seller shall retain the sole discretion to modify Appendix B after CPUC Approval to ensure that the Long-Term Resource Pool only includes Resources with terms greater than 10 years as of the start of the Delivery Period. Seller shall retain the sole and absolute discretion to modify, enforce, or terminate its power purchase agreements for Resources during the Delivery Period. Buyer shall not have any right to or discretion to request changes to the Resources or the Long-Term Resource Pool during the Delivery Period.

ARTICLE 3
DELIVERY

3.1 Delivery. Throughout the Delivery Period, Seller shall deliver, and Buyer shall receive, Product in accordance with the Confirmation. Seller, or a qualified third-party designated by Seller, will act as Scheduling Coordinator to deliver Product in each hour to the CAISO at the Delivery Point. Buyer shall take title and risk of loss of Product at the applicable Delivery Point selected by Seller.

3.2 Delivery Point. The “Delivery Point” is and shall mean where Seller, or a qualified third-party designated by Seller, shall deliver to, and Buyer shall take possession of, Product, which shall be NP 15, SP 15, and/or ZP 26, as selected by Seller.

3.3 Delivery Period. Subject to the satisfaction of the Conditions Precedent, the “Delivery Period” shall commence as of the date upon which CPUC approval occurs and last through and until the date upon which the amount of Green Attributes conveyed to the buyer meets the Total Amount following the Long-Term End Date.

ARTICLE 4

CONDITIONS PRECEDENT

4.1 Conditions Precedent. Notwithstanding any other provision of this Confirmation to the contrary, all of the Parties' obligations are conditioned upon (a) CPUC Approval; and (b) Seller's receipt of the Performance Assurance described in Article 7 as applicable from Buyer no later than five (5) Business Days following Seller's Notice to Buyer of CPUC Approval (collectively, "Conditions Precedent").

ARTICLE 5

CONVEYANCE OF GREEN ATTRIBUTES

5.1 Green Attributes. Seller represents and warrants that Seller holds the rights to such Green Attributes from the Resources in the Long-Term Resource Pool and Seller agrees to convey such Green Attributes to Buyer as included in the delivery of Product from the Resources in the Long-Term Resource Pool subject to the terms and conditions of this Agreement.

5.2 Conveyance of Green Attributes. Seller shall convey to Buyer the Green Attributes associated with Product no later than twenty-five (25) Business Days once the following have occurred: (a) Seller has obtained the WREGIS Certificates for the Green Attributes for the applicable Calculation Period or calendar year and (b) Seller has received Buyer's payment of the Monthly Cash Settlement Amount in accordance with Article 6 herein. Since WREGIS Certificates will only be created for whole MWh amounts of RPS Energy generated, any fractional MWh amounts (i.e., kWh) will be carried forward until sufficient generation is accumulated for the creation of a WREGIS Certificate. During the Delivery Period, Seller shall transfer all right, title, and interest in and to the WREGIS Certificates to Buyer's WREGIS account in an aggregate amount equivalent to the Total Amount.

5.3 WREGIS Certificate True-Up. A "WREGIS Certificate True-Up" means any deficit or surplus in WREGIS Certificates delivered to Buyer for a calendar month as compared to the Monthly Amount for the same calendar month ("True-Up Month"). Any adjustments to resolve a WREGIS Certificate True-Up will be made as an adjustment on Seller's monthly invoice to Buyer in accordance with Article 6, provided that no adjustments will be made for any WREGIS Certificate True-Up after twenty-four (24) months from the True-Up Month.

ARTICLE 6

COMPENSATION

6.1 Calculation Period. The "Calculation Period" shall be each calendar month or portion thereof that Delivery was conveyed to Buyer.

6.2 Monthly Cash Settlement Amount. Buyer shall pay Seller the Monthly Cash Settlement Amount, in arrears, for each Calculation Period.

The "Monthly Cash Settlement Amount" for a particular Calculation Period shall be equal to (a) plus (b) minus (c), where:

(a) equals the product of (i) the Index Price multiplied by (ii) the Monthly Amount; and

(b) equals the product of (i) the Green Attributes Price, multiplied by (ii) the Monthly Amount; and

(c) equals the product of (i) the Index Price multiplied by (ii) the Monthly Amount.

6.3 Payment. Notwithstanding anything to the contrary in Article Six of the Master Agreement, Buyer shall pay Seller the Monthly Cash Settlement Amount four (4) calendar months following the applicable Calculation Period and on or before the later of: (a) the twenty-fifth (25th) day of the month in which Buyer receives from Seller an invoice for the Calculation Period to which the Monthly Cash Settlement Amount pertains, or (b) within fifteen (15) days following receipt of an invoice issued by Seller for such applicable Calculation Period, provided that if such payment due date is not a Business Day, then on the next Business Day. This provision shall survive termination or expiration of the Agreement for all amounts due prior to such termination or expiration.

ARTICLE 7 **CREDIT TERMS**

7.1 This Confirmation's credit requirements for the RPS Energy portion of the Product shall be governed by the Master Agreement

7.2 This Confirmation's credit requirements for the Green Attributes portion of the Product shall apply as specified below:

(a) If the Master Agreement has a Collateral Annex, then the Exposure Amount for the Green Attributes portion of Product shall be equal to the lesser of (1) the product of the following: (i) five percent (5%), multiplied by (ii) the volume of the undelivered Green Attributes for Product, multiplied by (iii) the Green Attributes Price or (2) the highest consecutive six (6) months of expected payments.

(b) In the event the Master Agreement does not have a Collateral Annex and Section 8.2(c), entitled "Collateral Threshold" with respect to "Party B Credit Protection", of the Master Agreement applies, then for the Green Attributes portion of the Product to be delivered to Party B, the definition of Termination Payment in Section 8.2(c) of the Master Agreement will be the lesser of (1) product of the following: (i) five percent (5%), multiplied by (ii) the volume of the undelivered Green Attributes for applicable Product(s) multiplied by (iii) the Green Attributes Price or (2) the highest consecutive six (6) months of expected payments.

7.3 Section 8.1 of the Master Agreement, entitled "Party A Credit Protection", and all corresponding provisions of (i) the Cover Sheet to Section 8.1 of the Master Agreement and (ii) the Collateral Annex with respect to such Section 8.1 and the applicable provisions thereto of Paragraph 10 to the Collateral Annex do not apply to this Confirmation.

ARTICLE 8
SELLER'S REPRESENTATIONS, WARRANTIES, AND COVENANTS

8.1 Seller Representations and Warranties. Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

(a) For the avoidance of doubt, the term "Project" as used in the immediately preceding paragraph means Resources in the Long-Term Resource Pool, and the phrase "Delivery Term" means the Delivery Period.

8.2 Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

(a) For the avoidance of doubt, the phrase "Delivery Term" as used in the immediately preceding paragraph means the Delivery Period.

8.3 Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

(a) For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Confirmation, and the phrase "first delivery" means the first date of the Delivery Period.

8.4 In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Delivery Period, that:

(a) Seller has the contractual rights to sell all right, title, and interest in Product required to be delivered hereunder;

(b) at the time of delivery, all rights, title, and interest in Product required to be delivered hereunder are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever;

(c) Seller shall not substitute or purchase any Product from any generating resource other than the Resource(s) in the Long-Term Resource Pool hereunder;

(d) the facility(s) designated by Seller as the Resource(s) in the Long-Term Resource Pool and all electrical output from the facility(s) designated as the Resource(s) in the Long-Term Resource Pool are, or will be, by the first date of the Delivery Period, registered with WREGIS as RPS-eligible.

(e) As of the Confirmation Effective Date and throughout the Delivery Period, Seller represents, warrants and covenants that the Resource(s) in the Long-Term Resource Pool meet the criteria in either (i) or (ii)

(i) The facility(s) designated by Seller as the Resource(s) in the Long-Term Resource Pool either has a first point of interconnection with a California Balancing Authority, or a first point of interconnection with distribution facilities used to serve end users within a California Balancing Authority Area; or;

(ii) The facility(s) designated by Seller as the Resource(s) in the Long-Term Resource Pool has an agreement to dynamically transfer electricity to a California Balancing Authority.

(f) If and to the extent that the Product sold by Seller is a resale of part or all of a power purchase agreement between Seller and one or more third parties, Seller represents, warrants and covenants that the resale complies with the following conditions in (i) through (iv) below as of the Confirmation Effective Date and throughout the Delivery Period:

(i) The original upstream third party contract(s) meets the criteria of California Public Utilities Code Section 399.16(b)(1)(A);

(ii) This Agreement transfers only RPS Energy and Green Attributes that have not yet been generated prior to the commencement of the Delivery Period;

(iii) The RPS Energy transferred hereunder is transferred to Buyer in real time; and

(iv) If a Resource has an agreement to dynamically transfer electricity to a California Balancing Authority, the transactions implemented under this Agreement are not contrary to any condition imposed by a Balancing Authority participating in the dynamic transfer arrangement.

ARTICLE 9

TERMINATION AND CALCULATION OF SETTLEMENT AMOUNT

In the event this Transaction becomes a Terminated Transaction pursuant to Section 5.2 of the Master Agreement, then the Settlement Amount with respect to this Transaction shall not be calculated in accordance with the Master Agreement, but instead will be calculated as follows:

The Non-Defaulting Party shall determine its Gains and Losses by determining the Market Quotation Average Price for the Terminated Transaction. In the event the Non-Defaulting Party is not able, after commercially reasonable efforts, to obtain the Market Quotation Average Price with respect to the Terminated Transaction, then the Non-Defaulting Party shall calculate its Gains and Losses for the Terminated Transaction in a commercially reasonable manner by calculating the arithmetic mean of the quotes of at least three (3) Broker or Index Quotes based on the offers to sell or bids to buy, as applicable, obtained for transactions substantially similar to the Terminated Transaction. Such Broker or Index Quotes must be obtained assuming that the Party obtaining the quote will provide sufficient credit support for the proposed transaction. In the event the Non-Defaulting Party is not able, after commercially reasonable efforts to obtain at least three (3) such Broker or Index Quotes with respect to the Terminated Transaction, then the Non-Defaulting Party shall calculate its Gains and Losses for such Terminated Transaction in a commercially reasonable manner by reference to information supplied to it by one or more third parties including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets. Third parties supplying such information may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information; provided, however, that such third parties shall not be Affiliates of either Party. Only in the event the Non-Defaulting Party is not able, after using commercially reasonable efforts, to obtain such third-party information, then the Non-Defaulting Party shall calculate its Gains and Losses for such Terminated Transaction in a commercially reasonable manner using relevant market data it has available to it internally. If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Transaction, the Settlement Amount for this Transaction will be zero.

ARTICLE 10

GENERAL PROVISIONS

10.1 Buyer Audit Rights. In addition to any audit rights provided under the Master Agreement, Seller shall, upon the Confirmation Effective Date and continuing until the end of the Delivery Period, provide documentation (which may include, for example, WREGIS reports) sufficient to demonstrate that Product has been conveyed and delivered to Buyer.

10.2 Governing Law.

(a) Notwithstanding any provision to the contrary in the Master Agreement, the Governing Law applicable to this Agreement shall be as set forth herein. This Section 9.2 does not change the Governing Law applicable to any other confirmation or transaction entered into between the Parties under the Master Agreement.

(b) Governing Law. This agreement and the rights and duties of the parties hereunder shall be governed by and construed, enforced, and performed in accordance with the laws of the state of California, without regard to principles of conflicts of law. To the extent enforceable at such time, each party waives its respective right to any jury trial with respect to any litigation arising under or in connection with this agreement.

ACKNOWLEDGED AND AGREED TO:

Buyer, or Party A:

NAME, place of formation, and type of entity

Seller, or Party B:

**PACIFIC GAS AND ELECTRIC
COMPANY, a California corporation**

Sign: _____

Print: _____

Title: _____

Date: _____

Sign: _____

Print: _____

Title: _____

Date: _

APPENDIX A

DEFINED TERMS

Any capitalized terms used in this Confirmation but not otherwise defined below shall have the meaning ascribed to such term in the Master Agreement:

“Applicable Law” means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties, the Product, or the terms of the Agreement.

“Balancing Authority” has the meaning set forth in the Tariff.

“Business Day” means all calendar days other than those days on which the Federal Reserve member banks in New York City are authorized or required by law to be closed, and shall be between the hours of 8:00 a.m. and 5:00 p.m. Pacific Prevailing Time for the relevant Party’s principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom written communications or payment or delivery is being sent and by whom written communications or payment or delivery is to be received.

“Buyer” means Party A.

“CAISO” means the California Independent System Operator Corporation or the successor organization to the functions thereof.

“Confirmation Effective Date” means the date in which the Confirmation is fully executed by both Parties.

“CPUC” means the California Public Utilities Commission.

“CPUC Approval” means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement. CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable. For the purpose of this definition of “CPUC Approval”, a CPUC Energy Division disposition which contains such findings, or deems approved an advice letter requesting such findings, shall be deemed to satisfy the CPUC decision requirement set forth above. Also, for the purpose of this definition of “CPUC Approval” only, the references therein to “Buyer” shall mean “Seller”.

“California Renewables Portfolio Standard” or “RPS” means the California renewables portfolio standard, as set forth in Cal. Pub. Util. Code §§ 399.11 et seq. and Cal. Pub. Res. Code §§ 25740-25751, and as administered by the CEC as set forth in the CEC RPS Eligibility Guidebook (9th Ed.), as may be subsequently modified by the CEC, and the California Public

Utilities Commission (“CPUC”) as set forth in CPUC Decision (“D”) 08-08-028, D.08-04-009, D.11-01-025, D.11-12-020, D.11-12-052, D.12-06-038 and D.14-12-023, and as may be modified by subsequent decision of the CPUC or by subsequent legislation, and regulations promulgated with respect thereto.

“CEC” means the California Energy Commission.

“CPUC” means the California Public Utilities Commission.

“Delivery Period” has the meaning set forth in Section 3.3.

“Delivery Point” has the meaning set forth in Section 3.2.

“Election” has the meaning set forth in Section 2.2.

“Energy” means electrical energy, measured in MWh.

“FERC” means the Federal Energy Regulatory Commission.

“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Resource, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (a) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (b) any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere ; (c) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any Energy, capacity, reliability or other power attributes from the Resource, (ii) production tax credits associated with the construction or operation of the Resource and other financial incentives in the form of credits, reductions, or allowances associated with the Resource that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Resource for compliance with local, state, or federal operating and/or air quality permits. If the Resource is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Resource.

"Green Attributes Price" has the meaning set forth in Section 2.3.

"Governmental Authority" or "Governmental Entity" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, or the CAISO or any other transmission authority, having or asserting jurisdiction over a Party or the Agreement.

"Index Price" means the Trading Hub price (as defined in the Tariff) measured in \$/MWh, for each MWh of Product, and associated with the Product to the Delivery Point for each applicable hour as published by the CAISO on the CAISO website; or any successor thereto, unless a substitute publication and/or index is mutually agreed to by the Parties.

"Long-Term End Date" is the end date of the contract with the longest term in the Long-Term Resource Pool, excluding PG&E owned resources and resources without fixed expiration dates.

"Long-Term Resource Pool" means Seller's Resources in Appendix B reflecting all PCIA-eligible RPS resources remaining after Voluntary Allocation with power purchase agreements with terms that have greater than 10 years remaining from the start of the Delivery Period that meet the criteria of Public Utilities Code §399.16(b)(1). The actual resources included in this pool (and listed in Appendix B) may change for reasons set forth in Section 2.4.

"MWh" means megawatt-hour.

"Monthly Cash Settlement Amount" has the meaning set forth in Section 6.2.

"Monthly Amount" has the meaning set forth in Section 2.1.

"PG&E" means the Pacific Gas and Electric Company, its successors and assigns.

"PCIA" or "Power Charge Indifference Adjustment" is a charge to ensure that both PG&E customers and those who have left PG&E service to purchase electricity from other providers pay for the above-market costs for electric generation resources that were procured by PG&E on their behalf. "Above market" refers to expenditures for generation resources that cannot be fully recovered through sales of these resources at current market prices.

"Product" has the meaning set forth in Section 1.1.

"Renewable Energy Credits" or "REC" has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as may be amended from time to time or as further defined or supplemented by Law.

"Resource(s)" means generation units owned by Seller or contracted by Seller, which corresponding costs are recovered through the PCIA.

"RPS Energy" means the Energy generated from Resources from the Long-Term Resource Pool.

“Scheduling Coordinator (SC)” means an entity certified by the CAISO to perform the functions as described in the Tariff.

“Seller” means Party B.

“Tariff” means the FERC-approved California Independent System Operator Tariff, including any current CAISO-published “Operating Procedures” and “Business Practice Manuals,” as may be amended, supplemented or replaced from time to time.

“Total Amount” has the meaning set forth in Section 2.1.

“Voluntary Allocation” means the 2022 process by which PG&E allocates its PCIA-eligible RPS Energy among all PCIA-eligible load-serving entities in its service territory up to their forecasted, vintaged, annual load shares and the actual, vintaged, annual RPS Energy production of PCIA-eligible RPS Energy resources, as defined in CPUC Decision D.21-05-030, or as modified by subsequent decision of the CPUC.

“WREGIS” means the Western Renewable Energy Generation Information System or any successor renewable energy tracking program.

“WREGIS Certificate” has the same meaning as “Certificate” as defined by WREGIS in the WREGIS Operating Rules and are designated as eligible for complying with the California Renewables Portfolio Standard.

APPENDIX B
LIST OF RESOURCES IN LONG-TERM RESOURCE POOL

Resource Name	Technology	CES RPS ID	PCIA Vintage	End Date
Montezuma Wind Energy Center	Wind	60543A	2010	1/27/2036
High Plains Ranch II	Solar PV	60603A	2008	10/30/2038
Topaz Solar Farm	Solar PV	61698A	2008	10/26/2039
Ivanpah Unit 1	Solar Thermal	62273A	2009	1/20/2039
Ivanpah Unit 3	Solar Thermal	62275A	2009	1/26/2039
AV Solar Ranch One	Solar PV	60790A	2009	11/20/2039
Agua Caliente Solar Project	Solar PV	60894A	2009	6/22/2039
High Plains Ranch III	Solar PV	60603A	2010	9/30/2038
Mojave Solar Project	Solar Thermal	60848A	2009	11/20/2039
Genesis Solar Energy Project	Solar Thermal	60605A	2009	3/6/2039
DTE Stockton	Biomass	60964A	2009	2/20/2039
Alpaugh 50	Solar PV	60945A	2010	3/7/2038
Alpaugh North	Solar PV	60946A	2010	3/7/2038
Atwell Island	Solar PV	60947A	2010	3/11/2038
Corcoran	Solar PV	60948A	2010	8/14/2038
White River	Solar PV	60949A	2010	6/26/2038
Sunshine Landfill	Landfill Gas	60815A	2010	8/31/2034
Potrero Hills Landfill	Landfill Gas	63116A	2010	4/12/2041
Desert Center Solar Farm	Solar PV	61068A	2010	12/16/2039
North Star Solar	Solar PV	61198A	2010	6/19/2035
Vasco Wind Energy Center	Wind	61344A	2010	3/12/2037
Montezuma II Wind Energy Center	Wind	61345A	2010	3/13/2037
Westlands Solar Farms	Solar PV	61755A	2011	4/30/2034
Orion Solar	Solar PV	61570A	2011	6/25/2034
North Sky River Energy Center	Wind	61385A	2011	12/20/2037
Copper Mountain Solar 2	Solar PV	60990A	2011	5/12/2040
Shiloh IV Wind Project	Wind	61617A	2011	1/27/2038
West Antelope	Solar PV	61850A	2012	2/8/2035
Western Antelope Blue Sky Ranch A	Solar PV	61517A	2012	2/16/2035
SPI Biomass Portfolio	Biomass	60088A	2012	9/22/2035
SPI Biomass Portfolio	Biomass	61146A	2012	9/22/2035
SPI Biomass Portfolio	Biomass	60087A	2012	9/22/2035
SPI Biomass Portfolio	Biomass	60089A	2012	9/22/2035

SPI Biomass Portfolio	Biomass	60576A	2012	9/22/2035
Kansas	Solar PV	61263A	2012	12/31/2037
Lost Hills Solar	Solar PV	61893A	2012	12/31/2043
Cuyama Solar Array	Solar PV	61891A	2012	12/31/2043
Blackwell Solar	Solar PV	61892A	2012	12/31/2043
Henrietta Solar	Solar PV	61841A	2012	9/30/2036
Kent South	Solar PV	61262A	2012	2/18/2035
Algonquin SKIC 20 Solar	Solar PV	61558A	2012	3/30/2035
Mammoth G1	Geothermal	60306A	2012	12/25/2033
Alamo Solar, LLC	Solar PV	61453A	2012	6/29/2035
CID Solar PV Project	Solar PV	62285A	2012	3/19/2035
Old River One	Solar PV	60853A	2013	2/8/2035
Shafter Solar	Solar PV	62325A	2013	7/15/2035
Rising Tree Wind Farm II	Wind	62426A	2013	8/6/2035
Kekawaka Creek Hydroelectric Facility	Small Hydro	60186A	2013	5/31/2035
RE Astoria	Solar PV	62284A	2013	1/2/2034
Midway Solar Farm I	Solar PV	61295A	2013	5/31/2040
California Flats Solar Project	Solar PV	62552A	2013	4/9/2034
Portal Ridge Solar C Project	Solar PV	61684A	2014	4/20/2037
Sunray 2	Solar PV	62694A	2014	8/24/2037
Bayshore Solar A	Solar PV	63133A	2015	4/17/2038
Bayshore Solar B	Solar PV	63134A	2015	4/17/2038
Bayshore Solar C	Solar PV	63135A	2015	4/17/2038
Java Solar	Solar PV	63137C	2016	1/30/2040
RE Gaskell West 3	Solar PV	63619C	2017	3/22/2038
RE Gaskell West 4	Solar PV	63617C	2017	3/22/2038
RE Gaskell West 5	Solar PV	63618C	2017	3/22/2038
PGE Alta	Small Hydro	60033	Pre-2002	N/A
PGE Centerville	Small Hydro	60034	Pre-2002	N/A
PGE Coleman	Small Hydro	60037	Pre-2002	N/A
PGE Cow Creek	Small Hydro	60038	Pre-2002	N/A
PGE Crane Valley	Small Hydro	60039	Pre-2002	N/A
PGE Deer Creek	Small Hydro	60040	Pre-2002	N/A
PGE De Sabla	Small Hydro	60041	Pre-2002	N/A
PGE Dutch Flat 1	Small Hydro	60042	Pre-2002	N/A
PGE Halsey	Small Hydro	60043	Pre-2002	N/A
PGE Hamilton Branch	Small Hydro	60044	Pre-2002	N/A
PGE Hat 1	Small Hydro	60045	Pre-2002	N/A
PGE Hat 2	Small Hydro	60046	Pre-2002	N/A
PGE Inskip	Small Hydro	60047	Pre-2002	N/A
PGE Kerckhoff 1	Small Hydro	62360	Pre-2002	N/A

PGE Kilarc	Small Hydro	60049	Pre-2002	N/A
PGE Lime Saddle	Small Hydro	60050	Pre-2002	N/A
PGE Newcastle	Small Hydro	60053	Pre-2002	N/A
PGE Oak Flat	Small Hydro	60276	Pre-2002	N/A
PGE Phoenix	Small Hydro	60054	Pre-2002	N/A
PGE Potter Valley	Small Hydro	60055	Pre-2002	N/A
PGE Five Points	Solar PV	61432	2010	N/A
PGE Stroud	Solar PV	61434	2010	N/A
PGE Westside	Solar PV	61433	2010	N/A
PGE Cantua	Solar PV	61823	2011	N/A
PGE Giffen	Solar PV	61822	2011	N/A
PGE Huron	Solar PV	61821	2011	N/A
PGE Gates	Solar PV	62353	2012	N/A
PGE Guernsey	Solar PV	62354	2012	N/A
PGE West Gates	Solar PV	62352	2012	N/A
PGE Rock Creek RPS	Small Hydro	62269	Pre-2002	N/A
PGE San Joaquin 1A	Small Hydro	60056	Pre-2002	N/A
PGE San Joaquin 2	Small Hydro	60057	Pre-2002	N/A
PGE San Joaquin 3	Small Hydro	60058	Pre-2002	N/A
PGE South	Small Hydro	60059	Pre-2002	N/A
PGE Spaulding 1	Small Hydro	60060	Pre-2002	N/A
PGE Spaulding 2	Small Hydro	60061	Pre-2002	N/A
PGE Spaulding 3	Small Hydro	60062	Pre-2002	N/A
PGE Spring Gap	Small Hydro	60063	Pre-2002	N/A
PGE Toadtown	Small Hydro	60064	Pre-2002	N/A
PGE Tule River	Small Hydro	60065	Pre-2002	N/A
Vaca-Dixon Solar (PG&E)	Solar PV	60966	2010	N/A
PGE Volta 1	Small Hydro	60066	Pre-2002	N/A
PGE Volta 2	Small Hydro	60067	Pre-2002	N/A
PGE West Point	Small Hydro	60068	Pre-2002	N/A
PGE Wise 1	Small Hydro	60069	Pre-2002	N/A
PGE Wise 2	Small Hydro	60070	Pre-2002	N/A
PGE A.G.Wishon	Small Hydro	60032	Pre-2002	N/A