

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



December 15, 2016

Advice Letter 4958-E and 4958-E-A

Erik Jacobson
Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

**Subject: PG&E's Bioenergy Renewable Auction Mechanism (BioRAM)
Power Purchase Agreement with Burney Forest Products and
Supplemental Filing**

Dear Mr. Jacobson:

Advice Letter 4958-E and 4958-E-A are effective as of December 15, 2016.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph
Director, Energy Division

November 15, 2016

Advice 4958-E

(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: Advice Letter Filing of PG&E's Bioenergy Renewable Auction Mechanism (BioRAM) Power Purchase Agreement with Burney Forest Products

I. Purpose

Pursuant to Resolution E-4770, Pacific Gas and Electric Company ("PG&E") hereby submits this Advice Letter, seeking approval of a Renewables Portfolio Standard ("RPS")-eligible power purchase agreement ("PPA") executed between PG&E and Burney Forest Products ("Burney") resulting from PG&E's solicitation conducted pursuant to Resolution E-4770 ("BioRAM").

II. Background

In Resolution E-4770, the California Public Utilities Commission ("Commission" or "CPUC") directed the investor-owned utilities ("IOUs"), including PG&E, to conduct a BioRAM solicitation for facilities that utilize biofuel from high hazard zones, as designated pursuant to the Governor's Tree Mortality Emergency Proclamation.¹ Resolution E-4770 directed the three IOU's to procure collectively a minimum of 50 megawatts ("MW"), with PG&E's share a minimum of 20 MW for this solicitation.

III. Solicitation Summary**A. Solicitation Process****1. Design**

On April 7, 2016, PG&E filed Advice Letter 4822-E seeking to update the BioRAM Request for Offers ("RFO") Protocol ("BioRAM Protocol") and seeking approval of a rider ("BioRAM Rider") to modify the most recently approved Renewable Auction Mechanism ("RAM") power

¹ Resolution E-4770 at p. 18 (Ordering Paragraph ("OP") 1).

purchase agreement (“PPA”) (from the sixth RAM solicitation). Amendments to the Advice Letter (Advice Letters 4822-E-A and 4822-E-B) were filed on June 1, 2016 and June 3, 2016 respectively. The three advice letters were approved via a disposition letter dated June 14, 2016. Under the approved BioRAM Protocol, the primary guidelines for eligibility include:

- 1) Project Size: Greater than 3 MW (with no maximum project size).
- 2) Wood burning facilities are eligible. Multi-fuel facilities restricted to woody biomass fuel are also eligible.
- 3) Project Location: The Project must be located within California and directly connected to the California Independent System Operator (“CAISO”) or dynamically scheduled into the CAISO.
- 4) Seller must have a completed a System Impact Study, a Phase II interconnection study, or have documentation showing that the project passed the Wholesale Distribution Tariff or CAISO Fast Track screens.
- 5) Facilities must demonstrate that they will be able to meet the following minimum levels of the fuel source that should come from California Department of Forest and Fire Prevention-designated Tier 1 and Tier 2 High Hazard Zones (“HHZ”). The minimums are 40% of total fuel use in 2016; 50% in 2017; 60% in 2018; and 80% for each year thereafter.
- 6) New facilities must be able to begin commercial operation within 36 months of Commission final and non-appealable approval of the associated RAM PPA and BioRAM Rider.
- 7) Existing facilities may participate provided that, if the project is currently under contract, the existing contract will need to be terminated prior to PG&E accepting deliveries under the BioRAM PPA. Existing facilities must begin delivery within 12 months of Commission’s final and non-appealable approval of the associated RAM PPA and BioRAM Rider.

All documents for the BioRAM solicitation, including the BioRAM Protocol document, the BioRAM Rider, and an Excel offer form with detailed instructions were posted at www.pge.com/rfo/RAM. In signing and submitting an offer form, the Seller agreed to abide by the terms and conditions of the BioRAM Protocol and to maintain confidentiality regarding its offer.

2. Process Overview

PG&E notified over 2,900 market participants (from PG&E’s normal distribution list for energy procurement solicitations) when the BioRAM solicitation was launched on June 28, 2016. PG&E followed the following timeline:

Date/Time	Event
June 28, 2016	PG&E issued the BioRAM RFO.
July 7, 2016	Bidders' Webinar for BioRAM RFO.
July 28, 2016 no later than 12:00 P.M.(PPT)	Offers due and offer evaluation begins.
September 20, 2016	PG&E met with members of the Procurement Review Group ("PRG") concerning the BioRAM RFO.
October 4, 2016	PG&E selected offers and notified Selected and Waitlist Participants.
October 6, 2016	Deadline for Selected and Waitlisted Participants to return signed acceptance letters.
October 14, 2016	Waitlisted participants were notified that PG&E would not be moving forward with their project in this solicitation.
October 14, 2016 no later than 1:00 P.M.(PPT)	Submittal of signed PPA. If the selected participant wished to continue participation in the BioRAM RFO, it had to return a signed BioRAM Rider, RAM PPA, and required documentation as shown in Appendix VIII of the PPA to PG&E.
November 1, 2016	PG&E and Burney (the selected participant) executed a PPA.

3. Bidders Webinar

PG&E held the Bidders' Webinar on July 7, 2016, with 17 people attending via the internet or by phone. The Bidders' Webinar materials and an audio file of the conference are posted on PG&E's RAM website: www.pge.com/rfo/RAM.

The Bidders' Webinar covered the following major subjects: (1) introduction of the BioRAM Program which included the public disclosure of information, the procurement targets for this solicitation, updates from earlier RAM-like solicitations, and the role of the IE; (2) eligibility requirements to participate in this solicitation; (3) an overview of the PPA and BioRAM Rider; (4) the evaluation methodology used to select winning projects; (5) guidelines to submitting a successful proposal; (6) the offer submittal process and the required offer submission forms; (7) interconnection process; and (8) questions from webinar attendees.

No questions were asked by potential Participants during the Webinar. In addition, PG&E responded to email questions from bidders both before and after the Bidders' Webinar, and posted questions and answers of general interest on the website.

4. Offer Overview

PG&E received 19 offers for 8 unique facilities from 5 developers totaling 180.7 MW. Resolution E-4770 mandated that PG&E procure a minimum of 20 MW in this solicitation.

B. Offer Evaluation

PG&E screened all offers on a "pass-fail" basis against the following eligibility requirements: project size; location; interconnection status; site control; developer experience; commercialized technology; and commercial operation date.

Based on this initial screen, PG&E eliminated one offer as non-conforming for not meeting the metering requirement in the PPA.

Conforming offers were then evaluated quantitatively based on PG&E's Commission-approved Least-Cost, Best-Fit (LCBF) evaluation criteria and additionally qualitatively by the following criteria:

- Preference for delivery terms less than 20 years;
- Sellers commitment to burning a higher minimum percentage of High Hazard Fuel; and
- Project's proximity to HHZs.

C. Offer Selection

Using the evaluation criteria described above, PG&E selected Burney as the offer that had lower overall costs compared to other offers. A more detailed description of the selection and execution process is contained in Confidential Appendix C.

D. Summary of Terms and Conditions

A summary of some of the terms and conditions in PG&E's approved RAM PPA and BioRAM Rider used in the BioRAM solicitation is included in the chart below. Please note that all capitalized terms not defined in the chart below are defined in the RAM PPA.

Key Contract Term	PG&E RAM PPA and BioRAM Rider
Delivery Term	5 years (with or without extensions) for existing facilities; and 10, 15 or 20 years for new and existing facilities.
Eligibility	Existing and new projects located within California and directly connected to the CAISO or dynamically scheduled into the CAISO.
Contract Quantity	Participants in the solicitation are asked to provide a best estimate

Key Contract Term	PG&E RAM PPA and BioRAM Rider
	of annual deliveries as part of an Offer, which serves as a basis for the Guaranteed Energy Production (“GEP”).
Commercial Operation Date	New facilities must be commercially operable within 36 months of the final and non-appealable approval by the Commission of the associated PPA, subject to the excused delays for permitting, transmission and force majeure. Existing facilities must start delivering with 12 months of the Effective Date of the RAM PPA and BioRAM Rider.
Energy only, PCDS or FCDS	Sellers have the option to bid in as energy only, partial capacity deliverability status, or full capacity deliverability status.
Performance Standards/ Requirements: Minimum production requirement	GEP: 90% of expected contract quantity based on one year of rolling production (baseload).
Scheduling Coordinator (“SC”)	PG&E is the SC.
Metering	Required to have a CAISO approved revenue meter.
Western Renewable Energy Generation Information System (“WREGIS”)	Seller shall, at its sole expense but subject to the Compliance Cost Cap (applicable to change-in-law only), take all action to ensure all WREGIS Certificates associated with all RECs corresponding to the Delivered Energy are issued and tracked for Buyer’s sole benefit. Seller must transfer all Renewable Energy Credits (“RECs”) associated with Delivered Energy, even if the Delivered Energy is not accepted and/or paid for because it is above the Contract Capacity or, for Baseload Product, paid for at a lower price because it is in excess of the scheduled energy (beyond tolerance band).
Excess Sales	Seller has option to contract as full buy-sell or excess sales.
Curtailment	Seller must curtail in response to CAISO, reliability coordinator, or Participating Transmission Owner curtailment. There is no limitation on curtailment of this type and no payment. Buyer may direct curtailment for any reason for unlimited hours per year. Buyer will pay Seller contract price for energy deemed delivered.
Force Majeure	“Force Majeure” includes any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement, but only if and to the extent (i) such event is not within the party invoking force

Key Contract Term	PG&E RAM PPA and BioRAM Rider
	majeure's reasonable control and the party has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party's ability to perform its obligations and such event is not the direct or indirect result of the negligence or the failure of, or caused by, the Party seeking to have its performance obligations excused thereby. (a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to, the following: (i) flooding, lightning, landslide, earthquake, or unusual or extreme adverse weather-related events; (ii) war (declared or undeclared), riot or similar civil disturbance; (iii) strikes, work stoppage or other labor disputes; or (iv) emergencies declared by the Transmission Provider successor or regional transmission organization or any state or federal regulator or legislature requiring a forced curtailment of the Project or making it impossible for the Transmission Provider to transmit Energy (b) Force Majeure shall not be based on: (i) Buyer's inability economically to use or resell the Product purchased hereunder; (ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement; (iii) Seller's inability to obtain permits or approvals of any type for the construction, operation, or maintenance of the Project; (iv) Seller's inability to obtain sufficient fuel, power or materials to operate the Project, except if Seller's inability to obtain sufficient fuel, power or materials is caused solely by an event of Force Majeure; (vi) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure; (vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; (viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure; (ix) a Party's inability to pay amounts due to the other Party under this Agreement.
Failure to Meet Guaranteed Commercial	Six-month extension allowed in the event of Permitting Delay, Transmission Delay or Force Majeure. Notice of Permitting Delay

Key Contract Term	PG&E RAM PPA and BioRAM Rider
Operation Date	or Transmission Delay required no later than 6 months after Effective Date. Notice of Force Majeure due as soon as possible.
Confidentiality	In general, non-public terms of the Agreement shall not be disclosed except to Affiliates, to Buyer's Procurement Review Group, in order to comply with any applicable law, regulation, or any exchange, control area or CAISO rule. Permitted disclosures expanded to include the number of bids per company, project size, contract capacity, and the achievement of project milestones.
Construction Start and Commercial Operation Certification Forms and Procedures	The Construction Start and Commercial Operation Certification Forms and Procedures are provided.
Credit—Project Development Security	Sellers to post project development security prior to commercial operation: \$90/kilowatt ("KW") (Baseload)
Credit—Delivery Term Security	An amount equal to the higher of 5% of expected total Project revenues, or one year of revenue at (Contract Price \$/megawatt-hour ("MWh"))-\$89.23/MWh), due on the Commercial Operation Date. 5% of total revenue is equal to 6 months of revenue for a 10 year PPA.

E. Solicitation Results

1. Summary of Solicitation Participation

Appendix G contains information on the results of PG&E's BioRAM solicitation and Appendix H includes the location of the bids by county.

2. Summary of Solicitation Selection

The executed Burney PPA is summarized in the table below. For purposes of this Advice Letter, the PPA below is also referred to as the "BioRAM PPA." For further information please refer to Appendices G and H:

Project	Technology	Capacity (MW)	Location	Est. Annual Deliveries (GWh)	Guaranteed Commercial Operation Date (COD)	Term (years)
Burney Forest Products	Biomass	29.0	Shasta	217.6	12 months after approval of this Advice	5

Project	Technology	Capacity (MW)	Location	Est. Annual Deliveries (GWh)	Guaranteed Commercial Operation Date (COD)	Term (years)
					Letter	

D.11-12-052 requires that the IOUs make an upfront showing related to the portfolio content categorization of each proposed RPS procurement transaction. Specifically, for approval of contracts meeting the criteria of Public Utilities Code Section 399.16 (b)(1)(A) (“Portfolio Content Category One”), an IOU may show that the RPS-eligible generator has its first point of interconnection with the Western Electricity Coordinating Council (“WECC”) transmission system within the boundaries of a California balancing authority area (“CBA”).²

The BioRAM PPA satisfies the upfront showing required by D.11-12-052 for Portfolio Content Category One. The PPA has or is expected to have its first point of interconnection within the metered boundaries of an IOU transmission or distribution system, within a CBA (ie., the CAISO). Therefore, the RPS-eligible procurement from the PPA satisfies the criteria for Portfolio Content Category One adopted in D.11-12-052.

In D.07-01-039, the Commission adopted an Emission Performance Standard (“EPS”) that applies to contracts for a term of five or more years for baseload generation with an annualized plant capacity factor of at least sixty (60) percent. The Burney procurement complies with the EPS because it is an existing biomass facility covered by Conclusion of Law 35(d) of D.07-01-039.

V. Request for Commission Approval

PG&E requests the Commission approve the BioRAM PPA through an Energy Division disposition letter issued within 30 days of the filing of this Advice Letter (by December 14, 2016), including adoption of the following findings of fact and conclusions of law:³

1. The BioRAM PPA should be approved in its entirety, including payments to be made by PG&E pursuant to the PPA, subject to the Commission’s review of PG&E’s administration of the PPA;

² See D.11-12-052 at pp. 40-41; See also *id.* at p. 37 (explaining that the upfront showing required of IOUs for procurement projected to meet Portfolio Content Category One based on the relevant point of interconnection would be “straightforwardly based on showing that the RPS-eligible generator has the applicable first point of interconnection.”).

³ If the Energy Division disposition does not include explicit findings and conclusions, the approval of this advice letter shall be deemed to include approval of the requested findings and conclusions.

2. A finding that the selection of the BioRAM PPA was consistent with PG&E's approved BioRAM Protocol;
3. A finding that any procurement pursuant to the BioRAM PPA constitutes procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation or target 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.10-12-048, D.11-12-020, D.11-12-052, Resolution E-4414, or other applicable law;
4. A finding that, subject to after-the-fact verification that all applicable criteria have been met, the Energy Division accepts PG&E's upfront showing that deliveries from the BioRAM PPA should be categorized as procurement under the portfolio content category specified in Public Utilities Code Section 399.16 (b)(1)(A);
5. Adopts the following findings with respect to resource compliance with the EPS adopted in R.06-04-009:
 - a. The BioRAM PPA is pre-approved as meeting the EPS because it is an existing biomass facility covered by Conclusion of Law 35(d) of D.07-01-039;
6. A finding that all procurement and administrative costs, as provided by Public Utilities Code section 399.13(g), associated with the BioRAM PPA shall be recovered in rates; and
7. A finding that payments under the BioRAM PPA shall be recovered through PG&E's Energy Resource Recovery Account.

VI. Request for Confidential Treatment

In support of this Advice Letter, PG&E has provided the following confidential information: the executed BioRAM PPA and other information that more specifically describes the rights and obligations of the parties, and the confidential results of the solicitation. This information is being submitted in the manner directed by D.08-04-023 to demonstrate the confidentiality of material and to invoke the protection of confidential utility information provided under either the terms of the IOU Matrix, Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023, or General Order 66-C. A separate Declaration Seeking Confidential Treatment is being filed concurrently with this Advice Letter.

Confidential Attachments:

Confidential Appendix A:	Solicitation Data (Redacted version included with public filing)
Confidential Appendix C:	Valuation Process Summary
Confidential Appendix D:	Analysis of Customer Benefits
Confidential Appendix E:	Independent Evaluator Report (Redacted version included with public filing)

Confidential Appendix F: Executed Contract and Letter of Concurrence

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than December 5, 2016, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-1448
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Eric Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-1448
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

VII. Tier Designation

PG&E is designating this as a Tier 2 Advice Letter, in accordance with D.10-12-048 and Resolution E-4414.

VIII. Effective Date

Accordingly, PG&E requests that the Energy Division issue a disposition approving PG&E's BioRAM PPA within the initial review period, which will expire within 30 days of the filing of this Advice Letter (by December 14, 2016). Pursuant to General Order 96-B, the advice letter will be effective upon approval.

IX. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the service list for R.15-02-020. Address changes to the General Order 96-B list and electronic approvals should be directed to PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

/S/

Erik Jacobson
Director – Regulatory Relations

cc: Cheryl Lee– Energy Division
Service List for R.15-02-020

Limited Access to Confidential Material:

The portions of this Advice Letter marked Confidential Protected Material are submitted under the confidentiality protection of Section 583 and 454.5(g) of the Public Utilities Code and General Order 66-C. This material is protected from public disclosure because it consists of, among other items, the contracts themselves and price information of a proposed RPS-eligible RAM contract, which are protected pursuant to D.06-06-066 and D.08-04-023. A separate Declaration seeking Confidential Treatment regarding the confidential information is filed concurrently herewith.

Attachments:

Confidential Appendix A:	Solicitation Data (Redacted version included with public filing)
Appendix B:	PG&E's RAM Standard Contract and BioRAM Rider
Confidential Appendix C:	Valuation Process Summary
Confidential Appendix D:	Analysis of Customer Benefits
Confidential Appendix E:	Independent Evaluator Report (Redacted version included with public filing)
Confidential Appendix F:	Executed Contract
Appendix G:	Summary of Solicitation Participation
Appendix H:	Location of Bids

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:

☒ ELC

☐ GAS

☐ PLC

☐ HEAT

☐ WATER

Contact Person: Annie Ho

Phone #: (415) 973-8794

E-mail: AMHP@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **4958-E**

Tier: **2**

Subject of AL: **Advice Letter Filing of PG&E's Bioenergy Renewable Auction Mechanism (BioRAM) Power Purchase Agreement with Burney Forest Products**

Keywords (choose from CPUC listing): Compliance, Agreements, Procurement

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: E-4770

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: Yes. See the attached matrix that identifies all of the confidential information.

Confidential information will be made available to those who have executed a nondisclosure agreement: ☒ Yes ☐ No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Chris DiGiovanni, (415) 973-4656

Resolution Required? ☐ Yes ☒ No

Requested effective date: **December 14, 2016**

No. of tariff sheets: **N/A**

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission

Energy Division

EDTariffUnit

505 Van Ness Ave., 4th Flr.

San Francisco, CA 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Erik Jacobson

Director, Regulatory Relations

c/o Megan Lawson

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

Confidentiality Declaration & Matrix

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

**DECLARATION OF CHRIS DIGIOVANNI
SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION
CONTAINED IN ADVICE LETTER 4958-E**

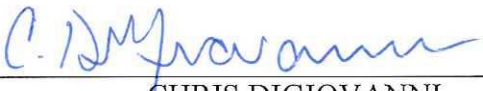
I, Chris DiGiovanni, declare:

1. I am a Manager in the Renewable Energy Procurement department within Energy Policy and Procurement at Pacific Gas and Electric Company (PG&E). In this position, my responsibilities include management of PG&E's Bioenergy Renewable Auction Mechanism (BioRAM) program. This declaration is based on my personal knowledge of PG&E's practices and my understanding of the Commission's decisions protecting the confidentiality of market-sensitive information.

2. Based on my knowledge and experience, and in accordance with the Decisions 06-06-066, 08-04-023, and relevant Commission rules, I make this declaration seeking confidential treatment for certain data and information contained in PG&E's Advice Letter 4958-E submitted on November 15, 2016.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes confidential market sensitive data and information covered by D.06-06-066. The attached matrix also specifies why confidential protection is justified. Further, the data and information: (1) is not already public; and (2) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating into this declaration all of the explanatory text that is pertinent to my testimony in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed on November 15, 2016 at San Francisco, California.



CHRIS DIGIOVANNI

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

ADVICE LETTER 4958-E

November 15, 2016

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	Justification for Confidential Treatment	Length of Time Data To Be Kept Confidential
Document: Advice Letter 4958-E (and Appendices)			
Appendix A (Solicitation Data and Project Development Milestones) – gray shaded areas	VIII.B – Quantitative analysis for scoring and evaluating bids	Confidential quantitative analysis for scoring and evaluating bids in solicitation	Three years after winning bidders selected
Appendix C (Valuation Process Summary) – in its entirety	VIII.B – Quantitative analysis for scoring and evaluating bids	Confidential quantitative analysis for scoring and evaluating bids in solicitation	Three years after winning bidders selected
Appendix D (Analysis of Customer Benefits and NMV) – in its entirety including attachment	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments.	Three years from contract date for deliveries to start or one year after expiration.
	VII – Score sheets, analysis and evaluation for RPS Projects	Confidential score sheets, analyses and evaluation for RPS contract.	Three years
	VIII.B – Quantitative analysis for scoring and evaluating bids	Confidential quantitative analysis for scoring and evaluating bids in solicitation	Three years after winning bidders selected

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

ADVICE LETTER 4958-E

November 15, 2016

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	Justification for Confidential Treatment	Length of Time Data To Be Kept Confidential
Appendix E (Independent Evaluator Report) – gray shaded areas	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments VII – Score sheets, analysis and evaluation for RPS Projects VIII.B – Quantitative analysis for scoring and evaluating bids	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments. Confidential score sheets, analyses and evaluation for RPS contract. Confidential quantitative analysis for scoring and evaluating bids in solicitation	Three years from contract date for deliveries to start or one year after expiration. Three years Three years after winning bidders selected
Appendix F (Executed PPAs and Letters of Concurrence) – in its entirety	VII.G – Terms and conditions of RPS contracts not eligible for Supplemental Energy Payments	Confidential terms and conditions of RPS contract that is not eligible for Supplemental Energy Payments.	Three years from contract date for deliveries to start or one year after expiration

Confidential Appendix A

Solicitation Data

(Redacted version included with public filing)

APPENDIX A

Table 1. Overview of BioRAM RFO

Seller's (Developer's) Name	Number of bids submitted	Full Capacity project	Energy Only project	Number of bids shortlisted	Number of executed contracts
HL Power Company LP	4			N/A	0
Burney Forest Products	2			N/A	1
Pacific Ultrapower Chinese Station	1			N/A	0
Madera Power, LLC	1			N/A	0
Community Renewable Energy Services, Inc.	1			N/A	0
RioBravo Rocklin, a California General Partnership	4			N/A	0
Rio Bravo Fresno, a California General Partnership	4			N/A	0
Thermal Energy Development Partnership, L.P.	2			N/A	0

Note: Given the structure of the BioRAM program, the concept of a shortlist is not applicable.

APPENDIX A

Table 2. Overview of BioRAM RFO by Capacity

	Contract Size (MW)	Number of Bids Submitted	Number of Bids Shortlisted	Number of executed contracts
1	0.5-5	0	N/A	0
2	>5-10	0	N/A	0
3	>10-15	1	N/A	0
4	>15-20	5	N/A	0
5	>20-25	9	N/A	0
6	>25-30	4	N/A	1

Note: Given the structure of the BioRAM program, the concept of a shortlist is not applicable.

APPENDIX A

Table 3. Overview of BioRAM RFO by Technology

	Participating Technology	Number of Bids Submitted	Number of Bids Shortlisted	Number of executed contracts
1	Solar PV	0	N/A	0
2	Wind	0	N/A	0
3	Landfill Gas	0	N/A	0
4	Geothermal	0	N/A	0
5	Biogas	0	N/A	0
6	Biomass	19	N/A	1
7	Small Hydro	0	N/A	0

Note: Given the structure of the BioRAM program, the concept of a shortlist is not applicable.

Table 4. Overview of BioRAM RFO

	Technology Type	Total # of Bids into RFO	Total # of Eligible Bids	Total # of Bids Shortlisted	Total # of Executed Contracts	Mean RFO Bid Size (MW)	Mean Shortlist Bid Size (MW)	Mean Contract Size (MW)	No. of RFO Bids that Failed Each Viability Screen				
									Dev. Exp.	Site Control	Commercialized Tech.	Interconnection	COD > 36 mos
1	Solar PV	0	0	N/A	0	0.0	N/A	0	0	0	0	0	0
2	Wind	0	0	N/A	0	0.0	N/A	0.0	0	0	0	0	0
3	Landfill Gas	0	0	N/A	0	0.0	N/A	0.0	0	0	0	0	0
4	Geothermal	0	0	N/A	0	0.0	N/A	0.0	0	0	0	0	0
5	Biomass	19	18	N/A	1	23.3	N/A	29.0	0	0	0	1	0
6	Biogas	0	0	N/A	0	0.0	N/A	0.0	0	0	0	0	0
7	Small Hydro	0	0	N/A	0	0.0	N/A	0.0	0	0	0	0	0

Note: Given the structure of the BioRAM program, the concept of the shortlist is not applicable.

APPENDIX A

Table 5. All Bids

Net Market Value Overview by Project Size (MW)						
	BioRAM RFO			RAM Shortlist		
	Min.	Max.	Mean	Min.	Max.	Mean
0.5-5				N/A	N/A	N/A
>5-10				N/A	N/A	N/A
>10-15				N/A	N/A	N/A
>15-20				N/A	N/A	N/A
>20-25				N/A	N/A	N/A
>25-30				N/A	N/A	N/A

Table 6. All Bids

Net Market Value Overview by Technology Type						
	BioRAM RFO			RAM Shortlist		
	Min.	Max.	Mean	Min.	Max.	Mean
Solar PV				N/A	N/A	N/A
Wind				N/A	N/A	N/A
Landfill Gas				N/A	N/A	N/A
Geothermal				N/A	N/A	N/A
Biogas				N/A	N/A	N/A
Biomass				N/A	N/A	N/A
Small Hydro				N/A	N/A	N/A

Note: Given the structure of the BioRAM program, the concept of the shortlist is not applicable.

Note: Only data from the 18 eligible bids are included in the tables above.

Appendix B

PG&E's BioRAM Standard Contract and Rider

Appendix B: RAM PROGRAM: Form of Power Purchase Agreement

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.

POWER PURCHASE AGREEMENT

Between

PACIFIC GAS AND ELECTRIC COMPANY
(as “Buyer”)

and

(as “Seller”)

POWER PURCHASE AGREEMENT

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APPENDICES

The following Appendices constitute a part of this Agreement and are incorporated into this Agreement by reference:

Appendix I	Form of Letter of Credit
Appendix II	Initial Energy Delivery Date Confirmation Letter
Appendix III	Form of Progress Report
Appendix IV	Construction Start and Commercial Operation Certification Forms and Procedures
Appendix IV-1	Construction Start Form of Certification
Appendix IV-2	Commercial Operation Certification Procedure
<u>Attachment A</u>	Commercial Operation Form of Certification
Appendix IV-3	Capacity Test Procedure <i>[For Baseload Product only]</i>
Appendix V	GEP Damages Calculation
Appendix VI	Notification Requirements for Available Capacity and Project Outages
Appendix VII	Form of Consent to Assignment
Appendix VIII	Seller Documentation Condition Precedent
Appendix IX	Form of Actual Availability Report <i>[For As-Available Product only]</i>
Attachment A	Form of Actual Availability Report
Appendix X	Telemetry Parameters for Wind or Solar Facility
Appendix XI	Form of Letter of Concurrence
Appendix XII	Supplier Diversity Program
Appendix XIII	Project Specifications and Contract Capacity Calculation
Appendix XIV	Section 3.3(e) Liquidated Damages Calculation

POWER PURCHASE AGREEMENT

COVER SHEET

This Power Purchase Agreement ("Agreement") is entered into between Pacific Gas and Electric Company, a California corporation ("Buyer" or "PG&E"), and _____ *[insert name of Seller]*, a _____ *[include place of formation and business type]* ("Seller"), as of the Execution Date. The information contained in this Cover Sheet shall be completed by Seller and incorporated into the Agreement.

A. Transaction Type

Seller may not modify the Transaction Type designated in this Part A of the Cover Sheet at any time after the Execution Date.

Program: ☐ GTSR Program

Product: ☐ As-Available Non-Peaking
☐ As-Available Peaking
☐ Baseload

Deliverability:

- ☐ Energy Only Status
- ☐ Partial Capacity Deliverability Status ("PCDS")
- a) If PCDS is selected, provide the Expected PCDS Date, or the date the Project received a PCDS finding if already received:
_____ (mm/dd/yyyy);
- b) The Partial Capacity Deliverability Status Amount the Project will obtain is _____ MW.
- ☐ Full Capacity Deliverability Status ("FCDS")
- a) If FCDS is selected, provide the Expected FCDS Date, or the date the Project received a FCDS finding if already received:
_____ (mm/dd/yyyy).

Seller shall elect one of the following types of transactions pursuant to Section 3.1(b) of the Agreement:

- ☐ Full Buy/Sell
- ☐ Excess Sale

Seller shall elect one of the following Delivery Terms:

- ☐ ten (10) Contract Years
- ☐ fifteen (15) Contract Years
- ☐ twenty (20) Contract Years

B. Project Description Including Description of Site

Contract Capacity: [] MW *[Provide the maximum capacity to be made available to PG&E pursuant to the transaction, which in the case of an Excess Sale transaction, may be less than the maximum capacity of the Project]*

(i) Project Development:

(a) The Project is an:

[An existing or repowered Project with substantial changes, including but not limited to, new major permits, a new interconnection study, or the construction of new generators, should check “New Project” instead of “Existing Project.”]

☐ Existing Project

☐ New Project *[GTSR Projects must be New Projects]*

(1) If the Project is a New Project:

(A) The date on which the Commercial Operation Date of the Project is expected (must be no later than the Guaranteed Commercial Operation Date):

(B) The Expected Construction Start Date of the Project:

(2) If the Project is an Existing Project:

(A) The Expected Initial Energy Delivery Date (which shall be no later than the Guaranteed Commercial Operation Date) is:

(b) Project development Milestone schedule *[to be completed by Buyer and Seller. Insert additional rows if necessary]:*

Identify Milestone	Date for Completion

(ii) Supplier Diversity. For the purpose of Section 4 of the Supplier Diversity Program obligation set forth in Appendix XII of this Agreement, Seller’s supplier diversity spend target for work supporting the Project is ____%.

C. Contract Price

The Contract Price for each MWh of Product as measured by Delivered Energy in each Contract Year and the price for Deemed Delivered Energy in each Contract Year shall be as follows:

Contract Year	Contract Price (\$/MWh)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

D. Delivery Term Contract Quantity Schedule

Length of Delivery Term (in Contract Years):

Contract Year	Contract Quantity (MWh)¹
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

¹For a Baseload Product, the minimum qualifying Contract Quantity should be equivalent to at least an eighty percent (80%) Capacity Factor.

E. Collateral (as described in the RAM Protocol Agreement, under Section V.C. RAM PPA Terms and Conditions)

- Project Development Security (provide dollar amount)

Dollar Amount: \$ _____

- Cash, or
- Letter of Credit

- Delivery Term Security (provide dollar amount)

Dollar Amount: \$ _____

- Cash, or
- Letter of Credit

- Term Security (provide dollar amount) *[Applies to GTSR Projects 3MW or less]*

Dollar Amount: \$ _____

- Cash, or
- Letter of Credit

F. Buyer Bid Curtailment and Buyer Curtailment Orders.

Operational characteristics of the Project for Buyer Bid Curtailment and Buyer Curtailment Orders are listed below. Buyer, as the Scheduling Coordinator, may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project. In addition, Seller agrees to coordinate with Buyer or Third-Party SC, as applicable, to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are based on the true physical characteristics of the resource.

- PMax of the Project: ____MW
- Minimum operating capacity: ____MW
- Ramp Rate: ____MW/Minute

[For As-Available Products]

- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).
- Maximum number of Start-ups per calendar day (if any such operational limitations exist):

[For Baseload Products]

- Maximum number of Start-ups per calendar day, month, year (if any such operational limitations exist): _____
- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

Other Requirements:

- Maximum number of hours annually for Buyer Curtailment Periods: unlimited hours
- The Project will be capable of receiving and responding to all Dispatch Instruction in accordance with Section 3.1(q).
- Start-Up Time (if applicable): _____Minutes
- Minimum Run Time after Start-Up (if applicable): _____Minutes
- Minimum Down Time after Shut-Down (if applicable): _____Minutes

Note: Sellers should enter the maximum flexibility the Project can offer given the operational constraints of the technology.

G. Damage Payment (as described under Damage Payment definition in Section 1.60)

- ☐ Ten (10) year Delivery Term. Dollar amount: \$_____
- ☐ Fifteen (15) year Delivery Term. Dollar amount: \$_____
- ☐ Twenty (20) year Delivery Term. Dollar amount: \$_____

H. Notices List

Name: **[Seller's Name]**, a **[include place of formation and business type]** ("Seller")

All Notices: **[Seller to complete]**

Delivery Address:

Street:

City: State: Zip:

Mail Address: (if different from above)

Attn:

Phone:

Facsimile:

Email:

DUNS:

Federal Tax ID Number:

Invoices:

Attn:

Phone:

Facsimile:

Email:

Scheduling:

Attn:

Name: Pacific Gas and Electric Company, a California corporation
("Buyer" or "PG&E")

All Notices:

Delivery Address:

77 Beale Street, Mail Code N12E
San Francisco, CA 94105-1702

Mail Address:

P.O. Box 770000, Mail Code N12E
San Francisco, CA 94177

Attn: Candice Chan (CWW9@pge.com)

Director, Contract Mgmt & Settlements

Phone: (415) 973-7780

Facsimile: (415) 972-5507

DUNS:

Federal Tax ID Number:

Invoices:

Attn: Azmat Mukhtar (ASM3@pge.com)

Manager, Electric Settlements

Phone: (415) 973-4277

Facsimile: (415) 973-2151

Scheduling:

Attn: Christopher McNeece (CMM4@pge.com)

Phone:
Facsimile:
Email:

Phone: (415) 973-4072
Facsimile: (415) 973-0400

Payments:

Attn:

Phone:
Facsimile:
Email:

Payments:

Attn: Azmat Mukhtar (ASM3@pge.com)
Manager, Electric Settlements
Phone: (415) 973-4277
Facsimile: (415) 973-2151

Wire Transfer:

BNK:
ABA:
ACCT:

Wire Transfer:

BNK:
ABA:
ACCT:

Credit and Collections:

Attn:

Phone:
Facsimile:
Email:

Credit and Collections:

Attn: Justice Awuku (J2AT@pge.com)
Manager, Credit Risk Management
Phone: (415) 973-4144
Facsimile: (415) 973-4071

With additional Notices of an Event of Default
to Contract Manager:

Attn: _____

Phone: _____
Facsimile: _____
Email: _____

Contract Manager:

Attn: Ted Yura (THY1@pge.com)
Senior Manager, Contract Management
Phone: (415) 973-8660
Facsimile: (415) 972-5507

With additional Notices of an Event of Default to:

PG&E Law Department
Attn: Renewables Portfolio Standard attorney
Phone: (415) 973-4377
Facsimile: (415) 972-5952

PREAMBLE

This Power Purchase Agreement, together with the Cover Sheet, appendices and any other attachments referenced herein, is made and entered into between PG&E and Seller, as of the Execution Date set forth in the Cover Sheet. Buyer and Seller hereby agree to the following:

GENERAL TERMS AND CONDITIONS

ARTICLE ONE: GENERAL DEFINITIONS

1.1 “Actual Availability Report” has the meaning set forth in Section 3.1(l)(i)(G). **[For As-Available Product only]**

1.2 “Additional Extension” has the meaning set forth in Section 3.1(c)(ii).

1.3 “Affiliate” means, with respect to any person or entity, any other person or entity (other than an individual) that (a) directly or indirectly, through one or more intermediaries, controls, or is controlled by such person or entity or (b) is under common control with such person or entity. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

1.4 “Agreement” means this Power Purchase Agreement between Buyer and Seller, which is comprised of the Cover Sheet, Preamble, these General Terms and Conditions, and all appendices, schedules and any written supplements attached hereto and incorporated herein by references, as well as all written and signed amendments and modifications thereto. For purposes of Section 10.12, the word “agreement” shall have the meaning set forth in this definition. For purposes of Section 3.1(k)(viii), the word “contract” shall have the meaning set forth in this definition.

1.5 “Ancillary Services” has the meaning set forth in the CAISO Tariff.

1.6 “Arbitration” has the meaning set forth in Section 12.3.

1.7 “As-Available Non-Peaking” Product is As-Available Product with a Capacity Factor of eighty percent (80%) or less averaged over all TOD Periods and less than ninety-five percent (95%) of expected output is in the Peak and Shoulder periods, as defined in Section 4.2.

1.8 “As-Available Peaking” Product is As-Available Product with a Capacity Factor of eighty percent (80%) or less averaged over all TOD Periods and ninety-five percent (95%) or more of expected output is in the Peak and Shoulder periods, as defined in Section 4.2.

1.9 “As-Available Product” means an As-Available Non-Peaking Product or an As-Available Peaking Product that is powered by one of the following sources, except for a *de minimis* amount of Energy from other sources: (a) wind, (b) solar energy, (c) hydroelectric potential derived from small conduit water distribution facilities that do not have storage capability, or (d) other variable sources of energy that are contingent upon natural forces other than geothermal. Subject to the terms of this Agreement, (i) Seller is obligated to sell and deliver and (ii) Buyer is obligated to purchase and receive, the Energy component of As-Available Product from the Project whenever such Energy is capable of being generated from the Project. In contrast to Baseload Product, the Seller does not control the availability of fuel supply to the Project producing As-Available Product and lacks the ability to store energy and control the rate of output.

- 1.10 “Availability Workbook” has the meaning set forth in Appendix IX.
- 1.11 “Available Capacity” means the capacity from the Project, expressed in whole megawatts, that is available to generate Product. ***[For As-Available Product facilities only]***
- 1.12 “Available Capacity” means the expected amount of Energy to be produced from the Project, expressed in megawatts. ***[For Baseload Product facilities and small hydro facilities]***
- 1.13 “Balancing Authority” has the meaning set forth in the CAISO Tariff.
- 1.14 “Bankrupt” means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, or has any such petition filed or commenced against it and such case filed against it is not dismissed in ninety (90) days, (b) makes an assignment or any general arrangement for the benefit of creditors, (c) otherwise becomes bankrupt or insolvent (however evidenced), (d) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (e) is generally unable to pay its debts as they fall due.
- 1.15 “Baseload” means a Product for which the Energy delivery levels are uniform twenty-four (24) hours per day, seven (7) days per week and has a Capacity Factor (averaged over all TOD Periods) greater than or equal to eighty percent (80%).
- 1.16 “Bid” has the meaning set forth in the CAISO Tariff.
- 1.17 “Business Day” means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local 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 the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.
- 1.18 “Buyer” has the meaning set forth in the Cover Sheet.
- 1.19 “Buyer Bid Curtailment” means Buyer as SC communicates a curtailment instruction to the Seller, requiring Seller to produce less Energy from the Project than the CAISO final market forecast amount to be produced from the Project for a period of time, and Buyer as the SC either (a) submitted a CAISO final market Energy Supply Bid and such curtailment is solely a result of the CAISO implementing the Energy Supply Bid; or (b) submitted a CAISO final market Self-Schedule for less than the amount of the final-market Energy forecasted to be produced from the Project. However, if the Project is subject to a Planned Outage, Forced Outage, Force Majeure and/or a Curtailment Period during the same period of time, then Buyer Bid Curtailment shall not include any Energy that is subject to such Planned Outage, Forced Outage, Force Majeure or Curtailment Period.
- 1.20 “Buyer Curtailment Order” means the instruction from Buyer to Seller to reduce generation from the Project by the amount, and for the period of time set forth in such order, for reasons unrelated to a Planned Outage, Forced Outage, Force Majeure and/or Curtailment Order.
- 1.21 “Buyer Curtailment Period” means the period of time, as measured using current Settlement Intervals, during which Seller reduces generation from the Project pursuant to (a) Buyer Bid Curtailment or (b) a Buyer Curtailment Order. The Buyer Curtailment Period shall be inclusive of the

time required for the Project to ramp down and ramp up; provided that such time periods to ramp down and ramp up shall be consistent with the Ramp Rate designated in the Cover Sheet.

1.22 “Buyer’s Notice of First Offer Acceptance” has the meaning set forth in Section 3.9(e)(ii) or Section 11.1(b)(ii), as applicable.

1.23 “Buyer’s WREGIS Account” has the meaning set forth in Section 3.1(k)(i).

1.24 “CAISO” means the California Independent System Operator Corporation or any successor entity performing similar functions.

1.25 “CAISO Global Resource ID” means the number or name assigned by the CAISO to the Project.

1.26 “CAISO Grid” has the same meaning as “CAISO Controlled Grid” as defined in the CAISO Tariff.

1.27 “CAISO Penalties” means any fees, liabilities, assessments, or similar charges assessed by the CAISO for (a) violation of the CAISO Tariff and all applicable protocols, WECC rules or CAISO operating instructions or orders or (b) as a result of a Party’s failure to follow Good Utility Practices. In either case, “CAISO Penalties” do not include the costs and charges related to scheduling and Imbalance Energy as addressed in Section 4.6(b) of this Agreement.

1.28 “CAISO Revenues” means the net amount resulting from (a) the credits and other payments received by Buyer, as Seller’s Scheduling Coordinator, as a result of test energy from the Project delivered by Seller during the Test Period, including revenues associated with CAISO dispatches and (b) the debits, costs, penalties and interest that are directly assigned by the CAISO to the CAISO Global Resource ID for the Project for, or attributable to, scheduling and deliveries from the Project under this Agreement, which amount may result in a negative or positive value.

1.29 “CAISO Tariff” means the California Independent System Operator Corporation, Fifth Replacement FERC Electric Tariff (Open Access Transmission Tariff), as it may be amended, supplemented or replaced (in whole or in part) from time to time.

1.30 “California Renewables Portfolio Standard” means the renewable energy program and policies established by California State Senate Bills 1038 and 1078 as amended by Senate Bill SB1X, and codified in California Public Utilities Code Sections 399.11 through 399.31 and California Public Resources Code Sections 25740 through 25751, as such provisions are amended or supplemented from time to time.

1.31 “Capacity Attributes” means any current or future defined characteristic (including the ability to generate at a given capacity level, provide Ancillary Services, and ramp up or ramp down at a given rate), certificate, tag, credit, flexibility, or dispatchability attribute, whether general in nature or specific as to the location or any other attribute of the Project, intended to value any aspect of the capacity of the Project to produce any and all Product, including any accounting construct so that the maximum amount of Contract Capacity of the Project may be counted toward a Resource Adequacy Requirement or any other measure by the CPUC, the CAISO, the FERC, or any other entity invested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer’s expense, Resource Adequacy or other such products.

1.32 “Capacity Factor” has the meaning set forth in Section 4.3. ***[For Baseload Product only]***

1.33 “Capacity Test” has the meaning set forth in Appendix IV-3 attached hereto. ***[For Baseload Product only]***

1.34 “CEC” means the California Energy Commission or its successor agency.

1.35 “CEC Certification and Verification” means that the CEC has certified (or, with respect to periods before the Project has commenced commercial operation (as such term is defined by and according to the CEC), that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Project.

1.36 “Claims” means all third party claims or actions, threatened or filed and, whether groundless, false, fraudulent or otherwise, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses, attorneys’ fees and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination or expiration of this Agreement.

1.37 “Commercial Operation” means the Project is operating and able to produce and deliver the Product to Buyer pursuant to the terms of this Agreement and in the case of Baseload Product, as further provided in Appendix IV-3.

1.38 “Commercial Operation Date” means ***[For As-Available Products use the following language]*** the date on which Seller (a) notifies Buyer that Commercial Operation has commenced, (b) notifies Buyer that all Reliability Network Upgrades identified in the Project’s Generator Interconnection Agreement have been completed, and (c) provides a certification of a Licensed Professional Engineer, substantially in the form attached hereto as Attachment A to Appendix IV-2, demonstrating satisfactory completion of the Commercial Operation Certification Procedure as provided in Appendix IV-2 hereto. ***[For Baseload Products use the following language]*** the date on which (a) Seller notifies Buyer that Commercial Operation has commenced, (b) Seller notifies Buyer that all Reliability Network Upgrades identified in the Project’s Generator Interconnection Agreement have been completed, (c) provides a certification of a Licensed Professional Engineer, substantially in the form attached hereto as Attachment A to Appendix IV-2, demonstrating satisfactory completion of the Commercial Operation Certification Procedure as provided in Appendix IV-2 hereto, and (d) Buyer accepts in writing the results of Seller’s initial Capacity Test report in compliance with the Capacity Test Procedure as provided in Appendix IV-3 hereto.

1.39 “Compliance Costs” means all reasonable out-of-pocket costs and expenses incurred by Seller and paid directly to third parties in connection with any of the obligations under Sections 3.1(j) (Greenhouse Gas Emissions Reporting), 3.1(k) (WREGIS), 3.1(n) (Obtaining and Maintaining CEC Certification and Verification), 3.3 (Resource Adequacy), 3.4(b) (EIRP Requirements), and 10.2(b) (ERR), including registration fees, volumetric fees, license renewal fees, external consultant fees and capital costs necessary for compliance, but excluding Seller’s internal administrative and staffing costs, due to a change, amendment, enactment or repeal of Law after the Execution Date which requires Seller to incur additional costs and expenses in connection with any of such obligations, in excess of the costs and expenses incurred for such obligations under the Law in effect as of the Execution Date. Compliance Costs do not include any amounts designated in the Project’s full capacity deliverability study to obtain FCDS nor any costs and expenses incurred by Seller for FCDS studies.

1.40 “Compliance Cost Cap” has the meaning set forth in Section 3.1(o).

1.41 “Condition Precedent” means each of, or one of, the conditions set forth in Section 2.5(a)(i) through (iv) and “Conditions Precedent” shall refer to all of the conditions set forth in Section 2.5(a)(i) through (iv).

1.42 “Confidential Information” has the meaning set forth in Section 10.7(a)

1.43 “Construction Start Date” means the later to occur of the date on which Seller delivers to Buyer (a) a copy of the Notice to Proceed that Seller has delivered to the EPC Contractor for the Project, and (b) a written Certification substantially in the form attached hereto as Appendix IV-1.

1.44 “Contract Capacity” has the meaning set forth in Section 3.1(f).

1.45 “Contract Capacity Commitment” means the amount of the Contract Capacity that may be constructed pursuant to the Governmental Approvals received or obtained by Seller as of, for a New Project, the Guaranteed Commercial Operation Date (as may be extended pursuant to Section 3.9(c)), and for an Existing Project, the Expected Initial Energy Delivery Date specified on the Cover Sheet.

1.46 “Contract Price” means the price in United States dollars (\$U.S.) (unless otherwise provided for) to be paid by Buyer to Seller for the purchase of the Product, as specified in the Cover Sheet.

1.47 “Contract Quantity” means the quantity of Delivered Energy expected to be delivered by Seller during each Contract Year as set forth in Section 3.1(e) and Cover Sheet Section D .

1.48 “Contract Year” means a period of twelve (12) consecutive months. The first Contract Year shall commence on the Initial Energy Delivery Date and each subsequent Contract Year shall commence on the anniversary of the Initial Energy Delivery Date.

1.49 “Costs” means, with respect to the Non-Defaulting Party, (a) brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or in entering into new arrangements which replace the Terminated Transaction; and (b) all reasonable attorneys’ fees and expenses incurred by the Non-Defaulting Party in connection with the termination of the Transaction.

1.50 “Cover Sheet” means the cover sheet to this Agreement, completed by Seller and incorporated into the Agreement.

1.51 “CPUC” or “Commission” means the California Public Utilities Commission, or successor entity.

1.52 “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 contains the following terms:

(a) 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; and

(b) finds 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.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

For purposes of this section, 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.

1.53 “CRS” means the Center for Resource Solutions or any successor entity performing similar functions.

1.54 “Credit Rating” means, with respect to any entity, (a) the rating then assigned to such entity’s unsecured senior long-term debt obligations (not supported by third party credit enhancements) or (b) if such entity does not have a rating for its unsecured senior long-term debt obligations, then the rating assigned to such entity as an issuer rating by S&P and/or Moody’s. If the entity is rated by both S&P and Moody’s and such ratings are not equivalent, the lower of the two ratings shall determine the Credit Rating. If the entity is rated by either S&P or Moody’s, but not both, then the available rating shall determine the Credit Rating.

1.55 “Cure” has the meaning set forth in Section 8.5(b).

1.56 “Cured Performance Measurement Period” has the meaning set forth in Section 3.1(e)(ii)(C).

1.57 “Cure Payment Period” has the meaning set forth in Section 3.1(e)(ii)(C)(III).

1.58 “Curtailement Order” means any of the following:

(a) the CAISO, Reliability Coordinator, Balancing Authority or any other entity having similar authority or performing similar functions during the Delivery Term, orders, directs, alerts, or communicates via any means, to a Party to curtail Energy deliveries, which may come in the form of a request to return to Schedule consistent with the CAISO Tariff, for reasons including, (i) any System Emergency, (ii) any warning of an anticipated System Emergency, or warning of an imminent condition or situation, which jeopardizes the CAISO’s electric system integrity or the integrity of other systems to which the CAISO is connected, or (iii) any warning, forecast, or anticipated over-generation conditions, including a request from CAISO to manage over-generation conditions, provided that this subsection (a) (iii) shall not include Buyer Bid Curtailement;

(b) a curtailment ordered by the Participating Transmission Owner, distribution operator (if interconnected to distribution or sub-transmission system), or any other entity having similar authority or performing similar functions during the Delivery Term, for reasons including (i) any situation that affects normal function of the electric system including any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, or (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner’s electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected;

(c) scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's or distribution operator's transmission or distribution facilities that prevents (i) Buyer from receiving or (ii) Seller from delivering Delivered Energy at the Delivery Point; or

(d) a curtailment in accordance with Seller's obligations under its Generator Interconnection Agreement with the Participating Transmission Owner or distribution operator.

For the avoidance of doubt, if Buyer or Third-Party SC submitted a Self-Schedule and/or an Energy Supply Bid that clears, in full, the applicable CAISO market for the full amount of Energy forecasted to be produced from the Project for any time period, any notice from the CAISO having the effect of requiring a reduction during the same time period is a Curtailment Order, not a Buyer Bid Curtailment.

1.59 "Curtailment Period" means the period of time during which Seller reduces generation from the Project, pursuant to a Curtailment Order. The Curtailment Period shall be inclusive of the time required for the Project to ramp down and ramp up; provided that such time periods to ramp down and ramp up shall be consistent with the Ramp Rate designated in the Cover Sheet.

1.60 "Damage Payment" means ~~[for a ten year Delivery Term the dollar amount that equals six (6) months minimum expected revenue of the Project based on Guaranteed Energy Production and the estimated average TOD-adjusted Contract Price, which will be calculated prior to the Execution Date]~~ ~~[for a fifteen year Delivery Term the dollar amount that equals nine (9) months minimum expected revenue of the Project based on Guaranteed Energy Production and the estimated average TOD-adjusted Contract Price, which will be calculated prior to the Execution Date]~~ ~~[for a twenty year or greater Delivery Term the dollar amount that equals twelve (12) months minimum expected revenue of the Project based on Guaranteed Energy Production and the estimated average TOD-adjusted Contract Price, which will be calculated prior to the Execution Date]~~. ***[Select bracketed language appropriate for the length of the Delivery Term]***

1.61 "DA Price" means the resource specific locational marginal price ("LMP") applied to the PNode applicable to the Project in the CAISO Day-Ahead Market.

1.62 "DA Scheduled Energy" means the Day-Ahead Scheduled Energy as defined in the CAISO Tariff.

1.63 "Day-Ahead Availability Notice" has the meaning set forth in Section 3.4***[(b)](c)](iii)(C)***.

1.64 "Day-Ahead Market" has the meaning set forth in the CAISO Tariff.

1.65 "Deemed Delivered Energy" means ***[For As-Available Products use the following language]*** the amount of Energy expressed in MWh that the Project would have produced and delivered to the Delivery Point, but that is not produced by the Project and delivered to the Delivery Point during a Buyer Curtailment Period, which amount shall be equal to (a) the EIRP Forecast, expressed in MWh, applicable to the Buyer Curtailment Period, whether or not Seller is participating in EIRP during the Buyer Curtailment Period, less the amount of Delivered Energy delivered to the Delivery Point during the Buyer Curtailment Period or, (b) if there is no EIRP Forecast available, the result of the equation provided pursuant to Section 3.1(l)(i)(G) and using relevant Project availability, weather and other pertinent data for the period of time during the Buyer Curtailment Period less the amount of Delivered Energy delivered to the Delivery Point during the Buyer Curtailment Period; *provided that*, if the applicable difference calculated pursuant to (a) or (b) above is negative as compared to the amount of metered Energy at the

CAISO revenue meter for the Project, the Deemed Delivered Energy shall be zero (0). ***[For Baseload Products use the following language]*** the amount of Energy expressed in MWh that the Project would have produced and delivered to the Delivery Point, but that is not produced by the Project and delivered to the Delivery Point during a Buyer Curtailment Period, which amount shall be determined by reference to the most recent Day-Ahead Availability Notice Buyer has received from Seller at the time Buyer issues a Buyer Curtailment Order.

1.66 “Defaulting Party” means the Party that is subject to an Event of Default.

1.67 “Deficient Month” has the meaning set forth in Section 3.1(k)(v).

1.68 “Deliverability Assessment” has the meaning set forth in the CAISO Tariff.

1.69 “Deliverability Finding Deadline” shall be two (2) calendar years after the RA Start Date. The Deliverability Finding Deadline shall be no later than December 31, 2024.

1.70 “Delivered Energy” means all Energy produced from the Project as measured in MWh at the CAISO revenue meter of the Project and in accordance with the CAISO Tariff, which shall include any applicable adjustments for power factor and Electrical Losses.

1.71 “Delivery Network Upgrade” has the meaning set forth in the CAISO Tariff.

1.72 “Delivery Point” means the point at which Buyer receives Seller’s Product, as identified in Section 3.1(d).

1.73 “Delivery Term” has the meaning set forth in Section 3.1(c)(i) and shall be of the length specified in the Cover Sheet.

1.74 “Delivery Term Security” means the Performance Assurance that Seller is required to maintain, as specified in Article Eight, to secure performance of its obligations during the Delivery Term.

1.75 “Disclosing Party” has the meaning set forth in Section 10.7.

1.76 “Dispatch Instruction” has the meaning set forth in the CAISO Tariff.

1.77 “Dispatch Interval” has the meaning set forth in the CAISO Tariff.

1.78 “Distribution Loss Factor” is a multiplier factor that reduces the amount of Delivered Energy produced by a Project connecting to a distribution system to account for the electrical distribution losses, including those related to distribution and transformation, occurring between the point of interconnection, where the Participating Transmission Owner’s meter is physically located, and the first Point of Interconnection, as defined in the CAISO Tariff, with the CAISO Grid.

1.79 “Distribution Upgrades” has the meaning set forth in the CAISO Tariff.

1.80 “DUNS” means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun & Bradstreet, Inc.

1.81 “Early Termination Date” has the meaning set forth in Section 5.2.

1.82 “Effective Date” means the date on which all of the Conditions Precedent set forth in Section 2.5(a) have been satisfied or waived in writing by both Parties.

1.83 “Effective FCDS Date” means the date on which Seller provides Buyer Notice and documentation from CAISO that the Project has attained Full Capacity Deliverability Status, which Buyer subsequently finds, in its reasonable discretion, to be adequate evidence that the Project has attained Full Capacity Deliverability Status.

1.84 “Effective PCDS Date” means the date on which Seller provides Buyer Notice and documentation from CAISO that the Project has attained Partial Capacity Deliverability Status, which Buyer subsequently finds, in its reasonable discretion, to be adequate evidence that the Project has attained Partial Capacity Deliverability Status.

1.85 “EIRP Forecast” means the final forecast of the Energy to be produced by the Project prepared by the CAISO in accordance with the Eligible Intermittent Resources Protocol and communicated to Buyer or Third-Party SC for use in submitting a Schedule for the output of the Project in the Real-Time Market.

1.86 “Electrical Losses” means all applicable losses, including the following: (a) any transmission or transformation losses between the CAISO revenue meter(s) and the Delivery Point; and (b) the Distribution Loss Factor, if applicable.

1.87 “Electric System Upgrades” means any Network Upgrades, Distribution Upgrades, or Interconnection Facilities that are determined to be necessary by the CAISO or Participating Transmission Owner, as applicable, to physically and electrically interconnect the Project to the Participating Transmission Owner’s electric system for receipt of Energy at the Point of Interconnection (as defined in the CAISO Tariff) if connecting to the CAISO Grid, or the Interconnection Point, if connecting to a part of the Participating TO’s electric system that is not part of the CAISO Grid.

1.88 “Electrician” means any person responsible for placing, installing, erecting, or connecting any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells or any part thereof, which generate, transmit, transform or utilize energy in any form or for any purpose.

1.89 “Eligible Intermittent Resources Protocol” or “EIRP” means the Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.

1.90 “Eligible LC Bank” means either a U.S. commercial bank, or a foreign bank issuing a Letter of Credit through its U.S. branch; and in each case the issuing U.S. commercial bank or foreign bank must be acceptable to Buyer in its sole discretion and such bank must have a Credit Rating of at least: (a) “A-, with a stable designation” from S&P and “A3, with a stable designation” from Moody’s, if such bank is rated by both S&P and Moody’s; or (b) “A-, with a stable designation” from S&P or “A3, with a stable designation” from Moody’s, if such bank is rated by either S&P or Moody’s, but not both, even if such bank was rated by both S&P and Moody’s as of the date of issuance of the Letter of Credit but ceases to be rated by either, but not both of those ratings agencies.

1.91 “Eligible Renewable Energy Resource” or “ERR” has the meaning set forth in California Public Utilities Code Section 399.12 and California Public Resources Code Section 25741, as either code provision is amended or supplemented from time to time.

1.92 “Energy” means three-phase, 60-cycle alternating current electric energy measured in MWh and net of auxiliary loads and station electrical uses (unless otherwise specified).

1.93 “Energy Deviation(s)” means the absolute value of the difference, in MWh, in any Settlement Interval between (a) the final accepted Bid submitted for the Project; and (b) Delivered Energy.

1.94 “Energy Only Status Seller” or “EOS Seller” means a Seller that has selected Energy Only Status in the Cover Sheet. For avoidance of doubt, an EOS Seller does not have an obligation to have or obtain a Full Capacity Deliverability Status Finding.

1.95 “Energy Supply Bid” has the meaning set forth in the CAISO Tariff.

1.96 “EPC Contract” means the Seller’s engineering, procurement and construction contract with the EPC Contractor.

1.97 “EPC Contractor” means an engineering, procurement, and construction contractor, or if not utilizing an engineering, procurement and construction contractor, the entity having lead responsibility for the management of overall construction activities, selected by Seller, with substantial experience in the engineering, procurement, and construction of power plants of the same type of facility as the Seller’s; provided, however, that the Seller or the Seller’s Affiliate(s) may serve as the EPC Contractor.

1.98 “Equitable Defenses” means any bankruptcy, insolvency, reorganization or other Laws affecting creditors’ rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

1.99 “Event of Default” has the meaning set forth in Section 5.1.

1.100 “Excess Deemed Delivered Energy” has the meaning set forth in Section 4.5(a)(i). **[For As-Available Product only]**

1.101 “Excess Deemed Delivered Energy Price” has the meaning set forth in Section 4.5(a)(ii)(B). **[For As-Available Product only]**

1.102 “Excess Delivered Energy” has the meaning set forth in Section 4.5(a)(i). **[For As-Available Product only]**

1.103 “Excess Delivered Energy Price” has the meaning set forth in Section 4.5(a)(ii)(A). **[For As-Available Product only]**

1.104 “Excess Energy” has the meaning set forth in Section 4.5(a)(i). **[For As-Available Product only]**

1.105 “Excess Network Upgrade Costs” has the meaning set forth in Section 3.9(f)(ii).

1.106 “Excess Sale” means the type of transaction described in Section 3.1(b)(ii).

1.107 “Exclusivity Period” has the meaning set forth in Section 3.9(e)(i) or Section 11.1(b)(i), as applicable.

1.108 “Execution Date” means the latest signature date found on the signature page of this Agreement.

1.109 “Executive(s)” has the meaning set forth in Section 12.2(a).

- 1.110 “Exempt Wholesale Generator” has the meaning provided in 18 C.F.R. Section 366.1.
- 1.111 “Existing Project” is a Project that has achieved Commercial Operation on or prior to the Execution Date.
- 1.112 “Expected Construction Start Date” has the meaning set forth in the Cover Sheet.
- 1.113 “Expected FCDS Date” means the date set forth in Section A of the Cover Sheet which is the date the Project is expected to achieve Full Capacity Deliverability Status.
- 1.114 “Expected PCDS Date” means the date set forth in Section A of the Cover Sheet which is the date the Project is expected to achieve Partial Capacity Deliverability Status.
- 1.115 “Expected Initial Energy Delivery Date” is the date specified on the Cover Sheet for an Existing Project.
- 1.116 “Expected Net Qualifying Capacity” means an estimate of the amount of Net Qualifying Capacity the Project would have received had it obtained deliverability according to the deliverability type selected in Section A of the Cover Sheet, as determined in accordance with Appendix XIV.
- 1.117 “FERC” means the Federal Energy Regulatory Commission or any successor government agency.
- 1.118 “Final True-Up” means the final payment made pursuant to this Agreement settling all invoices by the Party with an outstanding net amount due to the other Party for Product delivered prior to the end of the Delivery Term or other amounts due pursuant to this Agreement incurred prior to the end of the Delivery Term.
- 1.119 “First Offer” has the meaning set forth in Section 3.9(e)(1) or Section 11.1(b)(i), as applicable.
- 1.120 “Force Majeure” means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement, but only if and to the extent (i) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (ii) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party’s ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (iii) such event is not the direct or indirect result of the negligence or the failure of, or caused by, the Party seeking to have its performance obligations excused thereby.
- (a) Subject to the foregoing, events that could qualify as Force Majeure include the following:
- (i) flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcanic eruption, other natural disaster or unusual or extreme adverse weather-related events;

(ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation;

(iii) except as set forth in subsection (b)(viii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable); or

(iv) emergencies declared by the Transmission Provider or any other authorized successor or regional transmission organization or any state or federal regulator or legislature requiring a forced curtailment of the Project or making it impossible for the Transmission Provider to transmit Energy, including Energy to be delivered pursuant to this Agreement; provided that, if a curtailment of the Project pursuant to this subsection (a)(iv) would also meet the definition of a Curtailment Period, then it shall be treated as a Curtailment Period for purposes of Section 3.1(p).

(b) Force Majeure shall not be based on:

(i) Buyer's inability economically to use or resell the Product purchased hereunder;

(ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;

(iii) Seller's inability to obtain permits or approvals of any type for the construction, operation, or maintenance of the Project, including a delay that could constitute a Permitting Delay unless caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above;

(iv) Seller's inability to complete interconnection or Electric System Upgrades by the Guaranteed Commercial Operation Date, including a delay that could constitute a Transmission Delay, unless such delay is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above;

(v) Seller's inability to obtain sufficient fuel, power or materials to operate the Project, except if Seller's inability to obtain sufficient fuel, power or materials is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above;

(vi) Seller's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement;

(vii) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above;

(viii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project;

(ix) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above; or

(x) a Party's inability to pay amounts due to the other Party under this Agreement, except if such inability is caused solely by a Force Majeure event that disables physical or electronic facilities necessary to transfer funds to the payee Party.

1.121 "Force Majeure Extension" has the meaning set forth in Section 3.9(c)(ii)(C).

1.122 "Force Majeure Failure" has the meaning set forth in Section 11.1(a).

1.123 "Forced Outage" means any unplanned reduction or suspension of the electrical output from the Project or unavailability of the Product in whole or in part from a Unit in response to any control system trip or operator-initiated trip in response to an alarm or equipment malfunction; or any other unavailability of the Project or a Unit for operation, in whole or in part, for maintenance or repair that is not a Planned Outage and not the result of Force Majeure.

1.124 "Forecasting Penalty" has the meaning set forth in Section 4.6(c)(iii), and "Forecasting Penalties" means more than one Forecasting Penalty. **[For As-Available Product only]**

1.125 "Full Buy/Sell" is the type of transaction described in Section 3.1(b)(i).

1.126 "Full Capacity Deliverability Status" or "FCDS" has the meaning set forth in the CAISO Tariff except that it applies to any Generating Facility (as defined in the CAISO Tariff).

1.127 "Full Capacity Deliverability Status Finding" or "FCDS Finding" means a written confirmation from the CAISO that the Project is eligible for FCDS.

1.128 "Full Capacity Deliverability Status Seller" or "FCDS Seller" means a Seller that selected Full Capacity Deliverability Status in the Cover Sheet and either has previously obtained, or is obligated to obtain per the terms of the Agreement, a Full Capacity Deliverability Status Finding.

1.129 "Gains" means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of the Transaction, determined in a commercially reasonable manner, subject to Section 5.3 hereof. Factors used in determining economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading platforms (e.g., NYMEX), all of which should be calculated for the remaining Delivery Term to determine the value of the Product.

1.130 "Generally Accepted Accounting Principles" means the standards for accounting and preparation of financial statements established by the Federal Accounting Standards Advisory Board (or its successor agency) or any successor standards adopted pursuant to relevant SEC rule.

1.131 "Generator Interconnection Agreement" or "GIA" means, for Projects interconnecting at the transmission level, the agreement and associated documents (or any successor agreement and associated documentation approved by FERC) by and among Seller, the Participating Transmission Owner, and the CAISO governing the terms and conditions of Seller's interconnection with the CAISO Grid, including any description of the plan for interconnecting to the CAISO Grid. For Projects interconnecting at the distribution level, it means the agreement and associated documents (or any successor agreement and associated documentation) by and between Seller and the Participating

Transmission Owner governing the terms and conditions of Seller's interconnection with the Participating TO's distribution system, including any description of the plan for interconnecting to Participating TO's distribution system.

1.132 "Generator Interconnection Process" or "GIP" means the Generator Interconnection Procedures set forth in the CAISO Tariff or Participating TO's tariff, as applicable, and associated documents; provided that if the GIP is replaced by such other successor procedures governing interconnection (a) to the CAISO Grid or Participating TO's distribution system, as applicable, or (b) of generating facilities with an expected net capacity equal to or greater than the Project's Contract Capacity, the term "GIP" shall then apply to such successor procedure.

1.133 "Geothermal Reservoir Report" means a report obtained by Seller from an expert independent consulting firm qualified in geothermal reservoir assessment which assesses the geothermal potential at the Site. ***[For Geothermal Projects only]***

1.134 "GEP Cure" has the meaning set forth in Section 3.1(e)(ii)(C).

1.135 "GEP Damages" has the meaning set forth in Appendix V.

1.136 "GEP Failure" means Seller's failure to produce Delivered Energy plus Deemed Delivered Energy in an amount equal to or greater than the Guaranteed Energy Production amount for the applicable Performance Measurement Period.

1.137 "GEP Shortfall" means the amount in MWh by which Seller failed to achieve the Guaranteed Energy Production in the applicable Performance Measurement Period.

1.138 "Good Utility Practice" has the meaning provided in the CAISO Tariff.

1.139 "Governmental Approval" means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use and operation of the Project.

1.140 "Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

1.141 "Governmental Charges" has the meaning set forth in Section 9.2.

1.142 "Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, 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 (SO_x), nitrogen oxides (NO_x), 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;¹ (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 Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project 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 Project for compliance with local, state, or federal operating and/or air quality permits. If the Project 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 Project.

1.143 "Green-e® Energy Certification" means the independent certification and verification program for renewable energy and greenhouse gas emission reductions as administered by CRS.

1.144 "GTSR Program" means the Green Tariff Shared Renewables program implemented per Senate Bill (SB) 43 (Stats. 2013, ch. 413 (Wolk)) and CPUC Decision 15-01-051.

1.145 "GTSR Project" means a Project procured for the GTSR Program in accordance with Green-e® Energy Certification.

1.146 "Guaranteed Commercial Operation Date" has the meaning set forth in Section 3.9(c)(i).

1.147 "Guaranteed Energy Production" or "GEP" has the meaning set forth in Section 3.1(e)(ii).

1.148 "Guaranty" means a guaranty issued by an entity and in a form acceptable to Buyer in Buyer's sole discretion.

1.149 "Imbalance Energy" has the meaning set forth in the CAISO Tariff.

1.150 "Initial Energy Delivery Date" has the meaning set forth in Section 3.1(c)(i).

1.151 "Initial Extension" has the meaning set forth in Section 3.1(c)(ii).

1.152 "Initial Negotiation End Date" has the meaning set forth in Section 12.2(a).

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

1.153 “Interconnection Customer’s Interconnection Facilities” has the meaning set forth in the CAISO Tariff or Participating TO’s tariff, as applicable.

1.154 “Interconnection Facilities” has the meaning set forth in the CAISO Tariff.

1.155 “Interconnection Point” means the physical interconnection point of the Project as identified by Seller in the Cover Sheet.

1.156 “Interconnection Study” means any of the studies defined in the CAISO Tariff or, if applicable, any distribution provider’s tariff that reflect the methodology and costs to interconnect the Project to the Participating Transmission Owner’s electric grid.

1.157 “Integrated Forward Market” has the meaning set forth in the CAISO Tariff.

1.158 “Interest Amount” means, with respect to an Interest Period, the amount of interest calculated as follows: (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; (b) multiplied by the Interest Rate in effect for that Interest Period; (c) multiplied by the number of days in that Interest Period; (d) divided by 360.

1.159 “Interest Payment Date” means the date of returning unused Performance Assurance held in the form of cash.

1.160 “Interest Period” means the monthly period beginning on the first day of each month and ending on the last day of each month.

1.161 “Interest Rate” means the rate per annum equal to the “Monthly” Federal Funds Rate (as reset on a monthly basis based on the latest month for which such rate is available) as reported in Federal Reserve Bank Publication H.15(519), or its successor publication.

1.162 “JAMS” means JAMS, Inc. or its successor entity, a judicial arbitration and mediation service.

1.163 “Law” means any statute, law, treaty, rule, regulation, CEC guidance document, 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, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which becomes effective after the Execution Date; or any binding interpretation of the foregoing. For purposes of Sections 1.52 “CPUC Approval,” 10.2(b), “Seller Representations and Warranties” and 10.12 “Governing Law”, the term “law” shall have the meaning set forth in this definition.

1.164 “Letter of Credit” means an irrevocable, non-transferable standby letter of credit, the form of which must be substantially as contained in Appendix I to this Agreement; provided, that, if the issuer is a U.S. branch of a foreign commercial bank, Buyer may require changes to such form; the issuer must be an Eligible LC Bank on the date of Transfer; and the issuing Letter of Credit amount may not be greater than the Maximum Issuing Amount if the total amount of collateral posted by the Seller in the form of Letter of Credit exceeds ten million dollars (\$10,000,000.00) on the date of Transfer.

1.165 “Licensed Professional Engineer” means a person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Project, (c) has no economic relationship, association, or

nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Project or of a manufacturer or supplier of any equipment installed at the Project, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

1.166 “Losses” means, with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from the termination of the Transaction, determined in a commercially reasonable manner, subject to Section 5.3 hereof. Factors used in determining the loss of economic benefit may include reference to information either available to it internally or supplied by one or more third parties including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading platforms (e.g. NYMEX), all of which should be calculated for the remaining term of the Transaction to determine the value of the Product.

1.167 “Manager” has the meaning set forth in Section 12.2(a).

1.168 “Master File” has the meaning set forth in the CAISO Tariff.

1.169 “Maximum Issuing Amount” means the amount of a Letter of Credit to be issued by an Eligible LC Bank, which cannot exceed the lesser of (a) sixty percent (60%) of the total collateral posted by Seller in the form of Letter of Credit including the Letter of Credit to be issued or (b) twenty-five million dollars (\$25,000,000.00), without Buyer’s prior written consent.

1.170 “Milestone(s)” means the key development activities required for the construction and operation of the Project, as set forth in Section B(i)(b) of the Cover Sheet.

1.171 “Minimum Load” has the meaning set forth in the CAISO Tariff.

1.172 “Minimum Down Time” has the meaning set forth in the CAISO Tariff.

1.173 “Monthly Payment for Excess Energy” has the meaning set forth in Section 4.5(b). ***[For As-Available Product only]***

1.174 “Monthly Period” has the meaning set forth in Section 4.2.

1.175 “Monthly TOD Payment” has the meaning set forth in Section 4.4.

1.176 “Moody’s” means Moody’s Investors Service, Inc., or its successor.

1.177 “MW” means megawatt in alternating current or AC.

1.178 “MWh” means megawatt-hour.

1.179 “NERC” means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

1.180 “Net Rated Output Capacity” means the Project’s Energy production capability as measured at the CAISO revenue meter in any Capacity Test inclusive of deductions for all applicable Electrical Losses. ***[Applies to Baseload Product only]***

- 1.181 “Net Qualifying Capacity” has the meaning set forth in the CAISO Tariff.
- 1.182 “Network Upgrades” has the meaning set forth in the CAISO Tariff or the Participating TO’s tariff, as applicable.
- 1.183 “New Project” is a Project that has not achieved Commercial Operation on or prior to the Execution Date.
- 1.184 “NOAA” means National Oceanic and Atmospheric Administration or successor thereto.
- 1.185 “Non-Defaulting Party” has the meaning set forth in Section 5.2.
- 1.186 “Notice,” unless otherwise specified in the Agreement, means written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail). The Cover Sheet contains the names and addresses to be used for Notices.
- 1.187 “Notice to Proceed” means the full notice to proceed, provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions to performance of such contract, by which Seller authorizes such EPC Contractor to begin mobilization and construction of the Project without any delay or waiting periods.
- 1.188 “Operational Deliverability Assessment” has the meaning set forth in the CAISO Tariff.
- 1.189 “Outage Notification Procedures” means the procedures specified in Appendix VI, attached hereto. PG&E reserves the right to revise or change the procedures upon written Notice to Seller.
- 1.190 “Partial Capacity Deliverability Status” or “PCDS” has the meaning set forth in the CAISO Tariff.
- 1.191 “Partial Capacity Deliverability Status Amount” means the number of MW that the Project will obtain, as stated in the Deliverability type selected in Section A of the Cover Sheet.
- 1.192 “Partial Capacity Deliverability Status Finding” or “PCDS Finding” means a written confirmation from the CAISO that the Project is eligible for PCDS.
- 1.193 “Participating Intermittent Resource” or “PIRP” has the meaning set forth in the CAISO Tariff. ***[For As-Available Product only]***
- 1.194 “Participating Transmission Owner” or “Participating TO” means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid.
- 1.195 “Party” means the Buyer or Seller individually, and “Parties” means both collectively. For purposes of Section 10.12, Governing Law, the word “party” or “parties” shall have the meaning set forth in this definition.
- 1.196 “Performance Assurance” means collateral provided by Seller to Buyer to secure Seller’s obligations hereunder and includes Project Development Security, Delivery Term Security, and Term Security, as applicable. Acceptable forms of collateral are cash or a Letter of Credit as designated in

Section E of the Cover Sheet. The required form of Letter of Credit is attached hereto in Appendix I. ***[Existing ERRs to replace Project Development Security with Pre-Delivery Term Security]***

1.197 “Performance Measurement Period” has the meaning set forth in Section 3.1(e)(ii).

1.198 “Performance Tolerance Band” shall be calculated as set forth in Section 4.5(c)(ii).

1.199 “Permit Failure” has the meaning set forth in Section 3.9(d). ***[For New Projects only]***

1.200 “Permitting Delay” has the meaning set forth in Section 3.9(c)(ii)(A).

1.201 “Permitted Extensions” means extensions to the Guaranteed Commercial Operation Date due to Permitting Delay, Transmission Delay, or Force Majeure Extension, as applicable, pursuant to Section 3.9(c).

1.202 “Planned Outage” means the removal of equipment from service availability for inspection and/or general overhaul of one or more major equipment groups. To qualify as a Planned Outage, the maintenance (a) must actually be conducted during the Planned Outage, and in Seller’s sole discretion must be of the type that is necessary to reliably maintain the Project, (b) cannot be reasonably conducted during Project operations, and (c) causes the generation level of the Project to be reduced by at least ten percent (10%) of the Contract Capacity.

1.203 “PMax” has the meaning set forth in the CAISO Tariff.

1.204 “PNode” has the meaning set forth in the CAISO Tariff.

1.205 “Preamble” means the paragraph that precedes Article One: General Definitions to this Agreement.

1.206 “Preschedule Day” has the meaning set forth in Section 3.4[(b)][(c)](iii).

1.207 “Product” means the Energy, capacity, Ancillary Services, and all products, services and/or attributes similar to the foregoing which are or can be produced by or associated with the Project, including renewable attributes, Renewable Energy Credits, Capacity Attributes and Green Attributes.

1.208 “Production Tax Credit” or “PTC” means the tax credit for electricity produced from certain renewable generation resources described in Section 45 of the Internal Revenue Code of 1986, as it may be amended or supplemented from time to time.

1.209 “Progress Report” means the report similar in form and content to that attached hereto as Appendix III.

1.210 “Project” means all of the Unit(s) and the Site at which the generating facility is located and the other assets, tangible and intangible, that compose the generation facility, including the assets used to connect the Unit(s) to the Interconnection Point, as more particularly described in the Cover Sheet.

1.211 “Project Development Security” is the collateral required of Seller, as specified and referred to in Section 8.4(a). ***[Existing ERRs to replace Project Development Security with Pre-Delivery Term Security]***

1.212 “Project Specifications” has the meaning set forth in Appendix XIII.

1.213 “Prolonged Outage” is any period of more than thirty (30) consecutive days during which the Project is or will be unable, for whatever reason, to provide at least sixty percent (60%) of the Contract Capacity.

1.214 “Qualifying Facility” has the meaning provided in the Public Utility Regulatory Policies Act (“PURPA”) and in regulations of the FERC at 18 C.F.R. §§ 292.201 through 292.207.

1.215 “RA Deficiency Amount” means the liquidated damages payment that Seller shall pay to Buyer for an applicable RA Shortfall Month as calculated in accordance with Section 3.3(e)(ii).

1.216 “RA Shortfall Period” means the period of consecutive calendar months that starts with the calendar month in which the RA Start Date occurs and concludes with the second calendar month following the calendar month in which the Effective FCDS Date or Effective PCDS Date occurs. The RA Shortfall Period shall not exceed twenty-six (26) months.

1.217 “RA Shortfall Month” means the applicable calendar month within the RA Shortfall Period for purposes of calculating an RA Deficiency Amount under Section 3.3(e)(ii).

1.218 “RA Start Date” shall be the later of the Initial Energy Delivery Date or the Expected PCDS Date or FCDS Date according to the deliverability type selected in Section A of the Cover Sheet.

1.219 “RA Value” means the value in U.S. dollars per MW of Expected Net Qualifying Capacity for each RA Shortfall Month, as set forth in Appendix XIV.

1.220 “Ramp Rate” has the meaning set forth in the CAISO Tariff.

1.221 “Real-Time Market” means any existing or future intra-day market conducted by the CAISO occurring after the Day-Ahead Market.

1.222 “Real-Time Price” means the Resource-Specific Settlement Interval LMP as defined in the CAISO Tariff. If there is more than one applicable Real-Time Price for the same period of time, Real-Time Price shall mean the price associated with the smallest time interval.

1.223 “Reductions” has the meaning set forth in Section 4.7(b).

1.224 “Referral Date” has the meaning set forth in Section 12.2(a).

1.225 “Reliability Coordinator” has the meaning set forth in the CAISO Tariff.

1.226 “Reliability Must-Run Contract” has the meaning set forth in the CAISO Tariff. **[For Baseload Product only]**

1.227 “Reliability Network Upgrade” has the meaning set forth in the CAISO Tariff.

1.228 “Renewable Energy Credit” 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.

1.229 “Replacement Capacity Rules” means the replacement requirement for Resource Adequacy Capacity (as defined in the CAISO Tariff) associated with a Planned Outage as set forth in the CAISO Tariff or successor replacement requirements as prescribed by the CPUC, CAISO and/or other regional entity.

1.230 “Resource Adequacy” means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions D.04-01-050, 04-10-035 and 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions or rulings addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

1.231 “Resource Adequacy Plan” has the meaning set forth in the CAISO Tariff.

1.232 “Resource Adequacy Requirements” has the meaning set forth in Section 3.3.

1.233 “Resource Adequacy Standards” means (a) the Program set forth in Section 40.9 of the CAISO Tariff and (b) any future program or provision under the CAISO Tariff providing for availability standards or similar standards with respect to any flexible Resource Adequacy resource, product, or procurement obligation; in the case of (a) or (b), as any such program or provision may be amended, supplemented, or replaced (in whole or in part) from time to time, setting forth certain standards regarding the desired level of availability for Resource Adequacy resources and possible changes and incentive payments for performance thereunder.

1.234 “Resource-Specific Settlement Interval LMP” has the meaning set forth in the CAISO Tariff.

1.235 “Retained Revenues” has the meaning set forth in Section 4.7(c).

1.236 “Revised Offer” has the meaning set forth in Section 3.9(e)(iii) or Section 11.1(b)(iii), as applicable.

1.237 “S&P” means the Standard & Poor’s Financial Services, LLC (a subsidiary of The McGraw-Hill Companies, Inc.) or its successor.

1.238 “Satisfaction Date” has the meaning set forth in Section 2.6.

1.239 “Schedule” has the meaning set forth in the CAISO Tariff.

1.240 “Scheduling Coordinator” or “SC” means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in “Responsibilities of a Scheduling Coordinator” of the CAISO Tariff, as amended from time to time.

1.241 “SEC” means the U.S. Securities and Exchange Commission.

1.242 “Self-Schedule” has the meaning set forth in the CAISO Tariff.

1.243 “Seller” has the meaning set forth in the Cover Sheet.

1.244 “Seller Excuse Hours” means those hours during which Seller is unable to deliver Delivered Energy to Buyer as a result of (a) a Force Majeure event, (b) Buyer’s failure to perform, or (c) Curtailment Period.

1.245 “Seller’s WREGIS Account” has the meaning set forth in Section 3.1(k)(i).

1.246 “Settlement Amount” means the amount in US dollars equal to the sum of Losses, Gains, and Costs, which the Non-Defaulting Party incurs as a result of the termination of this Agreement.

1.247 “Settlement Interval” has the meaning set forth in the CAISO Tariff.

1.248 “Settlement Interval Actual Available Capacity” means the sum of the capacity, in MWs, of all generating units of the Project that were available as of the end of such Settlement Interval, as indicated by the Actual Availability Report. ***[For As-Available Product only]***

1.249 “Shared Contract Year” has the meaning set forth in section 3.1(e)(ii)(C)(I).

1.250 “Site” means the location of the Project as described in the Cover Sheet.

1.251 “Start-up” means the action of bringing a Unit from non-operation to operation at or above the Unit’s Minimum Load, or with positive generation output if Minimum Load is zero.

1.252 “Surplus Delivered Energy” means, in any Settlement Interval, the Delivered Energy that exceeds the product of one hundred percent (100%) of Contract Capacity multiplied by a Settlement Interval.

1.253 “Supply Plan” has the meaning set forth in the CAISO Tariff.

1.254 “System Emergency” has the meaning set forth in the CAISO Tariff.

1.255 “Term” has the meaning provided in Section 2.6.

1.256 “Term Security” means for GTSR Projects with Contract Capacities 3MW or less, the Performance Assurance that Seller is required to maintain, as specified in Article Eight, to secure performance of its obligations during the Delivery Term.

1.257 “Terminated Transaction” means the Transaction terminated in accordance with Section 5.2 of this Agreement.

1.258 “Termination Payment” means the payment amount equal to the sum of (a) and (b), where (a) is the Settlement Amount and (b) is the sum of all amounts owed by the Defaulting Party to the Non-Defaulting Party under this Agreement, less any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date.

1.259 “Test Period” means the period of not more than ninety (90) consecutive days, as extended by the Initial Extension and Additional Extension according to Section 3.1(c)(ii), as applicable, which period shall commence upon the first date that the following have occurred (a) the CAISO informs Seller in writing that Seller may deliver Energy from the Project to the CAISO Grid, and (b) the items in Section 3.4(a)(i)(E) have been fulfilled and implemented, and shall end upon the Initial Energy Delivery Date.

1.260 “Third-Party SC” means a qualified third party designated by Buyer to provide the Scheduling Coordinator functions for the Project pursuant to this Agreement.

1.261 “TOD” means time of delivery of Delivered Energy from Seller to Buyer.

1.262 “TOD Factors” has the meaning set forth in Section 4.4(a).

1.263 “TOD Periods” has the meaning set forth in Section 4.2.

1.264 “Transaction” means the particular transaction described in its entirety in Section 3.1(b) of this Agreement.

1.265 “Transfer” with respect to Letters of Credit means the delivery of the Letter of Credit conforming to the requirements of this Agreement, by Seller or an Eligible LC Bank to Buyer or delivery of an executed amendment to such Letter of Credit (extending the term or varying the amount available to Buyer thereunder, if acceptable to Buyer) by Seller or Eligible LC Bank to Buyer.

1.266 “Transmission Delay” has the meaning set forth in Section 3.9(c)(ii)(B).

1.267 “Transmission Provider” means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

1.268 “Uninstructed Imbalance Energy” shall have the meaning set forth in the CAISO Tariff.

1.269 “Unit” means the technology used to produce the Products, which are identified in the Cover Sheet for the Transaction entered into under this Agreement.

1.270 “Variation(s)” means the absolute value of the difference, in MWh, in any Settlement Interval between (a) DA Scheduled Energy; and (b) Delivered Energy for the Settlement Interval. **[For Baseload Product only]**

1.271 “WECC” means the Western Electricity Coordinating Council or successor agency.

1.272 “Work” means (a) work or operations performed by a Party or on a Party’s behalf, and (b) materials, parts or equipment furnished in connection with such work or operations, including (i) warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of “a Party’s work”, and (ii) the providing of or failure to provide warnings or instructions.

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

1.274 “WREGIS Certificate Deficit” has the meaning set forth in Section 3.1(k)(v).

1.275 “WREGIS Certificates” 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.

1.276 “WREGIS Operating Rules” means those operating rules and requirements adopted by WREGIS as of December 2010, as subsequently amended, supplemented or replaced (in whole or in part) from time to time.

ARTICLE TWO: GOVERNING TERMS AND TERM

2.1 Entire Agreement. This Agreement, together with the Cover Sheet, Preamble and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire, integrated agreement between the Parties.

2.2 Interpretation. The following rules of interpretation shall apply in addition to those set forth in Section 10.13:

(a) The term “month” or “Month” shall mean a calendar month unless otherwise indicated, and a “day” shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a “day” may be 23 or 25 hours on those days on which daylight savings time begins and ends.

(b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then existing at the applicable time to which such construction applies.

(c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article One, unless otherwise specified.

(d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.

(e) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.

(f) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.

(g) All references to dollars are to U.S. dollars.

(h) The term “including” when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.

2.3 Authorized Representatives. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or dispatch order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

2.4 Separation of Functions. The Parties acknowledge that this Agreement is between (a) Seller and (b) Buyer acting solely in its merchant function. The Parties further acknowledge that they have no rights against each other or obligations to each other under this Agreement with respect to any relationship between the Parties in which PG&E is acting in its capacity as Participating Transmission Owner, including orders or instructions relating to Electric System Upgrades and/or Curtailment Periods.

2.5 Conditions Precedent.

(a) Conditions Precedent. Subject to Section 2.7 hereof, the Term shall not commence until the occurrence of all of the following:

(i) this Agreement has been duly executed by the authorized representatives of each of Buyer and Seller;

(ii) CPUC Approval has been obtained for the terms, conditions and pricing of this Agreement;

(iii) the advice letter submitting this Agreement to the CPUC becomes effective in accordance with CPUC General Order 96-B or its successor order, or as otherwise provided by CPUC order; and

(iv) Buyer receives from Seller the documentation listed in Appendix VIII (Seller Documentation Condition Precedent).

(b) Failure to Meet All Conditions Precedent. If the Conditions Precedent set forth in Sections 2.4(a)(ii) and (iii) are not satisfied or waived in writing by both Parties on or before one hundred and eighty (180) days from the date on which Buyer files an advice letter submitting this Agreement to the CPUC, then either Party may terminate this Agreement effective upon receipt of Notice by the other Party. Neither Party shall have any obligation or liability to the other, including for a Termination Payment or otherwise, by reason of such termination.

2.6 Term.

(a) The term shall commence upon the satisfaction of the Conditions Precedent set forth in Section 2.5(a) of this Agreement and shall remain in effect until the conclusion of the Delivery Term unless terminated sooner pursuant to Section 2.5(b), Section 5.2 or Section 11.1 of this Agreement (the “Term”); provided that this Agreement shall thereafter remain in effect (i) until the Parties have fulfilled all obligations with respect to the Transaction, including payment in full of amounts due pursuant to the Final True-Up, the Settlement Amount, or other damages (whether directly or indirectly such as through set-off or netting) and the undrawn portion of the Project Development Security, Delivery Term Security or Term Security as applicable, is released and/or returned as applicable (the “Satisfaction Date”) or (ii) in accordance with the survival provisions set forth in subpart (b) below.

(b) Notwithstanding anything to the contrary in this Agreement, (i) all rights under Section 10.5 (“Indemnities”) and any other indemnity rights shall survive the Satisfaction Date or the end of the Term (whichever is later) for an additional twelve (12) months; (ii) all rights and obligations under Section 10.7 (“Confidentiality”) shall survive the Satisfaction Date or the end of the Term (whichever is later) for an additional two (2) years; and (iii) the right of first offer in Section 11.1(b) shall survive the Satisfaction Date for three (3) years.

2.7 Binding Nature.

(a) Upon Execution Date. This Agreement shall be effective and binding as of the Execution Date only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under:

(i) Sections 3.9(a)(vii), 5.1(a)(iv)-(v), and 5.1(b)(iv);

(ii) Section 5.1(a)(ii) only with respect to Section 10.2, and Section 5.1(a)(iii) only with respect to the Sections identified in this Section 2.7;

(iii) Sections 5.2 through 5.7;

- (iv) Sections 8.3, 8.4(a)(i), 8.4(b), and 8.5;
- (v) Sections 10.2, 10.6 through 10.8, and Sections 10.12 through 10.16; and
- (vi) Articles One, Two, Seven, Twelve and Thirteen.

(b) Upon Effective Date. This Agreement shall be in full force and effect, enforceable and binding in all respects, upon occurrence of the Effective Date.

ARTICLE THREE: OBLIGATIONS AND DELIVERIES

3.1 Seller's and Buyer's Obligations.

(a) Product. The Product to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is set forth in the Cover Sheet. Buyer shall have exclusive rights to all Product during the Delivery Term.

(b) Transaction. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, pursuant to Seller's election in the Cover Sheet of a Full Buy/Sell or Excess Sale arrangement as described in paragraphs 3.1(b)(i) and 3.1(b)(ii) below. Buyer shall pay Seller the Contract Price in accordance with the terms of this Agreement. In no event shall Seller have the right (1) to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement except with respect to Energy delivered to Buyer in connection with Energy Deviations or Variations, as applicable, or (2) sell Product from the Project to a third party other than in connection with Energy Deviations or Variations, as applicable. Buyer shall have no obligation to receive or purchase Product from Seller prior to or after the Delivery Term, except during the Test Period. Seller shall be responsible for any costs or charges imposed on or associated with the Product or its delivery of the Product up to the Delivery Point. Buyer shall be responsible for any costs or charges imposed on or associated with the Product after its receipt at and from the Delivery Point. Seller shall comply with Buyer's Supplier Diversity Program in accordance with Appendix XII. Each Party agrees to act in good faith in the performance of its obligations under this Agreement.

(i) Full Buy/Sell. If "Full Buy/Sell" is elected on the Cover Sheet, Seller agrees to sell to Buyer the Project's gross output of Product measured in kilowatt-hours, net of station use and transformation and transmission losses to and at the Delivery Point. Seller shall purchase all Energy required to serve the Project's on-site load, net of station use, from Buyer or applicable retail service provider pursuant to its applicable retail rate schedule.

(ii) Excess Sale. If "Excess Sale" is selected on the Cover Sheet, Seller agrees to sell to Buyer the Project's gross output of Product as measured in kilowatt-hours, net of station Use, any on-site load and transformation and transmission losses to the Delivery Point. Seller agrees to convey to Buyer all elements of Product associated with the Energy sold to Buyer.

(c) Delivery Term.

(i) Delivery Term and Initial Energy Delivery Date. As used herein, "Delivery Term" shall mean the period of Contract Years specified on the Cover Sheet, beginning on the first date that Buyer accepts delivery of the Product from the Project in connection with this Agreement following Seller's demonstration of satisfaction of the items listed below in this Section 3.1(c)(i) ("Initial

Energy Delivery Date”) and continuing until the end of the tenth, fifteenth, or twentieth Contract Year (as applicable, based on the Cover Sheet election) unless terminated pursuant to the terms of this Agreement; provided that the Expected Initial Energy Delivery Date may be extended pursuant to Section 3.1(c)(ii). The Initial Energy Delivery Date shall be the later of the (A) date that the Buyer receives the "Initial Energy Delivery Date Confirmation Letter" attached hereto as Appendix II and (B) the date listed as the Initial Energy Delivery Date on the Initial Energy Delivery Date Confirmation Letter. The Initial Energy Delivery Date shall occur as soon as practicable once all of the following have been satisfied: (I) Seller notifies Buyer that Commercial Operation has occurred; (II) Buyer shall have received and accepted the Delivery Term Security or Term Security, as applicable, in accordance with the relevant provisions of Article Eight of the Agreement, as applicable; (III) Seller shall have obtained the requisite CEC Certification and Verification for the Project [and Seller shall have demonstrated submission and approval of documents and information to CRS necessary for the GTSR Project to receive an eligibility designation for Buyer’s Green-e® Energy Certification][***Bracketed language only applies to GTSR Projects***] (IV) all of the applicable Conditions Precedent in Section 2.5(a) have been satisfied or waived in writing; (V) for resources that are already under a contract as of the Execution Date, that existing contract must have expired by its own terms before the Initial Energy Delivery Date; (VI) Seller shall have demonstrated satisfaction of Seller’s other obligations in this Agreement that commence prior to or as of the Delivery Term; and (VII) unless Seller has been directed by Buyer to not participate in the Participating Intermittent Resource Program, Buyer shall have received written notice from the CAISO that the Project is certified as a Participating Intermittent Resource to the extent the Participating Intermittent Resource Program exists for the Project’s technology type at such time as the conditions in subsections (I) through (VI) of this Section 3.1(c)(i) are satisfied. [***Subsection (VII) applicable to solar, wind, or hydro Projects only***]

(ii) Extensions of Test Period and Initial Energy Delivery Date. In the event that Seller cannot satisfy the requirements for the Initial Energy Delivery Date by the Expected Initial Energy Delivery Date, as set forth in Section 3.1(c)(i), then Seller may provide Buyer with a one-time Notice of a thirty (30) day extension of the Test Period and Expected Initial Energy Delivery Date (“Initial Extension”) along with a written explanation of the basis for the extension, no later than five (5) Business Days prior to the Expected Initial Energy Delivery Date. In the event that Seller requires an additional extension of the Test Period and Expected Initial Energy Delivery Date beyond the Initial Extension, Seller may request a further extension of the Test Period and Expected Initial Energy Delivery Date from Buyer no later than ten (10) days prior to the expiration of the Initial Extension of up to sixty (60) days by providing Notice to Buyer along with a detailed written explanation of the basis for such request (“Additional Extension”). Buyer shall provide Seller with Notice of Buyer’s acceptance or rejection, in its sole discretion, of such Notice of Additional Extension within ten (10) days of receipt of Seller’s Notice of Additional Extension. If Buyer fails to provide a Notice of Buyer’s acceptance or rejection, then Seller’s Notice of Additional Extension shall be deemed accepted. If Buyer provides Seller with Notice of Buyer’s rejection of the Additional Extension, then Seller may be subject to an Event of Default. As evidence of the Initial Energy Delivery Date, the Parties shall execute and exchange the “Initial Energy Delivery Date Confirmation Letter,” attached hereto as Appendix II, on the Initial Energy Delivery Date.

(d) Delivery Point. The Delivery Point shall be the PNode designated by the CAISO for the Project.

(e) Contract Quantity and Guaranteed Energy Production.

(i) Contract Quantity. The Contract Quantity during each Contract Year is the amount set forth in the applicable Contract Year in Section D of the Cover Sheet (“Delivery Term Contract Quantity Schedule”), which amount is inclusive of outages.

[Use the following bracketed language for As-Available Product delivered by all facilities]

[(ii) Guaranteed Energy Production.

(A) Throughout the Delivery Term, Seller shall be required to provide to Buyer an amount of Delivered Energy plus Deemed Delivered Energy, if any, no less than the Guaranteed Energy Production over two (2) consecutive Contract Years during the Delivery Term (“Performance Measurement Period”). “Guaranteed Energy Production” is equal to the product of (x) and (y), where (x) is one hundred sixty percent (160%) of the average of the Contract Quantities applicable to the two (2) Contract Years comprising the Performance Measurement Period ***[Photovoltaic facilities only to use the then-applicable Contract Quantities for the Performance Measurement Period]***, and (y) is the difference between (I) and (II), with the resulting difference divided by (I), where (I) is the number of hours in the applicable Performance Measurement Period and (II) is the aggregate number of Seller Excuse Hours in the applicable Performance Measurement Period. Guaranteed Energy Production is described by the following formula:

Guaranteed Energy Production = (160% × average of the Contract Quantities in MWh in Performance Measurement Period) × [(Hrs in Performance Measurement Period – Seller Excuse Hrs in Performance Measurement Period) / Hrs in Performance Measurement Period]]

[Use the following bracketed language for Baseload Product only]

[(ii) Guaranteed Energy Production.

(A) Throughout the Delivery Term, Seller shall be required to provide to Buyer an amount of Delivered Energy plus Deemed Delivered Energy, if any, no less than the Guaranteed Energy Production in each Contract Year during the Delivery Term (“Performance Measurement Period”). “Guaranteed Energy Production” is equal to the product of (x) and (y), where (x) is ninety percent (90%) of the Contract Quantity, and (y) is the difference between (I) and (II), with the resulting difference divided by (I), where (I) is the number of hours in the applicable Performance Measurement Period and (II) is the aggregate number of Seller Excuse Hours in the applicable Performance Measurement Period. Guaranteed Energy Production is described by the following formula:

Guaranteed Energy Production = (90% × Contract Quantity in MWh) × [(Hrs in Performance Measurement Period – Seller Excuse Hrs in Performance Measurement Period) / Hrs in Performance Measurement Period]]

[Use the following subparts (B) and (C) to Section 3.1(e)(ii) for both As-Available and Baseload Products and all technologies]

(B) In no event shall any amount of Delivered Energy plus Deemed Delivered Energy in any Settlement Interval that exceeds the Contract Capacity be credited toward or added to Seller’s Guaranteed Energy Production requirement.

(C) GEP Failure, Cure, Damages.

(I) If Seller has a GEP Failure, then within forty-five (45) days after the last day of the last month of such Performance Measurement Period, Buyer shall promptly provide Notice to Seller of such failure, provided that Buyer’s failure to provide Notice shall not constitute as a waiver of Buyer’s rights to collect GEP damages. Seller may cure the GEP Failure by providing to Buyer an amount of Delivered Energy plus Deemed Delivered Energy, if any, that is no less than ninety percent (90%) of the Contract Quantity, subject to adjustment for Seller Excuse Hours over the next following Contract Year, as set forth in the formula below (“GEP Cure”).

GEP Cure = $(90\% \times \text{Contract Quantity in MWh}) \times [(\text{Hrs in next following Contract Year} - \text{Seller Excuse Hrs in next following Contract Year}) / \text{Hrs in next following Contract Year}]$

If Seller fails to provide sufficient Delivered Energy plus Deemed Delivered Energy, if any, as adjusted by Seller Excuse Hours, to qualify for the GEP Cure for a given Performance Measurement Period, Seller shall pay GEP Damages, calculated pursuant to Appendix V (“GEP Damages Calculation”). If Seller provides a GEP Cure or pays GEP Damages for the Contract Years in a particular Performance Measurement Period (“Cured Performance Measurement Period”), then for purposes of calculating the Guaranteed Energy Production in the following Performance Measurement Period, the amount of Delivered Energy plus Deemed Delivered Energy in the second Contract Year of the Cured Performance Measurement Period, which is also the first Contract Year of the following Performance Measurement Period (“Shared Contract Year”), shall be deemed equal to the greater of (X) the Delivered Energy plus Deemed Delivered Energy, if any, for the Shared Contract Year, subject to adjustment for Seller Excuse Hours, or (Y) eighty percent (80%) of Contract Quantity in the Shared Contract Year, where X and Y are calculated as follows:

$X = (\text{Delivered Energy} + \text{Deemed Delivered Energy in Shared Contract Year}) \times [\text{Hrs in Shared Contract Year} / (\text{Hrs in Shared Contract Year} - \text{Seller Excuse Hours in Shared Contract Year})]$ or;

$Y = 80\% \times \text{Contract Quantity in Shared Contract Year}$

For the avoidance of doubt, the calculation set forth above for the amount of Delivered Energy plus Deemed Delivered Energy for the Shared Contract Year shall not apply to the cumulative GEP Shortfall under Section 5.1(b)(vi)(B).]

[Bracketed text above applies to As-Available Product only.]

(II) The Parties agree that the damages sustained by Buyer associated with Seller’s failure to achieve the Guaranteed Energy Production requirement would be difficult or impossible to determine, or that obtaining an adequate remedy would be unreasonably time consuming or expensive and therefore agree that Seller shall pay the GEP Damages to Buyer as liquidated damages. In no event shall Buyer be obligated to pay GEP Damages.

(III) After the GEP Cure period has run, if Seller has not achieved the GEP Cure, Buyer shall have forty-five (45) days to notify Seller of such failure. Within forty-five (45) days of the end of the GEP Cure period, Buyer shall provide Notice to Seller in writing of the amount of the GEP Damages, if any, which Seller shall pay within sixty (60) days of receipt of the Notice (the “Cure Payment Period”). If Seller does not pay the GEP Damages within the Cure Payment Period, then Buyer may, at its option, declare an Event of Default pursuant to Section 5.1(b)(vi)(A) within ninety (90) days following the Cure Payment Period. If Seller has failed to pay the GEP Damages, and Buyer does not (1) notify Seller of the GEP Failure or (2) declare an Event of Default pursuant to Section 5.1(b)(vi) within the ninety (90) day period, then Buyer shall be deemed to have waived its right to declare an Event of Default based on Seller’s failure with respect to the Performance Measurement Period which served as the basis for the notice of GEP Failure, GEP Damages, or default, subject to the limitations set forth in Section 5.1(b)(vi)(B).

[The following bracketed version of Section 3.1(f) “Contract Capacity” applies to Full Buy/Sell transactions of As-Available Product only]

(f) Contract Capacity. The generation capability designated for the Project shall be the contract capacity in MW designated in the Cover Sheet, (the “Contract Capacity”), which shall be equal to the result of the Contract Capacity calculation performed in accordance with Section II of

Appendix XIII. Throughout the Delivery Term, Seller shall sell and deliver all Product produced by the Project solely to Buyer. In no event shall Buyer be obligated to receive, in any Settlement Interval, any Surplus Delivered Energy. Seller shall not receive payment for any Surplus Delivered Energy. To the extent Seller delivers Surplus Delivered Energy to the Delivery Point in a Settlement Interval in which the Real-Time Price for the applicable PNode is negative, Seller shall pay Buyer an amount equal to the Surplus Delivered Energy (in MWh) during such Settlement Interval, multiplied by the absolute value of the Real-Time Price per MWh for such Settlement Interval.]

[The following bracketed version of Section 3.1(f) “Contract Capacity” applies to all Baseload Products and Excess Sale transactions of As-Available Products.]

(f) Contract Capacity.

(i) Contract Capacity. The capacity of the Project at any time shall be the lower of the following: (A) the contract capacity in MW designated in the Cover Sheet or (B) the Net Rated Output Capacity of the Project (the “Contract Capacity”), which shall be equal to the result of the Contract Capacity calculation performed in accordance with Section II of Appendix XIII. Throughout the Delivery Term, Seller shall sell all Product produced by the Project solely to Buyer. In no event shall Buyer be obligated to receive, in any Settlement Interval, any Surplus Delivered Energy. Seller shall not receive payment for any Surplus Delivered Energy. To the extent Seller delivers Surplus Delivered Energy to the Delivery Point in a Settlement Interval in which the Real-Time Price for the applicable PNode is negative, Seller shall pay Buyer an amount equal to the Surplus Delivered Energy (in MWh) during such Settlement Interval, multiplied by the absolute value of the Real-Time Price per MWh for such Settlement Interval.

(ii) Net Rated Output Capacity Testing. Buyer shall have the right to request a Capacity Test as set forth in Appendix IV-3, to determine the Net Rated Output Capacity no more than one time per Contract Year. The resulting Net Rated Output Capacity shall be used to determine the Contract Capacity, in accordance with Section 3.1(f)(i) above, and shall remain in effect until the next Capacity Test requested by Buyer. Appendix IV-3 sets forth the agreements of Buyer and Seller with respect to the performance of Capacity Tests.]

(g) Project.

(i) All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only. Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity or the anticipated output of the Project without Buyer’s prior written consent. The Project is further described in Appendix XIII.

(ii) Seller shall not relinquish its possession or demonstrable exclusive right to control the Project without the prior written consent of Buyer, except under circumstances provided in Section 10.6.

Seller shall be deemed to have relinquished possession of the Project if after the Commercial Operation Date Seller has ceased work on the Project or ceased production and delivery of Product for a consecutive thirty (30) day period and such cessation is not a result of a Force Majeure event or direct action of Buyer.

(h) Interconnection Facilities.

(i) Seller Obligations. Seller shall (A) arrange and pay independently for any and all necessary costs under any Generator Interconnection Agreement with the Participating Transmission Owner; (B) cause the Interconnection Customer's Interconnection Facilities, including metering facilities, to be maintained; and (C) comply with the procedures set forth in the GIP and applicable agreements or procedures provided under the GIP in order to obtain the applicable Electric System Upgrades and (D) obtain Electric System Upgrades, as needed, in order to ensure the safe and reliable delivery of Energy from the Project up to and including quantities that can be produced utilizing all of the Contract Capacity of the Project.

(ii) Coordination with Buyer.

(A) Seller shall (I) provide to Buyer copies of all material correspondence related thereto; and (II) provide Buyer with written reports of the status of the GIA on a monthly basis. The foregoing shall not preclude Seller from executing a GIA that it reasonably determines allows it to comply with its obligations under this Agreement and applicable Law.

(B) Excess Network Upgrade Costs. Seller shall provide Buyer within ten (10) Business Days of receipt thereof, copies of any Interconnection Study or the interconnection agreement tendered to Seller by the Participating Transmission Owner that may give rise to a termination right of Buyer under Section 3.9(f)(i). Within that same period Seller shall also provide Buyer a Notice of its irrevocable election to exercise or not exercise its right to assume financial responsibility for any Excess Network Upgrade Cost pursuant to Section 3.9(f)(i), with a failure to provide such an election deemed to be an election not to exercise such rights for purposes of administration and enforcement of the terms of this Agreement.

(i) Performance Excuses.

(i) Seller Excuse. For Seller selling As-Available Product, Seller shall be excused from achieving the Guaranteed Energy Production only for the applicable time period during Seller Excuse Hours. For Seller selling Baseload Product, Seller shall be excused from achieving the Guaranteed Energy Production and the Capacity Factor only for the applicable time period during Seller Excuse Hours.

(ii) Buyer Excuses. Buyer shall be excused from (A) receiving and paying for the Product only (I) during periods of Force Majeure, (II) by Seller's failure to perform, (III) during Curtailment Periods and (B) receiving Product during Buyer Curtailment Periods.

(iii) Curtailment. Notwithstanding Section 3.1(b) and this Section 3.1(i), Seller shall reduce output from the Project during any Curtailment Period or Buyer Curtailment Period.

(j) Greenhouse Gas Emissions Reporting. During the Term, Seller acknowledges that a Governmental Authority may require Buyer to take certain actions with respect to greenhouse gas emissions attributable to the generation of Energy, including reporting, registering, tracking, allocating for or accounting for such emissions. Promptly following Buyer's written request, Seller agrees to take all commercially reasonable actions and execute or provide any and all documents, information or instruments with respect to generation by the Project reasonably necessary to permit Buyer to comply with such requirements, if any, subject to the Compliance Cost Cap. Nothing in this Section 3.1(j) shall cause Buyer to assume any liability or obligation with respect to Seller's compliance obligations with respect to the Project under any new or existing Laws, rules, or regulations.

(k) WREGIS. Seller shall, at its sole expense, but subject to the Compliance Cost Cap, take all actions and execute all documents or instruments necessary to ensure that all WREGIS Certificates associated with all Renewable Energy Credits corresponding to all Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewables Portfolio Standard and transferred in a timely manner to Buyer for Buyer's sole benefit. Seller shall transfer the Renewable Energy Credits to Buyer even if Buyer does not accept and/or pay for the underlying energy per Section 3.1(f) or for Baseload Product only, pays something other than the Contract Price. Seller shall comply with all Laws, including the WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer and Buyer shall be given sole title to all such WREGIS Certificates. Seller shall be deemed to have satisfied the warranty in Section 3.1(k)(viii), provided that Seller fulfills its obligations under Sections 3.1(k)(i) through (vii) below. In addition:

(i) Prior to the Initial Energy Delivery Date, Seller shall register the Project with WREGIS and establish an account with WREGIS ("Seller's WREGIS Account"), which Seller shall maintain until the end of the Delivery Term. Seller shall transfer the WREGIS Certificates using "Forward Certificate Transfers" (as described in the WREGIS Operating Rules) from Seller's WREGIS Account to the WREGIS account(s) of Buyer or the account(s) of a designee that Buyer identifies by Notice to Seller ("Buyer's WREGIS Account"). Seller shall be responsible for all expenses associated with registering the Project with WREGIS, establishing and maintaining Seller's WREGIS Account, paying WREGIS Certificate issuance and transfer fees, and transferring WREGIS Certificates from Seller's WREGIS Account to Buyer's WREGIS Account.

(ii) Seller shall cause Forward Certificate Transfers to occur on a monthly basis in accordance with the certification procedure established by the WREGIS Operating Rules. Since WREGIS Certificates will only be created for whole MWh amounts of 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.

(iii) Seller shall, at its sole expense, ensure that the WREGIS Certificates for a given calendar month correspond with the Delivered Energy for such calendar month as evidenced by the Project's metered data.

(iv) Due to the ninety (90) day delay in the creation of WREGIS Certificates relative to the timing of invoice payment under Article 6, Buyer shall make an invoice payment for a given month in accordance with Article 6 before the WREGIS Certificates for such month are formally transferred to Buyer in accordance with the WREGIS Operating Rules and this Section 3.1(k). Notwithstanding this delay, Buyer shall have all right and title to all such WREGIS Certificates upon payment to Seller in accordance with Article 6.

(v) A "WREGIS Certificate Deficit" means any deficit or shortfall in WREGIS Certificates delivered to Buyer for a calendar month as compared to the Delivered Energy for the same calendar month ("Deficient Month"). If any WREGIS Certificate Deficit is caused, or the result of any action or inaction, by Seller, then the amount of Delivered Energy in the Deficient Month shall be reduced by the amount of the WREGIS Certificate Deficit for the purposes of calculating Buyer's payment(s) to Seller under Article 6 and the Guaranteed Energy Production for the applicable Performance Measurement Period. Any amount owed by Seller to Buyer because of a WREGIS Certificate Deficit shall be made as an adjustment to Seller's next monthly invoice to Buyer in accordance with Article 6, and Buyer shall net such amount against Buyer's subsequent payment(s) to Seller pursuant to Article 6.

(vi) Without limiting Seller's obligations under this Section 3.1(k), if a WREGIS Certificate Deficit is caused solely by an error or omission of WREGIS, the Parties shall cooperate in good faith to cause WREGIS to correct its error or omission.

(vii) If WREGIS changes the WREGIS Operating Rules after the Execution Date or applies the WREGIS Operating Rules in a manner inconsistent with this Section 3.1(k) after the Execution Date, the Parties promptly shall modify this Section 3.1(k) as reasonably required to cause and enable Seller to transfer to Buyer's WREGIS Account a quantity of WREGIS Certificates for each given calendar month that corresponds to the Delivered Energy in the same calendar month.

(viii) 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.

(l) Access to Data and Installation and Maintenance of Weather Station.

(i) Commencing on the first date on which the Project generates Product to be delivered to the CAISO Grid or the Delivery Point, if different, and continuing throughout the Term, Seller shall provide to Buyer, in a form reasonably acceptable to Buyer, the data set forth below on a real-time basis; provided that Seller shall agree to make and bear the cost of changes to any of the data delivery provisions below, as requested by Buyer, throughout the Term, which changes Buyer determines are necessary to forecast output from the Project, and/or comply with Law:

(A) read-only access to meteorological measurements, *[inverter]* ***[bracketed language applies to solar photovoltaic Projects only]*** and transformer availability, any other facility availability information, all parameters necessary for use in the equation under item (G) of this list;

(B) read-only access to energy output information collected by the supervisory control and data acquisition (SCADA) system for the Project; provided that if Buyer is unable to access the Project's SCADA system, then upon written request from Buyer, Seller shall provide energy output information and meteorological measurements to Buyer in 1-minute intervals in the form of a flat file to Buyer through a secure file transport protocol (FTP) system with an e-mail back up for each flat file submittal;

(C) read-only access to the Project's CAISO revenue meter and all Project meter data at the Site;

(D) full, real-time access to the Project's Scheduling and Logging for the CAISO (SLIC) client application, or its successor system;

(E) net plant electrical output at the CAISO revenue meter;

[Subparts (F) through (G) below shall only apply to wind and solar facilities]

(F) instantaneous data measurements at sixty (60) second or increased frequency for the parameters set forth in Appendix X ("Telemetry Parameters for Wind or Solar Facilities"), which measurements shall be provided by Seller to Buyer in consolidated data report at least once every five minutes via flat file through a secure file transport protocol (FTP) system with an e-mail backup; and

(G) an equation, updated on an ongoing basis to reflect the potential generation of the Project as a function of ***[the following bracketed language applies to solar facilities only]*** [solar insolation, temperature, wind speed, and, if applicable, wind direction] ***[the following bracketed language applies to wind facilities only]*** [wind speed, wind direction, ambient temperature, atmospheric pressure]. Such equation shall take into account the expected availability of the facility.

[The following bracketed language applies to As-Available Product only]

[For any month in which the above information and access was not available to Buyer for longer than twenty-four (24) continuous hours, Seller shall prepare and provide to Buyer upon Buyer's request a report with the Project's monthly Settlement Interval Actual Available Capacity in the form set forth in Appendix IX ("Actual Availability Report"). Upon Buyer's request, Seller shall promptly provide to Buyer any additional and supporting documentation necessary for Buyer to audit and verify any matters set forth in the Actual Availability Report.] Buyer shall exercise commercially reasonable efforts to notify Seller of any deficiency by Seller in meeting the requirements of this Section 3.1(l)(i); provided that any failure by Buyer to provide such deficiency notice shall not result in any additional liability to Buyer under this Agreement.

(ii) Buyer reserves the right to validate the data provided pursuant to Section 3.1(l)(i) with information publicly available from NOAA and nearby weather stations and substitute such data for its scheduling purposes if Seller's data is inconsistent with the publicly available data or is missing; provided that Buyer shall notify Seller promptly of Buyer's substitution of such data.

(iii) Seller shall maintain at least a minimum of one hundred twenty (120) days' historical data for all data required pursuant to Section 3.1(l)(i), which shall be available on a minimum time interval of one hour basis or an hourly average basis, except with respect to the meteorological measurements which shall be available on a minimum time interval of ten (10) minute basis. Seller shall provide such data to Buyer within five (5) Business Days of Buyer's request.

[The following Sections 3.1(l)(iv) – (vi) apply to As-Available Product only]

[(iv) Installation, Maintenance and Repair.

(A) Seller, at its own expense, shall install and maintain one (1) stand-alone meteorological station at the Site to monitor and report the meteorological data required in Section 3.1(l)(i) of this Agreement, and for wind Projects, each wind turbine must be equipped with meteorological measurement equipment (e.g. anemometers) which are individually linked to Seller's plant information system. Seller, at its own expense, shall install and maintain a secure communication link in order to provide Buyer with access to the data required in Section 3.1(l)(i) of this Agreement.

(B) Seller shall maintain the meteorological stations, telecommunications path, hardware, and software necessary to provide accurate data to Buyer or Third-Party SC (as applicable) to enable Buyer or the Third-Party SC to meet current CAISO scheduling requirements. Seller shall promptly repair and replace as necessary such meteorological stations, telecommunications path, hardware and software and shall notify Buyer as soon as Seller learns that any such telecommunications paths, hardware and software are providing faulty or incorrect data.

(C) If Buyer notifies Seller of the need for maintenance, repair or replacement of the meteorological stations, telecommunications path, hardware or software, Seller shall maintain, repair or replace such equipment as necessary within five (5) days of receipt of such Notice.

(D) For any occurrence in which Seller's telecommunications system is not available or does not provide quality data and Buyer notifies Seller of the deficiency or Seller becomes aware of the occurrence, Seller shall transmit data to Buyer through any alternate means of verbal or written communication, including cellular communications from onsite personnel, facsimile, blackberry or equivalent mobile e-mail, or other method mutually agreed upon by the Parties, until the telecommunications link is re-established.

(v) Seller agrees and acknowledges that Buyer may seek from third parties any information relevant to its duties as SC for Seller, including from the Participating Transmission Operator. Seller hereby voluntarily consents to allow the Participating Transmission Operator to share Seller's information with Buyer in furtherance of Buyer's duties as SC for Seller, and agrees to provide the Participating Transmission Owner with written confirmation of such voluntary consent at least ninety (90) days prior to the Initial Energy Delivery Date.

(vi) No later than ninety (90) days before the Initial Energy Delivery Date, Seller shall provide one (1) year, if available, but no less than six (6) months, of recorded meteorological data to Buyer in a form reasonably acceptable to Buyer from a weather station at the Site. Such weather station shall provide, via remote access to Buyer, all data relating to (A) ***[Include the following bracketed language for solar Projects only]*** [total global horizontal irradiance, plane of array or direct normal insolation as is applicable for project type, air temperature, wind speed and direction, precipitation, barometric pressure, visibility in fog areas (forward scatter sensor) and humidity at the Site] ***[Include the following bracketed language for wind Projects only]*** [wind speed and direction (as close to hub height as possible), standard deviation of wind direction, peak instantaneous values, air temperature, barometric pressure, and humidity at the Site], as well as time-average data including 10-minute and hourly values of irradiance or insolation, air temperature, wind speed, wind direction, standard deviation of wind direction, relative humidity, precipitation, barometric pressure ***[Include the following bracketed language only if winter season output of solar Project is an issue]*** [and visibility in fog areas] All data, except peak values, should be 1-second samples averaged into 10-minute periods; (B) elevation, latitude and longitude of the weather station; and (C) any other data reasonably requested by Buyer.]

(m) Prevailing Wage. Seller shall use reasonable efforts to ensure that all Electricians hired by Seller, Seller's contractors and subcontractors are paid wages at rates not less than those prevailing for Electricians performing similar work in the locality as provided by Division 2, Part 7, Chapter 1 of the California Labor Code. Nothing herein shall require Seller, its contractors and subcontractors to comply with, or assume liability created by other inapplicable provisions of the California Labor Code.

(n) Obtaining and Maintaining CEC Certification and Verification. Subject to the Compliance Cost Cap, Seller shall take all necessary steps including making or supporting timely filings with the CEC to obtain and maintain CEC Certification and Verification throughout the Term.

(o) Compliance Cost Cap. Costs applicable to the Compliance Cost Cap are only those costs applicable under the definition of "Compliance Costs" and are new costs associated with a change in Law occurring after the Execution Date. The Parties agree that the Compliance Costs Seller shall be required to bear during the Delivery Term shall be capped annually at ten thousand dollars (\$10,000.00) per MW of Contract Capacity and in the aggregate throughout the Delivery Term at twenty thousand dollars (\$20,000.00) per MW of Contract Capacity (collectively, the "Compliance Cost Cap"). In the event and to the extent that the Compliance Costs incurred by Seller exceed the Compliance Cost Cap, Buyer shall either reimburse Seller for such Compliance Costs that exceed the Compliance Cost Cap, or excuse Seller from performing the obligations of this Agreement that would otherwise cause it to incur Compliance Costs in excess of the Compliance Cost Cap. Within sixty (60) days after the change,

amendment, repeal, or enactment of Law after the Execution Date which Seller anticipates will cause it to incur Compliance Costs in excess of the Compliance Cost Cap, Seller shall provide to Buyer Notice with an estimate of the expected annual Compliance Costs caused by such change in Law. Within thirty (30) days of the delivery of such Notice with the estimate, Buyer shall provide Seller Notice of (i) Buyer's request for Seller to incur the Compliance Costs in excess of the Compliance Cost Cap, (ii) Buyer's initiation of dispute resolution under Article 12, or (iii) Buyer's waiver of Seller's performance of such obligations. The Parties shall agree on a reasonable allocation, as between Seller and Buyer, over the remaining Term of any such Compliance Costs that are incurred after the fifteenth (15th) Contract Year and that are expected to benefit the Project beyond the Term of this Agreement. Any reimbursement by Buyer to Seller referenced above in this Section 3.1(o) shall be subject to CPUC approval, and the amount of such reimbursement shall not be paid by Buyer to Seller until such time as the CPUC has approved such payment. Seller shall be relieved from performing the obligations of this Agreement that would otherwise cause it to incur Compliance Costs in excess of the Compliance Cost Cap and which give rise to the payment that is the subject of the above-referenced CPUC approval until such time as the CPUC issued its approval of the reimbursement payment in final and non-appealable form.

(p) Curtailment Requirements.

(i) Order. Seller shall reduce generation from the Project as required pursuant to a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order, provided that (A) a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order shall be consistent with the operational characteristics set forth in Section F of the Cover Sheet; (B) the Buyer Curtailment Period shall be for unlimited hours cumulatively per Contract Year (which may or may not be consecutive); and (C) Buyer shall pay Seller for Deemed Delivered Energy associated with a Buyer Curtailment Period pursuant to Article 4. Seller agrees to reduce the Project's generation by the amount and for the period set forth in the Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order.

(ii) Failure to Comply. If Seller fails to comply with a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order provided in compliance with Section 3.1(p)(i), then, for each MWh of Delivered Energy that the Project generated in contradiction to the Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order, Seller shall pay Buyer for each such MWh at an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for delivery of such MWh (for example, the Contract Price adjusted by TOD Factors) and, (B) is the absolute value of the Real-Time Price for the applicable PNode, if such price is negative, for the Buyer Curtailment Period or Curtailment Period and, (C) is any penalties or other charges resulting from Seller's failure to comply with the Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order.

(q) Seller Equipment Required for Curtailment Instruction Communications. Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary to respond and follow instructions, including an electronic signal conveying real time and intra-day instructions, to operate the Units as directed by the Buyer and/or a Governmental Authority, including to implement a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take the steps necessary to become compliant as soon as commercially reasonably possible. Seller shall be liable pursuant to Section 3.1(p)(ii) for failure to comply with a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, a Buyer Curtailment Order,

Buyer Bid Curtailment or Curtailment Order communication via such systems and facilities shall have the same force and effect on Seller as any other form of communication.

[The following bracketed section only applies to GTSR Projects]

[(r) Green-e® Energy Certification.

(i) As of the Effective Date, Seller represents and warrants that (A) the Project is eligible for Green-e® Energy Certification and (B) the WREGIS Certificates associated with the Renewable Energy Credits corresponding to Delivered Energy have not been separately sold, separately marketed or otherwise separately represented by Seller or its Affiliates as renewable energy attributable to the Project other than to Buyer.

(ii) From the Execution Date, and for the duration of the Delivery Term, Seller covenants that it shall, at its sole expense, but subject to the Compliance Cost Cap, take all actions, including complying with all applicable registration, attestation, eligibility, auditing, and reporting requirements, and execute all documents or instruments necessary (A) to be eligible for and maintain the Green-e® Energy Certification during the Delivery Term, and (B) to enable Buyer to meet its obligation for a GTSR Program with Green-e® Energy Certification during the Delivery Term.]

3.2 Green Attributes.

(a) Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.

(b) Biomethane Transactions.

(i) For all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient renewable and environmental attributes of biomethane production and capture to ensure that there are zero net emissions associated with the production of electricity from the generating facility using the biomethane.

(ii) For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane if the capture and destruction is required by Law. If the capture and destruction of the biomethane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.

3.3 Resource Adequacy.

(a) During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes from the Project, to enable Buyer to meet its Resource Adequacy or successor program requirements, as the CPUC, CAISO and/or other regional entity may prescribe, including submission of a Supply Plan or Resource Adequacy Plan ("Resource Adequacy Requirements"). From the Execution Date, and for the duration of the Delivery Term, Seller shall take all commercially reasonable actions, including complying with all applicable registration and reporting requirements, and execute any and all documents or instruments necessary to enable Buyer to use all of the capacity of the Project, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement to meet Buyer's Resource Adequacy Requirements during the Delivery Term.

(b) Seller shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from Resource Adequacy Standards, if applicable, and Seller shall be entitled to retain all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Resource Adequacy Standards, if applicable.

(c) Buyer shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from the Replacement Capacity Rules, if applicable, provided that Seller has given Buyer Notice of the outages subject to the Replacement Capacity Rules by the earlier of ninety (90) days before the first day of the month for which the outage will occur or forty-five (45) days before Buyer's monthly Resource Adequacy capacity showing in accordance with the CAISO Tariff or decision of the CPUC. If Seller fails to provide such Notice, then Seller shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from the Replacement Capacity Rules for such outage.

(d) To the extent Seller has an exemption from the Resource Adequacy Standards or the Replacement Capacity Rules under the CAISO Tariff, Sections 3.3(b) and 3.3(c) above shall not apply. If Seller would like to request an exemption for this Agreement from the CAISO, Seller shall provide to Buyer, as Seller's Scheduling Coordinator, Notice specifically requesting that Buyer seek certification or approval of this Agreement as an exempt contract pursuant to the CAISO Tariff; provided that Buyer's failure to obtain such exemption shall not be an Event of Default and Buyer shall not have any liability to Seller for such failure.

(e) Resource Adequacy Failure.

(i) RA Deficiency Determination. Notwithstanding Seller's obligations set forth in Section 3.4(a)(i)(A) or anything to the contrary herein, the Parties acknowledge and agree that:

(A) if Seller is unable to obtain the deliverability type selected in Section A of the Cover Page by the RA Start Date, then Seller shall pay to Buyer the RA Deficiency Amount for each RA Shortfall Month as liquidated damages due to Buyer for the Capacity Attributes that Seller failed to convey to Buyer; and

(B) if Seller is unable to obtain the deliverability type selected in Section A of the Cover Page by the Deliverability Finding Deadline, then Seller shall be in breach of this Agreement and subject to an Event of Default under Sections 5.1(b)(vii) - (viii), regardless of Seller's payment of any RA Deficiency Amount hereunder.

(ii) RA Deficiency Amount Calculation.

(A) Buyer shall calculate the RA Deficiency Amount for each RA Shortfall Month using the formula set forth in Section 3.3(e)(ii)(B). Buyer shall notify Seller of the RA Deficiency Amount for a given RA Shortfall Month no later than the last day of that RA Shortfall Month. The Parties agree that these liquidated damages shall be paid to Buyer for each RA Shortfall Month and constitute a reasonable approximation of the harm or loss suffered by Buyer. The Parties further agree that Buyer may use such liquidated damages for any purpose in its sole discretion. Seller shall pay the RA Deficiency Amount for a given RA Shortfall Month in the form of a deduction from the amount invoiced by Seller in such month pursuant to Section 6.1. In the event that the RA Deficiency Amount for a given RA Shortfall Month exceeds the amount invoiced pursuant to Section 6.1, Buyer shall make no payment to Seller for that month, and the difference between the invoiced amount and the RA Deficiency Amount shall be deducted from the amount(s) invoiced in the succeeding month(s) until all of the RA Deficiency Amount for such RA Shortfall Month has been deducted. Any dispute regarding Buyer's calculation of any RA Deficiency Amount shall be resolved in accordance with Article Twelve.

(B) The RA Deficiency Amount for a given RA Shortfall Month shall be equal to the product of the RA Value and the Expected Net Qualifying Capacity, as calculated in accordance with Appendix XIV. The RA Deficiency Amount is represented by the following equation:

$$\text{RA Deficiency Amount (\$/Month)} = \text{RA Value (\$/MW/Month)} \times \text{Expected Net Qualifying Capacity (MW)}$$

To the extent the Project obtains Net Qualifying Capacity that Seller applies towards its obligations under Section 3.3(a) before the Project obtains the deliverability type selected in Section A of the Cover Page (e.g., through the CAISO's Operational Deliverability Assessment), then the RA Deficiency Amount calculated above for a given RA Shortfall Month shall be reduced accordingly (e.g. the RA Deficiency Amount would equal the product of (x) the RA Value and (y) the difference between the Expected Net Qualifying Capacity and the actual Net Qualifying Capacity):

$$\text{RA Deficiency Amount (\$/Month)} = \text{RA Value (\$/MW/Month)} \times [\text{Expected Net Qualifying Capacity (MW)} - \text{actual Net Qualifying Capacity (MW)}].$$

3.4 Transmission and Scheduling.

(a) Transmission.

(i) Seller's Transmission Service Obligations. Throughout the Term, and consistent with the terms of this Agreement, Seller shall:

(A) arrange and pay independently for any and all necessary electrical interconnection, distribution and/or transmission (and any regulatory approvals required for the foregoing), sufficient to allow Seller to deliver the Product to the Delivery Point for sale pursuant to the terms of this Agreement. Seller's interconnection, distribution and/or transmission arrangements shall provide for the deliverability type selected in Section A of the Cover Sheet as of the RA Start Date and throughout the Delivery Term.

(B) If Seller has elected Energy Only Status on the Cover Sheet, this Section 3.4(a)(i)(B) is not applicable. An FCDS or PCDS Seller shall have either previously obtained, or is obligated to obtain per the terms of the Agreement, a FCDS or PCDS Finding. If Seller's Project has not attained Full Capacity Deliverability Status or Partial Capacity Deliverability Status prior to the Execution Date, Seller shall take all actions necessary or appropriate to cause the Delivery Network Upgrades necessary for it to obtain Full Capacity Deliverability Status or Partial Capacity Deliverability

Status to be constructed and placed into service. The cost of each Deliverability Assessment and any necessary Delivery Network Upgrades to ensure Full Capacity Deliverability Status or Partial Capacity Deliverability Status shall be borne solely by Seller and shall not be subject to the Compliance Cost Cap. When the CAISO advises Seller that the Project has Full Capacity Deliverability Status or Partial Capacity Deliverability Status, Seller shall Notify Buyer of such status within five (5) Business Days of the date it receives notification from the CAISO of such status by providing Buyer documentation from the CAISO. The Effective FCDS Date or Effective PCDS Date must occur on or before the Deliverability Finding Deadline; a failure to do so shall constitute an Event of Default under Section 5.1(a)(iii). The Termination Payment for an Event of Default caused by Seller's failure to achieve the Effective FCDS Date or Effective PCDS Date on or before the Deliverability Finding Deadline shall be capped at the amount of Seller's Delivery Term Security or Term Security obligation under Section 8.4(a)(ii) or (iii), as applicable.

(C) if the Project has or obtains FCDS, Seller shall Notify Buyer of such status as of the Execution Date, if applicable, or within five (5) Business Days of the date it receives notification from the CAISO of such status by providing Buyer documentation from the CAISO. If Seller has elected Energy Only Status or Partial Capacity Deliverability Status on the Cover Sheet, Seller shall continue to receive payment based on the Energy Only Status TOD Factors set forth in Section 4.4 regardless of whether or not Seller obtains FCDS.

(D) bear all risks and costs associated with such transmission service, including any transmission outages or curtailment to the Delivery Point.

(E) fulfill all contractual, metering and applicable interconnection requirements, including those set forth in the Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, so as to be able to deliver Energy from the Project according to the terms of this Agreement.

(ii) Buyer's Transmission Service Obligations. As of the Test Period and during the Delivery Term,

(A) Buyer shall arrange and be responsible for transmission service at and from the Delivery Point.

(B) Buyer shall bear all risks and costs associated with such transmission service, including any transmission outages or curtailment from the Delivery Point.

(C) Buyer shall schedule or arrange for Scheduling Coordinator services with its Transmission Providers to receive the Product at the Delivery Point.

(D) Buyer shall be responsible for all CAISO costs and charges, electric transmission losses and congestion at and from the Delivery Point.

[The following Section (b) "EIRP Requirements" applies to EIRP-eligible facilities only]

[(b) EIRP Requirements. Seller shall provide Buyer with a copy of the notice from CAISO certifying the Project as a Participating Intermittent Resource as soon as practicable after Seller's receipt of such notice of certification. As of the first date of the Test Period and until the Project receives certification as a Participating Intermittent Resource, Seller, at its sole cost, shall comply with EIRP and additional protocols issued by the CAISO for Eligible Intermittent Resources. Throughout the Delivery Term, Seller, at its sole cost, shall participate in and comply with EIRP and all additional protocols issued

by the CAISO for a Participating Intermittent Resource. Throughout the Delivery Term, Seller, at its sole cost, shall participate in and comply with all other protocols issued by the CAISO for generating facilities providing energy on an intermittent basis; provided that, if multiple options exist, then Seller shall comply with any such protocols, rules or regulations as directed by Buyer. Throughout the Delivery Term, Buyer in its limited capacity as Seller's Scheduling Coordinator shall facilitate communication with the CAISO and provide other administrative materials to CAISO as necessary to satisfy Seller's obligations as Seller's Scheduling Coordinator and to the extent such actions are at *de minimis* cost to Buyer.]

[(b)](c) Scheduling Coordinator. Buyer shall act as the Scheduling Coordinator for the Project. In that regard, Buyer and Seller shall agree to the following:

(i) Designation as Scheduling Coordinator.

(A) At least ninety (90) days before the beginning of the Test Period Seller shall take all actions and execute and deliver to Buyer all documents necessary to authorize or designate Buyer, or Third-Party SC, as Seller's Scheduling Coordinator, and Buyer or Third-Party SC, as applicable, shall take all actions and execute and deliver to Seller or CAISO all documents necessary to become and act as Seller's Scheduling Coordinator. If Buyer designates a Third-Party SC, then Buyer shall give Seller Notice of such designation at least ten (10) Business Days before the Third-Party SC assumes Scheduling Coordinator duties hereunder, and Seller shall be entitled to rely on such designation until it is revoked or a new Third-Party SC is appointed by Buyer upon similar Notice. Buyer shall be fully responsible for all acts and omissions of Third-Party SC and for all cost, charges and liabilities incurred by Third-Party SC to the same extent that Buyer would be responsible under this Agreement for such acts, omissions, costs, charges and liabilities if taken, omitted or incurred by Buyer directly.

(B) Seller shall not authorize or designate any other party to act as Scheduling Coordinator, nor shall Seller perform, for its own benefit, the duties of Scheduling Coordinator during the Test Period and Delivery Term.

(ii) Buyer's Responsibilities as Scheduling Coordinator. Buyer or Third-Party SC shall comply with all obligations as Seller's Scheduling Coordinator under the CAISO Tariff and shall conduct all scheduling in full compliance with the terms and conditions of this Agreement, the CAISO Tariff, and all requirements of EIRP (if applicable).

(iii) Available Capacity Forecasting. Seller shall provide the Available Capacity forecasts described below. ***[The following bracketed language applies to As-Available solar or wind Projects only]*** [Seller's availability forecasts below shall include Project availability and updated status of ***[The following bracketed language applies to solar Projects only]*** [photovoltaic panels, inverters, transformers, and any other equipment that may impact availability] or ***[The following bracketed language applies to wind Projects only]*** [transformers, wind turbine unit status, and any other equipment that may impact availability].] ***[The following bracketed language applies to As-Available Product only]*** [To avoid Forecasting Penalties set forth in Section 4.6(c)(iii),] Seller shall use commercially reasonable efforts to forecast the Available Capacity of the Project accurately and to transmit such information in a format reasonably acceptable to Buyer. Buyer and Seller shall agree upon reasonable changes to the requirements and procedures set forth below from time-to-time, as necessary to comply with CAISO Tariff changes, accommodate changes to their respective generation technology and organizational structure and address changes in the operating and Scheduling procedures of Buyer, Third-Party SC (if applicable) and the CAISO, including automated forecast and outage submissions.

(A) Annual Forecast of Available Capacity. No later than (I) the earlier of July 1 of the first calendar year following the Execution Date or one hundred and eighty (180)

days before the first day of the first Contract Year of the Delivery Term (“First Annual Forecast Date”), and (II) on or before July 1 for each calendar year from the First Annual Forecast Date for every subsequent Contract Year during the Delivery Term, Seller shall provide to Buyer and Third-Party SC (if applicable) a non-binding forecast of the hourly Available Capacity for each day in each month of the following calendar year in a form reasonably acceptable to Buyer.

(B) Monthly Forecast of Available Capacity. Seller shall provide to Buyer and Third-Party SC (if applicable), pursuant to subsections (I) and (II) below, a non-binding forecast of the hourly Available Capacity for each day of the following month in a form reasonably acceptable to Buyer:

(I) by the earlier of ninety (90) days before the beginning of the Test Period or forty-five (45) days before Buyer’s monthly Resource Adequacy capacity showing in accordance with the CAISO Tariff or decision of the CPUC, and

(II) throughout the Delivery Term, by the earlier of ninety (90) days before the beginning of each month or forty-five (45) days before Buyer’s monthly Resource Adequacy capacity showing must be completed in accordance with the CAISO Tariff or decision of the CPUC.

(C) Daily Forecast of Available Capacity. During the Test Period and thereafter during the Delivery Term, Seller or Seller’s agent shall provide a binding day ahead forecast of Available Capacity (the “Day-Ahead Availability Notice”) to Buyer or Third-Party SC (as applicable) via Buyer’s internet site, as provided in Appendix VI, for each day no later than fourteen (14) hours before the beginning of the “Preschedule Day” (as defined by the WECC) for such day. The current industry standard Preschedule Day timetable in the WECC is as follows:

- (1) Monday – Preschedule Day for Tuesday
- (2) Tuesday – Preschedule Day for Wednesday
- (3) Wednesday – Preschedule Day for Thursday
- (4) Thursday – Preschedule Day for Friday and Saturday
- (5) Friday – Preschedule Day for Sunday and Monday

Exceptions to this standard Monday through Friday Preschedule Day timetable are presently set forth by the WECC in order to accommodate holidays, monthly transitions and other events. Exceptions are posted on the WECC website (www.wecc.biz) under the document title, “Preschedule Calendar.” Each Day-Ahead Availability Notice shall clearly identify, for each hour, Seller’s forecast of all amounts of Available Capacity pursuant to this Agreement. If the Available Capacity changes by at least one (1) MW as of a time that is less than fourteen (14) hours prior to the Preschedule Day but prior to the CAISO deadline for submittal of Schedules into the Day-Ahead Market then Seller must notify Buyer of such change by telephone and shall send a revised notice to Buyer’s Internet site set forth in Appendix VI. Such Notices shall contain information regarding the beginning date and time of the event resulting in the change in Available Capacity, the expected end date and time of such event, the expected Available Capacity in MW, and any other necessary information.

If Seller fails to provide Buyer with a Day-Ahead Availability Notice as required herein, then, until Seller provides a Day-Ahead Availability Notice, Buyer may rely on the most recent Day-Ahead Forecast of Available Capacity submitted by Seller to Buyer to the extent Seller’s failure contributes to Imbalance Energy, Seller shall be subject to the Forecasting Penalties set forth in Section 4.6(c).

(D) Real-Time Available Capacity. During the Test Period and thereafter during the Delivery Term, Seller shall notify Buyer of any changes in Available Capacity of one (1) MW or more, whether due to Forced Outage, Force Majeure or other cause, as soon as reasonably possible, but no later than one (1) hour prior to the deadline for submitting Schedules to the CAISO in accordance with the CAISO rules for participation in the Real-Time Market. If the Available Capacity changes by at least one (1) MW as of a time that is less than one (1) hour prior to the Real-Time Market deadline, but before such deadline, then Seller must likewise notify Buyer. Such Notices shall contain information regarding the beginning date and time of the event resulting in the change in Available Capacity, the expected end date and time of such event, the expected Available Capacity in MW, and any other information required by the CAISO or reasonably requested by Buyer. With respect to any Forced Outage, Seller shall use commercially reasonable efforts to notify Buyer of such outage within ten (10) minutes of the commencement of the Forced Outage. Seller shall inform Buyer of any developments that will affect either the duration of such event or the availability of the Project during or after the end of such event. These notices and changes to Available Capacity shall be communicated in a method acceptable to Buyer; provided that Buyer specifies the method no later than 60 days prior to the effective date of such requirement. In the event Buyer fails to provide Notice of an acceptable method for communications under this Section 3.4[(b)][(c)][(iii)(D)], then Seller shall send such communications by telephone to Buyer's Real-Time Desk and shall be sent to Buyer's internet site as set forth in Appendix VI.

(E) To the extent that Seller obtains, in the normal course of business, other forecasts of energy production at the Project not otherwise specified in this Section 3.4, then Seller shall grant Buyer read-only access to such forecasts.

(iv) Replacement of Scheduling Coordinator.

(A) At least ninety (90) days prior to the end of the Delivery Term, or as soon as practicable before the date of any termination of this Agreement prior to the end of the Delivery Term, Seller shall take all actions necessary to terminate the designation of Buyer or the Third-Party SC, as applicable, as Seller's SC. These actions include (I) submitting to the CAISO a designation of a new SC for Seller to replace Buyer or the Third-Party SC (as applicable); (II) causing the newly-designated SC to submit a letter to the CAISO accepting the designation; and (III) informing Buyer and the Third-Party SC (if applicable) of the last date on which Buyer or the Third-Party SC (as applicable) will be Seller's SC.

(B) Buyer shall submit, or if applicable cause the Third-Party SC to submit, a letter to the CAISO identifying the date on which Buyer (or Third-Party SC, as applicable) resigns as Seller's SC on the first to occur of either (I) thirty (30) days prior to the end of the Delivery Term or (II) the date of any early termination of this Agreement.

3.5 Standards of Care.

(a) General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to construction, safety, ownership and/or operation of the Project). In the event Seller requires any data or information from Buyer in order to comply with any applicable requirements of Law, including the requirements of CAISO, NERC and WECC, relating to the Project (including those related to construction, safety, ownership and/or operation of the Project), then Seller shall request in writing such data from Buyer no less than forty-five (45) calendar days prior to Seller's requested date of Buyer's response; provided that if Seller has less than forty-five (45) calendar days prior notice of the need for such data, Seller shall request in writing such data from Buyer as soon as reasonably practicable. Buyer shall make a good faith

effort to provide such data and/or information within the timeframe specified in writing by Seller or as soon thereafter as reasonably practicable.

(b) CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Utility Practices.

(c) Reliability Standard. Seller agrees to abide by (i) CPUC General Order No. 167, “Enforcement of Maintenance and Operation Standards for Electric Generating Facilities”, and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Participating Transmission Owner.

3.6 Metering. All output from the Project must be delivered through a single CAISO revenue meter located on the high-voltage side of the Project’s final step-up transformer (which must be dedicated solely to the Project) nearest to the Interconnection Point that exclusively measures output for the Project described herein. All Delivered Energy purchased under this Agreement must be measured by the Project’s CAISO revenue meter to be eligible for payment under this Agreement. Seller shall bear all costs relating to all metering equipment installed to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO Operational Meter Analysis and Reporting (OMAR) web and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

3.7 Outage Notification.

(a) CAISO Approval of Outage(s). Buyer, in its capacity as Scheduling Coordinator, is responsible for securing CAISO approvals for Project outages, including securing changes in its outage schedules when CAISO disapproves Buyer’s schedules or cancels previously approved outages and for entering Project outages in the Scheduling and Logging system for the CAISO (“SLIC”) or successor system. As Scheduling Coordinator, Buyer shall put forth commercially reasonable efforts to secure and communicate CAISO approvals for Project outages in a timely manner to Seller.

(b) Planned Outages. During the Delivery Term, Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by complying with [Section 3.4[(b)][(c)][(iii)(A), (“Annual Forecast of Available Capacity”) and Section 3.4[(b)][(c)][(iii)(B), (Monthly Forecast of Available Capacity”)] **[Applies to intermittent facilities only]** [3.4[(b)][(c)][(iii)(A), (“Annual Forecast of Available Capacity”) and Section 3.4[(b)][(c)][(iii)(B), (Monthly Forecast of Available Capacity”)] **[Applies to all facilities other than intermittent facilities]** and implementing the notification procedures set forth in Appendix VI no later than July 1st of each year during the Delivery Term. Seller shall also notify Buyer of the proposed Planned Outage schedule for the Project by the earlier of ninety (90) days before the beginning of each month or forty-five (45) days before Buyer’s monthly Resource Adequacy capacity showing must be completed in accordance with the CAISO Tariff or decision of the CPUC. The Planned Outage schedule is subject to Buyer’s approval, which approval may not be unreasonably withheld or conditioned. Seller shall also confirm or provide updates to Buyer regarding the Planned Outage by the earlier of fourteen (14) days prior to each Planned Outage or two (2)

Business Days prior to the CAISO deadline for submitting Planned Outages. Seller shall not conduct Planned Outages during the months of January, May through September, and December. During all other months, Seller shall not schedule Planned Outages without the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Utility Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Subject to Section 3.7(a), after any Planned Outage has been scheduled, at any time up to the commencement of work for the Planned Outage, Buyer may direct that Seller change its outage schedule as ordered by CAISO. For non-CAISO ordered changes to a Planned Outage schedule requested by Buyer, Seller shall notify Buyer of any incremental costs associated with such schedule change and an alternative schedule change, if any, that would entail lower incremental costs. If Buyer agrees to pay the incremental costs, Seller shall use commercially reasonable efforts to accommodate Buyer's request.

(c) Forced Outages. Seller shall notify Buyer of a Forced Outage as promptly as possible, but no later than ten (10) minutes after the commencement of the Forced Outage and in accordance with the notification procedures set forth in Appendix VI. Buyer shall put forth commercially reasonable efforts to submit such outages to CAISO.

(d) Prolonged Outages. Seller shall notify Buyer of a Prolonged Outage as soon as practicable in accordance with the notification provisions in Appendix VI. Seller shall notify Buyer in writing when the Project is again capable of meeting its Contract Quantity on a *pro rata* basis also in accordance with the notification provisions in Appendix VI.

(e) Force Majeure. Within two (2) Business Days of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Failure to provide timely Notice constitutes a waiver of a Force Majeure claim. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Products that Seller fails to deliver or provide as a result of Force Majeure during the term of a Force Majeure.

(f) Communications with CAISO. Buyer shall be responsible for all outage coordination communications with CAISO outage coordination personnel and CAISO operations management, including submission to CAISO of updates of outage plans, submission of clearance requests, and all other outage-related communications.

(g) Changes to Operating Procedures. Notwithstanding any language to the contrary contained in Sections 3.4, 3.6, 3.7, 3.8, or 10.13, or Appendix VI, and consistent with Section 3.5, Seller understands and acknowledges that the specified access to data and installation and maintenance of weather stations, transmission and scheduling mechanisms, metering requirements, Outage Notification Procedures and scheduling, forecast, bidding, notification and operating procedures described in the above-referenced sections are subject to change. If such changes are provided by (i) Notice from Buyer, then Seller shall implement any such changes as reasonably deemed necessary by Buyer; provided that such change does not result in an increased cost of performance to Seller hereunder other than *de minimis* amounts, or (ii) Law, then the Parties shall implement such changes as necessary for Seller and Buyer to perform their respective rights and obligations in accordance with the Law.

3.8 Operations Logs and Access Rights.

(a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include information on power production, ~~fuel consumption,~~ ***[Bracketed language for applicable Baseload Product only]*** efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of equipment and protective devices. Seller shall provide this information electronically to Buyer within thirty (30) days of Buyer's request.

(b) Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice (which no case shall be less than three (3) Business Days) visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, or its tariff schedules, PG&E Interconnection Handbook, Electric Rule 21, and rules on file with the CPUC. In connection with the foregoing, Buyer, its authorized agents, employees and inspectors must (i) at all times adhere to all safety and security procedures as may be required by Seller; (ii) not interfere with the operation of the Project; and (iii) unless waived in writing by Seller, be escorted by a representative of Seller. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator's Safety and Security Departments.

3.9 New Generation Facility.

(a) Seller, at no cost to Buyer, shall be responsible to:

(i) Design and construct the Project.

(ii) Perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO, the Participating Transmission Owner, and the applicable distribution provider for the Interconnection Facilities to Schedule and deliver the Product.

(iii) Acquire all permits and other approvals necessary for the construction, operation, and maintenance of the Project.

(iv) Complete all environmental impact studies necessary for the construction, operation, and maintenance of the Project.

(v) At Buyer's request, provide to Buyer the Seller's electrical specifications and design drawings pertaining to the Project for Buyer's review prior to finalizing design of the Project and before beginning construction work based on such specifications and drawings. Seller shall provide to Buyer reasonable advance Notice of any changes in the Project and provide to Buyer specifications and design drawings of any such changes.

(vi) Seller shall Notify Buyer of the Construction Start Date by sending to Buyer a written Certification substantially in the form provided in Appendix IV-1 as soon as practical upon issuance of Notice to Proceed.

(vii) Within fifteen (15) days after the close of each quarter from the first quarter following the Execution Date, until the month in which the Construction Start Date has occurred, provide to Buyer a quarterly Progress Report and agree to regularly scheduled meetings between

representatives of Buyer and Seller to review such quarterly reports and discuss Seller's construction progress. The quarterly Progress Report shall indicate whether Seller is on target to meet the Guaranteed Commercial Operation Date.

(viii) Within fifteen (15) days after the close of each month following the Construction Start Date until the Commercial Operation Date, provide to Buyer a monthly Progress Report and agree to regularly scheduled meetings between representatives of Buyer and Seller to review such monthly reports and discuss Seller's construction progress. The monthly Progress Report shall indicate whether Seller is on target to meet the Guaranteed Commercial Operation Date.

[The following Section 3.9(a)(ix) applies to geothermal Projects only]

[(ix) Provide to Buyer copies of all Geothermal Reservoir Reports and any revisions thereto, for the time period beginning on the Effective Date and ending on the last day of the first Contract Year.]

(b) Buyer shall have the right, but not the obligation, to:

(i) Notify Seller in writing of the results of the review performed pursuant to Section 3.9(a)(v) within thirty (30) days of Buyer's receipt of all specifications for the Project, including a description of any flaws perceived by Buyer in the design.

(ii) Inspect the Project's construction site or on-site Seller data and information pertaining to the Project during business hours upon reasonable notice.

(c) Guaranteed Commercial Operation Date.

(i) The Parties agree time is of the essence in regards to the Agreement. As such, Seller shall have demonstrated Commercial Operation per the terms of Appendix IV-2 by the date that is no later than twenty-four (24) months after the Effective Date of this Agreement, except as such date may be extended on a day for day basis for not more than a cumulative six (6) month period for a Permitted Extension (the "Guaranteed Commercial Operation Date").

(ii) Permitted Extensions. The Permitted Extensions to the Guaranteed Commercial Operation Date are as follows:

(A) Permitting Delay. The Guaranteed Commercial Operation Date may be extended on a day for day basis for not more than six (6) months if Seller has used commercially reasonable efforts (including Seller's timely filing of required documents and payment of all applicable fees) to obtain permits necessary for the construction and operation of the Project, but is unable to obtain such permits and Seller has worked diligently to resolve the delay ("Permitting Delay");

(B) Transmission Delay. The Guaranteed Commercial Operation Date may be extended on a day for day basis for a cumulative period equal to no more than six (6) months if Seller has used commercially reasonable efforts (including compliance with all CAISO, PTO, FERC or other requirements, as applicable, and Seller's timely submission of all required documents and applicable fees) to have the Project physically interconnected to the CAISO Grid and to complete all Electric System Upgrades, if any, but such interconnection or Electric System Upgrades cannot be completed by the Guaranteed Commercial Operation Date, and such delay is not caused by Seller, and Seller has worked diligently to resolve the delay ("Transmission Delay");

(C) Force Majeure Extension. The Guaranteed Commercial Operation Date may be extended on a day for day basis in the event of Force Majeure (“Force Majeure Extension”); provided that Seller works diligently to resolve the effect of the Force Majeure and provides evidence of its efforts promptly to Buyer upon Buyer’s written request; provided further that Seller may not claim Force Majeure for any reason that was the basis for or would qualify as a Permitting Delay or a Transmission Delay.

(iii) Notwithstanding the foregoing, if Seller claims more than one Permitted Extension under Section 3.9(c)(ii), such extensions cannot cumulatively exceed six (6) months and all Permitted Extensions taken shall be concurrent, rather than cumulative, during any overlapping days.

(iv) Notice of Permitted Extension.

(A) In order to request a Permitting Delay or Transmission Delay (individually and collectively, “Delay”), Seller shall provide Buyer with Notice of the requested Delay no later than sixty (60) days prior to the Guaranteed Commercial Operation Date, which Notice must clearly identify the Delay being requested, the length of the Delay requested (up to six (6) months), and include information necessary for Buyer to verify the length and qualification of the Delay. Buyer shall use reasonable discretion to grant or deny the requested extension, and shall provide Seller Notice of its decision within a reasonable time.

(B) In the case of a Force Majeure Extension, if sixty (60) days prior Notice is impracticable or impossible, Seller shall provide Notice as soon as possible after the occurrence of the Force Majeure event.

(v) Failure to Meet Guaranteed Commercial Operation Date. Seller shall cause the Project to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date; provided, however, that the Commercial Operation Date shall not occur more than one hundred eighty (180) days prior to the Guaranteed Commercial Operation Date. If the Commercial Operation Date occurs after the Guaranteed Commercial Operation Date after giving effect to Permitted Extensions or Force Majeure, then Buyer shall be entitled to declare an Event of Default and collect a Termination Payment pursuant to Article Five.

[The following subsections (d) and (e) shall only apply to a New Project:]

[(d) Resize of Project Due to Permit Failure.

(i) If Seller has not received or obtained by the earlier of the Expected Construction Start Date and the date that is six (6) months after the Effective Date final and non-appealable Governmental Approvals required for the construction of the Project with the Contract Capacity set forth in the Cover Sheet, after using commercially reasonable efforts to do so (including timely filings with all applicable Governmental Authorities and timely payment of any required fees) (“Permit Failure”), Seller may make a Contract Capacity Commitment on the Expected Construction Start Date (as may be extended), equal to, at a minimum, seventy percent (70%) of the Contract Capacity set forth in the Cover Sheet, provided that such amount shall also be the maximum amount of the generation capacity permitted under the final and non-appealable Governmental Approvals that Seller has received as of the Expected Construction Start Date (as may be extended), and may not be under one (1) MW, and provided further that for a period of two (2) years from any such resizing pursuant to this Section 3.9(d), Seller must offer Buyer a Right of First Offer for any Products from the Project up to the Contract Capacity set forth in the Cover Sheet as further provided in Section 3.9(e), below. Seller shall provide

Notice of such Contract Capacity Commitment to Buyer no later than ten (10) Business Days following the Expected Construction Start Date.

(ii) In the event that the Contract Capacity is reduced pursuant to Section 3.9(d)(i) above, the Contract Quantity during each Contract Year set forth in the Delivery Term Contract Schedule in the Cover Sheet shall be adjusted proportionately with such reduction.

(iii) In the event that the Contract Capacity and Contract Quantity are reduced pursuant to Sections 3.9(d)(i) and (ii), the revised Contract Capacity and Contract Quantity shall be used to determine Seller's performance under the Agreement, including the amount of Guaranteed Energy Production under Section 3.1(e) and the amount of Delivery Term Security or Term Security required under Section 8.4.

(iv) If the final Contract Capacity is less than the initial Contract Capacity due to a resize of the Project pursuant to Sections 3.1(e)(ii) and 3.9(d)(i), then Seller shall forfeit a proportional share of the Project Development Security on a percent-for-percent basis.

(e) Right of First Offer.

(i) If Seller resizes the Project due to Permit Failure, then for a period of three (3) years from the date on which Seller Notifies Buyer of the Contract Capacity Commitment ("Exclusivity Period"), neither Seller, its successors and assigns, nor its Affiliates shall enter into an obligation or agreement to sell or otherwise transfer any Products from the Project in excess of the Contract Capacity Commitment, up to the Contract Capacity set forth in the Cover Sheet, to any third party, unless Seller first offers, in writing, to sell to Buyer such Products from the Project on the same terms and conditions as this Agreement, subject to permitted modifications identified in subpart (ii) below, (the "First Offer") and Buyer either accepts or rejects such First Offer in accordance with the provisions herein.

(ii) If Buyer accepts the First Offer, Buyer shall Notify Seller within thirty (30) days of receipt of the First Offer subject to Buyer's management approval and CPUC Approval ("Buyer's Notice of First Offer Acceptance"), and then the Parties shall have not more than ninety (90) days from the date of Buyer's Notice to enter into a new power purchase agreement, in substantially the same form as this Agreement, or amend this Agreement, subject to CPUC Approval, if necessary; provided that the Contract Price may only be increased to reflect Seller's documented incremental costs in overcoming the Permit Failure.

(iii) If Buyer rejects or fails to accept Seller's First Offer within thirty (30) days of receipt of such offer, Seller shall thereafter be free to sell or otherwise transfer, and to enter into agreements to sell or otherwise transfer, any Products from the Project to any third party, so long as the material terms and conditions of such sale or transfer are not more favorable to the third party than those of the First Offer to Buyer. If, during the Exclusivity Period, Seller desires to enter into an obligation or agreement with a third party, Seller shall deliver to Buyer a certificate of an authorized officer of Seller (A) summarizing the material terms and conditions of such agreement and (B) certifying that the proposed agreement with the third party will not provide Seller with a lower rate of return than that offered in the First Offer to Buyer. If Seller is unable to deliver such a certificate to Buyer, then Seller may not sell or otherwise transfer, or enter into an agreement to sell or otherwise transfer, the Products from the Project without first offering to sell or otherwise transfer such Products to Buyer on such more favorable terms and conditions (the "Revised Offer") in accordance with subpart (ii) above. If within thirty (30) days of receipt of Seller's Revised Offer the Buyer rejects, or fails to accept by Notice to Seller, the Revised Offer, then Seller will thereafter be free to sell or otherwise transfer, and to enter into

agreements to sell or otherwise transfer, such Products from the Project to any third party on such terms and conditions as set forth in the certificate.]

(f) Excess Network Upgrade Cost Termination Right.

(i) Buyer has the right to terminate this Agreement by Notice on or before the date that is sixty (60) days after Seller provides to Buyer the results of any Interconnection Study, or the GIA tendered to Seller by the Participating Transmission Owner, if such Interconnection Study or GIA as of the date of the termination Notice, estimates, includes, specifies or reflects that the maximum total cost of the Network Upgrades to Buyer, or any Participating Transmission Owner under the jurisdiction of the CAISO, including costs reimbursed to Seller by Buyer or any Participating Transmission Owner under the jurisdiction of the CAISO (“Aggregate Network Upgrade Costs”), may in the aggregate exceed one hundred and ten percent (110%) of the amount identified in the Interconnection Studies that were submitted with Seller’s original bid offer (package) so long as the exceeded dollar amount is equal to or greater than one hundred thousand dollars (\$100,000.00) (“Network Upgrades Cap”), and Seller has not agreed to assume financial responsibility for Excess Network Upgrade Costs. This termination right is irrespective of any subsequent amendments of such Interconnection Study or GIA or any contingencies or assumptions upon which such Interconnection Study or GIA is based. Buyer’s Notice to terminate will be effective five (5) Business Days after such Notice is given to Seller.

(ii) Notwithstanding anything to the contrary in this Section 3.9(f)(ii), Buyer shall have no right to terminate this Agreement under Section 3.9(f)(i), if (A) Seller concurrently with its provision of the relevant Interconnection Study or GIA, as applicable, pursuant to Section 3.1(h)(ii)(B), irrevocably agrees to pay to the Participating Transmission Owner the amount by which the Aggregate Network Upgrade Costs exceed the Network Upgrades Cap (“Excess Network Upgrade Cost”) and (B) Seller enters into a GIA that states that Seller must pay all Excess Network Upgrade Costs without reimbursement from the Participating Transmission Owner. For sake of certainty, if Seller agrees to the above-described payment for the Excess Network Upgrade Costs pursuant to this Section 3.9(f)(ii), such agreement shall not independently convey to Seller any interest in or rights or title to any Network Upgrades or Congestion Revenue Rights (as defined in the CAISO Tariff) in connection with the development of the Project or the delivery of Product to Buyer pursuant to this Agreement.

(iii) Buyer shall have the right to terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is given, (A) if Seller elects to exercise its right to pay for any Excess Network Upgrade Costs, but (B) FERC, CAISO, or any Participating Transmission Owner, as applicable, rejects Seller’s interconnection agreement, in whole or in part, or modifies Seller’s interconnection agreement in a manner that would make Seller unable to comply with Seller’s obligation pursuant to Section 3.9(f)(i). In order to be effective, Buyer’s Notice of termination must be given on or before the date that is ninety (90) days after such rejection or modification by FERC, CAISO, or any Participating Transmission Owner.

ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

4.1 Price.

(a) Contract Price. The Contract Price for each MWh of Product as measured by Delivered Energy in each Contract Year is set forth in Section C of the Cover Sheet.

For the avoidance of doubt, Seller shall not be compensated for any Surplus Delivered Energy.

(b) Test Period Payments. During the Test Period, Seller’s full compensation for Product sold to Buyer shall be the CAISO Revenues for the Delivered Energy, which revenues Buyer shall forward to Seller in accordance with the schedule described in Section 6.1.

4.2 TOD Periods. The time of delivery periods (“TOD Periods”) specified below shall be referenced by the following designations:

	TOD PERIOD		
Monthly Period	1. Peak	2. Shoulder	3. Night
A. July – Sept.	A1	A2	A3
B. Oct. – Mar.	B1	B2	B3
C. Apr. – June	C1	C2	C3

Monthly Period Definitions. The Monthly Periods are defined as follows:

- A. July – September;
- B. October – March; and
- C. April – June.

TOD Period Definitions. The TOD Periods are defined as follows:

- 1. **Peak** = hours ending 16 - 21 (Pacific Prevailing Time (PPT)) all days in the applicable Monthly Period.
- 2. **Shoulder** = hours ending 7 - 15 PPT all days in the applicable Monthly Period.
- 3. **Night** = hours ending 1 - 6, 22, 23 and 24 PPT all days in the applicable Monthly Period.

[Section 4.3 “Capacity Factor” below applies to Baseload Product only]

[4.3 Capacity Factor. The Capacity Factor shall be calculated by TOD Period and defined as the percentage amount resulting from Delivered Energy plus Deemed Delivered Energy, if any, in the applicable TOD Period divided by the product resulting from multiplying the Contract Capacity times the number of hours in the applicable TOD Period minus Seller Excuse Hours in the applicable TOD Period (“Capacity Factor”):

Capacity Factor = (Delivered Energy + Deemed Delivered Energy) / (Contract Capacity × (Hours in TOD Period minus Seller Excuse Hours)).]

4.4 TOD Factors and Monthly TOD Payment.

(a) TOD Factors. In accordance with all other terms of this Article Four, the Contract Price for Delivered Energy and Deemed Delivered Energy shall be adjusted by the following Time of Delivery Factors (“TOD Factors”) for each of the specified TOD Periods in which Delivered Energy or Deemed Delivered Energy is delivered:

RPS TOD FACTORS – Full Capacity Deliverability Status			
Period	1. Peak	2. Shoulder	3. Night
A. July – Sept.	2.2304	0.8067	0.9569
B. Oct – Mar.	1.1982	0.7741	0.9399
C. Apr. – June	1.1941	0.6585	0.9299

RPS TOD FACTORS – Energy Only Status			
Period	1. Peak	2. Shoulder	3. Night
A. July – Sept.	1.4514	0.8317	1.0144
B. Oct – Mar.	1.2855	0.8312	1.0092
C. Apr. – June	1.1327	0.7036	0.9977

(b) Monthly TOD Payment. *[The following bracketed clause is applicable to As Available products only]* [(Except as provided in Section 4.5,)] For each month in each Contract Year, Buyer shall pay Seller for Delivered Energy and Deemed Delivered Energy in each TOD Period (“Monthly TOD Payment”) the amount resulting from (i) multiplying the Contract Price times the TOD Factor for the applicable TOD Period, times the sum of Delivered Energy (exclusive of Surplus Delivered Energy) for such TOD Period plus (ii) for each hour in the TOD Period, the Deemed Delivered Energy Price applicable to that hour times the TOD Factor for the applicable TOD Period, times the amount of Deemed Delivered Energy for such hour:

$$\text{Monthly TOD Payment} = \sum_{\text{hour}=1}^n ([\text{Contract Price \$}] \times \text{TOD Factor} \times \text{Delivered Energy MWh}_{\text{hour}}) + ([\text{Deemed Delivered Energy Price}_{\text{hour}} \$] \times \text{TOD Factor} \times \text{Deemed Delivered Energy MWh}_{\text{hour}})$$

For the avoidance of doubt, *[The following bracketed clause is applicable to As-Available products only]* [Excess Energy shall be compensated as set forth in Section 4.5 and shall not be included in the determination of payment set forth above; and] “Delivered Energy” as used in the formula above excludes Surplus Delivered Energy, for which Seller will receive no compensation,

(c) Annual TOD Payment Adjustment. *[“Annual TOD Payment Adjustment” below applies to Baseload Products only.]* In any Contract Year, if the sum of the Monthly TOD Payments (“Annual TOD Payment”) exceeds the product of (i) Delivered Energy (exclusive of Surplus Delivered Energy) and Deemed Delivered Energy in such Contract Year multiplied by (ii) one hundred and five percent (105%) of the Contract Price (“Annual Maximum TOD Payment”), Seller shall pay Buyer the Excess Payment Amount, as defined below within fifteen (15) days of receipt of Buyer’s invoice for such amounts; provided that if Seller fails to pay such amount Buyer may net the Excess Payment Amount from the next following payment that would be due from Buyer to Seller and all subsequent payments until Buyer has recouped the entire Excess Payment Amount.

If Annual TOD Payment > Annual Maximum TOD Payment, Seller refunds the amount resulting from subtracting the Annual TOD Payment from the Annual Maximum TOD Payment which amount shall be the “Excess Payment Amount.”

Where Annual TOD Payment = sum of Monthly TOD Payment for each month of the applicable Contract Year, and

Where Annual Maximum TOD Payment = $([Contract Price \$] \times 1.05 \times [Delivered Energy MWh_{hour} + Deemed Delivered Energy MWh_{hour}])$

For the avoidance of doubt, “Delivered Energy” as used in the formula above excludes Surplus Delivered Energy.

(d) Applicability of Full Capacity Deliverability Status TOD Factors. This Section 4.4(d) only applies to Sellers that elected to be FCDS Sellers in the Cover Sheet. The Full Capacity Deliverability Status TOD Factors shall apply as of the first day of the month immediately following the date that is forty-five (45) calendar days from the Effective FCDS Date.

[Section 4.5 Excess Delivered Energy below applies to Full Buy-Sell transactions of As-Available Product only]

[4.5 Excess Delivered and Deemed Delivered Energy.

(a) Excess Energy Price. If, at any point in any Contract Year, the amount of Delivered Energy (exclusive of Surplus Delivered Energy) plus the amount of Deemed Delivered Energy exceeds one hundred fifteen percent (115%) of the annual Contract Quantity amount, then:

(i) each MWh of additional Delivered Energy during such Contract Year shall be deemed “Excess Delivered Energy” and each MWh of additional Deemed Delivered Energy during such Contract Year shall be deemed “Excess Deemed Delivered Energy” (Excess Delivered Energy and Excess Deemed Delivered Energy, cumulatively, “Excess Energy”) and

(ii) for the remainder of such Contract Year:

(A) for every MWh of Excess Delivered Energy, the price paid to Seller shall be the lesser of (I) or (II), where (I) is seventy-five percent (75%) of the Contract Price for such Contract Year times the TOD Factor for the applicable TOD Period and (II) is the hourly DA Price at the Delivery Point (the “Excess Delivered Energy Price”); and

(B) for every MWh of Excess Deemed Delivered Energy the price paid to Seller shall be the lesser of (I) and (II) where (I) is seventy-five percent (75%) of the Deemed Delivered Energy Price times the TOD Factor for the applicable TOD Period and (II) is the hourly DA Price at the Delivery Point (the “Excess Deemed Delivered Energy Price”).

Excess Delivered Energy Price_{hour} = the lesser of $([75\% \times Contract Price \times TOD Factor])$ OR DA Price_{hour})

Excess Deemed Delivered Energy Price_{hour} = the lesser of $([75\% \times Deemed Delivered Energy Price_{hour} \times TOD Factor])$ OR DA Price_{hour})

For the avoidance of doubt, Excess Energy shall not include any Surplus Delivered Energy.

(b) Monthly Payment for Excess Energy. Buyer shall pay Seller for Excess Energy in each hour (“Monthly Payment for Excess Energy”) the amount resulting from (i) multiplying the Excess Delivered Energy Price applicable to that hour times the Excess Delivered Energy for such hour plus (ii) the Excess Deemed Delivered Energy Price applicable to that hour times the amount of Excess Deemed Delivered Energy for such hour:

$$\text{Monthly Payment for Excess Energy} = \sum_{\text{hour}=1}^n (\text{Excess Delivered Energy Price}_{\text{hour}} \times \text{Excess Delivered Energy MWh}_{\text{hour}}) + (\text{Excess Deemed Delivered Energy Price}_{\text{hour}} \times \text{Excess Deemed Delivered Energy MWh}_{\text{hour}})]$$

4.6 CAISO Charges.

(a) Seller shall assume all liability and reimburse Buyer for any and all CAISO Penalties incurred by Buyer because of Seller's failure to perform any covenant or obligation set forth in this Agreement. Buyer shall assume all liability and reimburse Seller for any and all CAISO Penalties incurred by Seller as a result of Buyer's actions, including those resulting in a Buyer Curtailment Period.

(b) Buyer, as Scheduling Coordinator, shall (i) be responsible for all costs and charges assessed by the CAISO with respect to scheduling and Imbalance Energy, subject to Sections 4.6(a) and (c) and (ii) retain the credits and other payments received as a result of Energy from the Project delivered to the Integrated Forward Market or Real-Time Market, including revenues associated with CAISO dispatches. Seller and Buyer shall cooperate to minimize such charges and Uninstructed Imbalance Energy to the extent possible. Seller shall use commercially reasonable efforts to monitor imbalances and shall promptly notify Buyer as soon as possible after it becomes aware of any material imbalance that is occurring or has occurred. Such notification shall not alter Seller's and Buyer's respective responsibilities for payment for Imbalance Energy and costs and CAISO Penalties under this Agreement. Throughout the Delivery Term, Buyer shall be entitled to all Integrated Forward Market Load Uplift Obligation credits (as defined or required for MRTU under the CAISO Tariff) associated with the Energy generated from the Project.

(c) Forecasting Penalties.

(i) Subject to Force Majeure, in the event Seller does not in a given hour either (A) provide the access and information required in Section 3.1(l)(i); (B) comply with the installation, maintenance and repair requirements of Section 3.1(l)(iv); or (C) provide the forecast of Available Capacity required in Section 3.4[(b)][(c)](iii), and the sum of Energy Deviations for each of the Settlement Intervals in the given hour exceeded the Performance Tolerance Band defined below, then Seller will be responsible for Forecasting Penalties as set forth below.

(ii) The Performance Tolerance Band is three percent (3%) multiplied by Contract Capacity multiplied by one (1) hour.

(iii) Forecasting Penalties. The Forecasting Penalty shall be equal to the greater of (A) one hundred fifty percent (150%) of the Contract Price or (B) the absolute value of the Real-Time Price, in each case for each MWh of Energy Deviation outside the Performance Tolerance Band, or any portion thereof, in every hour for which Seller fails to meet the requirements in Section 4.6(c)(i). Settlement of Forecasting Penalties shall occur as set forth in Section 6.1 of this Agreement.

4.7 Additional Compensation.

(a) To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Products produced by the Project, including compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance of doubt, nothing herein precludes Seller from retaining credits related to Electric System Upgrades contemplated in Section 3.1(h)(i).

(b) To the extent that during the Delivery Term Seller (at a nominal or no cost to Seller) is exempt from, reimbursed for or receives any refunds, credits or benefits from CAISO for congestion charges or Congestion Revenue Rights (as defined in the CAISO Tariff), whether due to any adjustments in Congestion Revenue Rights or any Locational Marginal Price (as defined in the CAISO Tariff), market adjustments, invoice adjustments, or any other hedging instruments associated with the Product (collectively, any such refunds, credits or benefits are referred to as “Reductions”), then, at Buyer’s option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer less any costs incurred by Seller in connection with such Reductions; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions less any costs incurred by Seller in connection with such Reduction and Seller shall retain the Reductions.

[Section 4.7(c) below applies to Baseload Product only]

(c) Reliability Must-Run Contract and Capacity Procurement Mechanism Obligations. Seller with an existing RMR Contract will assign all of the proceeds of any RMR Contract affecting the Project to Buyer, except as provided below. Buyer shall retain all revenues from said RMR Contract, except for Monthly Surcharge Payments, the CAISO Repair Share, and Motoring Charges for Ancillary Services Dispatch (“Retained Revenues”), as each is defined in the applicable RMR Contract, all of which shall be remitted to Seller. If the CAISO and/or Seller wish to negotiate or renegotiate an RMR Contract or contract related to the Capacity Procurement Mechanism (as defined in the CAISO Tariff) or similar capacity commitment under the CAISO Tariff that pertains to Unit(s) under this Agreement as of the Execution Date of this Agreement, Seller shall include Buyer in any such negotiations. If Seller enters into any new RMR Contract or contract related to the Capacity Procurement Mechanism or similar capacity commitment affecting the Project, Seller shall assign the revenues from such contract, except for Retained Revenues, Monthly Surcharge Payments, the CAISO Repair Share, and Motoring Charges for Ancillary Services Dispatch to Buyer.

ARTICLE FIVE: EVENTS OF DEFAULT; PERFORMANCE REQUIREMENT; REMEDIES

5.1 Events of Default. An “Event of Default” shall mean,

(a) with respect to a Party that is subject to the Event of Default, the occurrence of any of the following:

(i) the failure to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within five (5) Business Days after written Notice is received by the Party failing to make such payment;

(ii) any representation or warranty made by such Party herein (A) is false or misleading in any material respect when made or (B) with respect to Section 10.2(b), becomes false or misleading in any material respect during the Delivery Term; provided that, if a change in Law occurs after the Execution Date that causes the representation and warranty made by Seller in Section 10.2(b) to be materially false or misleading, such breach of the representation or warranty in Section 10.2(b) shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law during the Delivery Term in order to make the representation and warranty no longer false or misleading;

(iii) the failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default), if such failure is not remedied within forty-five (45) days after Notice from the Non-Defaulting Party, which time period shall be

extended if the Defaulting Party is making diligent efforts to cure such failure to perform, provided that such extended period shall not exceed forty-five (45) additional days;

(iv) such Party becomes Bankrupt; or

(v) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.

(b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:

(i) if at any time during the Term of this Agreement, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project;

(ii) failure by Seller to meet the Guaranteed Commercial Operation Date, as extended by any Permitted Extensions due solely to Seller's inability to achieve, after the use of commercially reasonable efforts, by the Guaranteed Commercial Operation Date the permits necessary to construct or operate the Project, the physical interconnection of the Project to the CAISO or any necessary Electric System Upgrades;

(iii) failure by Seller for any reason other than those explicitly provided in Section 5.1(b)(ii) above and Section 11.1(a)(ii) to meet the Guaranteed Commercial Operation Date as may be extended by Permitted Extensions;

(iv) failure by Seller to satisfy the creditworthiness/collateral requirements agreed to pursuant to Sections 8.3, 8.4, or 8.5 of this Agreement and such failure is not cured within any applicable cure period;

(v) if Seller has provided and Buyer has accepted, a Guaranty to satisfy the collateral obligations under this Agreement, then with respect to such guarantor or the Guaranty, if Seller had not replaced the Guaranty in accordance with Section 8.6 within five (5) Business Days following Buyer's Notice of a request for replacement;

(vi) failure by Seller to achieve the Guaranteed Energy Production requirement as set forth in Section 3.1(e)(ii) of this Agreement as follows:

(A) after the one (1) year GEP Cure period Seller has failed to cure the GEP Failure and has failed to pay GEP Damages in the time period set forth in Section 3.1(e)(ii); or

(B) if, after any Performance Measurement Period the cumulative GEP Shortfall for all preceding Performance Measurement Periods occurring during the Delivery Term equals or exceeds two times the Contract Quantity (as may be adjusted pursuant to Sections 3.9(d) and 3.1(e)(ii)); provided, however, that if all or a portion of the GEP Shortfall during an applicable Performance Measurement Period is principally caused by a non-Force Majeure major equipment malfunction, breakdown, or failure resulting in a reduction of Energy production of the Project by at least fifty percent (50%) of the Contract Quantity in one or both years of the Performance Measurement Period, as applicable, and such malfunction, breakdown, or failure was not caused by Seller and could not

have been avoided through the exercise of Good Utility Practice, such failure shall be excluded from the calculation of the cumulative GEP Shortfall for purposes of this subsection.

(vii) Seller has not obtained the deliverability type selected in Section A (FCDS or PCDS) of the Cover Sheet by the Deliverability Finding Deadline.

(viii) Seller has not obtained the Partial Capacity Deliverability Status Amount identified in Section A of the Cover Sheet by the Deliverability Finding Deadline.

5.2 Remedies. If an Event of Default with respect to a Defaulting Party shall have occurred and is continuing, the other Party (“Non-Defaulting Party”) shall have the following rights:

(a) send Notice, designating a day, no earlier than the day such Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement (“Early Termination Date”) on which to (i) collect the Damage Payment (in the case of any Event of Default of Seller that arose at any time prior to the commencement of the Delivery Term, including an Event of Default of Seller pursuant to Section 5.1(b)(ii)), or (ii) collect the Termination Payment (in the case of any Event of Default of Seller that arose during the Delivery Term or in the case of any Event of Default of Buyer at any time);

(b) accelerate all amounts owing between the Parties, terminate the Transaction and end the Delivery Term effective as of the Early Termination Date;

(c) (i) collect the Damage Payment in accordance with Section 5.8 below, if the Event of Default arose under Section 5.1(b)(ii), or (ii) collect the Termination Payment for any other Event of Default;

(d) withhold any payments due to the Defaulting Party under this Agreement;

(e) suspend performance;

(f) exercise its rights pursuant to Section 8.3 to draw upon and retain Performance Assurance;

(g) demand payment for damages due to Buyer’s unexcused failure to take delivery or pay for Product; and

(h) exercise any other rights or remedies available at Law or in equity (including the collection of monetary damages) to the extent otherwise permitted under this Agreement.

Notwithstanding anything to the contrary contained herein, Seller may exercise the rights or remedies set forth in Sections 5.2(e), (g), and (h) without terminating this Agreement.

5.3 Calculation of Termination Payment.

(a) In the case where the Non-Defaulting Party is entitled to collect the Termination Payment pursuant to Section 5.2(a)(ii), the Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. If the Non-Defaulting Party uses the market price for a comparable transaction to

determine the Gains or Losses, such price should be determined by using the average of market quotations provided by three (3) or more bona fide unaffiliated market participants. If the number of available quotes is three, then the average of the three quotes shall be deemed to be the market price. Where a quote is in the form of bid and ask prices, the price that is to be used in the averaging is the midpoint between the bid and ask price. The quotes shall be obtained in a commercially reasonable manner and shall be: (i) for a like amount, (ii) of the same Product, (iii) at the same Delivery Point, and (iv) for the remaining Delivery Term. Regardless of the method chosen by the Non-Defaulting Party to calculate the Settlement Amount, the Settlement Amount must still be reasonable under the circumstances.

(b) If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of the Terminated Transaction, the Settlement Amount shall be zero.

(c) The Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount.

5.4 Notice of Payment of Termination Payment. As soon as practicable after a liquidation, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within ten (10) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article Twelve.

5.6 Rights And Remedies Are Cumulative. The rights and remedies of a Party pursuant to this Article Five shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

5.7 Duty to Mitigate. Buyer and Seller shall each have a duty to mitigate damages pursuant to this Agreement, and each shall use reasonable efforts to minimize any damages it may incur as a result of the other Party's non-performance of this Agreement, including with respect to termination of this Agreement.

5.8 Damage Payment for Failure to Achieve Guaranteed Dates. The Parties agree that the Damage Payment to be paid by Seller for an Event of Default arising under Section 5.1(b)(ii) associated with Seller's failure to achieve the Guaranteed Commercial Operation Date shall be considered liquidated damages and not a penalty, in accordance with Section 7.1.

ARTICLE SIX: PAYMENT

6.1 Billing and Payment; Remedies. On or about the tenth (10th) day of each month beginning with the second month of either the Test Period or the first Contract Year, whichever occurs first, and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO

metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from the CAISO, necessary to verify the accuracy or amount of any Reductions; and (c) an invoice, in the format specified by Buyer, covering the services provided in the preceding month determined in accordance with the applicable provisions of Article Four. Seller shall continue to provide to Buyer an invoice of CAISO charges, net any sums Buyer owes Seller under this Agreement, on or about the tenth (10th) day of each month until the date of the Final True-Up. Buyer shall pay the undisputed amount of such invoices less the amount of any RA Deficiency Amount and the amount of any Forecasting Penalties, as applicable on or before the later of the twenty-fifth (25th) day of each month and fifteen (15) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. During the Test Period, and for twelve (12) months following the Test Period only, Buyer shall provide to Seller a statement of the CAISO Revenues and any true-ups of CAISO Revenues from prior months and Buyer shall forward to Seller the CAISO Revenues from such statement, according to the invoice and payment schedules described in this Section 6.1. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Interest Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail.

6.2 Disputes and Adjustments of Invoices. In the event an invoice or portion thereof or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with Notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Subject to Section 3.6, in the event adjustments to payments are required as a result of inaccurate meter(s), Buyer shall use corrected measurements to recompute the amount due from Buyer to Seller for the Product delivered under the Transaction during the period of inaccuracy. The Parties agree to use good faith efforts to resolve the dispute or identify the adjustment as soon as possible. Upon resolution of the dispute or calculation of the adjustment, any required payment shall be made within fifteen (15) days of such resolution along with interest accrued at the Interest Rate from and including the due date, but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment, but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made; provided that, such waiver shall not apply to any adjustment or dispute related to Seller's performance under any applicable RMR Contract; and provided further that, any disputes with respect to a statement of CAISO Revenues is waived unless Seller notifies Buyer in accordance with this Section 6.2 within one (1) month after the last statement of CAISO Revenues is provided. If an invoice is not rendered within twelve (12) months after the close of the month during which performance under the Transaction occurred, the right to payment for such performance is waived.

ARTICLE SEVEN: LIMITATIONS

7.1 Limitation of Remedies, Liability and Damages. EXCEPT AS MAY OTHERWISE BE EXPRESSLY PROVIDED IN THIS AGREEMENT, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY

ARE WAIVED UNLESS EXPRESSLY HEREIN PROVIDED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 10.5 ("INDEMNITIES"), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF.

TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS

8.1 Buyer Financial Information. If requested by Seller, Buyer shall deliver to Seller (a) within one hundred twenty (120) days after the end of each fiscal year with respect to Buyer, a copy of Buyers's annual report containing audited consolidated financial statements for such fiscal year and (b) within sixty (60) days after the end of each of Buyer's first three fiscal quarters of each fiscal year, a copy of Buyers's quarterly report containing unaudited consolidated financial statements for each accounting period prepared in accordance with Generally Accepted Accounting Principles. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available on Buyer's website or on the SEC EDGAR information retrieval system; provided however, that should such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default, so long as such statements are provided to Seller upon their completion and filing with the SEC.

8.2 Seller Financial Information. If requested by Buyer, Seller shall deliver to Buyer (a) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's or Seller's guarantor's, if applicable, annual report containing unaudited consolidated financial statements for such fiscal year (or audited consolidated financial statements for such fiscal year if otherwise available) and (b) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of such Party's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with Generally Accepted Accounting Principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as such Party diligently pursues the preparation, certification and delivery of the statements.

[For purposes of Sections 8.3 and 8.4, existing ERRs to replace Project Development Security with Pre-Delivery Term Security]

8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent Seller delivers the Project Development Security, Delivery Term Security, or Term Security, as applicable, hereunder, Seller hereby grants to Buyer, as the secured party, a first priority security

interest in, and lien on (and right of setoff against), and assignment of, all such Performance Assurance posted with Buyer in the form of cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer. Within thirty (30) days of the delivery of the Project Development Security, Delivery Term Security, or Term Security, as applicable, Seller agrees to take such action as Buyer reasonably requires in order to perfect a first-priority security interest in, and lien on (and right of setoff against), such Performance Assurance and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, Buyer, as the Non-Defaulting Party, may do any one or more of the following: (a) exercise any of the rights and remedies of a secured party with respect to all Project Development Security, Delivery Term Security, or Term Security, as applicable, including any such rights and remedies under the Law then in effect; (b) exercise its rights of setoff against any and all property of Seller, as the Defaulting Party, in the possession of the Buyer or Buyer's agent; (c) draw on any outstanding Letter of Credit issued for its benefit; and (d) liquidate all Project Development Security, Delivery Term Security, or Term Security, as applicable, then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to the Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

8.4 Performance Assurance.

(a) Security. Seller agrees to deliver to Buyer collateral to secure its obligations under this Agreement, which Seller shall maintain in full force and effect for the period posted with Buyer, as follows:

(i) Project Development Security pursuant to this Section 8.4(a)(i) in the amount of \$60/kW for As-Available resources or \$90/kW for Baseload resources multiplied by the capacity of the Project as reflected in Section B of the Cover Sheet, within five (5) Business Days following the Effective Date of this Agreement until Seller posts Delivery Term Security pursuant to Section 8.4(a)(ii) below with Buyer.

(ii) Delivery Term Security pursuant to this Section 8.4(a)(ii) in the amount of five percent (5%) of expected total Project revenues from the date required pursuant to Section 3.1(c)(i) as a condition precedent to the Initial Energy Delivery Date until the end of the Term; provided that, with Buyer's consent, Seller may elect to apply the Project Development Security posted pursuant to Section 8.4(a)(i) toward the Delivery Term Security posted pursuant to this Section 8.4(a)(ii).

[For purposes of Section 8.4(a), GTSR Projects 3 MWs or less only need to comply with the following bracketed language.]

[(iii) Term Security pursuant to this Section 8.4(a)(iii) in the amount of \$20/kW for GTSR Projects with Contract Capacity of three (3) MW and under multiplied by the capacity of the Project as reflected in Section B of the Cover Sheet, within thirty (30) days following the Effective Date of this Agreement until the end of the Term.]

The amount of Performance Assurance required under this Agreement shall not be deemed a limitation of damages. Except as specifically provided for in this Section 8.4(a), Buyer acknowledges that Seller shall not be required to post any additional security.

(b) Use of Project Development Security or Term Security. Buyer shall be entitled to draw upon the Project Development Security or Term Security for any damages arising upon Buyer's declaration of an Early Termination Date.

(c) Termination of Project Development Security. If after the Initial Energy Delivery Date no damages are due and owing to Buyer under this Agreement, then Seller shall no longer be required to maintain the Project Development Security, and Buyer shall return to Seller the Project Development Security, less the amounts drawn in accordance with Section 8.4(b). The Project Development Security (or portion thereof) due to Seller shall be returned to Seller within five (5) Business Days of Seller's provision of the Delivery Term Security, as applicable unless, with Buyer's consent, Seller elects to apply the Project Development Security posted pursuant to Section 8.4(a)(i) toward the Delivery Term Security posted pursuant to Section 8.4(a)(ii), as applicable. ***[Section 8.4(c) does not apply to GTSR Projects 3 MWs or less.]***

(d) Payment and Transfer of Interest. Buyer shall pay interest on cash held as Project Development Security, Delivery Term Security or Term Security, as applicable, at the Interest Rate; provided that, the interest on Project Development Security shall be retained by Buyer until Seller posts the Delivery Term Security pursuant to Section 8.4(a)(ii). Upon Seller's posting of the Delivery Term Security, all accrued interest on the unused portion of Project Development Security shall be transferred from Buyer to Seller in the form of cash by wire transfer to the bank account specified under "Wire Transfer" in the Cover Sheet (Notices List). After Seller posts the Delivery Term Security or Term Security, Buyer shall transfer (as described in the preceding sentence) on or before each Interest Payment Date the Interest Amount due to Seller for such Delivery Term Security or Term Security.

(e) Return of Performance Assurance. Buyer shall return the unused portion of Project Development Security, Delivery Term Security or Term Security, as applicable, including the payment of any interest due thereon, pursuant to Section 8.4(d) above, to Seller promptly after the following has occurred: (i) the Term of the Agreement has ended, or subject to Section 8.3, an Early Termination Date has occurred, as applicable; and (ii) all payment obligations of the Seller arising under this Agreement, including payments pursuant to Section 4.6 ("CAISO Charges"), Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

(f) Adjustment of Security Amounts for Project Resizing. The required amount of Delivery Term Security or Term Security, as applicable, shall be proportionally and automatically adjusted in connection with any resizing of the Project under Section 3.9(d), and Buyer shall promptly return to Seller the unused portion of Delivery Term Security or Term Security in connection with any such adjustment.

8.5 Letter of Credit. Performance Assurance provided in the form of a Letter of Credit shall be subject to the following provisions:

(a) If Seller has provided a Letter of Credit pursuant to any of the applicable provisions in this Article Eight, then Seller shall renew or cause the renewal of each outstanding Letter of Credit on a timely basis in accordance with this Agreement.

(b) In the event the issuer of such Letter of Credit at any time (i) fails to maintain the requirements of an Eligible LC Bank or Letter of Credit, (ii) indicates its intent not to renew such Letter of Credit, or (iii) fails to honor Buyer's properly documented request to draw on such Letter of Credit, Seller shall cure such occurrence by complying with either (A) or (B) below in an amount equal to the outstanding Letter of Credit, and by completing the action within five (5) Business Days after the date of

Buyer's Notice to Seller of an occurrence listed in this subsection (Seller's compliance with either (A) or (B) below is considered the "Cure"):

(A) providing a substitute Letter of Credit that is issued by an Eligible LC Bank, other than the bank which is the subject of Buyer's Notice to Seller in Section 8.5(b) above, or

(B) posting cash.

If Seller fails to Cure or if such Letter of Credit expires or terminates without a full draw thereon by Buyer, or fails or ceases to be in full force and effect at any time that such Letter of Credit is required pursuant to the terms of this Agreement, then Seller shall have failed to meet the creditworthiness or collateral requirements of Article Eight.

(c) Notwithstanding the foregoing in Section 8.5(b), if, at any time, the issuer of such Letter of Credit has a Credit Rating on "credit watch" negative or developing by S&P, or is on Moody's "watch list" under review for downgrade or uncertain ratings action (either a "Watch"), then Buyer may make a demand to Seller by Notice ("LC Notice") to provide a substitute Letter of Credit that is issued by an Eligible LC Bank, other than the bank on a Watch ("Substitute Letter of Credit"). The Parties shall have thirty (30) Business Days from the LC Notice to negotiate a Substitute Letter of Credit ("Substitute Bank Period").

(i) If the Parties do not agree to a Substitute Letter of Credit by the end of the Substitute Bank Period, then Buyer shall provide Seller with Notice within five (5) Business Days following the expiration of the Substitute Bank Period ("Ineligible LC Bank Notice Period") that either:

(A) Buyer agrees to continue accepting the then currently outstanding Letter of Credit from the bank that is the subject of the LC Notice, but such bank shall no longer be an Eligible LC Bank ("Ineligible LC Bank") and Buyer will not accept future or renewals of Letters of Credit from the Ineligible LC Bank; or

(B) the bank that is the subject of the LC Notice is an Ineligible LC Bank and Seller shall then have thirty (30) days from the date of Buyer's Notice to Cure pursuant to Section 8.5(b) and, if Seller fails to Cure, then the last paragraph in Section 8.5(b) shall apply to Seller.

(ii) If the Parties have not agreed to a Substitute Letter of Credit and Buyer fails to provide a Notice during the Ineligible LC Bank Notice Period above, then Seller may continue providing the Letter of Credit posted immediately prior to the LC Notice.

(d) In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.

8.6 Guaranty. If at any time Seller's guarantor or Guaranty is no longer acceptable to Buyer in its sole discretion, Seller shall replace the Guaranty with Performance Assurance as provided herein. Within five (5) Business Days following Buyer's written request for replacement of the Guaranty, Seller shall deliver to Buyer replacement Performance Assurance in the form of a replacement Guaranty, Letter of Credit or cash in an amount equal to the applicable amount of the Guaranty issued pursuant to this Agreement. In the event Seller shall fail to provide replacement Performance Assurance to Buyer as required in the preceding sentence, then Buyer may declare an Event of Default pursuant to Section 5.1(b)(v) by providing Notice thereof to Seller in accordance with Section 5.2.

ARTICLE NINE: GOVERNMENTAL CHARGES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any Governmental Authority ("Governmental Charges") on or with respect to the Product or the Transaction arising at the Delivery Point, including ad valorem taxes and other taxes attributable to the Project, land, land rights or interests in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the Transaction from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law. A Party that is exempt at any time and for any reason from one or more Governmental Charges bears the risk that such exemption shall be lost or the benefit of such exemption reduced; and thus, in the event a Party's exemption is lost or reduced, each Party's responsibility with respect to such Governmental Charge shall be in accordance with the first four sentences of this Section.

ARTICLE TEN: MISCELLANEOUS

10.1 Recording. Unless a Party expressly objects to a recording at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording of all telephone conversations between Buyer's employees or representatives performing a Scheduling Coordinator function as provided in Section 3.4[(b)][(c)] and any representative of Seller. The Parties agree that any such recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.

10.2 Representations and Warranties.

(a) General Representations and Warranties. On the Execution Date, each Party represents and warrants to the other Party that:

(i) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(ii) it has all regulatory authorizations necessary for it to perform its obligations under this Agreement, except for (A) CPUC Approval in the case of Buyer, and (B) all permits necessary to install, operate and maintain the Project in the case of Seller;

(iii) it is a "forward contract merchant" within the meaning of the United States Bankruptcy Code (as in effect as of the Execution Date of this Agreement);

(iv) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Laws applicable to it;

(v) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;

(vi) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;

(vii) there is not pending or, to its knowledge, threatened against it or any of its Affiliates, any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(viii) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(ix) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and

(x) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

(b) 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.

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.

(c) The term "commercially reasonable efforts" as used in Section 10.2(b) of this Agreement shall not require Seller to incur Compliance Costs in excess of the Compliance Cost Cap.

10.3 Covenants.

(a) General Covenants. Each Party covenants that throughout the Delivery Term:

(i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all regulatory authorizations necessary for it to legally perform its obligations under this Agreement and the Transaction; and

(iii) it shall perform its obligations under this Agreement and the Transaction in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Law, rule, regulation, order or the like applicable to it.

(b) Seller Covenants.

(i) Seller covenants throughout the Delivery Term that it will take no action or permit any other person or entity (other than Buyer) to take any action that would impair in any way Buyer's ability to rely on the Project in order to satisfy its Resource Adequacy Requirements; and

(ii) Seller covenants that it shall comply with all CAISO Tariff requirements and/or Participating TO tariff requirements, as applicable, that are applicable to an Interconnection Customer (as defined in the CAISO Tariff or Participating TO's tariff, as applicable) and shall take any other necessary action, including payment of fees and submission of requests, applications or other documentation, to promote the completion of the Electric System Upgrades prior to the RA Start Date.

[The following clause (iii) applies to Existing Projects only:]

(iii) Seller covenants that the Initial Energy Delivery Date shall occur no later than the Expected Initial Energy Delivery Date specified in Section B of the Cover Sheet, except as provided pursuant to Section 11.1(a)(ii).

10.4 Title and Risk of Loss. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, Claims and encumbrances or any interest therein or thereto by any person or entity arising prior to or at the Delivery Point.

10.5 Indemnities.

(a) Indemnity by Seller. Seller shall release, indemnify and hold harmless Buyer or Buyers' respective directors, officers, agents, and representatives against and from any and all loss, Claims, actions or suits, including costs and attorney's fees resulting from, or arising out of or in any way connected with (i) the Product delivered under this Agreement to the Delivery Point, or (ii) Seller's operation and/or maintenance of the Project, including any loss, Claim, action or suit, for or on account of injury to, bodily or otherwise, or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such loss, Claim, action or suit as may be caused solely by the willful misconduct or gross negligence of Buyer, its Affiliates, or Buyers' and Affiliates' respective agents, employees, directors, or officers.

(b) Indemnity by Buyer. Buyer shall release, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, Claims, actions or suits, including costs and attorney's fees resulting from, or arising out of or in any way connected with the Product delivered by Seller under this Agreement after the Delivery Point, including any loss, Claim, action or suit, for or on account of injury to, bodily or otherwise, or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such loss, Claim, action or suit as may be caused solely by the willful misconduct or gross negligence of Seller, its Affiliates, or Seller's and Affiliates' respective agents, employees, directors or officers.

(c) No Dedication. Without limitation of each Party's obligations under Sections 10.5(a) and 10.5(b) herein, nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person or entity not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or the public, nor affect the status of Buyer as an independent public utility corporation or Seller as an independent individual or entity.

10.6 Assignment.

(a) General Assignment. Except as provided in Sections 10.6 (b) and (c), neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld so long as among other things (i) the assignee assumes the transferring Party's payment and performance obligations under this Agreement, (ii) the assignee agrees in writing to be bound by the terms and conditions hereof, (iii) the transferring Party delivers evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill the assigning Party's obligations hereunder and (iv) the transferring Party delivers such tax and enforceability assurance as the other Party may reasonably request. Notwithstanding the foregoing and except as provided in Section 10.6(b), consent shall not be required for an assignment of this Agreement where the assigning Party remains subject to liability or obligation under this Agreement, provided that (i) the assignee assumes the assigning Party's payment and performance obligations under this Agreement, (ii) the assignee agrees in writing to be bound by the terms and conditions hereof, and (iii) the assigning Party provides the other Party hereto with at least thirty (30) days' prior written notice of the assignment.

(b) Assignment to Financing Providers. Seller shall be permitted to assign this Agreement as collateral for any financing or refinancing of the Project with the prior written consent of the Buyer, which consent shall not be unreasonably withheld. If Buyer gives its consent, then such consent shall be in a form substantially similar to the Form of Consent to Assignment attached hereto as Appendix VII provided that (i) Buyer shall not be required to consent to any additional terms or conditions beyond those contained in Appendix VII, including extension of any cure periods or additional remedies for financing providers, and (ii) Seller shall be responsible at Buyer's request for Buyer's reasonable costs associated with the review, negotiation, execution and delivery of documents in connection with such assignment, attorneys' fees.

(c) Notice of Change in Control. Except in connection with public market transactions of the equity interests or capital stock of Seller or Seller's Affiliates', Seller shall provide Buyer notice of any direct change of control of Seller (whether voluntary or by operation of Law).

(d) Unauthorized Assignment. Any assignment or purported assignment in violation of this Section 10.6 is void.

10.7 Confidentiality.

(a) Neither Party shall disclose the non-public terms or conditions of this Agreement (the “Confidential Information”) to a third party, other than as follows:

(i) to the Party’s Affiliates, the Party’s or its Affiliates’ respective employees, lenders, investors, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential,

(ii) for disclosure to Buyer’s Procurement Review Group, as defined in CPUC Decision D. 02-08-071, subject to a confidentiality agreement,

(iii) to the CPUC under seal for purposes of review,

(iv) for disclosure of those certain terms specified in and pursuant to Section 10.8 of this Agreement;

(v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party (“Disclosing Party”), other than to those entities set forth in subsection (vi);

(vi) in order to comply with *any* applicable regulation, rule, or order of the CPUC, CEC, or the FERC;

(vii) to the extent necessary for Buyer to exercise its exclusive rights to the Product during the Delivery Term, including its rights to resell any or all portions of the Product as set forth in Section 3.1(a), other than the Contract Price;

(viii) for disclosure by Buyer to publicly release generation information of GTSR Projects, in the aggregate with three or more GTSR or RPS-eligible Projects on an annual basis; or

(ix) for disclosure by Buyer to CRS in connection with Buyer’s Green-e® Energy Certification of the GTSR Program.

(b) The Parties agree that the confidentiality provisions under this Section 10.7 are separate from, and shall not impair or modify any other confidentiality agreements that may be in place between the Parties or their Affiliates; provided however, that the confidentiality provisions of this Section 10.7 shall govern confidential treatment of all non-public information exchanged between the Parties related directly or indirectly to this Agreement as of and after the Effective Date.

10.8 RPS Confidentiality. Notwithstanding Section 10.7(a) of this Agreement, at any time on or after the date on which the Buyer makes its advice filing letter seeking CPUC Approval of this Agreement, either Party shall be permitted to disclose the following terms with respect to such Transaction: Party names, the number of bids per company, Project size, resource type, Delivery Term, Project location, Capacity Factor and Contract Capacity, Commercial Operation Date, Expected Initial Energy Delivery Date, Contract Quantity, Delivery Point, and the achievement of Project development Milestones.

10.9 Audit. Each Party has the right, at its sole expense and during normal working hours, after reasonable Notice, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement including

amounts of Delivered Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Interest Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived.

10.10 Insurance. Throughout the Term, Seller shall, at its sole cost and expense, obtain and maintain the following insurance coverages and be responsible for its subcontractors, including Seller's EPC Contractors, maintaining sufficient limits of the appropriate insurance coverage. The obligations of the Seller in this Section 10.10 constitute material obligations of the Agreement.

(a) Workers' Compensation and Employers' Liability.

(i) Workers' Compensation insurance indicating compliance with any applicable labor codes, acts, Laws or statutes, state or federal, where Seller performs Work.

(ii) Employers' Liability insurance shall not be less than one million dollars (\$1,000,000.00) for injury or death occurring as a result of each accident.

(b) Commercial General Liability.

(i) Coverage shall be at least as broad as the Insurance Services Office Commercial General Liability Coverage "occurrence" form, with no alterations to the coverage form.

(ii) The limit shall not be less than three million dollars (\$3,000,000.00) each occurrence for bodily injury, property damage, personal injury and products/completed operations. Defense costs shall be provided as an additional benefit and not included within the limits of liability. Coverage limits may be satisfied using an umbrella or excess liability policy or an Owners Contractors Protective (OPC) policy. Limits shall be on a per project basis.

(iii) Coverage shall:

(A) by "Additional Insured" endorsement add as insureds PG&E, its directors, officers, agents and employees with respect to liability arising out of the Work performed by or for the Seller. In the event the Commercial General Liability policy includes a "blanket endorsement by contract," the following language added to the certificate of insurance will satisfy Buyer's requirement: "PG&E, its directors, officers, agents and employees with respect to liability arising out of the Work performed by or for the Seller has been endorsed by blanket endorsement;"

(B) be endorsed (blanket or otherwise) to specify that the Seller's insurance is primary and that any insurance or self-insurance maintained by PG&E shall not contribute with it; and

(C) include a severability of interest clause.

(c) Business Auto.

(i) Coverage shall be at least as broad as the Insurance Services Office Business Auto Coverage form covering Automobile Liability, code 1 "any auto".

(ii) The limit shall not be less than one million dollars (\$1,000,000.00) each accident for bodily injury and property damage.

(iii) If scope of Work involves hauling hazardous materials, coverage shall be endorsed in accordance with Section 30 of the Motor Carrier Act of 1980 (Category 2) and the CA 99 48 endorsement.

(d) All Risk Property Insurance.

(i) During construction, an All Risk Property insurance policy including earthquake and flood (with sublimits as appropriate) shall be maintained during the course of Work being performed and include Start-up and testing for installed equipment and delayed opening coverage. Such policy shall include coverage for materials and equipment while under the care, custody and control of the Seller during the course of Work, at the Site, offsite or while in transit to the Site.

(e) Additional Insurance Requirements.

(i) Before commencing performance of the Work, Seller shall furnish Buyer with certificates of insurance and endorsements of all required insurance for Seller.

(ii) The documentation shall state that coverage shall not be cancelled except after thirty (30) days prior written Notice has been given to Buyer.

(iii) Buyer uses a third party vendor, EXIGIS,LLC to confirm and collect insurance documents. Certificates of insurance and endorsements shall be signed and submitted by a person authorized by that insurer to issue certificates of insurance and endorsements on its behalf, and submitted via email or fax to:

Certificate Holder:
Pacific Gas & Electric Company
c/o EXIGIS, LLC
support@exigis.com
Fax: 646-755-3327

(iv) Reviews of such insurance may be conducted by Buyer on an annual basis.

(v) Upon request, Seller shall furnish Buyer evidence of insurance for its subcontractors.

(f) Form And Content.

All policies or binders with respect to insurance maintained by Seller shall waive any right of subrogation of the insurers hereunder against Buyer, its officers, directors, employees, agents and representatives of each of them, and any right of the insurers to any setoff or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under such policy.

10.11 Access to Financial Information. The Parties agree that Generally Accepted Accounting Principles and SEC rules require Buyer to evaluate if Buyer must consolidate Seller's financial information. Buyer will require access to financial records and personnel to determine if consolidated

financial reporting is required. If Buyer determines that consolidation is required, Buyer shall require the following during every calendar quarter for the Term:

- (a) Complete financial statements and notes to financial statements; and
- (b) Financial schedules underlying the financial statements, all within fifteen (15) days after the end of each fiscal quarter.

Any information provided to Buyer pursuant to this Section 10.11 shall be considered confidential in accordance with the terms of this Agreement and shall only be disclosed on an aggregate basis with other similar entities for which Buyer has power purchase agreements. The information will only be used for financial statement purposes and shall not be otherwise shared with internal or external parties.

10.12 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.

10.13 General. Except to the extent provided for, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. The Parties acknowledge and agree that this Agreement is a “forward contract” (within the meaning of the Bankruptcy Code, as in effect as of the Execution Date). This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. Facsimile or PDF transmission will be the same as delivery of an original document; provided that at the request of either Party, the other Party will confirm facsimile or PDF signatures by signing and delivering an original document; provided, however, that the execution and delivery of this Agreement and its counterparts shall be subject to Section 10.15. This Agreement shall be binding on each Party’s successors and permitted assigns.

10.14 Severability. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.

10.15 Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

10.16 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to the FERC pursuant to the provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior written agreement in writing by both Parties, the standard of review for changes to the rates,

terms or conditions of service of this Agreement proposed by a Party, a non-Party, or the FERC acting *sua sponte* shall be the “public interest” standard of review set forth in *United States Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956).

ARTICLE ELEVEN: TERMINATION EVENT

11.1 Force Majeure Termination Event.

(a) Force Majeure Failure. Buyer shall have the right, but not the obligation, to terminate this Agreement after the occurrence of any of the following: (each constituting a “Force Majeure Failure”):

(i) If prior to the Delivery Term, Seller is unable, due solely to a Force Majeure event, to achieve the Commercial Operation Date or place the Project into Commercial Operation by the Guaranteed Commercial Operation Date, after applicable extensions or cure periods have run, as set forth in Section 3.9(c); provided that if a Force Majeure event is caused by a catastrophic natural disaster, then upon Buyer’s written request to Seller, Seller shall have not more than ninety (90) days from the date of such Force Majeure event to obtain a report from an independent, third party engineer stating whether the Project is capable of being repaired or replaced within such twenty-four (24) month period and Seller shall provide Buyer a copy of the engineer’s report, at no cost to Buyer; provided further that if such engineer’s report concludes that the Project is capable of being repaired or replaced within twenty-four (24) months from the date of the Seller provides the engineer’s report to Buyer and Seller undertakes and continues such repair or replacement with due diligence, then Buyer shall not have the right to terminate this Agreement pursuant to this Section 11.1(a) until the expiration of the repair or replacement period deemed necessary by the engineer’s report (which shall not exceed twenty-four (24) months), after which time, Buyer may terminate this Agreement unless the Project has been repaired or replaced, as applicable, and Seller has resumed and is satisfying its obligations under this Agreement.

(ii) If during the Delivery Term:

(A) the Project fails to deliver at least forty percent (40%) of the Contract Quantity to the Delivery Point for a period of twelve (12) consecutive rolling months following a Force Majeure event that materially and adversely impacts the Project and Buyer has provided Notice to Seller of such failure; provided that, if Seller within forty-five (45) days of receipt of Notice from Buyer, presents Buyer with a plan for mitigation of the effect of the Force Majeure within a period not to exceed six (6) months from the above-mentioned Notice date, which plan is commercially reasonable and satisfactory to Buyer, as evidenced by Buyer’s written acknowledgement of such plan, then Buyer shall not have the right to terminate this Agreement pursuant to this Section 11.1(a) until the expiration of the mitigation period deemed necessary by Seller to repair the Project (which shall not exceed six (6) months); provided that Seller diligently pursues such mitigation plan throughout the mitigation period, and after which time Buyer may terminate this Agreement unless the Project has been repaired, and the Seller has resumed and is satisfying all of its obligations under this Agreement; or

(B) the Project is destroyed or rendered inoperable by a Force Majeure event caused by a catastrophic natural disaster; provided that Seller shall have up to ninety (90) days following such Force Majeure event to obtain a report from an independent, third party engineer stating whether the Project is capable of being repaired or replaced no later than twenty-four (24) months from the date of the report and Seller shall provide Buyer with a copy of the engineer’s report, at no cost to Buyer; provided further that if such engineer’s report concludes that the Project is capable of being repaired or replaced within such twenty-four (24) month period and Seller undertakes and continues such

repair or replacement with due diligence, then Buyer shall not have the right to terminate this Agreement pursuant to this Section 11.1(a) until the expiration of the period deemed necessary by the engineer's report (which shall not exceed twenty-four (24) months), after which time, Buyer may terminate this Agreement unless the Project has been repaired or replaced, as applicable, and the Seller has resumed and is satisfying all of its obligations under this Agreement.

(b) Termination and Right of First Offer.

(i) If Buyer exercises its termination right in connection with the Force Majeure Failure, then the Agreement shall terminate without further liability of either Party to the other, effective upon the date set forth in Buyer's Notice of termination, subject to each Party's satisfaction of all of the final payment and survival obligations set forth in Sections 2.6(a) and (b). The Parties agree that for a period of three (3) years from the date on which Buyer Notifies Seller of termination due to the Force Majeure Failure ("Exclusivity Period"), neither Seller, its successors and assigns, nor its Affiliates shall enter into an obligation or agreement to sell or otherwise transfer any Products from the Project to any third party, unless Seller first offers, in writing, to sell to Buyer such Products from the Project on the same terms and conditions as this Agreement, subject to permitted modifications identified in subpart (ii) below, (the "First Offer") and Buyer either accepts or rejects such First Offer in accordance with the provisions herein.

(ii) If Buyer accepts the First Offer, Buyer shall Notify Seller within thirty (30) days of receipt of the First Offer subject to Buyer's management approval and CPUC Approval ("Buyer's Notice of First Offer Acceptance"), and then the Parties shall have not more than ninety (90) days from the date of Buyer's Notice of First Offer Acceptance to enter into a new power purchase agreement, in substantially the same form as this Agreement, or amend this Agreement, subject to CPUC Approval, if necessary; provided that the Contract Price may only be increased to reflect Seller's documented incremental costs in overcoming the Force Majeure event.

(iii) If Buyer rejects or fails to accept Seller's First Offer within thirty (30) days of receipt of such offer, Seller shall thereafter be free to sell or otherwise transfer, and to enter into agreements to sell or otherwise transfer, any Products from the Project to any third party, so long as the material terms and conditions of such sale or transfer are not more favorable to the third party than those of the First Offer to Buyer. If, during the Exclusivity Period, Seller desires to enter into an obligation or agreement with a third party, Seller shall deliver to Buyer a certificate of an authorized officer of Seller (A) summarizing the material terms and conditions of such agreement and (B) certifying that the proposed agreement with the third party will not provide Seller with a lower rate of return than that offered in the First Offer to Buyer. If Seller is unable to deliver such a certificate to Buyer, then Seller may not sell or otherwise transfer, or enter into an agreement to sell or otherwise transfer, the Products from the Project without first offering to sell or otherwise transfer such Products to Buyer on such more favorable terms and conditions (the "Revised Offer") in accordance with subpart (ii) above. If within thirty (30) days of receipt of Seller's Revised Offer the Buyer rejects, or fails to accept by Notice to Seller, the Revised Offer, then Seller will thereafter be free to sell or otherwise transfer, and to enter into agreements to sell or otherwise transfer, such Products from the Project to any third party on such terms and conditions as set forth in the certificate.

ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 Intent of the Parties. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement is the dispute resolution procedure set forth in this Article Twelve. The lone exception to the foregoing is that either Party may seek an injunction in Superior Court in San Francisco, California if such action is necessary to prevent irreparable harm, in

which case both Parties nonetheless will continue to pursue resolution of all other aspects of the dispute by means of this procedure.

12.2 Management Negotiations.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement by prompt negotiations between each Party's Authorized Representative, or such other person designated in writing as a representative of the Party (each a "Manager"). Either Manager may request a meeting, to be held in person or telephonically, to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place. If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies ("Executive(s)"), who shall have authority to settle the dispute. Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another written Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

(b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date to meet, which date shall not be greater than thirty (30) days from the Referral Date. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

(c) All communication and writing exchanged between the Parties in connection with these negotiations shall be deemed confidential and subject to the confidentiality provisions of this Agreement. All such communication and writing shall be inadmissible as evidence such that it cannot be used or referred to in any subsequent binding adjudicatory process between the Parties, whether with respect to this dispute or any other.

(d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the written request to meet, pursuant to Section 12.2(a), refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a), either Party may initiate mediation of the controversy or claim according to the terms of the following Section 12.3.

12.3 Arbitration Initiation. If the dispute cannot be resolved by negotiation as set forth in Section 12.2 above, then the Parties shall resolve such controversy through Arbitration. The Arbitration shall be adjudicated by one retired judge or justice from the JAMS panel. The Arbitration shall take place in San Francisco, California, and shall be administered by and in accordance with JAMS's Commercial Arbitration Rules ("Arbitration"). If the Parties cannot mutually agree on the arbitrator who will adjudicate the dispute, then JAMS shall provide the Parties with an arbitrator pursuant to its then-applicable Commercial Arbitration Rules. The arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. Either Party may initiate Arbitration by filing with the JAMS a notice of intent to arbitrate within one hundred and twenty (120) days of service of the Referral Date.

12.4 Arbitration Process. At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and Confidential

Information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

(a) Each of the Parties shall submit to the arbitrator, in accordance with a schedule set by the arbitrator, offers in the form of the award it considers the arbitrator should make. If the arbitrator requires the Parties to submit more than one such offer, the arbitrator shall designate a deadline by which time the Parties shall submit their last and best offer. In such proceedings the arbitrator shall be limited to awarding only one of the two “last and best” offers submitted, and shall not determine an alternative or compromise remedy.

(b) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.

(c) The arbitrator’s award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary. The California Superior Court of the City and County of San Francisco may enter judgment upon any award rendered by the arbitrator. The Parties are aware of the decision in *Advanced Micro Devices, Inc. v. Intel Corp.*, 9 Cal. 4th 362 (1994) and, except as modified by this Agreement, intend to limit the power of the arbitrator to that of a Superior Court judge enforcing California Law.

(d) The prevailing Party in this dispute resolution process is entitled to recover its costs and reasonable attorneys’ fees.

(e) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before him or her.

(f) Except as may be required by Law, neither a Party nor an arbitrator may disclose the existence, content, or results of any Arbitration hereunder without the prior written consent of both Parties.

ARTICLE THIRTEEN: NOTICES

Whenever this Agreement requires or permits delivery of a “Notice” (or requires a Party to “notify”), the Party with such right or obligation shall provide a written communication in the manner specified herein; provided, however, that notices of Outages or other Scheduling or dispatch information or requests, as provided in Appendix VI, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Notices may be sent by facsimile or e-mail. A Notice sent by facsimile transmission or e-mail will be recognized and shall be deemed received on the Business Day on which such Notice was transmitted if received before 5:00 p.m. (and if received after 5:00 p.m., on the next Business Day) and a Notice of overnight mail or courier shall be deemed to have been received two (2) Business Days after it was sent or such earlier time as is confirmed by the receiving Party. Either Party may periodically change any address, phone number, e-mail, website, or contact, including such information in Appendix VI and the “Notices List” in the Cover Sheet, to which Notice is to be given it by providing Notice of such change to the other Party.

SIGNATURES

Agreement Execution

In WITNESS WHEREOF, each Party has caused this Agreement to be duly executed by its authorized representative as of the dates provided below:

[SELLER, a (*include place of formation and business type*)]

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

Signature: _____ Signature: _____

Name: _____ Name: _____

Title: _____ Title: _____

Date: _____ Date: _____

APPENDIX I

FORM OF LETTER OF CREDIT

Issuing Bank Letterhead and Address

STANDBY LETTER OF CREDIT NO. XXXXXXXX

Date: [insert issue date]

Beneficiary: Pacific Gas and Electric Company
77 Beale Street, Mail Code B28L
San Francisco, CA 94105
Attention: Credit Risk Management

Applicant: [Insert name and address of Applicant]

Letter of Credit Amount: [insert amount]

Expiry Date: [insert expiry date]

Ladies and Gentlemen:

By order of **[insert name of Applicant]** (“Applicant”), we hereby issue in favor of Pacific Gas and Electric Company (the “Beneficiary”) our irrevocable standby letter of credit No. **[insert number of letter of credit]** (“Letter of Credit”), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ **[insert amount in figures followed by (amount in words)]** (“Letter of Credit Amount”). This Letter of Credit is available with **[insert name of issuing bank, and the city and state in which it is located]** by sight payment, at our offices located at the address stated below, effective immediately, and it will expire at our close of business on **[insert expiry date]** (the “Expiry Date”).

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

1. Beneficiary’s signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of Credit No. **[insert number]** and stating the amount of the demand; and

2. One of the following statements signed by an authorized representative or officer of Beneficiary:

A. “Pursuant to the terms of that certain **[insert name of the agreement]** (the “Agreement”), dated **[insert date of the Agreement]**, between Beneficiary and **[insert name of Seller under the Agreement]**, Beneficiary is entitled to draw under Letter of Credit No. **[insert number]** amounts owed by **[insert name of Seller under the Agreement]** under the Agreement; or

B. “Letter of Credit No. **[insert number]** will expire in thirty (30) days or less and **[insert name of Seller under the Agreement]** has not provided replacement security acceptable to Beneficiary.

Special Conditions:

1. Partial and multiple drawings under this Letter of Credit are allowed;
2. All banking charges associated with this Letter of Credit are for the account of the Applicant;
3. This Letter of Credit is not transferable; and
4. The Expiry Date of this Letter of Credit shall be automatically extended without a written amendment for a period of one year and on each successive Expiry Date, unless at least sixty (60) days before the then current Expiry Date, we notify you by registered mail or courier that we elect not to extend the Expiry Date of this Letter of Credit for such additional period.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at **[insert issuing bank's address for drawings]**.

All demands for payment shall be made by presentation of originals or copies of documents; or by facsimile transmission of documents to **[insert fax number]**, Attention: **[insert name of issuing bank's receiving department]**, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at **[insert phone number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit will be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision*, International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we will honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly.

The law of the State of New York shall apply to any matters not covered by the UCP 600.

For telephone assistance regarding this Letter of Credit, please contact us at **[insert number and any other necessary details]**.

Very truly yours,

[insert name of issuing bank]

By: _____
Authorized Signature

Name: **[print or type name]**

Title: _____

Exhibit A SIGHT DRAFT

TO
[INSERT NAME AND ADDRESS OF PAYING BANK]

AMOUNT: \$ _____ DATE: _____

AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF PACIFIC GAS AND ELECTRIC
COMPANY THE AMOUNT OF U.S.\$ _____ (_____ U.S. DOLLARS)

DRAWN UNDER [INSERT NAME OF ISSUING BANK] LETTER OF CREDIT NO. XXXXXX.

REMIT FUNDS AS FOLLOWS:

[INSERT PAYMENT INSTRUCTIONS]

DRAWER

BY: _____
NAME AND TITLE

APPENDIX II

INITIAL ENERGY DELIVERY DATE CONFIRMATION LETTER

In accordance with the terms of that certain Power Purchase Agreement dated _____ (“Agreement”) by and between _____ (“Buyer”) and _____ (“Seller”), this letter (“Initial Energy Delivery Date Confirmation Letter”) serves to document the Parties’ further agreement that (i) the Conditions Precedent to the occurrence of the Initial Energy Delivery Date have been satisfied, and (ii) Buyer has accepted delivery of the Product, as specified in the Agreement, as of this ____ day of _____, _____ (the “Initial Energy Delivery Date”). All capitalized terms not defined herein shall have the meaning set forth in the Agreement.

Seller represents to Buyer that it has been granted status as an [Exempt Wholesale Generator] [Qualifying Facility]. Additionally Seller provides the following FERC Tariff information for reference purposes only:

Tariff:

Dated:

Docket Number:

IN WITNESS WHEREOF, each Party has caused this Initial Energy Delivery Date Confirmation Letter to be duly executed by its authorized representative as of the date of last signature provided below:

[SELLER]

PACIFIC GAS AND ELECTRIC COMPANY

Signature: _____	Signature: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

APPENDIX III
FORM OF PROGRESS REPORT

Progress Report

of

("Seller")

provided to

Pacific Gas and Electric Company
("Buyer")

[Date]

Instructions.

Any capitalized terms used in this report which are not defined herein shall have the meaning ascribed to them in the Power Purchase Agreement by and between _____, (“Seller”) and Pacific Gas and Electric Company dated _____, (the “Agreement”).

Seller shall review the status of each Milestone of the construction schedule for the Project and Seller shall identify such matters referenced in clauses (i)-(v) below as known to Seller and which in Seller’s reasonable judgment are expected to adversely affect the schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that the Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

- (i) Any material matter or issue arising in connection with a Governmental Approval, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of a Law, actual or threatened opposition to the granting of a necessary Governmental Approval, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Units or related Project, attaining any Milestone, or obtaining any contemplated agreements with other parties which are necessary for attaining any Milestone or which otherwise reasonably could be expected to materially threaten Seller’s ability to attain any Milestone.
- (ii) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller’s business or prospects which reasonably could be expected to materially threaten financing of the Project, attainment of any Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Milestone or could otherwise reasonably be expected to materially threaten Seller’s ability to attain any Milestone;
- (iii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller’s ability to attain any Milestone;
- (iv) Any material change in the Seller’s schedule for initiating or completing any material aspect of Project;
- (v) The status of any matter or issue identified as outstanding in any prior Progress Report and any material change in the Seller’s proposed actions to remedy or overcome such matter or issue.

For guidance, each “overview” subsection shall include a summary of the status and progress of major activities associated with that section, whether planned, in progress, or completed, including relevant dates. Each “recent activities” subsection shall include details of activities during the previous month. Each “expected activities” subsection shall include a brief list of major activities planned for the current month.

Seller shall complete, certify, and deliver this form of Progress Report to [REDACTED], together with all attachments and exhibits, with copies of this report delivered to GCMTGroup@pge.com and [REDACTED].

1. Executive Summary

Please provide an overview of the Project, including technology, size, location, and ownership.

Please provide a brief chronological cumulative summary of the **major** activities completed for each of the following aspects of the Project. Include the date each item was added to the summary (*e.g., in Milestone section “January 2012 – notice of Construction Start Date milestone achieved was reported to PG&E on January 15, 2012” and in Construction section “January 2012 - Notice to Proceed was issued to EPC contractor on January 10, 2012”*):

- 1.1 Milestones**
- 1.2 Governmental Approvals**
- 1.3 Financing**
- 1.4 Property Acquisition**
- 1.5 Design and Engineering**
- 1.6 Major Equipment procurement**
- 1.7 Construction**
- 1.8 Interconnection**
- 1.9 Startup**

2. Milestones

In this section, please include information on each Milestone listed in the Cover Sheet, plus any additional significant milestones related to the project.

2.1 Milestone schedule

Please state the status and progress of each Milestone. Provide the date of completion of completed Milestone(s) and the expected date of completion of uncompleted Milestone(s). The expected date is the current best estimate, and may change from time to time as better information becomes available.

2.2 Remedial Action Plan (applicable if Seller fails to achieve a Milestone by the Milestone Date)

Please describe in detail any delays (actual or anticipated) beyond the scheduled Milestone dates. Describe the cause of the delay (*e.g., governmental approvals, financing, property acquisition, design activities, equipment procurement, project construction, interconnection, or any other factor*). Describe Seller’s Remedial Action Plan which shall include detailed plans to achieve the missed Milestone and subsequent Milestones.

3. Governmental Approvals

In this section, please include information on each of the Governmental Approvals required for the construction of the Units and the status thereof. List the applicable government agency, the type of application/approval requested, and the dates (expected or actual) of significant activity. Significant activity includes, but is not limited to, application submission, notice of complete application, notice of preparation, public hearing or comment period, draft documents and/or approvals, final documents and/or approvals, notice of determination, and/or issuance of permit. If the government agency maintains a website with information on the approval process for the Project, please provide a link.

3.1 Environmental Impact Report/Statement (EIR/EIS)

Please describe the environmental review process and each of the Governmental Approval(s) to be obtained for the Project. Provide the status and completion date (expected or actual) of each significant activity in the process.

3.2 Other Governmental Approvals

Please describe each of the other Governmental Approvals to be obtained for the Project. Provide the status and completion date (expected or actual) of each significant activity.

3.3 Recent Governmental Approval activities

Please describe in detail the Governmental Approval activities that occurred during the previous calendar month.

3.4 Expected Governmental Approval activities

Please list all Governmental Approval activities that are expected to be performed during the current calendar month.

3.5 Governmental Approval Notices received

Please attach to this Progress Report copies of any Notices related to Governmental Approval activities received during the previous calendar month.

4. Financing Activities

In this section, please include information on each separate phase of financing for the Project. Include information on debt, equity, and/or federal or state loans or grants.

4.1 Overview of financing activities

Please provide a summary of the status and progress of each major financing activity, including the date of execution of significant documents, and information on the expected timing of future significant activities.

4.2 Recent financing activities

Please describe in detail the financing activities that occurred during the previous calendar month.

4.3 Expected financing activities

Please list the financing activities that are expected to be performed during the current calendar month.

5. Property Acquisition Activities

In this section, please include information on property acquisition or site control activities for the Project.

5.1 Overview of property acquisition activities

Please provide a summary of the status and progress of each major property acquisition activity, including the date of execution of significant documents, and information on the expected timing of future significant activities.

5.2 Recent property acquisition activities

Please describe in detail the property acquisition activities that occurred during the previous calendar month.

5.3 Expected property acquisition activities

Please list the property acquisition activities that are expected to be performed during the current calendar month.

6. Design and Engineering Activities

In this section, please include information on the status of design and engineering for the Project.

6.1 Overview of design activities

Please provide a summary of the status and progress of each major design or engineering activity, including dates of completion of significant activities and expected timing of future activities.

6.2 Recent design activities

Please describe in detail the design activities that occurred during the previous calendar month.

6.3 Expected design activities

Please list the design activities that are expected to be performed during the current calendar month.

7. Major Equipment Procurement

In this section, please include information on all major equipment to be procured for all portions of the Project to be completed by Seller, including switchyards, substations and any other interconnection equipment, in addition to generating and auxiliary equipment.

7.1 Overview of major equipment procurement activities

For each type of equipment, list the number of each major item to be procured, the manufacturer, model number (if applicable), and rating. List the delivery schedule (expected or actual as applicable), breaking out the number of each item (to be) procured or delivered in each month.

7.2 Recent major equipment procurement activities

Please describe in detail the major equipment procurement activities that occurred during the previous calendar month.

7.3 Expected major equipment procurement activities

Please list the major equipment procurement activities that are expected to be performed during the current calendar month.

8. Construction Activities

In this section, please include information on the status of any construction-related factors that may affect the ability of the Project to deliver Product to the Buyer. Include information on the Project infrastructure, generating equipment, and major auxiliary equipment. Also include information on the substations, switchyards, gen-ties, telecommunications equipment or other interconnection facilities that are the direct responsibility of the Project.

8.1 Overview of major construction activities

Please provide a summary of the status and progress of each major construction activity for all portions of the Project, including a schedule showing expected or actual dates as applicable. Provide the name of the EPC Contractor, the date of execution of the EPC Contract, and the date of issuance of a full Notice to Proceed (or equivalent). For each major type of equipment, break out the number of each item (to be) installed and/or commissioned in each month.

8.2 Recent construction activities

Please describe in detail the construction activities that occurred during the previous calendar month.

8.3 Expected construction activities

Please list the interconnection activities that are expected to be performed during the current calendar month.

8.4 EPC Contractor Progress Report

Please attach a copy of the Progress Reports received during the previous calendar month from the EPC Contractor pursuant to the construction contract between Seller and EPC Contractor, certified by the EPC Contractor as being true and correct as of the date issued.

8.5 Look-ahead construction schedule

Please provide a look-ahead construction schedule covering at least three months.

8.6 OSHA Recordables

Please list all OSHA recordables from the previous calendar month.

8.7 Work stoppages

Please describe any work stoppage from the previous calendar month and its effect on the construction schedule.

9. Interconnection Activities

In this section, please include information on interconnection-related factors that may affect the ability of the Project to deliver Product to the Buyer. Include information on the status of interconnection studies, Interconnection Agreements, design and construction of Interconnection Facilities (e.g., substations, switchyards, gen-ties, system protection schemes, telecommunications equipment to the extent not already covered in the Project construction information in Section 8), Network Upgrades, and grid outage and/or interconnection schedules.

9.1 Overview of interconnection activities

Please provide a summary of the status and progress of each major interconnection activity including dates of completion of significant activities and expected timing of future activities.

9.2 Recent interconnection activities

Please describe in detail the interconnection activities that occurred during the previous calendar month.

9.3 Expected interconnection activities

Please list the interconnection activities that are expected to be performed during the current calendar month.

10. Startup

In this section, please include information on the status of activities related to preparation for Commercial Operation, including equipment testing, commissioning, release to operations, requirements of the grid operator, and any other activities that must be conducted before the Project may deliver Energy to the grid and/or declare Commercial Operation.

10.1 Overview of startup activities

Please provide a summary of the status and progress of each major startup activity including dates of completion of significant activities and expected timing of future activities.

10.2 Recent startup activities

Please describe in detail the startup activities that occurred during the previous calendar month.

10.3 Expected startup activities

Please list the startup activities that are expected to be performed during the current calendar month.

I, _____, on behalf of and as an authorized representative of _____, do hereby certify that any and all information contained in this Seller's Progress Report is true and accurate, and reflects, to the best of my knowledge, the current status of the construction of the Project as of the date specified below.

By:_____

Name:_____

Title:_____

Date:_____

APPENDIX IV

CONSTRUCTION START AND COMMERCIAL OPERATION CERTIFICATION FORMS AND PROCEDURES

Appendix IV-1: CONSTRUCTION START FORM OF CERTIFICATION

Appendix IV-2: COMMERCIAL OPERATION CERTIFICATION PROCEDURE

Attachment A Commercial Operation Form of Certification

Appendix IV-3: CAPACITY TEST PROCEDURE *[Use for Baseload Product only]*

[Use this Appendix IV—1 for BOTH As-Available and Baseload Products]

APPENDIX IV—1

**CONSTRUCTION START
FORM OF CERTIFICATION**

(Date)

Director Contract Management and Settlements
Pacific Gas and Electric Company
77 Beale Street, Mail Code N12E
San Francisco, CA 94105-1702

Re: Construction Start Date

This certification (“Certification”) of the Construction Start Date is delivered by _____ (“Seller”) to Pacific Gas and Electric Company (“Buyer”) in accordance with the terms of that certain Power Purchase Agreement dated _____ (“Agreement”) by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement. Seller hereby certifies and represents to Buyer all of the following:

- a) the EPC Contract related to the Project was executed on _____;
- b) [permitting agency name] _ issued grading permits to the Seller on _____; and
- c) the Notice to Proceed was issued on _____ (attached), and.
- d) mobilization at the Project Site commenced on _____.

IN WITNESS WHEREOF, the undersigned has executed this certificate on behalf of the Seller as of the ____ day of _____.

(Seller)

(Name)

(Position)

[LICENSED PROFESSIONAL ENGINEER]

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX IV-2

COMMERCIAL OPERATION CERTIFICATION PROCEDURE

In accordance with the terms of that certain Power Purchase Agreement dated _____, 20__ by and between Pacific Gas and Electric Company (“Buyer”) and _____ (“Seller”) to declare and recognize the Commercial Operation Date of the Project, Seller shall provide all of the documents set forth herein to Buyer as of the Commercial Operation Date. All terms not defined herein shall have the meaning set forth in the Agreement.

- (1) A certification from an authorized officer of Seller, substantially in the form of Attachment A to this Appendix IV-2, dated as of the Commercial Operation Date; and
- (2) A certificate or report from a Licensed Professional Engineer containing all of the following:
 - (a) A statement that the Project has achieved Mechanical Completion and the date on which it was achieved;
 - (b) A statement that the Project has successfully completed Project Testing and the dates on which Seller has accepted the test results; and
 - (c) A statement that the Project has achieved Substantial Completion and the date on which it was achieved.
- (3) Seller has provided to Buyer all documents which demonstrate that Seller has satisfied all of the CAISO agreement, interconnection agreement, and metering requirements in Sections 3.4 and 3.6 and has enabled Buyer to schedule the Facility with the CAISO for the Facility’s full unrestricted output.
- (4) Definitions.
 - (a) “Mechanical Completion” means that (i) all components and systems of the Project have been properly constructed, installed and functionally tested according to EPC Contract requirements in a safe and prudent manner that does not void any equipment or system warranties or violate any permits, approvals or Laws; (ii) the Project is ready for startup testing and commissioning; (iii) Seller has provided written acceptance to the EPC Contractor of mechanical completion as that term is specifically defined in the EPC Contract.
 - (b) “Project Testing Completion” means the written acceptance to the EPC Contractor of the completion of startup testing / commissioning, emissions testing (as applicable), and performance / acceptance / warranty testing (all such testing shall be collectively referred to as “Project Testing”) as required under the EPC Contract. The objectives of the tests shall be generally (i) to verify that the Project has been properly designed and constructed to meet the performance and operating requirements of the EPC Contract; (ii) to assure warranty coverage for equipment and systems over their warranty periods.
 - (c) “Substantial Completion” means when the following has occurred: (i) the Project is sufficiently complete, in accordance with the EPC Contract, that Seller has full and unrestricted use and benefit of the Project in the use for which it is intended; (ii) the Project has achieved Mechanical Completion; (iii) utilities are fully connected and operating normally; (iv) all necessary permits have been issued; (v) the Project is fully and properly interconnected and synchronized with the electrical grid and is capable of producing electricity in accordance with the EPC Contract; (vi) the operating manual has been approved by Seller; (vii) all work other than incidental corrective and incidental punch list work is complete; and (viii) Seller has provided written acceptance to the EPC Contractor of substantial completion as that term is specifically defined in the EPC Contract.

APPENDIX IV-2 –Attachment A

**COMMERCIAL OPERATION
FORM OF CERTIFICATION**

This certification (“Certification”) of Commercial Operation is delivered by _____ (“Seller”) to Pacific Gas and Electric Company (“Buyer”) in accordance with the terms of that certain Power Purchase Agreement dated _____ (“Agreement”) by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement.

Seller hereby certifies and represents to Buyer the following:

- (1) Mechanical Completion of the Project was achieved on ____ [DATE] ____.
- (2) Project Testing Completion successfully occurred on:

[Seller to indicate each type of Project Testing and date completed]

- (a) NAME OF TEST [DATE]
- (b) NAME OF TEST [DATE]
- (c) NAME OF TEST [DATE]
- (3) Substantial Completion of the Project was achieved on ____ [DATE] ____
- (4) Pre-parallel inspection of the Project was successfully completed on ____ [DATE] ____
- (5) Authorization to parallel the Project was obtained on ____ [DATE] ____
- (6) Telemetry / SCADA visibility with PTO and CAISO grid control and power dispatch centers was obtained for the Project on ____ [DATE] ____
- (7) Reliability Network Upgrades (as defined in the CAISO Tariff) were completed on the Project on ____ [DATE] ____
- (8) Power system stabilizer testing and calibration was obtained for the Project on ____ [DATE] ____
or, ☐ was not required
- (9) Full Capacity Deliverability Status Finding from CAISO was obtained for the Project on ____ [DATE] ____ or, ☐ was not required because the Project is Energy Only.
- (10) The Participating Transmission Provider or Distribution Provider has provided documentation supporting full unrestricted release for Commercial Operation by [Name of Participating Transmission Owner as appropriate] on ____ [DATE] ____.
- (11) The CAISO has provided notification supporting Commercial Operation, in accordance with the CAISO tariff on ____ [DATE] ____.

A certified statement of the Licensed Professional Engineer, attached hereto, has been provided as evidence of Commercial Operation of the Project to provide Product and meet, at a minimum, the requirements indicated herein.

EXECUTED by SELLER this _____ day of _____, 20__.

[Licensed Professional Engineer]

Signature: _____	Signature: _____
Name: _____	Name: _____
Title: _____	Title: _____
	Date: _____
License Number and LPE Stamp _____	

[Use for Baseload Product only]

APPENDIX IV-3

CAPACITY TEST PROCEDURE

[To be developed by Buyer and Seller by using CAISO test procedures for the applicable technology]

APPENDIX V

GEP DAMAGES CALCULATION

In accordance with the provisions in Section 3.1(e)(ii), GEP Damages means the liquidated damages payment due by Seller to Buyer, calculated as follows:

$$[(A-B) \times (C-D)]$$

Where:

A = the Guaranteed Energy Production for the Performance Measurement Period, in MWh

B = Sum of Delivered Energy plus Deemed Delivered Energy, if any, over the Performance Measurement Period, in MWh

C = Replacement price for the Performance Measurement Period, in \$/MWh, which is the sum of (a) the simple average of the Integrated Forward Market hourly price for all the hours in the Performance Measurement Period, as published by the CAISO, for the Existing Zone Generation Trading Hub (as defined in the CAISO Tariff), in which the PNode resides, plus (b) \$50/MWh

D = the unweighted Contract Price specified in the Cover Sheet for the Performance Measurement Period, in \$/MWh

The Parties agree that in the above calculation of GEP Damages, the result of “(C-D)” is less than \$20/MWh, the “(C-D)” will be replaced with \$20/MWh.

APPENDIX VI

NOTIFICATION REQUIREMENTS FOR AVAILABLE CAPACITY AND PROJECT OUTAGES

A. NOTIFICATION REQUIREMENTS FOR ROUTINE START-UP AND SHUTDOWNS

Prior to paralleling or after disconnecting from the electric system, ALWAYS follow your balancing authority rules and notify the applicable Participating Transmission Owner's (PTO) switching center

- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer's Real-Time Desk to advise of the intent to parallel before any Start-up.
- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer's Real-Time Desk after the unit has been paralleled and report the parallel time and intended unit output.
- Call the applicable Participant Transmission Owner's (PTO) switching center and Buyer's Real-Time Desk after any routine separation and report the separation time as well as the date and time estimate for return to service.

B. SUBMISSION OF AVAILABLE CAPACITY AND PLANNED OUTAGES

1. Submit information by posting to PG&E's approved web-based system, which is located at www.pge.com under "Business to Business," or alternative website designated by PG&E (both, "PG&E's Website"). Once directed to the appropriate page, enter the username and password assigned by PG&E's Bilateral Settlements Group. If PG&E's Website is unavailable, implement the procedures set forth below:
 - a. **For all email correspondence, enter the following in the email subject field: Delivery Date Range, Company Name, Contract Name, Email Purpose, Date Range (For example: "dd/mm/yyyy through dd/mm/yyyy, XYZ Company Project #2, Daily Forecast of Available Capacity,")**
 - b. For Annual Forecasts of Available Capacity, email to DAenergy@pge.com and Bilat_Settlements@pge.com.
 - c. For Monthly and Daily Forecasts of Available Capacity, email to DAenergy@pge.com.
 - d. For Daily Forecasts of Available Capacity after fourteen (14) hours before the WECC Preschedule Day, but before the CAISO deadline for submitting Schedules into the Day-Ahead Market, call primary phone (415) 973-1971 or backup phone (415) 973-4500. Also send email to DAenergy@pge.com.
 - e. For Hourly Forecasts of Available Capacity, call PG&E's Real Time Desk at (415) 973-4500 and email to RealTime@pge.com.

- f. For Planned Outages and Prolonged Outages, complete the specifics below and submit by email to MerchantOutages@pge.com, DAenergy@pge.com, ESMAoutageCoordinator@pge.com, and Bilat_Settlements@pge.com.
 - i. **Email subject field: Company Name, Contract Name, Email Purpose, Date Range (For example: “dd/mm/yyyy through dd/mm/yyyy, XYZ Company Project #2, Daily Forecast of Available Capacity”)**
 - ii. **Email body:**
 1. **Type of Outage: Planned Outage or Prolonged Outage**
 2. **Start Date and Start Time**
 3. **Estimated or Actual End Date and End Time for Outage**
 4. **Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted**
 5. **Text description of additional information as needed, including, but not limited to, changes to a Planned Outage or Prolonged Outage.**
 6. **Contact name: first and last name of the individual at the Unit to contact regarding the outage(s) at issue in the email.**

C. FORCED OUTAGE REPORTING

1. Forced Outages – Seller shall notify PG&E Merchant Generation desk verbally at (415) 973-4500 within ten (10) minutes of event or as soon as reasonably possible, after the safety of all personnel and securing of all facility equipment.
 - a. Verbal notification shall include time of forced outage, cause, current availability and estimated return date and time.
 - b. After verbally notifying PG&E Merchant Generation desk of the forced outage, Seller shall also put forth commercially reasonable efforts to notify PG&E Settlements via PG&E’s Website, as defined above.
 - c. If PG&E’s Website is unavailable, submit the following information via email to Bilat_Settlements@pge.com.
 - i. **Email subject field: Company Name, Contract Name, Email Purpose, Date Range (For example: “dd/mm/yyyy through dd/mm/yyyy, XYZ Company Project #2, Daily Forecast of Available Capacity”)**
 - ii. **Email body:**
 1. **Type of Outage: Forced Outage**
 2. **Start Date and Start Time**
 3. **Estimated or Actual End Date and End Time**

4. *Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted.*
5. *Text description of additional information as needed.*
6. *Primary and secondary causes of Forced Outage, including a detailed description of specific equipment involved and the nature of the problem or condition.*
7. *Equipment description and nature of work being performed. For generation outages, include NERC Generation Availability Data System (GADS) numbers (as available) that identify the specific equipment and type of work that affect restrictions. Include additional equipment designations as available.*
8. *Text description of additional information as needed, including, but not limited to, changes to a previously scheduled Outage, links/cross-references to related outage cards and log entries, outage classifications per the CAISO Tariff, etc.*
9. *Associated events, e.g. operation of Special Protection Schemes.*
10. *Impact on CAISO-controlled Grid.*

APPENDIX VII

FORM OF CONSENT TO ASSIGNMENT

CONSENT AND AGREEMENT

This CONSENT AND AGREEMENT (“Consent and Agreement”) is entered into as of [_____, 2____], between PACIFIC GAS AND ELECTRIC COMPANY (“PG&E”), and [_____] , as collateral agent (in such capacity, “Financing Provider”), for the benefit of various financial institutions (collectively, the “Secured Parties”) providing financing to [_____] (“Seller”). PG&E, Seller, and the Financing Provider shall each individually be referred to as a “Party” and collectively as the “Parties”.

Recitals

A. Pursuant to that certain Power Purchase Agreement dated as of _____, 2____ (as amended, modified, supplemented or restated from time to time, as including all related agreements, instruments and documents, collectively, the “Assigned Agreement”) between PG&E and Seller, PG&E has agreed to purchase energy from Seller.

B. The Secured Parties have provided, or have agreed to provide, to Seller financing (including a financing lease) pursuant to one or more agreements (the “Financing Documents”), and require that Financing Provider be provided certain rights with respect to the “Assigned Agreement” and the “Assigned Agreement Accounts,” each as defined below, in connection with such financing.

C. In consideration for the execution and delivery of the Assigned Agreement, PG&E has agreed to enter into this Consent and Agreement for the benefit of Seller.

Agreement

1. Definitions. Any capitalized term used but not defined herein shall have the meaning specified for such term in the Assigned Agreement.

2. Consent. Subject to the terms and conditions below, PG&E consents to and approves the pledge and assignment by Seller to Financing Provider pursuant to the Loan Agreement and/or Security Agreement of (a) the Assigned Agreement, and (b) the accounts, revenues and proceeds of the Assigned Agreement (collectively, the “Assigned Agreement Accounts”).

3. Limitations on Assignment. Financing Provider acknowledges and confirms that, notwithstanding any provision to the contrary under applicable law or in any Financing Document executed by Seller, Financing Provider shall not assume, sell or otherwise dispose of the Assigned Agreement (whether by foreclosure sale, conveyance in lieu of foreclosure or otherwise) unless, on or before the date of any such assumption, sale or disposition, Financing Provider or any third party, as the case may be, assuming, purchasing or otherwise acquiring the Assigned Agreement (a) cures any and all defaults of Seller under the Assigned Agreement which are capable of being cured and which are not personal to the Seller, (b) executes and delivers to PG&E a written assumption of all of Seller’s rights and obligations under the Assigned Agreement in form and substance reasonably satisfactory to PG&E, (c) otherwise satisfies and complies with all requirements of the Assigned Agreement, (d) provides such tax and enforceability assurance as PG&E may reasonably request, and (e) is a Permitted Transferee (as defined below). Financing Provider further acknowledges that the assignment of the Assigned Agreement and the Assigned Agreement Accounts is for security purposes only and that Financing Provider has no

rights under the Assigned Agreement or the Assigned Agreement Accounts to enforce the provisions of the Assigned Agreement or the Assigned Agreement Accounts unless and until an event of default has occurred and is continuing under the Financing Documents between Seller and Financing Provider (a “Financing Default”), in which case Financing Provider shall be entitled to all of the rights and benefits and subject to all of the obligations which Seller then has or may have under the Assigned Agreement to the same extent and in the same manner as if Financing Provider were an original party to the Assigned Agreement.

“Permitted Transferee” means any person or entity who is reasonably acceptable to PG&E. Financing Provider may from time to time, following the occurrence of a Financing Default, notify PG&E in writing of the identity of a proposed transferee of the Assigned Agreement, which proposed transferee may include Financing Provider, in connection with the enforcement of Financing Provider’s rights under the Financing Documents, and PG&E shall, within thirty (30) business days of its receipt of such written notice, confirm to Financing Provider whether or not such proposed transferee is a “Permitted Transferee” (together with a written statement of the reason(s) for any negative determination) it being understood that if PG&E shall fail to so respond within such thirty (30) business day period such proposed transferee shall be deemed to be a “Permitted Transferee”.

4. Cure Rights.

(a) Notice to Financing Provider by PG&E. PG&E shall, concurrently with the delivery of any notice of an event of default under the Assigned Agreement (each, an “Event of Default”) to Seller (a “Default Notice”), provide a copy of such Default Notice to Financing Provider pursuant to Section 9(a) of this Consent and Agreement. In addition, Seller shall provide a copy of the Default Notice to Financing Provider the next business day after receipt from PG&E, independent of any agreement of PG&E to deliver such Default Notice.

(b) Cure Period Available to Financing Provider Prior to Any Termination by PG&E. Upon the occurrence of an Event of Default, subject to (i) the expiration of the relevant cure periods provided to Seller under the Assigned Agreement, and (ii) Section 4(a) above, PG&E shall not terminate the Assigned Agreement unless it or Seller provides Financing Provider with notice of the Event of Default and affords Financing Provider an Additional Cure Period (as defined below) to cure such Event of Default. For purposes of this Agreement “Additional Cure Period” means (i) with respect to a monetary default, ten (10) days in addition to the cure period (if any) provided to Seller in the Assigned Agreement, and (ii) with respect to a non-monetary default, thirty (30) days in addition to the cure period (if any) provided to Seller in the Assigned Agreement.

(c) Failure by PG&E to Deliver Default Notice. If neither PG&E nor Seller delivers a Default Notice to Financing Provider as provided in Section 4(a), the Financing Provider’s applicable cure period shall begin on the date on which notice of an Event of Default is delivered to Financing Provider by either PG&E or Seller. Except for a delay in the commencement of the cure period for Financing Provider and a delay in PG&E’s ability to terminate the Assigned Agreement (in each case only if both PG&E and Seller fail to deliver notice of an Event of Default to Financing Provider), failure of PG&E to deliver any Default Notice shall not waive PG&E’s right to take any action under the Assigned Agreement and will not subject PG&E to any damages or liability for failure to provide such notice.

(d) Extension for Foreclosure Proceedings. If possession of the Project (as defined in the Assigned Agreement) is necessary for Financing Provider to cure an Event of Default and Financing Provider commences foreclosure proceedings against Seller within thirty (30) days of receiving notice of an Event of Default from PG&E or Seller, whichever is received first, Financing Provider shall be

allowed a reasonable additional period to complete such foreclosure proceedings, such period not to exceed ninety (90) days; provided, however, that Financing Provider shall provide a written notice to PG&E that it intends to commence foreclosure proceedings with respect to Seller within ten (10) business days of receiving a notice of such Event of Default from PG&E or Seller, whichever is received first. In the event Financing Provider succeeds to Seller's interest in the Project as a result of foreclosure proceedings, the Financing Provider or a purchaser or grantee pursuant to such foreclosure shall be subject to the requirements of Section 3 of this Consent and Agreement.

5. Setoffs and Deductions. Each of Seller and Financing Provider agrees that PG&E shall have the right to set off or deduct from payments due to Seller each and every amount due PG&E from Seller whether or not arising out of or in connection with the Assigned Agreement. Financing Provider further agrees that it takes the assignment for security purposes of the Assigned Agreement and the Assigned Agreement Accounts subject to any defenses or causes of action PG&E may have against Seller.

6. No Representation or Warranty. Seller and Financing Provider each recognizes and acknowledges that PG&E makes no representation or warranty, express or implied, that Seller has any right, title, or interest in the Assigned Agreement or as to the priority of the assignment for security purposes of the Assigned Agreement or the Assigned Agreement Accounts. Financing Provider is responsible for satisfying itself as to the existence and extent of Seller's right, title, and interest in the Assigned Agreement, and Financing Provider releases PG&E from any liability resulting from the assignment for security purposes of the Assigned Agreement and the Assigned Agreement Accounts.

7. Amendment to Assigned Agreement. Financing Provider acknowledges and agrees that PG&E may agree with Seller to modify or amend the Assigned Agreement, and that PG&E is not obligated to notify Financing Provider of any such amendment or modification to the Assigned Agreement. Financing Provider hereby releases PG&E from all liability arising out of or in connection with the making of any amendment or modification to the Assigned Agreement.

8. Payments under Assigned Agreement. PG&E shall make all payments due to Seller under the Assigned Agreement from and after the date hereof to [____], as depositary agent, to ABA No. [____], Account No. [____], and Seller hereby irrevocably consents to any and all such payments being made in such manner. Each of Seller, PG&E and Financing Provider agrees that each such payment by PG&E to such depositary agent of amounts due to Seller from PG&E under the Assigned Agreement shall satisfy PG&E's corresponding payment obligation under the Assigned Agreement.

9. Miscellaneous.

(a) Notices. All notices hereunder shall be in writing and shall be deemed received (i) at the close of business of the date of receipt, if delivered by hand or by facsimile or other electronic means, or (ii) when signed for by recipient, if sent registered or certified mail, postage prepaid, provided such notice was properly addressed to the appropriate address indicated on the signature page hereof or to such other address as a party may designate by prior written notice to the other parties, at the address set forth below:

If to Financing Provider:	
Name:	
Address:	
Attn:	
Telephone:	
Facsimile:	
Email:	

If to PG&E:	
Name:	
Address:	
Attn:	
Telephone:	
Facsimile:	
Email:	

(b) No Assignment. This Consent and Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of PG&E, and shall be binding on and inure to the benefit of the Financing Provider, the Secured Parties and their respective successors and permitted transferees and assigns under the loan agreement and/or security agreement.

(c) No Modification. This Consent and Agreement is neither a modification of nor an amendment to the Assigned Agreement.

(d) Choice of Law. The parties hereto agree that this Consent and Agreement shall be construed and interpreted in accordance with the laws of the State of California, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

(e) No Waiver. No term, covenant or condition hereof shall be deemed waived and no breach excused unless such waiver or excuse shall be in writing and signed by the party claimed to have so waived or excused.

(f) Counterparts. This Consent and Agreement may be executed in one or more duplicate counterparts, and when executed and delivered by all the parties listed below, shall constitute a single binding agreement.

(g) No Third Party Beneficiaries. There are no third party beneficiaries to this Consent and Agreement.

(h) Severability. The invalidity or unenforceability of any provision of this Consent and Agreement shall not affect the validity or enforceability of any other provision of this Consent and Agreement, which shall remain in full force and effect.

(i) Amendments. This Consent and Agreement may be modified, amended, or rescinded only by writing expressly referring to this Consent and Agreement and signed by all parties hereto.

IN WITNESS WHEREOF, each of PG&E and Financing Provider has duly executed this Consent and Agreement as of the date first written above.

PACIFIC GAS AND ELECTRIC COMPANY (PG&E)

By: _____
Name: _____
Title: _____

[_____]
(Financing Provider), as collateral agent

By: _____
Name: _____
Title: _____

ACKNOWLEDGEMENT

The undersigned hereby acknowledges the Consent and Agreement set forth above, makes the agreements set forth therein as applicable to Seller, including the obligation of Seller to provide a copy of any Default Notice it receives from PG&E to Financing Provider the next business day after receipt by Seller, and confirms that the Financing Provider identified above and the Secured Parties have provided or are providing financing to the undersigned.

[_____] [name of Seller]

By: _____
Name: _____
Title: _____

APPENDIX VIII

SELLER DOCUMENTATION CONDITION PRECEDENT

Seller shall provide to Buyer all of the following documentation prior to the Execution Date:

1. A copy of each of (A) the articles of incorporation, certificate of incorporation, operating agreement or similar applicable organizational document of Seller and (B) the by-laws or other similar document of Seller (collectively, “Charter Documents”) as in effect, or anticipated to be in effect, on the Execution Date.
2. A certificate signed by an authorized officer of Seller (who must be a different person than the officers listed in clause (C) below), dated no earlier than ten (10) Business Days prior to the Execution Date, certifying (A) that attached thereto is a true and complete copy of the Charter Documents of the Seller, as in effect at all times from the date on which the resolutions referred to in clause (B) below were adopted to and including the date of such certificate; (B) that attached thereto is a true and complete copy of resolutions duly adopted by the board of directors (or other equivalent body) or evidence of all corporate or limited liability company action, as the case may be, of Seller, authorizing the execution, delivery and performance of this Agreement, and that such resolutions have not been modified, rescinded or amended and are in full force and effect, and (C) as to the name, incumbency and specimen signature of each officer of Seller executing this Agreement.
3. A certificate from the jurisdiction of Seller’s incorporation or organization certifying that Seller is duly organized, validly existing and in good standing under the laws of such jurisdiction.
4. Evidence of Site control (e.g. lease with redacted price terms) satisfactory to Buyer.
5. Evidence of CEC Certification and Verification (pre-certification) satisfactory to Buyer.
6. A copy of the most recent financial statements (which may be unaudited) from Seller together with a certificate from the Chief Financial or equivalent officer of Seller, dated no earlier than ten (10) Business Days prior to the Execution Date, to the effect that, to the best of such officer’s knowledge, (A) such financial statements are true, complete and correct in all material respects and (B) there has been no material adverse change in the financial condition, operations, Properties, business or prospects of Seller since the date of such financial statements.
7. An executed Letter of Concurrence substantially in the form specified in Appendix XI.

[Appendix IX applies to As-Available Product only]

APPENDIX IX

FORM OF ACTUAL AVAILABILITY REPORT

Pursuant to Section 3.1(l)(i), Seller shall prepare an Actual Availability Report in accordance with the procedures described in this Appendix IX.

- (a) Availability Workbook. Seller shall (i) collect the measurement data, listed in (b) below, in one (1) or more Microsoft Excel Workbooks (the “Availability Workbook”) provided in a form and naming convention approved by Buyer and (ii) electronically send the Availability Workbook to an address provided by Buyer. The Actual Availability Report shall reflect the sum of the Settlement Interval Actual Available Capacity of all generators as measured by such generator’s internal turbine controller.
- (b) Log of Availability. The Availability Workbook shall be created on a single, dedicated Excel worksheet and shall be in the form of Attachment A to this Appendix IX.

APPENDIX IX

Attachment A

Form of Actual Availability Report

Seller's Actual Availability Report

All amounts are in MWs

<u>Settlement Interval No.</u>	<u>Date</u>	<u>HE1</u>	<u>HE2</u>	<u>HE3</u>	<u>HE4</u>	<u>HE5</u>	<u>HE6</u>	<u>HE7</u>	<u>HE8</u>	<u>HE9</u>	<u>HE10</u>	<u>HE11</u>	<u>HE12</u>	<u>HE13</u>	<u>HE14</u>	<u>HE15</u>	<u>HE16</u>	<u>HE17</u>	<u>HE18</u>	<u>HE19</u>	<u>HE20</u>	<u>HE21</u>	<u>HE22</u>	<u>HE23</u>	<u>HE24</u>
1	mm/dd/yyyy																								
2	mm/dd/yyyy																								
3	mm/dd/yyyy																								
4	mm/dd/yyyy																								
5	mm/dd/yyyy																								
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6	mm/dd/yyyy																								

Date/Time of Submittal

APPENDIX X

TELEMETRY PARAMETERS FOR WIND OR SOLAR FACILITY

Technology Type	Telemetry Parameters	Units
Solar Photovoltaic	Back Panel Temperature	°C
	Global Horizontal Irradiance	W/m ²
	Plane of Array Irradiance (If PV is fixed) Direct Normal Irradiance (If PV is Tracking)	W/m ²
	Wind Speed	m/s
	Peak Wind Speed (Within 1 minute)	m/s
	Wind Direction	Degrees
	Ambient Air Temperature	°C
	Dewpoint Air Temperature or Relative Humidity	°C
	Horizontal Visibility	m
	Precipitation (Rain Rate)	mm/hr
	Precipitation (Running 30 day total)	mm
	Barometric Pressure	Millibars or Hecto Pascals (hPa)
Solar Thermal or Solar Trough	Global Horizontal Irradiance	W/m ²
	Plane of Array Irradiance (If PV is fixed) Direct Normal Irradiance (If PV is Tracking)	W/m ²
	Wind Speed	m/s
	Peak Wind Speed (Within 1 minute)	m/s
	Wind Direction	Degrees
	Ambient Air Temperature	°C
	Dewpoint Air Temperature or Relative Humidity	°C
	Horizontal Visibility	m
	Precipitation (Rain Rate)	mm/hr
	Precipitation (Running 30 day total)	mm
	Barometric Pressure	Millibars or Hecto Pascals (hPa)
	Individual Tracking Assembly Angle Set Points (Solar Trackers Only)	Degrees
	Actual Tracking Assembly Angles (Solar Trackers Only)	Degrees
Wind	Wind Speed (measured at hub height)	m/s
	Peak Wind Speed (Within 1 minute, measured at hub height)	m/s
	Wind Direction	Degrees
	Wind Speed Standard Deviation	--
	Wind Direction Standard Deviation	--
	Barometric Pressure (measured at hub height)	Millibars or Hecto Pascals (hPa)
	Ambient Temperature (measured at hub height)	°C

APPENDIX XI

FORM OF LETTER OF CONCURRENCE

[Date]

[Name]

[Position]

[Company]

[Address]

Re: Letter of Concurrence Regarding Control of [Name] Facility

This letter sets forth the understanding of the degree of control exercised by Pacific Gas and Electric Company (“PG&E”) and [Company Name] with respect to [Facility Name (the “Facility”)] for the purposes of facilitating compliance with the requirements of the Federal Energy Regulatory Commission’s (“Commission”) Order No. 697.¹ Specifically, Order No. 697 requires that sellers filing an application for market-based rates, an updated market power analysis, or a required change in status report with regard to generation specify the party or parties they believe have control of the generation facility and extent to which each party holds control.² The Commission further requires that “a seller making such an affirmative statement seek a ‘letter of concurrence’ from other affected parties identifying the degree to which each party controls a facility and submit these letters with its filing.”³

PG&E and [Company Name] have executed a [power purchase and sale agreement (the “Agreement”)] with regard to the Facility. The Facility is a [XX] MW [description] facility located in [County, State]. Pursuant to the Agreement, [Company Name] maintains sole control of the Facility. [Company Name] agrees to provide subsequent Letters of Concurrence as may be necessary should any of the information provided herein change after the execution date of this letter.

If you concur with the statements made in this letter, please countersign the letter and send a copy to me.

Best regards,

[Author]

[Position]

Pacific Gas and Electric Company

¹ *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697 at P 186-187, FERC Stats. & Regs. ¶ 31,252, *clarified*, 121 FERC ¶ 61,260 (2007), *order on reh’g*, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 (2008), *clarified*, 124 FERC ¶ 61,055 (2008), *order on reh’g*, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), *order on reh’g*, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), *order on reh’g*, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305 (2010).

² Order No. 697 at P 186.

³ Order No. 697 at P 187.

Concurring Statement

On behalf of [Company Name], I am authorized to countersign this letter in concurrence with its content.

By: _____

[Name]

[Company Position]

[Company Name]

APPENDIX XII

SUPPLIER DIVERSITY PROGRAM

1. Seller shall provide Women-, Minority-, and service Disabled Veteran-, and Lesbian, Gay, Bisexual and/or Transgender-owned Business Enterprises, as verified pursuant to the procedures prescribed in Section 2 of CPUC General Order 156 (“WMDVLBE”), the maximum practicable opportunity to participate in the performance of work supporting Seller’s construction, operation, and maintenance of the Project. General Order 156 can be found on <http://www.cpuc.ca.gov/puc/documents/go.htm>.
2. Upon request from Buyer, Seller shall provide a separate “Supplier Plan” consisting of a specific list of suppliers that may participate in the performance of the work supporting the construction of the Project prior to the Commercial Operation Date and operation and maintenance of the Project after the Initial Energy Delivery Date, and a statement setting forth any additional efforts Seller will employ to increase the participation of WMDVLBE suppliers supporting the construction, operation and maintenance of the Project.
3. Upon request from Buyer, but no less than once per 365 day period of time between the Execution Date and the end of the Delivery Term, Seller shall report its spending with WMDVLBE suppliers per instructions to be provided by PG&E.
4. Targets.
 - a) Seller’s supplier diversity spending target for Work supporting the construction of the Project prior to the Commercial Operation Date is ____ percent (____%) as measured relative to Seller’s total expenditures on construction of the Project prior to the Commercial Operation Date, and;
 - b) Seller’s annual supplier diversity spending target for Work supporting the operation and maintenance of the Project after the Initial Energy Delivery Date is ____percent (____%) as measured relative to the net payments made by Buyer to Seller in each Contract Year.
5. Seller shall use good faith efforts in meeting the requirements of this Appendix XII which efforts shall be material obligations.

[Bracketed language applicable to WMDVLBE Sellers only]

6. Seller is a WMDVLBE, as certified by _____ [please identify the certifying agency].

APPENDIX XIII
PROJECT SPECIFICATIONS AND CONTRACT CAPACITY CALCULATION

I. PROJECT SPECIFICATIONS

“MVA” means megavolt ampere, the unit of apparent power.

“Nameplate Rated Output” means, with respect to an inverter or electric generator, the MVA that the manufacturer of the inverter or generator has designed such equipment to produce under normal operating conditions as specified by such manufacturer.

“Designated Power Factor” means, with respect to an inverter or electric generator, the power factor required to satisfy the portion of the Project’s reactive power requirements that are specified in *[please identify the applicable source, such as the PTO’s Interconnection Handbook, the CAISO’s Phase II Study, or the Generator Interconnection Agreement for the Project]* and are not being satisfied by other sources of reactive power within the Project.

“Nameplate Rated Power” means, with respect to an inverter or electric generator, the multiplication product of the Nameplate Rated Output and the Designated Power Factor for such inverter or generator, in MWs.

The project specifications shall consist of the following eleven (11) items (each item of which shall be a “Project Specification”). As provided in Section 3.1(g), Seller shall not make any change or modification to any Project Specification without Buyer’s prior written consent.

1. Project name:
2. Project Site name:
3. Project physical address:
4. Total number of Units at the Project:
5. Technology Type:
6. Interconnection Point of Project:
7. Service Territory of Project:
8. Substation:
9. Description of Units: *[delete inapplicable project types]*

• **For a Solar PV Project**

- a. For each type of inverter in the Project, specify in the table below the type, the number of inverters, the Nameplate Rated Output, the total Nameplate Rated Output, the Designated Power Factor, the Nameplate Rated Power and the total Nameplate Rated Power: *[add rows as needed]*

Inverter Type	Number of Inverters	Nameplate Rated Output (MVA)		Designated Power Factor	Nameplate Rated Power (MW)	
		Per Inverter	Total		Per Inverter	Total
Total		N/A			N/A	

- b. For each type of panel technology (e.g., multi-crystalline silicon, mono-crystalline silicon, thin-film CdTe, multi-junction, bifacial, concentrating, etc.) and each type of panel orientation (e.g., fixed-mount, tilt-angle, azimuth, single-axis tracker, double axis tracker, etc.) specify in the table below the technology, the type of orientation and the total DC rating at Standard Test Conditions: ***[add rows as needed]***

Panel Technology	Orientation	DC Rating at STC (MW _{DC})
Total	N/A	

“Standard Test Conditions” means, with respect to determining the nameplate DC rating of a solar PV panel in a factory flash test, an irradiance of 1,000 W/m², a panel temperature of 25°C, and an air mass of 1.5.

- **For a Solar Thermal Project**

- Specify the total area (square meters) of solar mirrors (or of apertures for parabolic mirrors):
- Specify the technology (e.g., parabolic trough, power tower, parabolic disk) and the storage medium and capacity, etc.:
- For each steam turbine, specify the rated conditions (MW rating, steam inlet temperature, steam inlet pressure, condensing temperature, mass flow rate):
- For each electric generator, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power:

- **For a Wind Project**

For each type of turbine, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power and the rated output wind speed (m/s):

- **For a Biomass or Geothermal Steam Project**

- For each steam turbine, specify the rated conditions (MW rating, steam inlet temperature, steam inlet pressure, condensing temperature, mass flow rate):
- For each electric generator, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power:

10. Description of Land:

The Site contains the following Assessor Parcel Numbers upon which the Project is located and as identified on the topographical map included in this Appendix XIII: [Insert Map]

11. Description of Interconnection Facilities and metering:

The Project will use the following Interconnection Facilities and metering configuration as identified in this one-line diagram included in this Appendix XIII:

[Insert One-Line Diagram for Interconnection Facilities and Metering]

12. Maps: The Site is identified in the following topographical map:

[INSERT MAP]

II. CONTRACT CAPACITY CALCULATION

The Contract Capacity specified in Section B of the Cover Sheet shall be the factor (A) minus each of the factors (B) through (E) provided below:

A	Sum of the Nameplate Rated Power of all inverters/generators	_____ MW
B	Calculated electrical losses from inverter/generator output terminals to Delivery Point (with all inverters/generators operating at Nameplate Rated Outputs)	_____ MW
C	Electrical Losses	_____ MW
D	Auxiliary and station loads coincident with inverters/generators operating at Nameplate Rated Outputs	_____ MW
E	Other factors (explain below)	_____ MW
F	Contract Capacity at the Delivery Point ($F = A - B - C - D - E$), which shall be the same as the MW amount specified for the Contract Capacity in Section B of the Cover Sheet	_____ MW

Inputs for the Nameplate Rated Power calculation:

Designated Power Factor:

	Leading	Lagging
Project power factor requirements	_____	_____
Seller's Designated Power Factor for inverters/generators	_____	_____

Power factor requirement is measured at (check one):

☐ inverter/generator terminals; ☐ Point of Interconnection; ☐ Other:_____

APPENDIX XIV

SECTION 3.3(e) LIQUIDATED DAMAGES CALCULATION

I. Equation and Formulas for Calculating RA Deficiency Amount

As provided in Section 3.3(e)(ii)(B), the formula for calculating the RA Deficiency Amount in a given RA Shortfall Month is:

$$\text{RA Deficiency Amount (\$/Month)} = \text{RA Value (\$/MW/Month)} \times \text{Expected Net Qualifying Capacity (MW)}$$

Where the:

- A. RA Value shall be \$4,010/MW/Month in calendar year 2016 and shall escalate at 2.5% per year for each succeeding calendar year; and
- B. Expected Net Qualifying Capacity for projects that selected Full Capacity Deliverability Status shall be the product of the Contract Capacity and the applicable monthly Qualifying Capacity factor in the table below; or
- C. Expected Net Qualifying Capacity for Projects seeking Partial Capacity Deliverability Status shall be the minimum of (a) the Expected Net Qualifying Capacity values as calculated in Section B above; or, (b) the product of the Contract Capacity and the Partial Capacity Deliverability Status Amount.

Table XIV-1 Monthly Qualifying Capacity Factor

Month	Biomass	Geothermal	Solar	Wind
Jan	70.61%	84.92%	0.79%	4.43%
Feb	72.50%	85.34%	6.62%	8.25%
March	70.79%	82.42%	15.12%	21.36%
April	62.13%	80.44%	60.43%	23.90%
May	65.57%	81.99%	64.13%	31.04%
June	73.55%	78.59%	80.03%	27.31%
July	76.32%	78.74%	80.39%	17.04%
Aug	75.31%	78.37%	74.86%	15.31%
Sept	74.67%	78.78%	73.05%	9.20%
Oct	71.80%	79.05%	48.29%	7.22%
Nov	70.86%	81.08%	2.49%	4.43%
Dec	74.25%	83.15%	1.33%	4.50%

II. Example of Calculation of the RA Deficiency Amount (for illustrative purposes only) if:

- RA Shortfall Month is June 2019
- Project is a solar system
- Contract Capacity is 20 MW
- RA Start Date is based on the Expected FCDS Date, which is January 1, 2019
- FCDS is achieved on August 14, 2019

RA Value (\$/MW/Month) = \$4,010.00, escalated at 2.5% per year for 3 years, from 2016 to 2019

$$\$4,010 \times (1.025)^3 = \$4,318/\text{MW/Month}.$$

Monthly Qualifying Capacity factor for a solar project in June is 86.74% (from table above).

Expected Net Qualifying Capacity =

$$\text{Contract Capacity (MW)} \times \text{monthly Qualifying Capacity factor} =$$

$$20 \text{ MW} \times 86.74\% = 17.35 \text{ MW}$$

RA Deficiency Amount (\$/Month) =

$$\text{RA Value ($/MW/Month)} \times \text{Expected Net Qualifying Capacity (MW)} =$$

$$\$4,318/\text{MW/Month} \times 17.35 \text{ MW} = \$74,917.30$$

In this example, the RA Shortfall Period is from January through October 2019. The calculations above would be performed and the result applied for each month in this RA Shortfall Period.

BIOENERGY PROCUREMENT RIDER AND AMENDMENT

FORM # _____

to the

**RENEWABLE AUCTION MECHANISM
POWER PURCHASE AGREEMENT**

FORM # _____

between

PACIFIC GAS AND ELECTRIC COMPANY

and

[NAME OF SELLER]

This Bioenergy Procurement Rider and Amendment (“Rider”) to the form Renewable Auction Mechanism Power Purchase Agreement (“RAM PPA”), which is attached hereto and incorporated by this reference, is entered into by and between Pacific Gas and Electric Company (“PG&E”) and ***[Name of Seller]*** (“Seller”). PG&E and Seller are hereinafter sometimes referred to individually as a “Party” and jointly as the “Parties”. Capitalized terms used herein and not otherwise defined in this Rider shall have the meanings ascribed to such terms in the RAM PPA.

AGREEMENT

All Section references herein are to the RAM PPA, and each sets forth the change or addition to that Section of the RAM PPA being made by this Rider. Unless specifically modified, superseded, or deleted by this Rider, the terms of the RAM PPA shall apply. To the extent of inconsistency between the RAM PPA and this Rider, this Rider shall govern.

All references to “Cover Sheet” shall refer to the Cover Sheet in Appendix D to this Rider, which supersedes the Cover Sheet in the RAM PPA.

I. Power Purchase Agreement Cover Sheet

The Cover Sheet to the Power Purchase Agreement is superseded with the Cover Sheet located in Appendix D to this Rider.

II. Definitions

Article I of the RAM PPA is amended to include or modify the following definitions:

“Amended Price” means the lesser of the Contract Price set forth in Section C of the Cover Sheet and \$89.23/MWh with \$89.23/MWh being the price identified in Resolution E-4770.

“Calendar Quarter” refers to one of the following time periods, as applicable: January 1– March 31; April 1- June 30; July 1 – September 30; or October 1 – December 31.

“Existing Project” means a Project that is not a New Project.

“Extension Option” has the meaning set forth in Section 3.1(c)(iii).

“Fuel Switching” has the meaning set forth in Section 3.10(d).

“Fuel Switching Effective Date” means that date that the Seller is switched from being paid the Contract Price to the Amended Price.

“Fuel Switching Notification” has the meaning set forth in Section 3.10(d).

“Fuel Use” means the woody biomass fuel used to generate electricity or thermal output to serve on-site load or for the generation of electricity to deliver Product to Buyer (in bone dry tons).

“High Hazard Fuel” means fuel sourced from within the geographic boundary of High Hazard Zones.

"High Hazard Fuel Requirements" has the meaning set forth in Section 3.10.

"High Hazard Fuel Use" means Fuel Use sourced from High Hazard Zones (in bone dry tons).

“High Hazard Fuel Use Percentage” means the ratio of High Hazard Fuel Use over total Fuel Use.

“High Hazard Zones” means areas designated as Tier 1 or Tier 2 high hazard zones for wildfire and falling trees by the California Department of Forestry and Fire Protection (“CAL FIRE”), the California Natural Resources Agency, the California Department of Transportation, the California Energy Commission, or other designated agency.

“Minimum Percentage” has the meaning set forth in Section 3.10(a)(i).

“New Project” means a Project to be developed on a greenfield site or a repowered facility as defined in the California Energy Commission’s Renewables Portfolio Standard Eligibility Guidebook.

“Registered Professional Forester” means a professional forester registered as such through the State of California’s Office of Professional Foresters Registration at the time of Quarterly Fuel Attestation submittal.

“Quarterly Fuel Attestation” has the meaning set forth in Section 3.10(b).

“Quarterly Fuel Attestation Deadline” has the meaning set forth in Section 3.10(b).

III. Conditions Precedent

Section 2.5(a) of the RAM PPA is amended to include the following condition precedent:

2.5(a)(v) CPUC Approval of this Rider.

IV. Failure to Meet All conditions Precedent

Section 2.5(b) is amended as follows:

Failure to Meet All Conditions Precedent. If the Conditions Precedent set forth in Sections 2.5(a)(ii), (iii), and (v) are not satisfied or waived in writing by both Parties on or before one hundred and eighty (180) days from the date on which Buyer files an advice letter submitting this Agreement to the CPUC, then either Party may terminate this Agreement effective upon receipt of Notice by the other Party. Neither Party shall have any obligation or liability to the other, including for a Termination Payment or otherwise, by reason of such termination.

V. Section 3.1(c)(i) is modified as follows:

The following sentence in the RAM PPA shall be amended as follows:

(V) for resources that are already under a contract as of the Execution Date, that existing contract must have expired by its own terms before the Initial Energy Delivery Date, or Seller must have terminated its existing contract and Buyer must have received any applicable termination payment or damages.

VI. A new Section 3.1(c)(iii) Extension Option is added:

If the Seller chooses the five-year Delivery Term with Extension Option, Buyer will have the right to extend the five-year Delivery Term of Existing Projects for one year at a time provided (A) the Governor of California’s State of Emergency remains in effect, and (B) subject to acceptance by Seller of up to a cumulative total of ten years.

No later than 90 days prior to the end of the Delivery Term, Buyer will provide Notice to Seller of its intent to extend the Delivery Term by one year. Upon provision of Notice by Buyer to Seller, Seller will have 30 days to inform Buyer whether it wishes to extend the Delivery Term by one year or allow the Agreement to terminate.

VII. Existing Section 3.9(c)(i) is superseded by the following:

The Parties agree time is of the essence in regards to the Agreement. As such, for New Projects, Seller shall have demonstrated Commercial Operation per the terms of Appendix IV-2 by the date that is no later than thirty-six (36) months after the Effective Date of this Agreement, except as such date may be extended on a day for day basis for not more than a cumulative six (6) month period for a Permitted Extension (the “Guaranteed Commercial Operation Date”). For Existing Projects, the Initial Energy Delivery Date must start between the Effective Date and one (1) year after the Effective Date, at Seller’s election in Section B(i)(a) of the Cover Sheet.

VIII. Existing Section 3.9(c)(v) shall be amended to remove the strikeout words:

Failure to Meet Guaranteed Commercial Operation Date. Seller shall cause the Project to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date; ~~provided, however, that the Commercial Operation Date shall not occur more than one hundred eighty (180) days prior to the Guaranteed Commercial Operation Date.~~ If the Commercial Operation Date occurs after the Guaranteed Commercial Operation Date after giving effect to Permitted Extensions or Force Majeure, then Buyer shall be entitled to declare an Event of Default and collect a Termination Payment pursuant to Article Five.

IX. A new Section 3.10 is added:

“3.10 High Hazard Fuel Terms

(a) High Hazard Fuel Requirements.

(i) Minimum Percentage. Project’s High Hazard Fuel Use must meet minimum percentages, as measured pursuant to Appendix B, shall be: 40% in 2016, 50% in 2017, 60% in 2018, 80% in 2019, and 80% for each subsequent year (“Minimum Percentage”). If the Seller elects a higher percentage High Hazard Fuel in the Cover Sheet, the percentages in the preceding are to be replaced with the percentages Seller entered in the Cover Sheet. The percentage of High Hazard Fuel Use will be demonstrated annually based on Seller’s Quarterly Fuel Attestations as calculated in Appendix B.

(ii) Failure to Meet Minimum Percentage. If the Seller has not met the Minimum Percentage at the end of any calendar year, Seller will be paid the Amended Price for such calendar year and for the remainder of the Delivery Term.

If Seller has elected Fuel Switching as described in Section 3.10(d), Buyer will assess whether Seller has met the Minimum Percentage for the period of the calendar year prior to Fuel Switching Effective Date, pursuant to Appendix C. If Seller has not elected Fuel Switching, Buyer will assess whether Seller has met the Minimum Percentage at the end of the calendar year.

If Seller has not met the Minimum Percentage for the period prior to Fuel Switching Effective Date, Buyer will adjust invoices for the calendar year to reflect the Amended Price as described in Section 6.3.

(b) Seller's Quarterly Attestations.

(i) Quarterly Submission. Seller shall have the burden of proving that it has met the requirements for the use of High Hazard Fuel set forth in part (a). To this end, Seller must submit to Buyer a Quarterly Fuel Attestation at the end of each Calendar Quarter in the form of Appendix A (including the Quarterly Fuel Usage Log in the format provided by Buyer) (collectively, the "Quarterly Fuel Attestation") to this Rider, setting forth, among other things, the specific designated High Hazard Zone(s) from which its High Hazard Fuel was harvested and the percentage of total High Hazard Fuel burned that came from each referenced High Hazard Zone(s). Seller must submit to Buyer's designated recipient its Quarterly Fuel Attestation with Seller's invoice for the prior month's delivery of Product. Each Quarterly Fuel Attestation must be fully complete, not materially modified, and signed by both an officer of the Seller and a Registered Professional Forester (RPF), who shall, by his or her signature, attest to the accuracy of the information set forth in Seller's Quarterly Fuel Attestation. Seller shall not be required to include in its Quarterly Fuel Attestation the signature and attestation of a RPF, if, prior to the due date for Quarterly Fuel Attestation, the Parties have agreed to an alternative provider of the Quarterly Fuel Attestation or alternative mechanism for Seller to prove it has met the requirement set forth in part (a). Such alternative provider or alternative mechanism for the Quarterly Fuel Attestation shall constitute the Quarterly Fuel Attestation for purposes of this Rider.

(ii) Failure to Submit.

- (A) If Seller has not submitted a Quarterly Fuel Attestation by January 30th of the next calendar year, or within 60 days after Fuel Switch Effective Date, Seller shall be deemed to have used zero percent (0%) High Hazard Fuel during such Calendar Quarter.
- (B) If Buyer does not receive Seller's Quarterly Attestation with its monthly invoice for the 3rd, 6th, 9th or 12th month of the calendar year, that month's invoice will be deemed incomplete, and non-payable by Buyer until the Quarterly Attestation is received.

(c) Buyer's Audit Right.

Buyer may reasonably rely on Seller's properly completed and timely submitted Quarterly Fuel Attestations as evidence of Seller's compliance with the applicable High Hazard Fuel requirements. However, Buyer has rights to audit Seller's records and conduct on-site visits, at the Seller's expense, to confirm Seller's compliance. Buyer's audit shall include but not be limited to Buyer's receipt and review of electronic copies of Seller's invoices for purchased fuel, including the location from which the fuel was harvested, and the records of each RPF who co-signed one or more of Seller's Quarterly Fuel Attestations.

(d) Seller Election of Fuel Switching or Termination

Seller may elect, by Notice to Buyer, a one-time irrevocable option to (i) operate at the Amended Price and be relieved of compliance with the Minimum Percentage requirement (“Fuel Switching”) or (ii) terminate this Rider and RAM PPA with the termination becoming effective five (5) Business Days after Seller’s Notice. To exercise the Fuel Switching option, Seller must send the Fuel Switching Notification to Buyer provided in Appendix C, at least 10 days prior to the end of the calendar month. The Fuel Switching Effective Date shall occur on the first of the month. If the Fuel Switching Notification is received in the last 10 days of a calendar month, the Fuel Switching Effective Date will be delayed to the first of the next month. Seller shall also provide a final Quarterly Fuel Attestation for the period prior to Fuel Switching Effective Date. Buyer will calculate Seller’s compliance with the Minimum Percentage requirement for the period of the calendar year prior to Fuel Switching Effective Date. If Seller has a 5 year Delivery Term (without Extension Option), and Seller has previously chosen to operate at the Amended Price, then Seller will have the option to operate at the Contract Price pursuant to Section 4.1(a).

(e) End to Governor’s Proclamation

If the Governor of California (or other appropriate regulatory body) declares an end to or terminates the State of Emergency, issued on October 30, 2015, related to drought impacts on tree mortality and bark beetle infestations, the Fuel Switching Effective Date will be the 1st of the month following 30 days after the declaration that the State of Emergency is over. Seller shall retain a one-time irrevocable option to either terminate this Rider and RAM PPA or operate at the Amended Price for the remainder of the Delivery Term.

(f) Event of Default and Termination.

Any representation or warranty made by Seller on the Quarterly Fuel Attestation that is false or misleading in any material respect when made shall be an Event of Default under Section 5.1(a)(ii) of the RAM PPA and shall be grounds for early termination of this Rider and the RAM PPA. Seller shall not have a right to cure this Event of Default.

X. Article Four

Section 4.1(a) “Contract Price” is superseded by the following:

The Contract Price for each MWh of Product as measured by Delivered Energy in each Contract Year is set forth in Section C of the Cover Sheet. If the Fuel Switching provision in Section 3.10(d) has been invoked, the Contract Price shall be revised to the Amended Price for the remainder of the Delivery Term.

If the State of Emergency remains in effect, and if Seller has chosen the 5 year Delivery Term (without Extension Option), Seller has a one-time option after the Fuel Switching Effective Date to revert from Amended Price to Contract Price. Seller must provide Quarterly Fuel Attestations for the prior calendar year by January 30 which demonstrates it has met the prior year’s Minimum Percentage. If Seller has demonstrated it has met the prior year’s Minimum Percentage, then payment for that calendar year will be adjusted as described in Section 6.4, and payments for the current and future years will be at the Contract Price as long as Project’s High Hazard Fuel Use meets Minimum Percentage requirements. If Seller fails to meet Minimum High Hazard Fuel Requirements and the

Fuel Switching provision in Section 3.10(d) has been invoked a second time, the Contract Price shall be revised to the Amended Price for the remainder of the Delivery Term.

Section 4.2 “TOD Periods” is superseded by the following:

TOD Periods. The time of delivery periods (“TOD Periods”) specified below shall be referenced by the following designations:

Monthly Period Definitions. The Monthly Periods are defined as follows:

Summer: July – September;

Winter: October – February; and

Spring: March – June.

TOD Period Definitions. The TOD Periods are defined as follows:

1. **Peak** = hours ending 17 - 22 (Pacific Prevailing Time (PPT)) all days in the applicable Monthly Period.
2. **Mid-Day** = hours ending 10 - 16 PPT all days in the applicable Monthly Period.
3. **Night** = hours ending 1 - 9, 23 and 24 PPT all days in the applicable Monthly Period.

Section 4.4(a) “TOD Factors” is superseded by the following:

RPS TOD FACTORS			
Period	Peak	Mid-Day	Night
Summer	1.479	0.604	1.087
Winter	1.399	0.718	1.122
Spring	1.270	0.280	1.040

XI. Section 6.1 is amended by adding the underlined text as follows:

6.1 Billing and Payment; Remedies. On or about the tenth (10th) day of each month beginning with the second month of either the Test Period or the first Contract Year, whichever occurs first, and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from the CAISO, necessary to verify the accuracy or amount of any Reductions; and (c) an invoice, in the format specified by Buyer, covering the services provided in the preceding month determined in

accordance with the applicable provisions of Article Four. Seller shall continue to provide to Buyer an invoice of CAISO charges, net any sums Buyer owes Seller under this Agreement, on or about the tenth (10th) day of each month until the date of the Final True-Up. Buyer shall pay the undisputed amount of such invoices less the amount of any RA Deficiency Amount and the amount of any Forecasting Penalties, as applicable on or before the later of the twenty-fifth (25th) day of each month and fifteen (15) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. During the Test Period, and for twelve (12) months following the Test Period only, Buyer shall provide to Seller a statement of the CAISO Revenues and any true-ups of CAISO Revenues from prior months and Buyer shall forward to Seller the CAISO Revenues from such statement, according to the invoice and payment schedules described in this Section 6.1. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Interest Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail. The invoice for the third, sixth, ninth and twelfth month of each calendar year must include the Quarterly Fuel Attestation. Failure to include the Quarterly Fuel Attestation will render the invoice incomplete and not payable by Buyer.

XII. A new Section 6.3 is added:

6.3 Adjustments of Invoices for Failure to Meet Minimum Percentage

If Seller fails to meet the minimum High Hazard Fuel requirement at the end of the calendar year, Buyer will adjust the Invoice for every month of the calendar year to reflect the Amended Price.

Buyer may reflect the adjustment by netting future invoice payments to Seller. If there are no future invoice payments, Buyer may deduct those amounts from Performance Assurance.

XIII. A new Section 6.4 is added:

6.4 Adjustments of Invoices after Fuel Switch Effective Date

If Seller meets the minimum High Hazard Fuel requirement at the end of a calendar year, after the Fuel Switching Effective Date (pursuant to Section 3.10(d), Seller will adjust the Invoice for every month of the calendar year to reflect the Contract Price (pursuant to Section 4.1(a)).

XIV. Performance Assurance

Section 8.4 (a) (ii) is superseded as follows:

Delivery Term Security pursuant to this Section 8.4 (a) (ii) in the amount of the higher of A) five percent (5%) of expected total Project revenues from the date required pursuant to Section 3.1(c)(i) as a condition precedent to the Initial Energy Delivery Date until the end of the Term and B) Annual Contract Quantity X (Contract Price-Amended Price)

Agreement Execution

In WITNESS WHEREOF, each Party has caused this Agreement to be duly executed by its authorized representative as of the dates provided below:

[SELLER, a (*include place of formation and business type*)]

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

Signature: _____

Name: _____

Title: _____

Date: _____

Signature: _____

Name: _____

Title: _____

Date: _____

APPENDIX A
FORM OF QUARTERLY FUEL ATTESTATION

[VIA ELECTRONIC SUBMISSION]
[Sellers Letterhead]

[Date]

PG&E
Attn:
Street Address
City, State Zip

Subject: Bioenergy Renewable Auction Mechanism Power Purchase Agreement (“BioRAM PPA”) by and between PG&E and *[Insert Seller’s full legal name]*, a *[Insert Seller’s form of entity and state of registration]* (“Seller”) – Quarterly Fuel Attestation

Dear Sir or Madam:

Pursuant to Section 3.10(b)(i) of the BioRAM PPA, Seller submits to PG&E this Quarterly Fuel Attestation for the Calendar Quarter ended *[Date]*. Seller hereby represents and warrants that:

1. All sources of fuel used to generate Product are included in the Quarterly Fuel Use log and meets the definition of Fuel Use.
2. The percentage of High Hazard Fuel Use during the Calendar Quarter is *[insert percentage]*.

Fuel Use during the Calendar Quarter is documented in the attached Microsoft Excel spreadsheet (“Quarterly Fuel Use Log”), using the template provided by Buyer. Buyer may make reasonable changes to the template to accommodate additional information on High Hazard Fuel that allow Buyer to identify work in High Hazard Zones provided by CAL FIRE or other agencies

Capitalized terms used but not otherwise defined in this letter have the meanings set forth in the BioRAM PPA.

Very truly yours,

	Seller	Registered Professional Forester <i>[or alternative provider pursuant to Section 3.10(b)(i)]</i>
Print Name		
Signature		
Title		
Date		

APPENDIX B

HIGH HAZARD FUEL USE CALCULATION

No later than March 30th of each year in the Delivery Term following the Initial Energy Delivery Date, Buyer shall determine the Project's High Hazard Fuel Use percentage for the preceding calendar year using the following formula:

$$\frac{\sum_{i=1}^4 Q_i * D_i}{\sum_{i=1}^4 D_i}$$

Q_i =the percentage of High Hazard Fuel Use during the Calendar Quarter during the period when High Hazard Fuel Requirements are in effect

D_i = the number of days in the Calendar Quarter when High Hazard Fuel Requirements are in effect

If Buyer has not received a Quarterly Attestation for any quarter for the previous calendar year by January 30th, Buyer will assume zero % High Hazard Fuel use for that quarter.

If Seller fails to meet its Minimum Percentage, Buyer will adjust all payments made during the previous calendar year using the Amended Price, for the period prior to the Fuel Switching Effective Date.

APPENDIX C
FUEL SWITCHING NOTIFICATION

[VIA ELECTRONIC SUBMISSION]
[Sellers Letterhead]

[Date]

PG&E

Attn:

Street Address

City, State Zip

Subject: Bioenergy Renewable Auction Mechanism Power Purchase Agreement
("BioRAM PPA") by and between PG&E and *[Insert Seller's full legal name]*, a *[Insert Seller's form of entity and state of registration]* ("Seller") – Fuel Switching Notification

In accordance with the terms of that certain Power Purchase Agreement dated _____ ("Agreement") by and between _____ ("Buyer") and _____ ("Seller"), this letter ("Fuel Switching Notification") serves to document the Parties' further recognition that Seller is exercising the Fuel Switching provision pursuant to Section 3.10 (d). All capitalized terms not defined herein shall have the meaning set forth in the Agreement.

Seller's Contract Price is amended to the Amended Price as of the Fuel Switching Effective Date for the remainder of the Delivery Term, as may be extended for Existing Projects pursuant to Section 3.1(c)(iii). The following provisions of the Bioenergy Procurement Rider And Amendment are no longer required of Seller: 3.10(a)(b)(c)(e), Appendix A and Appendix B.

[SELLER]

Signature: _____

Name: _____

Title: _____

Date: _____

APPENDIX D
POWER PURCHASE AGREEMENT COVER SHEET

This Power Purchase Agreement (“Agreement”) is entered into between Pacific Gas and Electric Company, a California corporation (“Buyer” or “PG&E”), and _____
[insert name of Seller], a _____
[include place of formation and business type] (“Seller”), as of the Execution Date. The information contained in this Cover Sheet shall be completed by Seller and incorporated into the Agreement.

A. Transaction Type

Seller may not modify the Transaction Type designated in this Part A of the Cover Sheet at any time after the Execution Date.

Product: ☒ Baseload, specifically, woody biomass facilities only

Annual High Hazard Fuel Percentage: The Seller is contractually bound at a minimum, to the percentages designated in the Resolution and defined in Section 3.10(a)(i). If Seller selects a higher percentage, these percentages will replace the Minimum Percentage values provided in Section 3.10(a)(i). The Project shall achieve High Hazard Fuel Use according to the following percentages.

- ☐ Minimum Percentage.
- ☐ Higher Percentage (Note, selecting this option does not guarantee that the facility will be awarded a contract. The facility shall be given preference only in relation to facilities that have a similar Least Cost Best Fit value).

Calendar Year	Minimum Percentage ¹	Seller’s Higher Percentage ²
2016	40%	
2017	50%	
2018	60%	
2019 and beyond	80%	

Deliverability:

- ☐ Energy Only Status

¹ CPUC Resolution E-4770, page 5

² Ibid

- ☐ Partial Capacity Deliverability Status (“PCDS”)
 - a) If PCDS is selected, provide the Expected PCDS Date, or the date the Project received a PCDS finding if already received:
_____ (mm/dd/yyyy);
 - b) The Partial Capacity Deliverability Status Amount the Project will obtain is _____MW.
- ☐ Full Capacity Deliverability Status (“FCDS”)
 - a) If FCDS is selected, provide the Expected FCDS Date, or the date the Project received a FCDS finding if already received:
_____ (mm/dd/yyyy).

Seller shall elect one of the following types of transactions pursuant to Section 3.1(b) of the Agreement:

- ☐ Full Buy/Sell
- ☐ Excess Sale

Seller shall elect one of the following Delivery Terms:

- ☐ five (5) Contract Years
- ☐ five (5) Contract Years with Extension Option
- ☐ ten (10) Contract Years
- ☐ fifteen (15) Contract Years
- ☐ twenty (20) Contract Years

B. Project Description Including Description of Site

Contract Capacity: [_____] MW ***[Provide the maximum capacity to be made available to PG&E pursuant to the transaction, which in the case of an Excess Sale transaction, may be less than the maximum capacity of the Project]***

(i) Project Development:

(a) The Project is an:

☐ Existing Project

(A) The date on which the Expected Initial Energy Delivery Date of the Project is expected (which shall be no later than 1 (one) year after the Effective Date) is:

☐ New Project

(A) The date on which the Commercial Operation Date of the Project is expected (must be no later than the Guaranteed Commercial Operation Date):

(B) The Expected Construction Start Date of the Project:

(b) Project development Milestone schedule *[to be completed by Buyer and Seller. Insert additional rows if necessary]:*

Identify Milestone	Date for Completion

(ii) Supplier Diversity. For the purpose of Section 4 of the Supplier Diversity Program obligation set forth in Appendix XII of this Agreement, Seller's supplier diversity spend target for work supporting the Project is ____%.

C. Contract Price

The Contract Price for each MWh of Product as measured by Delivered Energy in each Contract Year and the price for Deemed Delivered Energy in each Contract Year shall be as follows:

Contract Year	Contract Price (\$/MWh)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	

Contract Year	Contract Price (\$/MWh)
20	

D. Delivery Term Contract Quantity Schedule

Length of Delivery Term (in Contract Years):

Contract Year	Contract Quantity (MWh)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

E. Collateral (as described in the RAM Protocol Agreement, under Section V.C. RAM PPA Terms and Conditions)

- Project Development Security (provide dollar amount)

Dollar Amount: \$ _____

- Cash, or
- Letter of Credit

- Delivery Term Security (provide dollar amount)

Dollar Amount: \$ _____

- Cash, or
- Letter of Credit

F. Buyer Bid Curtailment and Buyer Curtailment Orders.

Operational characteristics of the Project for Buyer Bid Curtailment and Buyer Curtailment Orders are listed below. Buyer, as the Scheduling Coordinator, may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project. In addition, Seller agrees to coordinate with Buyer or Third-Party SC, as applicable, to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are based on the true physical characteristics of the resource.

- PMax of the Project: ____MW
- Minimum operating capacity: ____MW
- Ramp Rate: ____MW/Minute
- Maximum number of Start-ups per calendar day, month, year (if any such operational limitations exist): ____
- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

Other Requirements:

- Maximum number of hours annually for Buyer Curtailment Periods: unlimited hours
- The Project will be capable of receiving and responding to all Dispatch Instruction in accordance with Section 3.1(q).
- Start-Up Time (if applicable): ____Minutes
- Minimum Run Time after Start-Up (if applicable): ____Minutes
- Minimum Down Time after Shut-Down (if applicable): ____Minutes

Note: *Sellers should enter the maximum flexibility the Project can offer given the operational constraints of the technology.*

G. Damage Payment (as described under Damage Payment definition in Section 1.60)

Dollar amount: \$_____

H. Notices List

Name: ***[Seller's Name], a [include place of formation and business type]*** ("Seller")

All Notices: ***[Seller to complete]***

Delivery Address:

Street:

City:

State:

Zip:

Name: Pacific Gas and Electric Company, a California corporation
("Buyer" or "PG&E")

All Notices:

Delivery Address:

77 Beale Street, Mail Code N12E
San Francisco, CA 94105-1702

Mail Address: (if different from above)

Attn:

Phone:

Facsimile:

Email:

DUNS:

Federal Tax ID Number:

Invoices:

Attn:

Phone:

Facsimile:

Email:

Scheduling:

Attn:

Phone:

Facsimile:

Email:

Payments:

Attn:

Phone:

Facsimile:

Email:

Wire Transfer:

BNK:

ABA:

ACCT:

Credit and Collections:

Attn:

Phone:

Facsimile:

Email:

With additional Notices of an Event of

Mail Address:

P.O. Box 770000, Mail Code N12E

San Francisco, CA 94177

Attn: Candice Chan (CWW9@pge.com)

Director, Contract Mgmt & Settlements

Phone: (415) 973-7780

Facsimile: (415) 972-5507

DUNS:

Federal Tax ID Number:

Invoices:

Attn: Azmat Mukhtar (ASM3@pge.com)

Manager, Electric Settlements

Phone: (415) 973-4277

Facsimile: (415) 973-2151

Scheduling:

Attn: Day-Ahead Operations

(DAEnergy@pge.com)

Phone: (415) 973-1971

Facsimile: (415) 973-4500

Payments:

Attn: Azmat Mukhtar (ASM3@pge.com)

Manager, Electric Settlements

Phone: (415) 973-4277

Facsimile: (415) 973-2151

Wire Transfer:

BNK:

ABA:

ACCT:

Credit and Collections:

Attn: PG&E Risk Credit Team

(pgeriskcredit@exchange.pge.com)

Manager, Credit Risk Management

Phone: (415) 973-4144

Facsimile: (415) 973-4071

Contract Manager:

Default to Contract Manager:

Attn: _____

Phone: _____

Facsimile: _____

Email: _____

Attn: Ted Yura (THY1@pge.com)
Senior Manager, Contract Management

Phone: (415) 973-8660

Facsimile: (415) 972-5507

With additional Notices of an Event of Default
to:

PG&E Law Department

Attn: Renewables Portfolio Standard attorney

Phone: (415) 973-4377

Facsimile: (415) 972-5952

Seller

% High Hazard Fuel Use for Quarter¹: #DIV/0!

			Bone Dry Tons			
Fuel Delivery Date	Fuel Delivery Vendor	Invoice #	Non-HHF Volume	HHF Volume	HHZ Project ID(s)	HHZ Location(s) (in Lat/Long)
Enter rows as needed						
Fuel Use by category (BDT)						
Total Fuel Use (BDT)				0.00		

1 The High Hazard Fuel Use percentage is calculated as the ratio of High Hazard Fuel Use over total Fuel Use.

Confidential Appendix C

Valuation Process Summary

Confidential Appendix D

Analysis of Customer Benefits

Net Market Value for BioRAM Projects

Confidential Appendix E

Independent Evaluator Report (Redacted version included with public filing)

PACIFIC GAS AND
ELECTRIC COMPANY
BIOENERGY
RENEWABLE AUCTION
MECHANISM (BIORAM)
SOLICITATION

REPORT OF THE INDEPENDENT
EVALUATOR ON THE OFFER EVALUATION
AND SELECTION PROCESS, AND ON THE
MERIT FOR APPROVAL OF A RENEWABLE
ENERGY CONTRACT WITH BURNEY FOREST
PRODUCTS, A JOINT VENTURE

NOVEMBER 15, 2016

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EXECUTIVE SUMMARY

This report provides an independent review of the process by which the Pacific Gas and Electric Company (PG&E) held a competitive solicitation in 2016 to procure biomass-fueled energy eligible to meet Renewables Portfolio Standard (RPS) goals using biofuel sourced primarily from designated High Hazard Zones (HHZs). This Bioenergy Renewable Auction Mechanism (“BioRAM”) solicitation was conducted in response to the Governor’s Emergency Proclamation on drought and tree mortality.

An independent evaluator (IE), Arroyo Seco Consulting (Arroyo), conducted a range of activities to review, test, and check PG&E’s processes as the utility conducted outreach to biomass-fueled power developers and operators, solicited offers, evaluated offers, and selected offers for BioRAM contracts. Activities included reviewing PG&E’s solicitation protocols, monitoring the utility team’s outreach efforts and results, assessing PG&E’s Least-Cost, Best-Fit (LCBF) methodology, analyzing PG&E’s selection decisions, performing independent evaluations of the offers’ net market value, assessing the fairness of PG&E’s decision-making process, and observing negotiations for a contract.

The high-level findings of this independent review are that

- PG&E undertook adequate outreach to the woody biomass-fueled renewable energy sector in California positioned to burn fuel from HHZs; the resulting competitive solicitation was modestly robust. PG&E failed to solicit adequate feedback from participants about the offer evaluation process after the solicitation was complete.
- The utility’s Least-Cost, Best-Fit methodology was designed such that Offers were fairly evaluated; Arroyo expressed concern about one element of the planned approach.
- Overall, PG&E administered its LCBF methodology fairly when evaluating BioRAM offers and making selections for contract award; some fairness concerns were identified.
- Project-specific negotiations for a contract with Burney Forest Products, A Joint Venture (“BFP”) were fair to ratepayers and competitors, in Arroyo’s opinion.
- Arroyo’s opinion is that the resulting contract with BFP merits approval.

The report details the basis for these findings, following the 2014 version of the RPS Solicitation Shortlist Report Template provided by the Energy Division (ED) of the California Public Utilities Commission (CPUC). The public version of this report has had confidential information redacted.

1. ROLE OF THE INDEPENDENT EVALUATOR

Pacific Gas and Electric Company issued a Request for Offers (RFO) on June 28, 2016, a competitive solicitation for biomass-fueled energy qualifying as eligible renewable energy resources within the California Renewables Portfolio Standard Program. The requirements for contracts arising from the solicitation included specifications for minimum percentages of annual fuel usage to be sourced from designated High Hazard Zones.

The Governor issued an Emergency Proclamation on October 1, 2015 to respond to widespread drought and tree mortality in forests across California which have heightened risks of wildfire and hazards to public safety from falling trees. It included directives to the CPUC to ensure that existing contracts with forest bioenergy facilities can be extended and new contracts can be executed. It directed the Department of Forestry and Fire Protection (“CalFire”) and other state agencies to identify High Hazard Zones. The CPUC issued Resolution E-4770 on March 17, 2016, which directed the three investor-owned utilities (“IOUs”) to conduct solicitations from generation facilities using biofuel from HHZs, using the Renewable Auction Mechanism (“RAM”) mechanism and standard contract.

The CPUC directed each IOU to develop a bioenergy-specific rider to the standard RAM contract that would impose contract requirements designed to achieve the goals of the Emergency Proclamation and Resolution E-4770. PG&E drafted such a rider, submitting it in Advice Letter 4822-E and after a few iterations through supplemental advice letters it was approved by the CPUC on June 14, 2016.

This chapter describes key roles of the IE and details activities undertaken by Arroyo in this solicitation to fulfill those roles.

A. KEY INDEPENDENT EVALUATOR ROLES AND RESPONSIBILITIES

To comply with CPUC requirements, PG&E retained Arroyo Seco Consulting to serve as IE for the BioRAM solicitation by providing an independent review of the utility’s offer evaluation and selection process and the fairness of negotiations of any resulting contracts.

The CPUC has stated its intent for IEs to “separately evaluate and report on the IOU’s entire solicitation, evaluation and selection process”, in order to “serve as an independent check on the process and final selections.”¹ The Energy Division of the CPUC has provided a 2014 template to guide how IEs should report on the RPS competitive procurement process, outlining five specific issues on which IEs should report²:

¹ California Public Utilities Commission Decision 06-05-039, May 25, 2006, Opinion Conditionally Approving Procurement Plans for 2006 RPS Solicitations, Addressing TOD Benchmarking Methodology, page 46.

² The RAM process does not involve a short list, so this report omits discussing merits of a short list.

- Did the IOU do adequate outreach to participants, and was the solicitation robust?
- Was the IOU's LCBF methodology designed such that offers were fairly evaluated?
- Was the LCBF offer evaluation process fairly administered?
- Were project-specific negotiations fair?
- Does the contract merit CPUC approval?

The structure of this report, setting out detailed findings for each of these issues, is organized around the guidance of the template.

C. IE ACTIVITIES

To fulfill the role of evaluating PG&E's evaluation and selection of offers, several activities were undertaken, both prior to the offer due-date and subsequently. Prior to the offer due date of July 28, 2016, Arroyo performed various tasks:

- Reviewed the solicitation and its attachments including PG&E's standard RAM contract and the customized BioRAM rider.
- Attended PG&E's Bidders' Webinar on July 7, 2016 to evaluate information provided to potential participants, and how that information was distributed.
- Reviewed the list of attendees of the Bidders' Webinar against PG&E's master list of RFO contacts (used for outreach to potential participants) and a list of active or recently laid-up woody waste biomass-fueled projects.
- Checked the posting of questions and answers from the Bidders' Webinar on PG&E's public website to see whether information that was made available live to conference attendees or bilaterally to potential participants through e-mail correspondence was also provided to other potential participants.
- Examined PG&E's RFO contact list and checked whether active or recently laid-up biomass-fueled projects in PG&E's service territory were included.

During the period between offer opening and PG&E's selection of winning offers, Arroyo's activities included:

- Participating in opening offers. Arroyo obtained an electronic copy of each offer package, and independently built a database for tracking offers.
- Monitoring PG&E's evaluation team's dialogues with participants seeking to address material deficiencies, to ensure that each offer included sufficient information to complete an evaluation and to minimize the number of offers disqualified as non-conforming. Arroyo monitored other e-mail communications between PG&E and participants to check for fairness in how information was provided.

- Reading portions of each offer. Arroyo focused on pricing, and HHZ fuel commitments, and deviations from standard requirements.
- Employing an independent valuation model to value offers. This served as a cross-check against PG&E's LCBF model. The IE model used independent inputs and a different methodology than PG&E's. It was simpler and lacked the granularity used in the PG&E model. However, an independent valuation was helpful for testing the robustness of PG&E team's value ranking of offers using alternate assumptions and different value metrics.
- Attending a meeting of PG&E's Procurement Review Group (PRG), presenting independent commentary and observations about the solicitation.

Following the selection of offers, Arroyo monitored contract negotiations for fairness as PG&E and BFP finalized and executed a BioRAM agreement.

2. ADEQUACY OF OUTREACH TO PARTICIPANTS AND ROBUSTNESS OF THE SOLICITATION

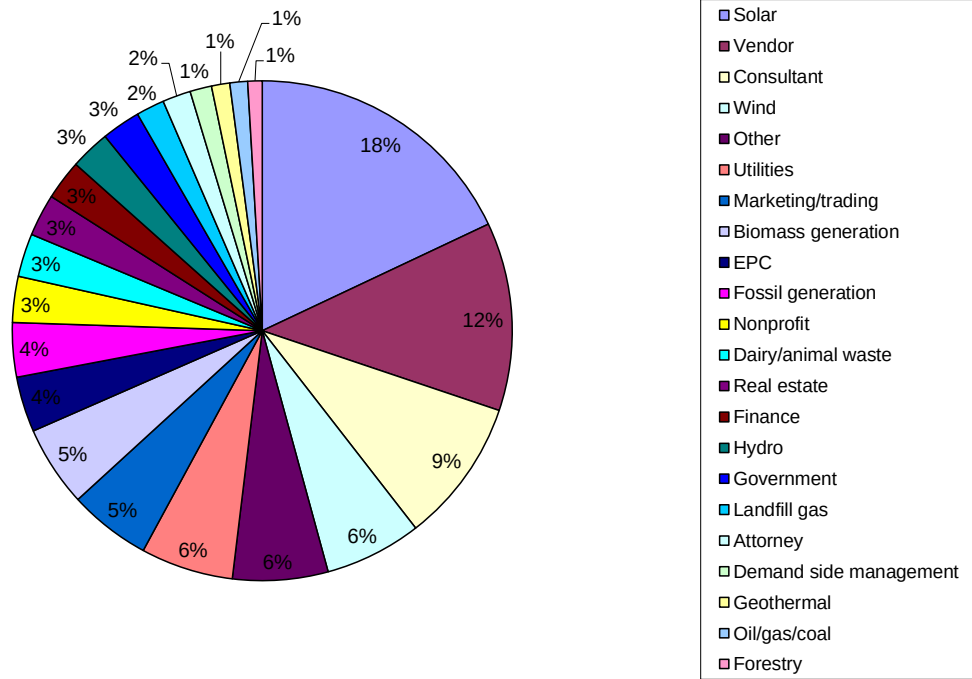
In its BioRAM solicitation, PG&E sought to meet a goal of procuring a minimum of 20 MW, as directed by Resolution E-4770, by selecting eligible offers that could lead to executed contracts. This section assesses the degree to which PG&E adequately conducted outreach to elicit sufficient participation in the BioRAM solicitation process, and the degree to which the resulting solicitation may be judged robust enough to be fully competitive.

A. ADEQUATE DISTRIBUTION OF SOLICITATION ANNOUNCEMENTS

PG&E relied upon e-mailing a large number of individuals on its RFO contact list as the primary means of announcing the opening of its BioRAM solicitation. The utility team has built its contact list over time, both proactively by adding potential participants for different RFOs and reactively by taking individuals' requests to be added to the list. Figure 1 shows a breakdown by industry sector of the contact list employed by PG&E for this solicitation, which has nearly three thousand individual contacts.

Figure 1.

Breakdown of RFO contact list



The largest segment represented on the list was composed of contacts active in the solar power sector. The second largest segment was comprised of vendors, including equipment vendors and design and engineering firms. The third largest segment was made up of consulting firms, with specialties such as electric transmission, water and wastewater quality, public relations and lobbying, environmental permitting, solar resource assessment, composting, and carbon offset credit certification.

Developers or owners of wind generation followed in representation on the list. Other well-represented sectors included electric and water utilities; wholesale marketers, brokers, and traders of power, gas, renewable energy credits, and other commodities; developers and owners of fossil-fueled generation or fossil fuel producers; non-profit organizations including land trusts and environmental advocacy groups; government agencies; and individuals with no obvious direct connection to the renewable power industry, such as residential real estate agents, a debt collector, a scuba diving instructor, and a university president's office. (Arroyo views the presence of less relevant contacts on PG&E's outreach list as a side consequence of the utility's efforts to be highly inclusive in building a contact list that accommodates individuals who requested to be added to RFO news distribution.)

Inspection of the contact list reveals that most but not all of the owners of existing woody biomass-fueled projects within California are represented and likely received PG&E's market notice of the release of the BioRAM solicitation. The projects include currently operating facilities, those with contracts that have entered long-term layup due to adverse economics, and projects whose contracts have terminated and have shut down. In some cases, the contact notified by PG&E was a consultant to the owner of the project or an operations and maintenance provider, not the actual owner. On average, Arroyo would expect that sending the market notice to a vendor to a plant could likely result in notification of the relevant decision-maker, but this is by no means certain, and Arroyo suspects that decision-makers for a recently laid-up project did not receive the market notice from PG&E.

PG&E did not issue a press release to announce the issuance of the BioRAM solicitation. However, news about the solicitation was to some extent disseminated by state agencies. For example, the state's Tree Mortality Task Force (a multiagency group) posted a fact sheet on the CalFire website that summarized Resolution E-4770 including the IOUs' solicitations. Similarly, in June a CalFire manager circulated a notification about PG&E's and Edison's webinars for their BioRAM solicitations by e-mail; the distribution list included two owners of existing biomass-fueled projects and one developer of new projects. Also, PG&E sent the market notice to the California Biomass Energy Alliance for redistribution.

Overall, Arroyo's opinion is that notifications about PG&E's BioRAM solicitation were adequately distributed. All the offers were submitted by companies or teams with individuals on the RFO e-mail contact list; perhaps there are other renewable energy developers of new wood-burning projects active in California who would have participated had they been contacted. Arroyo acknowledges the challenge any utility would face in identifying potential developers of new woody biomass-fueled projects, and the likelihood that few are actively developing projects sufficiently advanced to provide the basis for submitting timely offers. The very few developers that Arroyo identified as pursuing specific projects did not submit offers although they were contacted by PG&E via e-mail. Arroyo believes that PG&E could have improved its distribution of notices by ensuring that all

owners of existing biomass-fueled projects in California had been included, rather than just consultants or O&M providers in the case of a few projects.

B. CLARITY AND CONCISION OF SOLICITATION MATERIALS

PG&E's BioRAM solicitation protocol is modestly sized for a document of its type (it totals 22 pages excluding attachments, vs. 30 pages for Edison's BioRAM protocol). The presentation to potential participants in PG&E's outreach webinar was rather longer at 50 pages (vs. SDG&E's 89-page bidders' conference presentation), but it delved deeply into the terms and conditions of the BioRAM rider and into the nuts and bolts of how to enter data into the offer spreadsheet. Arroyo believes these materials are reasonably concise given the purposes they serve and given the inclusion of extensive legal disclosures the utility seems obligated to include for protection.

Arroyo's opinion is that the contents of the protocol generally provided clear and comprehensible direction on how to prepare and submit complete offer packages that could be accepted and evaluated.

- Half the offers were submitted as complete and conforming packages. This suggested that these participants understood and followed the guidance of the protocol and the outreach webinar presentation.
- There were solicitation requirements or inputs for which some participants failed to follow the instructions provided in the protocol. For example:
 - Omission of a schedule of milestones, description of units, description of interconnection facilities, PPA cover sheet, or single-line diagram;
 - Incomplete fields in the offer form spreadsheet, including the contract capacity calculation fields;
 - Incomplete site maps; and
 - Internally inconsistent contract milestone dates within the offer package.

The proportion of offers that needed to be corrected for other deficiencies in the offer packages was high for a PG&E RFO. This suggests that several participants did not grasp the full detail of the offer information requested in the protocol materials.

In Arroyo's opinion, the solicitation protocol was clear in plain English in specifying the many detailed requirements. Arroyo believes that the number of offers that initially failed to meet one or the other requirement was in part caused by inattention on the part of participants, rather than any vagueness or opacity of language with which PG&E drafted its guidance. Also, Arroyo notes that all of the participants have operated their facilities under agreements of long standing and most have not chosen to or been able to participate in competitive solicitations. Arroyo infers that the very large number of detailed offer package requirements that PG&E demands likely included several that were wholly unfamiliar to companies that do not routinely participate in RFOs.

One of the evaluation criteria that PG&E stated in its public protocol was proximity to HHZ fuel zones. None of the required offer materials specifically required participants to describe their projects' siting in relationship to high hazard zones. PG&E held several follow-up telephone calls with participants to ascertain current thinking about fuel procurement plans to meet the BioRAM rider's requirement for HHZ fuel content. In hindsight, it may have expedited the solicitation and improved clarity about PG&E's evaluation if some discussion of fuel procurement plans had been required of participants in the original offer packages.

Overall, Arroyo believes that PG&E's solicitation materials were clear and concise. As with most of its competitive solicitation, the utility tended not to provide detailed information on what metrics it employs to rank proposals; in this instance, it may have been better to provide more transparency to participants than was the case.

C. PG&E'S BIDDERS' CONFERENCE

PG&E held a bidders' webinar for potential participants in the BioRAM solicitations on July 7, 2016. This was a venue for the utility team to describe important features of the solicitation, such as:

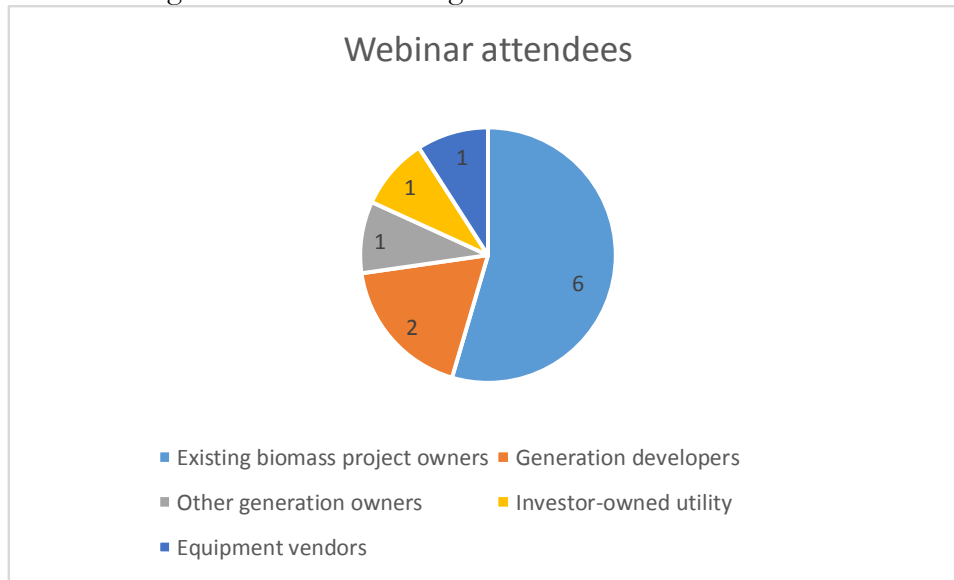
- Eligibility requirements unique to the BioRAM solicitation;
- Unique features of the BioRAM rider to the standard RAM agreement,
- A detailed discussion on how to fill out offer forms and submit complete offers.

The webinar was modestly attended compared to the turnout for RPS RFOs. This is reasonable given the limited number of existing projects that would be eligible to participate and the small number of developers of new woody biomass-fueled facilities. Only 11 firms were represented, including another IOU looking in on PG&E's activities.

Figure 2 displays a breakdown of registrants for this RFO's webinar. The most well represented sectors were current owners of operating woody biomass-fueled projects and firms that develop or advise on developing new or repowered generation.

Only one question was posed to PG&E at the end of the webinar, about whether the webinar presentation document would be posted. Arroyo cannot discern whether this meant that PG&E's public materials answered all outstanding questions or not. Most of the webinar attendees involved with existing generation submitted offers, some with deficiencies. It appears that the guidance provided in the public materials was insufficient to ensure complete and compliant offer packages from all parties.

Figure 2. Firms attending BioRAM bidders' conference



D. FEEDBACK FROM PARTICIPANTS ABOUT THE RFO

PG&E did not seek feedback about the BioRAM RFO, about how it conducted the solicitation, or about the evaluation and selection process, from either participants or non-participants. Arroyo's opinion is that PG&E's feedback efforts were entirely inadequate, and that it would have been better to use the opportunity to learn how a solicitation seeking a response from the small universe of California woody waste-burning biomass plants could have been better designed to elicit a more robust response. Also, if PG&E had sought feedback from participants it might have gained insight into why it was unable to convert some of the highest-valued offers into executed contracts.

E. ROBUSTNESS OF THE SOLICITATION

The response to the solicitation was modestly robust. PG&E received offers for eight existing facilities and no prospective new facilities. This represents about a third of the two dozen or so biomass-fueled projects in the state that have at some point burned woody biomass as fuel, counting projects that have ceased active operations but not counting those that have been demolished or have existing long-term contracts that would disqualify them from participation. None of the entities that have announced intentions of developing new biomass-fueled projects in the state submitted offers.

The total potential contract capacity offered to the solicitation was 181 MW, about nine times the 20 MW minimum about that PG&E sought to procure in the solicitation. With that level of response PG&E would expect to easily meet its minimum requirement, although PG&E was also in direct competition with Edison and SDG&E, that issued RFOs simultaneously. No offers were received for proposed new projects. This stands in contrast to the stated intent of the Governor's Emergency Proclamation, which calls for the CPUC to take action to ensure that new forest biomass facilities receiving feedstock from HHZs

can enter contracts. Arroyo notes that any new construction of a biomass-fueled project would likely be disadvantaged in competition with existing projects because of the former's need to recover capital expenditures for new build through contract pricing.

In summary, Arroyo's opinion is that PG&E conducted adequate outreach to biomass-fueled facilities in California near HHZs and to developers of potential new biomass-fueled projects. The number of individuals contacted and the decent yield of offers submitted by conference attendees suggest that PG&E's overall outreach effort was reasonably effective. PG&E failed to seek adequate feedback about the offer evaluation process from all participants after the solicitation was complete. Arroyo's opinion is that the response to the solicitation was modestly robust.

3. FAIRNESS OF OFFER EVALUATION AND SELECTION METHODOLOGY

The key finding of this chapter is that PG&E's evaluation and selection methodology for identifying contract awards for its BioRAM solicitation was designed fairly, overall.

The following discussion identifies principles for evaluating the methodology, evaluates its strengths and weaknesses, and identifies one specific issue with the methodology about which Arroyo initially disagreed with PG&E.

A. PRINCIPLES FOR EVALUATING THE METHODOLOGY

The Energy Division of the CPUC has usefully suggested a set of principles for evaluating the process used by IOUs for selecting offers in competitive renewable solicitations, within the template intended for use by IEs in reporting. These include:

- There should be no consideration of any information that might indicate whether the participant is an affiliate.
- Procurement targets and objectives were clearly defined in the IOU's solicitation materials.
- The IOU's methodology should identify quantitative and qualitative criteria and describe how they will be used to rank offers. These criteria should be applied consistently to all offers.
- The LCBF methodology should evaluate offers in a technology-neutral manner.
- The LCBF methodology should allow for consistent evaluation and comparison of offers of different sizes, in-service dates, and contract length.

Some additional considerations appear relevant to PG&E's specific situation. Unlike some utilities, PG&E does not rely on weighted-average numerical calculations of scores for evaluation criteria to arrive at a total aggregate score. Instead, the BioRAM public solicitation cites three criteria of which two are qualitative rather than quantitative. This suggests a few other principles for assessing fairness:

- The methodology should identify how non-valuation measures will be considered; all non-valuation criteria used in selecting offers should be transparent to participants.
- The logic of how non-valuation criteria or preferences are used to reject higher-value offers and select lower-value offers should be applied consistently and without bias.
- The valuation methodology should be reasonably consistent with industry practices.

B. STRENGTHS AND WEAKNESSES OF PG&E'S METHODOLOGY

PG&E's LCBF methodology for RAM and RPS RFOs has been revised over the years; its evolution has benefitted from input from IEs and the utility's PRG, and from internal review. This section discusses the methodology, and addresses a set of specific issues that are called out in the Energy Division's 2014 template for IE reports.

1. CONSISTENCY WITH PROCUREMENT PLAN, PORTFOLIO FIT, PRODUCTS

Overall, PG&E's evaluation and selection methodology is largely consistent with its 2015 RPS procurement plan as updated by CPUC direction in Resolution E-4770. In Arroyo's opinion, PG&E adequately incorporated the needs and preferences stated in its RPS procurement plan as approved by the CPUC into its approach. For example:

- PG&E's 2015 RPS procurement plan stated that the utility would not hold an RPS solicitation in its 2015 solicitation cycle and that PG&E would seek the CPUC's approval to procure any amounts other than those separately required under CPUC-mandated procurement programs such as feed-in tariffs. Resolution E-4770 subsequently ordered the IOUs to hold competitive solicitations using the RAM procurement process (rather than the RPS RFO process) and allowed the IOUs to enter bilateral contracts with biomass-fueled facilities using high hazard zone fuel.
- PG&E's 2015 RPS procurement plan stated that the utility will minimize the overall cost of renewables over time by, among other things, promoting competitive processes that can encourage price discipline. The utility is pursuing a RAM procurement process, at least initially, to secure biomass-fueled supply, rather than embarking first on bilateral negotiations for anything but short-term commitments.
- As ordered by the Decision approving PG&E's 2014 RPS procurement plan, the protocol requires new projects to have a Phase II interconnection study or its equivalent. (The Commission required this of Edison in its 2015 RPS procurement plan, but it was not explicitly required of PG&E because no RPS RFO was planned.)
- For the 2014 RPS procurement plan, the CPUC ordered PG&E to incorporate interim integration cost adders consistent with an approach described in the Decision that was originally recommended by PG&E. The utility team detailed this calculation of compliant interim adders in its 2014 non-public protocol for market valuation, and applied these adders in its LCBF valuation.
- PG&E's BioRAM solicitation protocol stated that it would use the least-cost, best-fit methodology approved by the CPUC in Decision 14-11-042 (the approval of PG&E's 2015 RPS procurement plan did not involve a version of the LCBF methodology.)

The products requested in the BioRAM solicitation were consistent with those specified in PG&E's solicitation protocol and in Resolution E-4770. The utility requested proposals for contracts to deliver energy from facilities that use biofuel from high hazard zones

designated by CalFire as approved by the CPUC. The contracts must deliver at least specified annual minimum percentages of fuel from HHZs. PG&E allowed existing projects to offer contracts of five-year term with or without an option for the buyer to extend up to ten years in one-year increments; this was required by the CPUC in Resolution E-4770.

Portfolio Fit. PG&E does not use a stand-alone metric for portfolio fit. It takes into account its various preferences for attributes of portfolio fit through adjustments it applies when calculating Portfolio-Adjusted Value: adjustments based on project location, timing of contract deliveries vs. periods of RPS compliance needs, firmness vs. variability of energy delivery, and benefits of buyer curtailment options. In Arroyo's opinion, the methodology adequately takes into account characteristics related to PG&E's portfolio fit preferences.

Preferences. PG&E incorporated specific preferences into its methodology for the BioRAM solicitation. The public solicitation protocol explicitly stated PG&E's preference for projects sited within PG&E's service territory, and for contract tenor of less than 20 years. While these preferences are not explicitly stated in the 2015 RPS procurement plan, the plan cites the public description of the Portfolio-Adjusted Value metric in Attachment K of the 2014 RPS solicitation protocol, which does specify these two preferences.

The solicitation protocol also stated a general preference for shorter delivery terms, not just a preference for terms shorter than 20 years, and cited the 2014 public Attachment K. That document states "a preference for offers with delivery periods of 10 to 15 years rather than delivery periods lasting 20 years or more." PG&E has thusly extrapolated from the actual text of the 2014 version of its LCBF methodology (a specific preference for offers for 10 to 15-year contracts in the context of the RPS RFO) to a more general preference for shorter over longer contract tenors. PG&E applied this more general preference rather than the more specific 2014 version in administering the BioRAM solicitation.

This preference is not stated within the 2015 RPS procurement plan, although it is consistent with PG&E's statement in the plan that it has no near-term need for RPS resources: all else being equal, shorter-term RPS contracts will have less impact on PG&E's excess RPS procurement situation than long-term contracts. Also, it is currently unclear whether the state of emergency for tree mortality will exist for five years or ten years; there is some risk that executing ten-year contracts may lock ratepayers into above-market payments beyond the duration of the public policy need expressed by the emergency proclamation.

Also, PG&E's BioRAM solicitation protocol alluded to Resolution E-4770's statements that IOUs may favor offers with earlier on-line dates and that IOUs shall favor offers that commit to meet HHZ fuel requirements on an accelerated basis, e.g. achieve higher percentages of HHZ content than the minimum annual levels specified in the Resolution. In this respect PG&E acknowledged that it would follow the Resolution's explicit guidance or could choose to apply its own preference for offers with earlier on-line dates over later.

The solicitation protocol stated that PG&E would give a qualitative preference to facilities in closer proximity to high hazard zones. This preference is not stated in the 2015 RPS procurement plan (that was drafted before the Governor's Emergency Proclamation) nor in Resolution E-4770. However, it seems to Arroyo that the preference is consistent with the sense of the Emergency Proclamation, which places an emphasis on facilities

receiving fuel from HHZs and on state agencies, utilities, and local governments taking urgent action within HHZs. Additionally, proximity of facilities to HHZs ought to be correlated with lower transport cost from where the fuel is harvested to delivery onto the fuel pile of the biomass-fueled facility, which on average should be correlated with lower costs to ratepayers. Lower transport costs would be expected to be experienced through the pricing of offers, however, which drives the LCBF valuation.

2. MARKET VALUATION

PG&E's market valuation approach has a number of general strengths including its consistency with industry practice, its rapid turnaround, its reliance on market price data rather than dispatch model outputs, its neutrality with respect to technologies (as opposed to project characteristics) and its relation to real option pricing. Its weaknesses are the same as other methods that rely on extrapolating market price beyond a time horizon when liquid, transparent market price signals for energy or capacity can be observed. In this solicitation, the shorter time horizon of ten years affords better visibility into price signals than in RFOs that require pricing assumptions for the 2040s.

Consistency of market valuation. Overall, PG&E calculated individual components of its market valuation methodology in a manner consistent with its protocol and with CPUC direction. PG&E developed interim integration adders for different resources and used them in calculating market value, consistent with the approach ordered by the CPUC.

Arroyo cannot identify any components of costs or revenues that should not have been included in PG&E's valuations of offers. The analysis was, overall, consistent with what was communicated in the solicitation protocol, which referred to the detailed public description in an attachment to PG&E's 2014 RPS RFO protocol.

Transmission costs. PG&E's methodology includes costs of transmission upgrades in its value calculations for all offers involving projects that propose to interconnect directly to the CAISO. In its market valuation protocol, PG&E stated that it would "use both the reliability network upgrades and delivery network upgrades in the calculation" of a cost adder, relying on data from interconnection studies. The methodology weighs CAISO network upgrades against the benefits of RA value in calculating net market value. PG&E used transmission experts to review transmission study results that served as inputs to the LCBF methodology. In the BioRAM solicitation, all offers were from existing facilities rather than from proposed new facilities requiring network upgrades. While some existing facilities that have operated under Qualifying Facility contracts may need to expend costs on new metering or telemetry in order to obtain CAISO interconnections, these should in general be interconnection facilities costs rather than network upgrade costs and if so would not affect contract valuation as adders.

3. EVALUATION OF OFFERS' PROJECT VIABILITY

The Attachment K to PG&E's 2014 RPS solicitation protocol that the BioRAM protocol refers to as the description of the LCBF methodology includes a description of PG&E's approach to scoring project viability for each offer.

Consistent with its approach to prior RAM RFOs, PG&E did not ask BioRAM participants to self-score their projects using the Energy Division’s project viability calculator. Instead, the offer form required some information about the status of the project’s interconnection or conversion to a CAISO interconnection and the developers’ prior experience with projects of comparable technology and capacity. PG&E also required the offer package to contain a completed site control questionnaire and attestation, a letter from the site owner for smaller projects, evidence of an interconnection agreement or study, a deliverability study for offers providing capacity attributes, and a proposed commercial operation date that would fall within 36 months of the effective date of a contract. These data served as the basis for screening offers for minimum project viability.

Arroyo considers the actual distinctions in viability between offers to be rather subtle, reflecting the varying degrees to which QF projects have embarked on conversion to a CAISO interconnection, or how long a mothballed project has been shut down.

C. FUTURE LCBF METHODOLOGY IMPROVEMENTS

PG&E’s methodology has undergone repeated refinement, motivated both by internal choices within the utility and external impetus from the regulator. Incremental improvements have been made over time. If PG&E were to apply its methodology to another BioRAM solicitation, however, Arroyo has one recommendation for improvement.

The template for Independent Evaluator reports on RPS solicitations provided by the Energy Division provides an example of a principle that IEs could use in evaluating the fairness of a solicitation:

“The LCBF methodology should allow for consistent evaluation and comparison of offers of different sizes, in-service dates, and contract length.”

Arroyo agrees that this principle should be used in assessing the fairness of a competitive solicitation.

PG&E’s prior practice in applying its LCBF methodology to evaluate the Portfolio-Adjusted Value of offers in RPS RFOs has been to calculate PAV in levelized dollars per MWh. This is an intrinsic property. If two offers of different sizes otherwise have identical characteristics such as price, generation shape, contract tenor, buyer curtailment hours, location, etc., then they would be expected to have the same PAV in levelized \$/MWh.

In the BioRAM solicitation, PG&E used an extrinsic property (e.g. a variable proportional to the offer’s size) to measure and rank Portfolio-Adjusted Value: the total present value of PAV in dollars. In the spreadsheet provided to PG&E’s BioRAM steering committee in its deliberations, offers with the highest (least negative) present-value dollar values were ranked first, the offers with the largest negative present-value dollar values were ranked last. (All offers had negative PAVs as measured in either \$ or \$/MWh because their proposed contract prices were substantially above renewable energy market price.)

Both the levelized \$/MWh and present-value \$ variables are outputs of PG&E's LCBF methodology; both are based on energy and capacity value and cost, then adjusted by the various factors that PG&E has adopted, related to project location, portfolio need, energy firmness, curtailment hours, etc. However, when PG&E uses the extrinsic property of present-value \$ PAV to rank offers, it does not make consistent comparisons of offers of different sizes as described in the Energy Division's principle.

If two offers had identical \$/MWh pricing, location, tenor, seasonal and time-of-day generation shape, start date, firmness, and buyer curtailment hours, but one offered 10 MW of contract capacity and the second offered 20 MW of contract capacity, then PG&E's levelized \$/MWh PAV metric would be identical for the two. However, PG&E's present-value \$ PAV metric for the second offer would be twice that of the first. An offer twice the size would have twice the dollar value. If PG&E used the levelized \$/MWh PAV metric, the two offers would be tied in value, but using the \$ PAV metric the smaller first offer would have a smaller (negative) and higher value and be ranked above the second offer.

Arroyo believes that use solely of the present-value \$ PAV metric does not allow for consistent evaluation and comparison of offers of different sizes. Ranking and selecting negatively valued offers solely by present-value \$ PAV would create a consistent bias towards selecting smaller offers over bigger ones. Arroyo has in regarded PG&E's prior use of the levelized \$/MWh metric as providing consistent valuation of offers of different sizes, a metric that in and of itself does not bias selection towards large projects or small projects.

Arroyo acknowledges that ratepayers' interests may be better served in situations such as the BioRAM solicitation by use of the extrinsic present-value \$ PAV metric. Any contract emerging from this solicitation will have a price above market price; any contract will have negative market value. One could argue that ratepayers are least harmed if PG&E enters into a contract with the smallest negative value in dollars while fully complying with its assigned 20-MW minimum capacity target for the BioRAM solicitation and supporting the objectives of the Governor's Emergency Declaration. This contrasts with an alternative approach of ranking offers by \$/MWh and entering a contract with the participant providing the highest-valued energy, even if it means taking a larger volume of above-market-price biomass-fueled energy. There is dissonance between the strategy of fully complying with regulatory obligations while minimizing above-market costs to ratepayers, and satisfying the principle of consistent evaluation of offers of different sizes.

As described in the next chapter, the way that PG&E actually administered its LCBF methodology was subtler than solely ranking offers by \$ PAV, in way that fully mitigated Arroyo's concerns about sole use of an intrinsic variable as a metric for valuation. It would still have been better to provide greater transparency to participants up front about what metrics for valuation would be employed as opposed to citing PG&E's usual LCBF methodology as the basis for selection.

4. FAIRNESS OF ADMINISTERING THE OFFER EVALUATION AND SELECTION PROCESS

This section describes the extent to which PG&E's administration of its protocols for offer evaluation and selection in the BioRAM solicitation was conducted fairly. Arroyo's opinion is that the process was, overall, conducted in a fair and consistent manner.

A. PRINCIPLES USED TO DETERMINE FAIRNESS OF PROCESS

The Energy Division has suggested a set of principles proposed to guide IEs in determining if an IOU's administration of its evaluation and selection process was fair:

- Were all offers treated the same regardless of the identity of the bidder?
- Were participants' questions answered fairly and consistently and the answers made available to all participants?
- Did the utility ask for "clarifications" that provided one participant an advantage over others?
- Was the economic evaluation of the offers fair and consistent?
- Was there a reasonable justification for any fixed parameters that were a part of the IOU's LCBF methodology (e.g., RMR values; debt equivalence parameters)?
- Were the qualitative and quantitative factors used to evaluate offers fair to all offers?

Some other considerations appear relevant to reviewing PG&E's administration of its methodology. The use of business judgment in bringing multiple non-valuation criteria to bear on decision-making, rather than a mathematical, objective means of doing so, implies an opportunity to test the fairness of administration using additional principles:

- Were the decisions to reject higher-valued offers because of low scores in criteria or preferences other than market valuation applied consistently across all offers? Were the selections of lower-valued offers in preference to higher-valued ones based on their superior attributes in non-valuation criteria made consistently, or were high-valued offers skipped over unfairly?
- If PG&E did not select the projects that provide the best overall value while meeting the needs of PG&E's three compliance periods, what factors prevented those projects from being selected? Was their rejection based on considerations that were communicated transparently to participants in the solicitation protocol?
- Does the resulting selection conform to the needs of PG&E's portfolio?

- Were the judgments used to create the selection based on evaluation criteria and preferences that were publicly disseminated to participants prior to offer submittal?

B. REVIEWING PG&E'S ADMINISTRATION OF ITS EVALUATION AND SELECTION PROCESS

PG&E provided Arroyo Seco Consulting with detailed inputs to its valuation model and with results during the evaluation process. Arroyo had access to all offer packages and to correspondence with participants, and was able to arrive at independent opinions about the strengths and weaknesses of individual offers against the evaluation criteria.

The PG&E evaluation team discussed its logic for its draft selections with the IE, but PG&E did not include Arroyo in its steering committee meeting in which alternate proposals for the offer selection were reviewed and discussed by management. Arroyo did have access to members of the evaluation team responsible for scoring the offers against each of the evaluation criteria.

Additional elements of Arroyo's approach for evaluating the fairness of the evaluation and selection process include:

- Running an independent valuation model that directly used detailed offer information, to construct an independent ranking of offers by net market value;
- Independently scoring offers using the CPUC-approved Project Viability Calculator;
- Developing an independent point of view about which offers merited selection;
- Comparing PG&E's valuation ranking to the independent model's ranking, identifying outliers (e.g. where the utility ranked an offer higher than the IE or vice versa), and determining whether variances were caused by different inputs and methodology or stemmed from errors by either PG&E or Arroyo;
- Observing communications between PG&E and participants to check whether any individual participant was advantaged over its competitors by requests posed or information provided;
- Reviewing PG&E's selection, rejection, and waitlisting decisions for consistency; reviewing whether the logic for selection vs. rejection was consistently applied to all offers.

C. IDENTIFYING NONCONFORMING OFFERS

PG&E performed a detailed review of offer packages to identify specific deficiencies that needed to be addressed by participants and to assess which offers had terms that deviated materially from RFO requirements. Most participants whose offers were identified as deficient were able to submit the missing information. Deficiencies included:

- Not adhering to PG&E’s conventions;
- Using forms from prior RAM solicitations rather than the BioRAM-specific contract cover sheet;
- Failing to complete all required fields of the offer form; providing offer inputs were internally inconsistent;
- Providing incomplete documentation of interconnection status;
- Not providing site maps, single-line diagrams, or parcel identifications for projects;
- Omitting schedules of project milestones; and
- Submitting offers that did not satisfy the requirements for the baseload product category.

In all but one case participants eventually corrected deficiencies to PG&E’s satisfaction. All offer packages were submitted timely by the deadline. All offers passed the BioRAM solicitation’s project viability screens for eligibility.

PG&E disqualified one offer variant. [REDACTED]

[REDACTED]

Arroyo’s opinion is that PG&E’s rejection of this offer variant for non-conformance to the requirements of the solicitation was fair to the participant and to its competitors.

D. REASONABLENESS AND FAIRNESS OF PARAMETERS AND INPUTS

Parameters and inputs that PG&E used in its evaluation of offers to the BioRAM solicitation were reasonably and fairly chosen, in Arroyo’s opinion. This includes assumptions for market pricing of energy, system RA capacity, flexible capacity, for the value of buyer curtailment options, for the impact of debt equivalence, and for numerous other inputs. PG&E used internal energy forward curves from July 2016 as the basis for valuation.

PG&E has a variety of internal controls in place to ensure that its selection of inputs and parameters are reasonable and fair. The Energy Supply organization relies on a separate and independent risk management function for oversight of power market assumptions used in valuation, and on a corporate financial function for oversight on financial assumptions. Some of the inputs are based on estimates made by the CEC and CPUC. Additionally, Arroyo had the opportunity to review the inputs to the valuation model in detail and to raise specific questions about or objections to inputs with the PG&E team as appropriate.

E. THIRD-PARTY ANALYSIS

PG&E did not engage Arroyo or third parties to conduct any part of offer evaluation.

F. TRANSMISSION COST ADDERS AND INTEGRATION COSTS

PG&E followed its public and nonpublic protocols in administering its procedures for CAISO-based transmission adders and CPUC-approved integration cost adders. Because all offers were submitted by existing generation projects that are already interconnected to the grid, no transmission adders for network upgrades were required in the evaluation.

G. AFFILIATE PROPOSALS AND BUYOUT OR TURNKEY OFFERS

PG&E did not solicit offers for utility buy-outs of new projects or for turnkey construction of projects to transfer to utility ownership. No affiliates of PG&E submitted offers so the issue of conflicts of interest in selecting proposals from affiliates did not arise.

H. PG&E'S USE OF ADDITIONAL CRITERIA AND ANALYSIS

In addition to performing market valuations on the offers using its LCBF methodology, PG&E applied some qualitative criteria and preferences to evaluate proposals. In the case of these criteria and preferences, Arroyo can only speculate on how PG&E's decisions were made because the IE was unable to observe the RFO steering committee's deliberations.

1. EXCEEDING MINIMUM FUEL REQUIREMENTS

The public solicitation protocol for the BioRAM solicitation stated that "preference will be given to projects that commit to exceeding the minimum fuel requirements." Participants were allowed to propose annual contract requirements for HHZ fuel as a percent of total that would exceed the minimum percentages each year required by Resolution E-4770. If so, PG&E took that into account when scoring offers. [REDACTED] offered to use HHZ fuels at a proportion modestly higher than the minimum requirement, [REDACTED]. Exceeding minimum requirements does not seem to have affected selection decisions; [REDACTED] not selected.

2. PROXIMITY TO HIGH HAZARD ZONES

PG&E also stated in its public protocol that “Consideration will also be given to project proximity to high hazard fuel zones.” The utility constructed a metric of how much of the area within a 30-mile radius around projects was composed of HHZs. The ranking of these percentages was consolidated into a point system for scoring offers and considered in making the selection. [REDACTED] were scored high for proximity to HHZs. Arroyo speculates that proximity to HHZs played a minor or no role in selection decisions compared to market valuation and contract tenor.

3. RPS GOALS

PG&E’s public protocol refers to the RPS Goals evaluation criterion as part of the overall LCBF methodology stated in Attachment K to PG&E’s 2014 RPS RFO. That document describes a preference to be given to projects that provide environmental or economic benefits to communities afflicted with poverty, high unemployment, or high levels of air pollution and greenhouse gases. The BioRAM solicitation protocol’s language interpreted Attachment K’s description of the RPS Goals criterion to encompass the preference for projects “in closer proximity to high hazard fuel zones”. The 2014 document was drafted before a state of emergency was declared for tree mortality hazards.

Arroyo believes that using the specific RPS Goals language stated in the 2014 document to justify the use of proximity to high hazard zones as an application of the RPS Goals criterion is a stretch, and difficult to accept as the basis for the criterion. However, Arroyo does agree with PG&E that the criterion of proximity to HHZs is a legitimate measure for assessing the degree to which a contract with a biomass-fueled project will align with the state’s urgent public policy goals (not the 2014 version of the RPS Goals criterion specifically) as stated in the Emergency Proclamation and Resolution E-4770. PG&E’s 2014 documents specify that PG&E may consider other qualitative factors affecting offer value, and proximity to HHZs may be considered to be such a factor.

4. SUPPLIER DIVERSITY

PG&E also stated in its public protocol that it would evaluate offers on how they would contribute to the utility’s supplier diversity goals, consistent with the CPUC’s General Order 156. None of the participants is a diverse business enterprise; participants proposed targets for diverse spending on subcontractors in a range [REDACTED]. PG&E made no use of the offers’ supplier diversity targets in its offer selection process.

5. OTHER EVALUATION CRITERIA AND PREFERENCES

Other preferences stated in the protocol played a minor or no role in offer selection.

Contract tenor. In its public protocol, PG&E stated a preference for contracts with a delivery term of less than twenty years.

In practice, PG&E’s use of an intrinsic \$ metric for market valuation instead of \$/MWh led it to prefer five-year contract offers to ten-year offers even without separately considering contract tenor as a preference. Specifically, PG&E preferred [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED].

On-line date. The public protocol indicated that PG&E could give preference to offers with earlier on-line dates. In practice, participants submitted offers with a range of proposed contract start dates, [REDACTED]. PG&E's selection process did not appear to be influenced by proposed on-line dates.

I. ANALYSIS OF PG&E'S SELECTION RESULTS

This section discusses PG&E's selections and an instance in which Arroyo disagreed with PG&E's decisions in the administration of its evaluation and selection methodology.

1. SELECTED OFFERS

PG&E selected two offers to award contracts, and notified the parties on October 4:

- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].
- Burney Forest Products. BFP, the owner of a biomass-fueled QF in Shasta County, submitted [REDACTED]
[REDACTED]. PG&E selected the variant with a 5-year term.

The selected offers totaled [REDACTED] of contract capacity, well in excess of the goal of procuring a minimum of 20 MW as directed for PG&E in Resolution E-4770. On September 14, the Governor signed Senate Bill 859, which among other things requires IOUs and large public utilities to procure 125 MW of generation from existing bioenergy facilities using minimum percentages of certain types of forest feedstock, including a requirement of at least 60% from HHZs. It was as yet unclear as of the October 4 deadline to notify participants of RFO selection or rejection what specific allocation of that 125 MW would be assigned to PG&E. However, it was clear to PG&E management that the utility's MW biomass-fueled obligation would increase substantially and that procuring more contract capacity in the BioRAM solicitation than the minimum 20 MW would contribute towards meeting that increased compliance obligation.

[REDACTED] declined PG&E's selection of [REDACTED] offer on October 6, not explicitly citing a reason.³ PG&E embarked on discussions with BFP to execute a contract.

³ In September 2016 at the end of PG&E's and [REDACTED]
[REDACTED] the seller cited as a deal-breaker its
concern about the [REDACTED]
(Footnote continued)

2. DISAGREEMENTS IN EVALUATION PROCESS

As described previously, Arroyo agrees that PG&E employed its LCBF methodology to analyze the net market value and Portfolio-Adjusted Value of offers. Arroyo disagreed with the concept of solely using total \$ PAV as the value metric for ranking offers for selection, as opposed to \$/MWh PAV. In principle, ranking offers by lowest \$ PAV would favor smaller projects or offers over larger ones, which would contradict the principle of consistent evaluation of offers of different sizes first propounded by the Energy Division.

In the actual selection, however, PG&E did not choose the offer variant with the lowest \$/MWh PAV [REDACTED] or the variant with the lowest total \$ PAV [REDACTED]. Of BFP's [REDACTED] offer variants, PG&E selected the 5-year offer which had the lower \$ PAV. [REDACTED], PG&E selected the variant with the lowest \$/MWh PAV. PG&E did not use \$ PAV as the sole metric for ranking offers for selection, mitigating the IE's concern about methodology.

One perspective with which to view this preference structure is to consider that PG&E sought to comply with its regulatory directive to procure at least some minimum MW of contract capacity from projects meeting the HHZ content requirement, at the maximum value to ratepayers. At the point in time PG&E had to select BioRAM offers, it was not yet known with precision how much of the 125 MW would be assigned to PG&E, so the minimum MW objective was unknown. However, one could construct a ranking of offers in PAV \$/contract MW which could guide the choice of how best to reach any MW target at maximum value to ratepayers. Such a ranking would inform a decision about high-value strategies to meet a fixed MW goal. Figure 3 shows stack of offers ranked by PAV \$/MW⁴.

This illustrates that if PG&E sought the highest-valued approach to securing [REDACTED] of contract capacity, it would select [REDACTED]. If it sought the highest-PAV approach to procuring [REDACTED], it would select that plus [REDACTED]. If it instead wanted to procure [REDACTED] of contract capacity with the highest PAV, it would select those two plus [REDACTED]. Perhaps because of the uncertainty about its share of the allocation of the incremental 125 MW, PG&E selected [REDACTED]. This was the highest-value approach to obtain [REDACTED]. At the deadline when PG&E was scheduled to notify selected participants, the total allocation from Senate Bill 859 was as yet unknown, but the team speculated that the total contractual obligation for generation from HHZ-fuel-based generation might be in the 60s of megawatts. Later the CPUC issued Resolution E-4805 which added 43 MW to PG&E's allocation of 20 MW from Resolution E-4770.

[REDACTED] It stated its belief that this [REDACTED] heightened the risk of regulatory rejection of such a [REDACTED]. Arroyo speculates, with no direct evidence, that the seller also imputed an unacceptably higher risk of regulatory rejection to any [REDACTED] BioRAM contract with PG&E. [REDACTED]

⁴ Note that some of the offer variants displayed are mutually exclusive, so the sum of MW offered in the graph exceeds what could be contracted.



Because PG&E's selection was designed to maximize the market value of procured HHZ-based energy while targeting at most [REDACTED] of contract capacity, Arroyo believes that its prior methodological concerns about solely using a valuation metric biased towards smaller offers was not realized in the actual outcome. While PG&E used a \$ PAV metric (as well as a \$/MWh metric) in its considerations, the actual selection was, in Arroyo's opinion, not biased towards smaller offers. The potential for disagreement between IE and utility about methodology was not realized; Arroyo agrees that the two selected offers, had both been executed as contracts, would have provided the highest-value approach to procure a volume of HHZ-based energy that would approach the total MW regulatory requirement.

PG&E could have selected three offers totaling [REDACTED] MW of contract capacity, which might also have resulted in the highest-valued [REDACTED] MW of contracts if [REDACTED] had accepted selection. Arroyo agrees that PG&E acted reasonably to avoid possible overprocurement of HHZ-based generation given that its increased compliance target was still uncertain on October 4 and that it was unknown whether and which participants might accept or reject selection of their offers in favor of contracting with other IOUs.

3. INDEPENDENT OFFER ANALYSES

Arroyo conducted an independent valuation analysis. The results correlated with PG&E's Net Market Value analysis, but resulted in different rankings for NMV.

Arroyo's analysis would have ranked the same three offer variants as PG&E's as the highest valued selections for a given MW of contract capacity; however, Arroyo would have ranked [REDACTED] offer above the Burney Forest Products offer in NMV \$/MWh. (Arroyo employs a higher discount rate than PG&E does in valuation analysis, and the annual pricing of the two offers differs markedly in escalation rate, causing this disparity in results between PG&E's approach and the independent analysis.) However,

Arroyo's results would have led to the same selection that PG&E chose if the volume target were to procure [REDACTED] and not [REDACTED] of highest-valued contracts, stretching towards a total volume in the 60s. PG&E's PAV methodology, including choice of discount rate, is the CPUC-approved LCBF approach to valuation and as such is more appropriate for making selection decisions than a net market value calculation using any methodology.

4. RECTIFYING DEFICIENCIES OF REJECTED OFFERS

In the one case in which PG&E rejected an offer variant for noncompliance with the requirements of the RFO, PG&E and [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]. Arroyo does not believe that any further discussion between the parties or actions on [REDACTED] part could have rectified the deficiencies of that offer variant.

5. OVERALL FAIRNESS OF ADMINISTRATION

Arroyo's opinion is that PG&E's administration of its least-cost, best-fit methodology to select offers for the BioRAM solicitation was fair. PG&E's decisions to select or reject offers to arrive at a selection were fair and reasonable. Although it employed, among others, a metric for valuation that by itself could have led to unfair decisions biased in favor of small projects, PG&E's actual selections maximized ratepayer value while attempting to achieve a volumetric goal beyond the original 20 MW target for the RFO and closer to the anticipated but then-uncertain compliance requirement. Arroyo believes that the actual selection of offers was handled fairly and that the offers PG&E selected, had they both resulted in contracts, would have provided the best overall value to ratepayers while advancing the portfolio towards meeting the compliance needs of Resolutions E-4770 and E-4805.

In Arroyo's opinion, offers were treated the same regardless of the identity of the participant, questions from participants were answered fairly and consistently and the answers were made available to all participants, input parameters to PG&E's LCBF methodology were reasonably justified, and the economic evaluation of offers was fair and consistent. PG&E's selections conformed to the needs of the utility's portfolio and RPS requirement, in that they would fulfill the compliance needs for biomass-fueled generation using fuel harvested from designated high hazard zones as laid out by Resolution E-4770. In Arroyo's opinion, PG&E's selections for its BioRAM solicitation were reasonable.

5. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

This chapter provides an independent review of the extent to which PG&E's negotiations with Burney Forest Products for a BioRAM contract were conducted fairly. BFP accepted the terms of PG&E's BioRAM offer selection letter on October 6, 2016. As is the case with other solicitations using the Renewable Auction Mechanism process, the terms and conditions of the agreement were largely non-negotiable. Although fairness issues arose, Arroyo's opinion is that, overall, PG&E's negotiations with BFP were conducted in a manner that was fair to competitors, to BFP, and to other IOUs. The next chapter further addresses whether the contract is fair to PG&E's ratepayers.

A. BACKGROUND INFORMATION

BFP and PG&E had executed a Qualifying Facilities agreement in April 1985; this contract still governs the facility's sale of energy and capacity. It currently provides capacity payments based on performance and energy payments based on short-run avoided cost.

The parties executed an amendment to the QF agreement in October 2011 that provided relief in the form of a higher energy price. The 2011 amendment had a term of three years with two options for PG&E to extend the term at its sole discretion, by one year and then by an additional eleven months. PG&E exercised both options to extend price relief. The parties also bilaterally negotiated then executed another pricing relief amendment on October 4, 2016, that governs energy pricing from October 2016 through March 2017. This latest price amendment contains a provision that that [REDACTED]

[REDACTED]

The facility was brought into commercial operation in 1989. Its annual production, based on public filings, averaged about 221 GWh/year over the 2011-2015 period for a capacity utilization of 81%, compared to contract quantity of 216 GWh/year specified in the 2011 amendment (this includes generation from both woody waste and natural gas, the supplemental fuel). BFP's facility is one of the biomass-fueled generators nearest to CalFire-designated HHZs; the boundary of the nearest HHZ is perhaps a mile from the project. The only closer biomass-fueled facilities are two that are actually sited within HHZs, one of which has ceased operation. BFP was one of [REDACTED] that PG&E scored high for proximity to HHZs in the BioRAM solicitation using its metric for proximity.

B. PRINCIPLES FOR EVALUATING THE FAIRNESS OF NEGOTIATIONS

Arroyo considered some principles to evaluate the degree of fairness with which PG&E handled negotiations for the Burney Forest Products contract.

- Were sellers treated fairly and consistently by PG&E during negotiations? Were all sellers given equitable opportunities to advance proposals towards final PPAs? Were individual sellers given unique opportunities to move their proposals forward or concessions to improve their contracts' commercial value, opportunities not provided to others?
- Was the distribution of risk between seller and buyer in the PPAs distributed equitably across PPAs? Did PG&E's ratepayers take on a materially disproportionate share of risks in some contracts and not others? Were individual sellers given opportunities to shift their commercial risks towards ratepayers, opportunities that were not provided to others?
- Was non-public information provided by PG&E shared fairly with all sellers? Were individual sellers uniquely given information that advantaged them in securing contracts or realizing commercial value from those contracts?
- If any individual seller was given preferential treatment by PG&E in the course of negotiations, is there evidence that other sellers were disadvantaged by that treatment? Were other proposals of comparable value to ratepayers assigned materially worse outcomes?

Terms and conditions in the RAM form agreement and BioRAM rider were not significantly altered during the discussions between the parties after BFP's offer was selected. Instead, these conversations focused on:

- [REDACTED]
- [REDACTED]
- [REDACTED].
- Initial Energy Delivery Date. [REDACTED]

- Buyer curtailment. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

[REDACTED]

[REDACTED]

[REDACTED].

The provisions of the BioRAM contract were quickly agreed by the parties. There were no changes to the major terms of the form agreement. Most of the discussions focused on achieving clarity on operational and metering arrangements, not modifying the form agreement.

D. DEGREE OF FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

Overall, Arroyo's opinion is that PG&E's negotiations with BFP were fair to the seller's competitors, to the seller, and to other IOUs. Fairness to PG&E's ratepayers is discussed in the next chapter.

Fairness to competitors. BFP's 5-year offer variant was the third-highest valued proposal (in \$/MWh PAV) submitted in the BioRAM solicitation. PG&E did not select [REDACTED] would contribute the same number of megawatts of contract capacity towards meeting the compliance goals of Resolutions E-4770 and E-4805 while adding substantially to total above-market cost borne by ratepayers because of the larger total MWh deliveries. PG&E also selected the proposal with the [REDACTED], but that participant chose not to accept PG&E's selection. By contracting with BFP, PG&E met its volume target for the solicitation with the highest-valued remaining five-year proposal (in \$/MWh), avoiding greater excess above-market costs associated with ten-year agreements. Participants offering lower-value proposals were not unfairly disadvantaged by PG&E's selections based on market value.

Arroyo did not observe PG&E providing BFP with any non-public information that might have advantaged the seller against its competitors. Other biomass-fueled plant owners

were given the same opportunities as BFP to advance their proposals towards executed contracts. PG&E did not grant BFP any unique concessions in the course of negotiating the BioRAM agreement. BFP was not given any unique opportunities to shift risks towards ratepayers; the RAM form PPA and Rider were not materially altered to provide more favorable terms to BFP than prior agreement based on the RAM form agreement.⁵

Fairness to BFP. A second issue is whether PG&E unfairly used its market position to force BFP to accept PG&E's selection of its BioRAM offer. PG&E had created an incentive for BFP [REDACTED]

Arroyo observes that if in fact BFP had submitted offers to other IOUs' BioRAM RFOs and had been selected, it had freedom of choice to accept or reject PG&E's selection. The short-term pricing amendment that PG&E executed with BFP to extend price relief in the existing QF agreement did not contractually bind BFP to accept PG&E's selection. PG&E exploited its incumbency as the buyer of BFP's product under that QF agreement to create a strong economic incentive [REDACTED]. Arroyo has no information about whether BFP actually did submit proposals to other BioRAM RFOs, whether its offer prices were the same or different in different solicitations, or whether other IOUs selected BFP's proposals. Thus, Arroyo has no basis to conclude that BFP was unfairly disadvantaged by [REDACTED]. Arroyo has not observed BFP expressing any perception that its treatment by PG&E was unfair or that it experienced any sense of coercion, although the IE was unable to observe all discussions between the parties.

Fairness to other IOUs. A third issue is whether BFP and PG&E's execution of a BioRAM PPA was unfair to other utilities and their ratepayers. Arroyo has no information whether any other California IOU selected a BFP offer for its BioRAM solicitation. Arroyo has no specific evidence that, if this were hypothetically the case, anything about the manner in which PG&E conducted its own BioRAM solicitation harmed any other buyer. BFP had freedom of action to accept or reject PG&E's selection of its BioRAM offer, [REDACTED]

Arroyo's opinion is that PG&E's negotiation of a BioRAM contract with BFP was handled fairly, absent any specific information that other parties might have been harmed by BFP's choice to accept PG&E's selection.

⁵ PG&E had previously granted BFP and two other sellers short-term pricing amendments to their QF agreements that allowed the projects to continue to operate in the short term at favorable terms, while denying this opportunity to competing biomass-fueled QFs. Arroyo does not believe that this disparate treatment influenced the outcome of the BioRAM solicitation in any way. The issue of whether such unequal treatment was fair to BFP's competitors was discussed in a separate IE reports accompanying the filing of those bilaterally negotiated contract amendments.

6. MERIT FOR CPUC APPROVAL

This chapter provides an independent review of the merits of the BioRAM contract between PG&E and Burney Forest Products based on criteria specified in the Energy Division's 2014 RPS IE template.

A. CONTRACT SUMMARY

On November 1, 2016, PG&E and Burney Forest Products executed a BioRAM PPA and rider for delivery of RPS-eligible energy from BFP's existing biomass-fueled generation facility. Contract capacity is 29 MW. The contract quantity for the PPA averages 218 GWh/year over the five-year contract term. The expected initial energy delivery date is October 1, 2017. Deliveries of fuel to the plant must meet or exceed annual targets for content of high hazard fuel. The project is located west of the unincorporated town of Burney in Shasta County, adjacent to the Shasta Green sawmill.

B. NARRATIVE OF EVALUATION CRITERIA AND RANKING

The 2014 RPS template for IEs provided by the Energy Division calls for a narrative of the merits of the proposed project on the criteria of contract price, net market value, portfolio fit, and project viability.

CONTRACT PRICE AND MARKET VALUATION

Contract Price. The contract price paid to BFP [REDACTED]

[REDACTED].

When compared to proposals for long-term contracts for renewable energy, the BFP agreement ranks high in price. Its average pre-TOD contract price would place it in the highest-priced quartile among offers to PG&E's 2014 RPS RFO, its most recent RPS solicitation (Arroyo does not have access to PG&E's more recent RAM 6 offers).

However, the deliveries from BFP under the BioRAM contract differ from other renewable energy proposals in that the contract imposes a minimum obligation that at least 40% of the fuel used to generate energy come from High Hazard Zones. The state of California has placed a premium on biomass-fueled generation using HHZ fuels; executive, legislative, and regulatory bodies have set a priority on contracts for such generation during the current tree mortality emergency. So, a more relevant benchmark for the market prices to which BFP's contract should be compared is the set of other proposals from biomass-fueled generators proposing to deliver HHZ fuel-based energy to PG&E's BioRAM solicitation. The BFP contract price is lower than the offer prices of [REDACTED] offer variants, and [REDACTED].

The BFP contract therefore ranks low in price when compared to competing alternatives that would provide access to generation that uses biomass fuel harvested from HHZs. As a matter of public policy, the CPUC's Resolution E-4770 implies that the priority placed on responding to the tree mortality emergency justifies contracts that would be high priced if they were measured only against sources of renewable energy.

Market Valuation. The BFP contract's Portfolio-Adjusted Value would rank it in the lowest-valued decile if compared to all offers for renewable energy received in PG&E's 2014 RPS RFO. However, it was the [REDACTED]-highest in PAV among offer variants proposing to deliver HHZ-based energy in the BioRAM solicitation. Only [REDACTED] ranked higher in value.

Arroyo made an independent estimate of the net market value of the BFP contract. This estimate ranks the BFP contract's net market values near the lowest of offers received in PG&E's 2014 RPS RFO. It ranks the BFP agreement as the [REDACTED] highest in value among offer variants PG&E received in the BioRAM solicitation, and the [REDACTED] highest in value among proposals for five-year contracts (which would provide lower total above-market payments, for the same contract capacity MW needed to meet the Resolution E-4770 and E-4805 goals, compared to the ten-year offers). The independent NMV metric ranks the BFP contract as moderate compared to all BioRAM proposals and high among offers for five-year contracts.

Based on these comparisons, the BFP contract ranks moderate to high in market value when compared to competing alternatives for providing biomass-fueled energy using woody waste harvested from high hazard zones while minimizing above-market payments. While it ranks low in value compared to proposals from all sources of renewable energy, the purpose of this solicitation is to meet an emergency need to help the state cope with hazards from tree mortality, a need that would not be met by procuring more lowest-priced solar or wind generation.

The terms of the contract do not shift risks from BFP to PG&E's ratepayers beyond the balance of risks already established in the form agreement for RAM contracts. Arroyo views the balance of risks between buyer and seller as within the range of what PG&E achieves with other sellers, and as fair to ratepayers. One could argue that ten-year offers with higher PAV \$/MWh would have been superior in value, but Arroyo observes that the five-year BFP contract provides higher value than most alternatives while minimizing the risk that a ten-year contract might impose above-market payment obligations on ratepayers that would persist after possible future termination of the tree mortality emergency.

CONSISTENCY WITH RPS GOALS AND PROCUREMENT PLAN

Procurement plan. As part of the RPS procurement cycle, PG&E drafted a 2015 RPS procurement plan in August 2015 that was accepted with conditions by the CPUC in Decision 15-12-025. The plan states that PG&E's existing RPS contract portfolio, its own RPS generation, and its expected bank of renewable energy credits are adequate to ensure compliance with near-term RPS requirements. In the plan, PG&E's projections for its renewable net short position suggest that its procurement of renewable energy to date well exceeds its compliance need in the medium term. This suggests that, in a narrow sense,

executing the BFP contract is inconsistent with the 2015 procurement plan. The plan states that PG&E has no near-term need for RPS resources but will procure incremental volumes of RPS-eligible contracts in 2016 through CPUC-mandated programs such as the RAM, ReMAT, and BioMAT programs. Arroyo believes that some specifics of PG&E's approved 2015 RPS procurement plan, which did not contemplate a tree mortality emergency, have been superseded by the CPUC's issuance of Resolutions E-4770 and E-4805.

PG&E's procurement plan states that the utility uses its Portfolio-Adjusted Value (PAV) methodology to evaluate which products provide the best fit at least cost; PG&E based its selection of the BFP offer on the results of its PAV analysis.

The BFP contract will have the effect of increasing resource diversity, or at least slowing a decline in resource diversity, within PG&E's RPS portfolio, which is identified in the 2015 procurement plan as a possible risk-reducing strategy.

RPS Goals. PG&E's 2014 RPS solicitation protocol included an evaluation criterion for a contract's contribution to RPS goals. One of the subcriteria was whether a project would provide economic benefits to "communities afflicted with high poverty or unemployment", which was one of the legislative goals for the state's RPS program. The community of Burney fits that characterization: median annual household income in Burney in 2014 was \$38.2 thousand vs. \$61.5 thousand for the state of California, based on the U.S. Census Bureau's 2014 American Community Survey. The percentage of Burney's population living below poverty levels was 19.9% vs. the state's 16.4%; an estimated 14.8% of the population over age 16 was unemployed vs. 7.0% for the state.

Another RPS Goals evaluation subcriterion in the 2014 RPS RFO was contribution to Executive Order S-06-06, which called for 20% of the state's renewable energy needs in electricity to be met by electricity from biomass. The agreement would contribute to meeting this goal by reducing further declines in biomass-fueled production, assuming that BFP could likely shut down or reduce output rather than continue operating in baseload mode when exposed to short-run avoided cost energy pricing.

When the RPS Goals protocol was drafted for PG&E's 2014 RPS RFO neither PG&E nor its regulator anticipated the Governor's 2015 emergency proclamation. Ensuring continued operation of biomass-fueled generators to burn dead and dying trees harvested from high hazard zones was not specifically an element of PG&E's RPS Goals criterion. However, because the contract requires use of these as feedstock, it provides immediate and timely support for the state's current executive, legislative, and regulatory goals in a period of emergency caused by tree mortality hazards.

PORTFOLIO FIT

Consistent with its approved 2015 RPS procurement plan, PG&E uses its Portfolio-Adjusted Value methodology to evaluate both market value and portfolio fit. PG&E ranked the BFP offer as ranking high in PAV against competing proposals.

Arroyo's opinion is that, qualitatively, the fit of the BFP agreement with PG&E's portfolio ranks low. The utility already expects a net long RPS compliance position for the

second and third compliance periods because of its prior procurement activities and because of changes in PG&E's retail load outlook. Contracting for deliveries of even more renewable energy increases PG&E's overprocurement of RPS-eligible energy in the next compliance period and increases the size of the REC bank that must be carried forward to future periods: costs for these RECs will be expended during the contract's delivery term but the net need for the RECs is projected to develop later in the 2020s.

BFP's production shape is generally baseload, whereas PG&E needs more flexible resources to deal with periods of overgeneration and negative market prices. The BioRAM contract provides PG&E with unlimited buyer curtailment hours per contract year, giving the utility the right to dispatch the unit down to minimum load. This provides PG&E with more flexibility to manage the BFP contract during periods of overgeneration than many other contracts in its RPS portfolio, and more flexibility than most biomass-fueled sellers.

PROJECT VIABILITY

As an existing generation facility that has operated reliably with production levels near or above its annual contract quantity, the project viability of the BFP facility ranks quite high. BFP's proposal passed all of the project viability screens required by the BioRAM RFO protocol. Arroyo assigns it a score of 100 using the Energy Division's project viability calculator.

C. DISCUSSION OF MERIT FOR APPROVAL

In Arroyo's opinion, the contract with Burney Forest Products merits CPUC approval.

- While Arroyo ranks the contract price as high compared to recent competing proposals from projects delivering renewable energy, the more relevant peer group to which to compare this contract is other proposals from biomass-fueled facilities that offered to deliver power from biofuel harvested from High Hazard Zones. The price of the BFP agreement ranks low when compared to that peer group.
- The Portfolio-Adjusted Value of the BFP contract in levelized \$/MWh ranks high compared to those of competing proposals received in PG&E's BioRAM solicitation for delivering energy derived from HHZ fuel. Arroyo independently ranked the BFP contract as moderate in \$/MWh net market value among BioRAM offer variants, and high in NMV when compared only to competing proposals for 5-year term contracts, which would expose ratepayers to lower total above-market payments than 10-year term contracts.
- Because the BFP contract requires the facility to meet an escalating target for the content of its delivered fuel that originates in High Hazard Zones, it will contribute to meeting an urgent public policy goal stated in the emergency proclamation on tree mortality and in regulatory and legislative directives. In Arroyo's opinion, the above-market payment the contract requires is justified by the progress toward burning HHZ biofuels it will provide in response to a state of emergency.

- While taking deliveries under the BFP contract is not well aligned with PG&E portfolio fit or compliance needs, and it is not particularly consistent with PG&E's 2015 RPS procurement plan, the agreement aligns quite well with the directives of Resolutions E-4770 and E-4805 to respond to the tree mortality emergency.
- The BFP contract will contribute to PG&E's prior definitions of its RPS goals evaluation criterion, such as contributing economic benefits to a community afflicted by poverty and high unemployment, and supporting the state goal for biomass-fueled energy as a percentage of renewable energy generation.
- As an operating facility that has delivered biomass-fueled energy reliably to PG&E for decades, BFP ranks high for project viability.
- The provision of [REDACTED]
[REDACTED]
[REDACTED] raises concerns about fairness of negotiations. Arroyo's own opinion is that PG&E's action [REDACTED]
[REDACTED] is, overall, fair to BFP's competitors, fair to the other IOUs and to their ratepayers, and fair to BFP itself.

Arroyo acknowledges that other observers of PG&E's business dealings [REDACTED]
[REDACTED]
[REDACTED] might view PG&E's negotiations as unfair treatment to BFP, to BFP's competitors, or to the other IOUs and their ratepayers. If that provision was unfair, it could call into question the fairness of PG&E and BFP's execution of a contract that resulted from the BioRAM solicitation. Ratepayers of the other utilities might, hypothetically, object that [REDACTED]
[REDACTED]
[REDACTED]. Arroyo's own opinion is that the terms of the [REDACTED]
[REDACTED] are a consequence of PG&E having a prior and ongoing business relationship with BFP, vs. other IOUs having no prior business relationship with BFP, and not an exercise of classic market power. However, Arroyo acknowledges that other observers could easily draw different conclusions.

Based on these observations and judgments about the fairness of negotiations, the ranking of the contract on specified evaluation criteria, and the contract's contribution to meeting public policy goals promulgated by the state during the current tree mortality emergency, Arroyo's opinion is that the Burney Forest Products contract merits CPUC approval.

Confidential Appendix F

Executed Contract

Burney Forest Products, a Joint Venture

Public Appendix G

Summary of Solicitation Participation

APPENDIX G**Names of participating companies and the number of offers per company****Indicates winning counterparty**

CONFORMING OFFERS		
Item:	Developers	Number of Offers Submitted
1	HL Power Company LP	3
2	Burney Forest Products, a Joint Venture	2
3	Pacific Ultrapower Chinese Station	1
4	Madera Power, LLC	1
5	Community Renewable Energy Services, Inc.	1
6	Rio Bravo Rocklin, a California General Partnership	4
7	Rio Bravo Fresno, a California General Partnership	4
8	Thermal Energy Development Partnership, L.P.	2
		18
NON CONFORMING (did not pass viability screen)		
	HL Power Company LP	1
	Total Non Conforming	1
	Total Offers	19

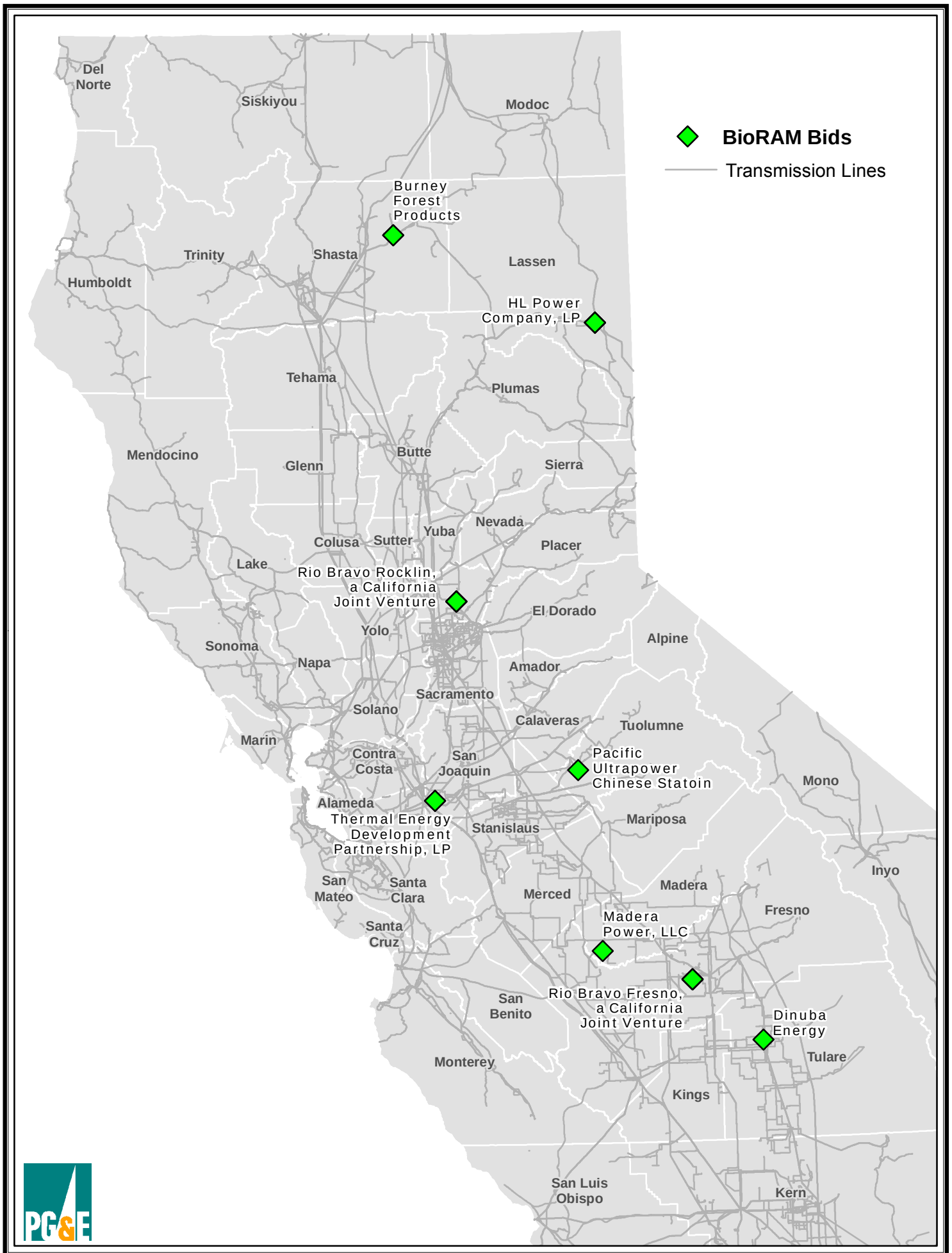
CONFORMING OFFERS				
Baseload Product Category				
Item No:	Counterparty	ERR Type	Contract Capacity (MW)	Annual Generation (GWh)
1	HL Power Company LP	Biomass	30.0	210.4
2	HL Power Company LP	Biomass	30.0	210.4
3	HL Power Company LP	Biomass	20.0	140.2
4	Burney Forest Products, a Joint Venture	Biomass	29.0	217.6
5	Burney Forest Products, a Joint Venture	Biomass	29.0	217.6
6	Pacific Ultrapower Chinese Station	Biomass	20.0	140.2
7	Madera Power, LLC	Biomass	24.0	184.3
8	Community Renewable Energy Services, Inc.	Biomass	11.5	89.3
9	Rio Bravo Rocklin, a California General Partnership	Biomass	24.4	181.1
10	Rio Bravo Rocklin, a California General Partnership	Biomass	24.4	181.1
11	Rio Bravo Rocklin, a California General Partnership	Biomass	24.4	181.1
12	Rio Bravo Rocklin, a California General Partnership	Biomass	24.4	181.1
13	Rio Bravo Fresno, a California General Partnership	Biomass	24.3	181.0
14	Rio Bravo Fresno, a California General Partnership	Biomass	24.3	181.0
15	Rio Bravo Fresno, a California General Partnership	Biomass	24.3	181.0
16	Rio Bravo Fresno, a California General Partnership	Biomass	24.3	181.0
17	Thermal Energy Development Partnership, L.P.	Biomass	17.5	122.7
18	Thermal Energy Development Partnership, L.P.	Biomass	17.5	122.7
18	Total Baseload Conforming Offers		180.7	1,326.5

NON CONFORMING OFFERS (Offer(s) that did not meet viability screen)					
	Counterparty	ERR Type	Contract Capacity (MW)	Annual Generation (GWh)	Reason
1	HL Power Company LP	Biomass	20.0	140.2	Interconnection Issues
1	Total Non Conforming Offers		-	-	

Note: The MW totals and annual GWh for each product category do not include project variations.

Public Appendix H

Location of Bids



**PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV**

AT&T	Division of Ratepayer Advocates	Office of Ratepayer Advocates
Albion Power Company	Don Pickett & Associates, Inc.	OnGrid Solar
Alcantar & Kahl LLP	Douglass & Liddell	Pacific Gas and Electric Company
Anderson & Poole	Downey & Brand	Praxair
Atlas ReFuel	Ellison Schneider & Harris LLP	Regulatory & Cogeneration Service, Inc.
BART	Evaluation + Strategy for Social Innovation	SCD Energy Solutions
Barkovich & Yap, Inc.	G. A. Krause & Assoc.	SCE
Bartle Wells Associates	GenOn Energy Inc.	SDG&E and SoCalGas
Braun Blaising McLaughlin & Smith, P.C.	GenOn Energy, Inc.	SPURR
Braun Blaising McLaughlin, P.C.	Goodin, MacBride, Squeri, Schlotz & Ritchie	San Francisco Water Power and Sewer
CENERGY POWER	Green Charge Networks	Seattle City Light
CPUC	Green Power Institute	Sempra Energy (Socal Gas)
California Cotton Ginners & Growers Assn	Hanna & Morton	Sempra Utilities
California Energy Commission	ICF	SoCalGas
California Public Utilities Commission	International Power Technology	Southern California Edison Company
California State Association of Counties	Intestate Gas Services, Inc.	Spark Energy
Calpine	Kelly Group	Sun Light & Power
Casner, Steve	Ken Bohn Consulting	Sunshine Design
Center for Biological Diversity	Leviton Manufacturing Co., Inc.	Tecogen, Inc.
City of Palo Alto	Linde	TerraVerde Renewable Partners
City of San Jose	Los Angeles County Integrated Waste Management Task Force	TerraVerde Renewable Partners, LLC
Clean Power	Los Angeles Dept of Water & Power	Tiger Natural Gas, Inc.
Clean Power Research	MRW & Associates	TransCanada
Coast Economic Consulting	Manatt Phelps Phillips	Troutman Sanders LLP
Commercial Energy	Marin Energy Authority	Utility Cost Management
Cool Earth Solar, Inc.	McKenna Long & Aldridge LLP	Utility Power Solutions
County of Tehama - Department of Public Works	McKenzie & Associates	Utility Specialists
Crossborder Energy	Modesto Irrigation District	Verizon
Crown Road Energy, LLC	Morgan Stanley	Water and Energy Consulting
Davis Wright Tremaine LLP	NLine Energy, Inc.	Wellhead Electric Company
Day Carter Murphy	NRG Solar	Western Manufactured Housing Communities Association (WMA)
Defense Energy Support Center	Nexant, Inc.	YEP Energy
Dept of General Services	ORA	