PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

June 16, 2016

Advice Letters 4822-E, 4822-E-A, & 4822-E-B

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

Subject: Approval of Advice Letters 4822-E 4822-E-A, and 4822-E-B

Dear Mr. Jacobson:

The California Public Utilities Commission (Commission) adopted Resolution E-4770 on March 17, 2016, ordering Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) (collectively the Investor-owned utilities or IOUs) to hold a solicitation for facilities that can use feedstock from high hazard zones using the Renewable Auction Mechanism (RAM) procurement process and standard contract (BioRAM solicitation). Specifically, Resolution E-4770 ordered the IOUs to file Tier 2 Advice Letters consisting of a contract rider to be used along with the Commission-approved standard RAM contract and the solicitation documents. On April 7, 2016 PG&E submitted Advice Letter 4822-E requesting approval of a RAM contract rider to be used for a RAM auction targeting facilities that can use feedstock from high hazard zones. On June 1, 2016 PG&E filed a supplemental Advice Letter. On April 25, 2016 the Forest Service protested and the Independent Energy producers (IEP) responded to and on April 27, 2016 the California Biomass Energy Alliance (CBEA) protested Advice Letter 4822-E. Staff read and considered all comments but limits the discussion herein to only the relevant issues.

Project Development Security and Performance Security:

The IOU's standard RAM contract approved by D.15-12-025 requires all successful bidders to post performance security and development security bonds upon Commission approval of their contracts. CBEA protests the inclusion of the development and performance security for the BioRAM solicitation and suggests that the IOUs should make an exception for the BioRAM solicitation.

CBEA's protest is without merit. Performance and development security bonds are pre-approved contract terms in the standard RAM contract and can only be altered through a formal process.[1] <u>Therefore, CBEA's protest that a successful bidder in the BioRAM solicitation should not have to pay a development security and a performance security is denied</u>.

Minimum Fuel Requirement Shortfall:

[1]D.14-11-042 specified that the IOUs should submit their standard RAM contracts with the RPS plans for Commission approval

In accordance with Resolution E-4770, PG&E offers facilities the option to either terminate the contract or to operate at the current ReMAT baseload price of $89.23 /MWh for the duration of the contract once the facility can no longer meet the minimum required high hazard zone fuel requirement. PG&E filed a supplemental Advice Letter modifying its rider to give a facility that does not meet its annual minimum high hazard zone fuel requirement a one-time opportunity to request that the contract price be re-established in a future year. The Forest Service, CBEA, and IEP protest this provision.

The protests of the Forest Service, CBEA, and IEP ignore that the scope and timing of Resolution E-4770 are directed to address the Proclamation - to protect public safety and property from falling dead trees and wildfire. The authorized procurement is meant to incentivize facilities to use removed high hazard biomass fuel from high hazard zones. Resolution E-4770 does not allow any dilution of minimum fuel standards. Therefore, the protest of the Forest Service, CBEA, and IEP that the IOUs should revise the minimum fuel requirement shortfall in the BioRAM solicitation is denied.

Early Contract Termination Fee:

PG&E's RAM contract and solicitation documents require that an existing contract expire before the commercial operation date deadline for a new RAM contract. PG&E's proposes to relax this condition for the BioRAM solicitation to allow a project with an existing contract between the counterparty and PG&E to participate in BioRAM as long as the counterparty pays minimum damages for early termination, as stated in the existing contract.[2] CBEA protests this requirement on the basis that successful bidders will "provide the same amount of qualifying capacity in the same place as they always have, without interruption."

CBEA's protest is outside the scope of this disposition letter. This disposition letter cannot legally alter contract terms in PG&E's existing contracts. CBEA's protest that PG&E should not collect termination fees for its existing contracts is denied.

Conclusion

PG&E Advice Letter 4822-E and supplemental advice letters 4822-E-A and 4822-E-B are approved on June 14, 2016.

Sincerely,

Edward Randolph

Edward Randolph, Director

Energy Division

[2] PG&E will allow projects with existing contracts to bid into BioRAM, even if those contracts do not expire within 12 months of the BioRAM contract becoming effective. However, the Seller's PPA must expire within 24 months or Seller's PPA must have a price amendment that has expired or will expire within 24 months. The Seller must terminate any existing PPA prior to beginning deliveries under BioRAM, and if that PPA is with PG&E, the Seller must pay any applicable minimum damages for early termination under the existing contract, (page 4-AL 4822)

Pacific Gas and Electric Company™

Erik Jacobson
Director
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June 3, 2016

Advice 4822-E-B
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

<u>Subject</u>: Submission of Second Supplemental Advice Letter with Updated Protocol and Appendices for a Solicitation Using the Renewable Auction Mechanism Targeted At Facilities That Utilize Fuel from High Hazard Zones Pursuant to Resolution E-4770

A. <u>Purpose:</u>

Pursuant to the California Public Utilities Commission's ("Commission" or "CPUC") General Order ("G.O.") 96-B,[1] Pacific Gas and Electric Company ("PG&E") submits this second supplement to Advice Letter 4822-E to provide an updated solicitation protocol and power purchase agreement ("PPA") for a proposed Solicitation using the Renewable Auction Mechanism ("RAM") targeted at facilities that utilize fuel from High Hazard Zones pursuant to Resolution E-4770 ("BioRAM"). The intent of this supplement is to incorporate certain changes, some of which were proposed in responses or protests by parties on PG&E's original Advice Letter 4822-E, and to expand the option of bids into the BioRAM to include contract terms of greater than 5 and 10 years for existing and new facilities, respectively.

PG&E filed supplemental Advice Letter 4822-E-A on June 1, 2016 providing a narrative detailing the changes that PG&E proposed to make to its BioRAM protocol and Rider submitted in Advice Letter 4822-E. In this second supplemental filing, PG&E provides both clean versions of the BioRAM Rider and Protocol, as proposed to be revised in supplemental Advice Letter 4822-E-A, and also redlined versions of these documents to show the revisions proposed by this supplement when compared against the BioRAM Rider and Protocol originally filed in Advice Letter 4822-E.

As described in more detail in Advice Letter 4822-E-A, PG&E proposes the following revisions to the BioRAM Rider and Protocol that it originally proposed in Advice Letter 4822-E:

- Delivery Terms
  - Expand options to allow new facilities to propose contract terms of 10, 15, or 20 years and existing facilities to propose contract terms of 5 (with a PG&E option to extend up to a cumulative total of 10 years), 10, 15, or 20 years;
  - Provide for a 5-year PPA option that does not include extension options; and

[1] *See* G.O. 96-B, Section 7.5.1.

   - Clarify that, consistent with its most recent Commission-approved Least-Cost, Best-Fit (“LCBF”) protocol, PG&E will qualitatively prefer bids offering contracts of less than 20 years.
- Modify PG&E’s definition of high hazard fuel to eliminate requirement that fuel be sourced from dead and dying trees.
- Eliminate requirement for an attestation by a Registered Forest Professional if there is another mutually agreeable process.
- Modify the BioRAM Rider to provide a one-time opportunity for a Seller to revert back to the Contract Price (for 5 year Delivery Term without Extension Option only).
- Clarify that when the High Hazard Fuel requirement is not met, the PPA price will be the lesser of $89.23/MWh specified in the Resolution and the Contract Price; and
- Allow more flexibility with respect to the non-High Hazard Fuel portion of the generation by allowing the non-High Hazard Fuel portion to be any form of woody biomass.

The table below lists the location in the BioRam Protocol and Rider of the substantive changes proposed:

Document	**Section Reference (with reference to the redlined version of the documents in Appendices A and B)**	**Description of Change(s)**
Rider	Section II	Modified “Amended Price” definition to refer to the lesser of Contract Price or $89.23/MWh
Rider	Section II	Deleted “Damage Payment” definition, which referred only to deals up to 10 years in length. The Damage Payment definition will revert to the original definition in the RAM PPA.
Rider	Section II	Modified “Fuel Use” definition to refer to woody biomass
Rider	Section II	Modified “High Hazard Fuel” definition to delete reference to dead and dying trees
Rider	Section V	Deleted the first portion of this section which originally had “tenth, fifteenth, or twentieth” removed.
Rider	Section VI	Added clarification/qualification to the first sentence that the annual extensions are only applicable if the Seller executes a contract with a 5 year Contract Term with Extension Option.
Rider	Section IX	Added provision that Quarterly Fuel Attestations are not required to be signed by a Registered Professional Forester if

		the parties have mutually agreed upon an alternative process.
Rider	Section IX, X, XIII	Added one-time provision for Sellers with 5 year contract (without an Extension Option) to revert to the higher Contract Price if High Hazard Fuel requirements are met after a failure to meet those requirements in a prior year.
Rider	Appendix D	Clarified that Product includes woody biomass facilities only.
Rider	Appendix D	Added in 5, 10, 15, and 20 year Delivery Term options for existing facilities in addition to the 5 year option with year to year extension. Removed separate distinction for existing facilities that now have the 10, 15, and 20 year options as well.
Rider	Appendix D: Section C (Contract Price)	Added in rows for Contract Years 11 – 20.
Rider	Appendix D: Section D (Quantity):	Added in rows for Contract Years 11 – 20.
Protocol	Section 1: Overview	Added in options for longer term contracts and clarified that the annual contract extensions are applicable only to facilities that execute a PPA with a five-year Delivery Term with Extension Option. Also added in a five-year option without Extension Option. Added in reference to LCBF preference for contract durations of less than 20 years.
Protocol	Section III: Eligibility	Removed restriction that fuel must come from forest fuelstock and clarified that multi-fuel facilities are eligible so long as they are burning woody biomass.
Protocol	Section III: Eligibility	Added reference to BioRAM Rider provision that Quarterly Fuel Attestations are not required to be signed by a Registered Professional Forester if the parties have mutually agreed upon an alternative process.
Protocol	Section IV: Evaluation Criteria	Minor updates to LCBF language and stated preference for shorter contract durations.
Protocol	Section V: Price	Added qualification that including 10

		years' worth of pricing is applicable to those facilities that bid in a five-year option with an Extension Option.

B. <u>Request for Commission Approval</u>

PG&E respectfully requests that the Commission approve the modifications set forth in Advice Letter 4822-E with the changes provided in this supplemental Advice Letter 4822-E-B and supplemental Advice Letter 4822-E-A on an expedited basis and requests that the Commission issue a final resolution or disposition letter,[2] containing:

1. Approval of the modified BioRAM PPA and Rider in its entirety;

2. Approval of PG&E's modified BioRAM Protocol in its entirety;

3. A finding that termination of an existing PPA to allow participation in BioRAM is reasonable, so long as PG&E collects any minimum contractual termination damages specified in the existing PPA.

4. A finding that the statewide high hazard zone designations made available by CAL FIRE on that agency's Tree Mortality Viewer tool constitute the agency's initial high hazard zones designation for purposes of determining the applicable commencement date for the BioRAM Solicitation.

5. Any other and further relief as the Commission finds just and reasonable.

Protests

In light of the urgent nature of BioRAM in helping to address the State's declared emergency related to tree mortality, and consistent with G.O. 96-B, Section 7.5.1, PG&E respectfully requests that the minor revisions made by this supplemental advice letter not re-start the timeline for submitting protests or responses on the original advice letter. However, pursuant to G.O. 96-B, any party may request that the Commission's Energy Division allow supplemental comments on this supplemental filing. The Energy Division may be contacted as follows:

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

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

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[2] If Commission approval is in the form of a disposition letter issued by the Commission's Energy Division, such approval shall be deemed to have made the following findings.

In the event that the Energy Division allows comments on this supplement, copies of those comments should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

Any such supplemental comments 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:

Erik 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) 973-7226
E-mail: PGETariffs@pge.com

Tier Designation and Effective Date

PG&E has designated Advice Letter 4822-E as a Tier 2 advice letter and initially sought approval of the Advice Letter by May 7, 2016, which was 30 days after filing of the original Advice Letter 4822-E. In light of the urgent nature of BioRAM in helping to address the State's declared emergency related to tree mortality, and consistent with G.O. 96-B, Section 7.5.1., PG&E respectfully requests that the minor revisions made by this supplemental advice letter not re-start the initial 30-day review period for Advice Letter 4822-E.

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: Paul Douglas – Energy Division
Megha Lakhchaura – Energy Division
Steven Kelly, Independent Energy Producers

Randy Moore, Forest Service, Pacific Southwest Region
Julee Malinowski Ball, California Biomass Energy Alliance
Service List R.15-02-020

Attachments:

Attachment A – Clean Version of the BioRAM Protocol, as proposed to be revised by this supplement

Attachment B – Clean Version of the BioRAM Rider, as proposed to be revised by this supplement

Attachment C – Redlined Version of the BioRAM Protocol, showing changes made by this supplement to the original Protocol submitted with Advice Letter 4822-E

Attachment D – Redlined Version of the BioRAM Rider, showing changes made by this supplement to the original Rider submitted with Advice Letter 4822-E

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: Jennifer Wirowek

Phone #: (415) 973-1419

E-mail: J6WS@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) #: **4822-E-B** **Tier:** **2**

Subject of AL: **Submission of Second Supplemental Advice Letter with Updated Protocol and Appendices for a Solicitation Using the Renewable Auction Mechanism Targeted At Facilities That Utilize Fuel from High Hazard Zones Pursuant to Resolution E-4770**

Keywords (choose from CPUC listing): Compliance, Contracts, Portfolio

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other ______________________________

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: 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: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: ____

Resolution Required? ☐ Yes ☑No

Requested effective date: **May 7, 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). N/A

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 the original filing, Advice 4822-E, 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

Attachment A

Revised BioRAM Protocol

(Clean Version)

Bioenergy Renewable Auction Mechanism (BioRAM) Request for Offers

June 3, 2016
(Filing Date)

Table of Contents

List of Appendices

I. Overview

Overview

Pacific Gas and Electric Company ("PG&E") is issuing a Bioenergy Renewable Auction Mechanism (BioRAM) Request for Offers ("RFO") in response to the Governor's Emergency Proclamation on drought and tree mortality. This protocol outlines the parameters governing the solicitation.

This solicitation is governed by Commission Decision ("D.") 14-11-042 and Resolution E-4770 (the "BioRAM Decision").

PG&E seeks Offers for the sale of Product[1] for a contract term of either 5 years, with or without an Extension Option (existing facilities only); or 10, 15, or 20 years for either existing or new facilities. For new facilities, the Project must be commercially operational no later than 36 months following final and non-appealable CPUC Approval of the PPA associated with the Project. For existing facilities, the Project must begin deliveries no later than 12 months following final and non-appealable CPUC Approval of the PPA associated with the Project.

For existing facilities that choose the five year contract term with Extension Option, PG&E will have a contractual option to extend the contract for consecutive one-year terms, up to a cumulative total of 10 years. As described in PG&E's most recently Commission approved least-cost-best-fit ("LCBF") methodology, PG&E has a preference for Offers with terms of less than 20 years.[2]

The solicitations for all three Investor Owned Utilities ("IOUs") will be conducted simultaneously. An entity submitting a bid into this RFO (a "Participant") may bid into all three IOU's solicitations. However, if PG&E notifies a Participant its Offer has been selected, the Participant must submit a signed PPA and provide all required documentation as shown in Appendix VIII to the PPA to PG&E within 10 calendar days of selection notification and withdraw from the other RFOs. PG&E reserves the ability to place some Offers on a waiting list to account for the potential that some selected Offers could be withdrawn prior to submission of signed PPA.

[1] Product means the electricity generated by a Project (the eligible renewable energy resource described in an Offer, together with all capacity and ancillary products, services or attributes which can be produced by or associated with the Project, and any other attributes required by the California Public Utilities Commission ("CPUC") and/or the California Energy Commission ("CEC") to count the electricity toward PG&E's Renewable Portfolio Standard ("RPS") requirements.

[2] PG&E's Final 2014 RPS Procurement Plan, Apprndix H (2014 RPS Solicitation Protocol), Attachment K (LCBF Description), p. 15 (describing contract tenor consideration).

For the purpose of this solicitation, reference to the term “PPA” may jointly refer to the Bioenergy Procurement Rider and Amendment Form and PG&E’s RAM 6 PPA.

Schedule

1. Schedule Overview

The BioRAM Decision requires that the three IOUs hold their BioRAM auctions simultaneously. The final RFO schedule is subject to change to conform to any CPUC requirement and otherwise at the discretion of PG&E at any time. PG&E will endeavor to notify Participants of any schedule change via notification on PG&E’s BioRAM RFO Website.[2]

As further described below, Participants may register at PG&E’s RFO website to receive notice of these and other RFO changes by electronic mail. PG&E will have no liability or responsibility to any Participant for any change in the schedule or for failing to provide notice of any change.

The expected launch for this RFO is May 15, 2016 if:

- CAL FIRE provides the initial high hazard zone designations, and
- The Commission approves the IOUs Tier 2 Advice Letter by May 1, 2016

Otherwise, the launch for this solicitation will be two weeks after both conditions are met.

The expected schedule for this RFO is (all times are in Pacific Prevailing Time (“PPT”)):

Date/Time[3]	**Event**
Ongoing	Participants may register online to receive notices regarding the RFO.
2 week after two conditions have been met	PG&E issues the RFO (Issuance Date).
TBD	Bidders’ Conference for RFO (via webinar).
Issuance Date + 30 days	Offers Due. Offer(s) must be submitted to the online platform at Power Advocate. Offer evaluation begins.
Issuance Date + 75 to 100 days	PG&E selects offers. PG&E notifies Selected Participants and any Waitlisted Participants (Notification Date).
Notification Date +	Submittal of Signed PPA. Selected Participants that wish to

[2] http://www.pge.com/rfo

[3] Dates after the notification date are subject to change.

Date/Time[3]	Event
5 days	continue participation in PG&E's RFO must return a signed PPA and required documentation as shown in Appendix VIII of the PPA via Power Advocate.
Notification Date + 30 days	PG&E executes PPAs (Execution Date).
Execution Date + 30 days	Advice Letter Filing for executed PPAs.

2. RFO Process

a. Registration. Participants may register online to receive announcements and updates about this RFO. Go to the BioRAM RFO Website and click on RFO Bidder Registration. Alternatively, go directly to www.pge.com/rfo.

b. Bidders' Webinar. PG&E will hold a Bidders' Webinar to review key Protocol and PPA items related to this solicitation.

c. Offers Due. Participant's Offer must be submitted via Power Advocate and must include all of the documents described in Section VII. By responding to this RFO, the Participant agrees to be bound by all of the terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E.

d. PG&E Selects Offers. Participants whose Offers have been selected will be notified via email. PG&E will select Offers within the Product Category described below according to the evaluation criteria described in Section IV. Some of the next-best Offers beyond those selected may be placed on a waiting list to be selected in order of priority should any selected Offers fail to complete the RFO process.

e. Submittal of Signed PPA. Participants with selected Offers must submit a signed PPA with all required documentation in accordance with the timeline described above. If a Participant fails to submit a signed PPA with required documentation for one or more Selected Offers as described above, PG&E will disqualify the originally selected Offer and will select the next-best Offer on the waiting list. A waitlisted Participant whose Offer is selected must return a signed PPA and the required documentation in accordance with the timeline described above.

f. Execution and Regulatory Approval. Once PG&E has fully executed each of the PPAs resulting from this RFO, it will submit all such PPAs to the CPUC for approval via a Tier 2 advice filing.

Disclaimers for Rejecting Offers and/or Terminating this RFO

This RFO does not constitute an offer to buy and creates no obligation to execute any PPA or to enter into a transaction under a PPA as a consequence of the RFO. PG&E shall retain the right at any time, at its sole discretion, to reject any Offer on the grounds that it does not conform to the terms and conditions of this RFO and reserves the right to request information at any time during the solicitation process.

PG&E retains the discretion, subject to, if applicable, the approval of the CPUC, to: (a) reject any Offer on the basis, including but not limited to the basis that an Offer is the result of market manipulation or is not cost competitive or any other reason; (b) modify this RFO with the approval of the CPUC, the form PPA as it deems appropriate to implement the RFO and to comply with applicable law or other decisions or direction provided by the CPUC; and (c) terminate the RFO should the CPUC not authorize PG&E to purchase Products in the manner proposed in this RFO. In addition, PG&E reserves the right to either suspend or terminate this RFO at any time if such suspension is required by or with the approval of the CPUC. PG&E will not be liable in any way, by reason of such withdrawal, rejection, suspension, termination or any other action described in this paragraph to any Participant, whether submitting an Offer or not.

II. RFO Goals

PG&E is seeking to procure a minimum of 20 MW in this solicitation.

In addition to the product definitions set forth in the PPA, and without implying any amendment to those product definitions, Products from BioRAM Projects must fall within the Baseload Product Category definition:

- “Baseload” Projects will have a generation profile demonstrating an annual capacity factor of 80% or greater (e.g., geothermal/biomass).
- Further, only facilities burning woody biomass are eligible to participate in this solicitation.

Additionally, as more particularly described in the PPA, each Offer should be identified as a full buy/sale transaction or an excess sales transaction, as follows:

- “Full buy/sale” transaction means 100% of the energy production, net of station use, is sold by the generator to PG&E.
- “Excess sales” transaction means that the output from the Project serves the generating facility’s own on-site load first and then sells the remaining energy production to PG&E.

New BioRAM Projects must achieve commercial operation within 36 months of the Effective Date of the associated PPA. Existing projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA. However, the

Resolution states that preference in the evaluation process can be given to projects with either an earlier online date, or commitment to meet the fuel requirements specified on an accelerated basis.

III. Eligibility

PG&E is seeking Products that meet the specific eligibility requirements below. The Participant's Offer must demonstrate that the Project meets each of the items in this Section III for the BioRAM program. PG&E will not be entertaining any storage related offers in this solicitation and will select from eligible Offers only.

All Projects must have the capability to comply with Section 3.1(q) (Seller Equipment Required for Curtailment Instruction Communications) of the PPA.

Project Design Eligibility Requirements: BioRAM

1. Existing and new generation facilities are eligible. An existing generating facility must be certified as an eligible renewable resource ("ERR").[4] PG&E encourages new resources to apply for pre-certification.

   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. PG&E will agree to early termination of existing legacy Standard Offer Power Purchase Agreements (PPA) subject to minimum damage payments specified in the PPA (e.g. Section 2 and Appendix E-11 of the Interim Standard Offer Four PPA). Existing contracts must a) expire within 24 months of execution, or b) have been subject to a current or expired fixed pricing amendment.

2. The Project must be located within California and directly connected to the CAISO or dynamically scheduled into the CAISO.

3. Neither the Project's nameplate capacity nor the Offer's contract capacity may be less than 3 MW. There is no cap on maximum eligible project size.

4. Wood burning facilities are eligible. Multi-fuel facilities restricted to woody biomass fuel are also eligible.

5. Facilities must demonstrate that they will be able to meet the following minimum

[4] The CEC is responsible for certifying ERRs for purposes of compliance with the RPS program. The CEC has published Guidebooks to explain its criteria for RPS eligibility and process for ERR certification. The CEC's "Renewable Portfolio Standard Eligibility Guidebook" 7th Edition publication number CEC-300-2010-007-CMF, January edition, is available at: http://www.energy.ca.gov/renewables/documents/.

levels of the fuel source that should come from CAL FIRE designated high hazard zones as approved by the CPUC[5] in the specified year of operation of the contract: 40% in 2016, 50% in 2017, 60% in 2018, and 80% for each subsequent year. Quarterly fuel attestations signed by both Seller and a Registered Professional Forester (or other mutually agreed-upon process) must be submitted as evidence of having met the minimum percentages of High Hazard fuel.

6. New resources must begin delivery within 36 months of the Effective Date. Existing resources must begin delivery within 12 months of the Effective Date.

Project Viability Eligibility Requirements

1. Interconnection

In order to participate in this RFO, Participants must have an executed Interconnection Agreement, a completed Phase II interconnection study[6] (or equivalent[7]), or documentation showing that the Project passed the Distribution Provider or CAISO Fast Track screens[8] at the time of Offer submittal.

Participants that bid in to the RFO must remain active in the applicable interconnection queue until the project's required network upgrades have been completed. Participants must submit the applicable interconnection study with any applicable appendices with the Offer. If an interconnection agreement for the Project exists, it should be submitted along with the most recent interconnection studies.

PG&E is accepting offers for projects with Full Capacity Deliverability Status ("FCDS"), Partial Capacity Deliverability Status ("PCDS"), and energy-only ("EO") status.

Participants offering fully or partially deliverable resource must provide documentation that the Project has received the FCDS or PCDS or provide documentation that the project is in the process of obtaining that deliverability, including any submitted requests for deliverability to the CAISO. The Participant must provide evidence of at least one of the following:

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[5] High hazard zones are areas of the state representing a high risk for wildfire and falling trees, resulting from severe drought conditions and bark beetle infestation.
[6] Passing of an Electrical Independence Test is not sufficient unless the Project has a completed Phase II interconnection study or equivalent.
[7] For example, a Facilities Study.
[8] *Submission* of an Interconnection Request into a Fast Track process is not sufficient unless the project has *passed* the Fast Track screens or has a completed study equivalent to a Phase II interconnection study.

a) An executed Interconnection Agreement or Amendment to an Interconnection Agreement that reflects the offered deliverability status[9];
b) Application for deliverability with a **completed** deliverability study (i.e., Phase II study or equivalent) with a deliverability status that matches the Offer;
c) A **completed** deliverablity assessment in the annual process that indicates that the project is deliverable pursuant to ISO Tariff Section 9.2 of Appendix DD; or
d) Documentation that the Project has **received** deliverability through the CAISO's Deliverability for Distribution pursuant to ISO Tariff Section 40.4.6.3.

Providing documentation that an application or request for FCDS or PCDS has been submitted through any CAISO annual process is **not** sufficient **unless** there is a finding of deliverability at the time of Offer submittal. Projects bid in as fully-deliverable must be fully deliverable by the date of deliverability designated in the Offer and need not be fully deliverable as of commercial operation.

Projects bidding as energy-only do not have to pursue any deliverability studies.

Repowering projects must provide an attestation that their plans can be accommodated under the existing interconnection agreement, or that they have received their completed Phase II study for any increased capacity at the time of offer submittal. *In addition, projects must provide an acknowledgment that they understand they will be in default under the PPA if the CAISO does not act as expected and they miss their online date after excused delays.* For further information, refer to Section 12 of the CAISO Business Practice Manual (BPM) for Generator Management.[10]

Existing projects will need to ensure that they can participate in the CAISO markets prior to commercial operation. Existing projects will therefore need to fulfill a set of requirements listed in the CAISO's New Resource Implementation Checklist[11], ensure all required CAISO metering and telemetry is installed, and potentially convert their Interconnection Agreement to a wholesale interconnection agreement under FERC jurisdiction.

Projects must obtain a wholesale interconnection agreement under FERC jurisdiction prior to operation. Note that Electric Rule No. 21 is not under FERC jurisdiction and does not result in a wholesale interconnection agreement under FERC jurisdiction. Wholesale procedures, both the CAISO and PG&E Wholesale Distribution Tariff

[9] Where the Interconnection Agreement does not reflect the Deliverability offered, the Participant must provide additional documentation from the CAISO verifying the deliverability
[10] http://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Generator%20Management

[11] CAISO's new resource implementation process is described at: http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx

generation interconnection procedures, can also be viewed on the PG&E website at: http://www.pge.com/wholesale/.

2. Site Control

Participants must attest that they have secured site control for the entire delivery term of their Project as part of their Offers. Requirements to demonstrate such site control are detailed in Appendix C to this solicitation. Examples of site control include: (1) ownership of the site, a leasehold interest, or a right to develop a site for the purpose of constructing a generating facility; (2) an option to purchase or acquire a leasehold site for purposes of constructing a generating facility; and (3) any other business relationship that, in the sole discretion of PG&E, amounts to the same right to develop property as provided in examples (1) or (2) above, between the Participant and another entity that has the right to sell, lease, or grant the right to possess or occupy the site for such a purpose.

Please note that these site control requirements may differ from those required in the interconnection process to achieve a deemed complete status.

3. Experience

A minimum level of developer experience is required for participation in this solicitation. Specifically, the Participant and/or a member of Participant's project development team must have either completed or begun construction of at least one other project of similar technology and capacity. PG&E considers a project to have begun construction if the developer has issued a full notice to proceed to its EPC contractor.

4. Commercialized Technology

The Participant must show that the Project employs technology currently in use at a minimum of two operating facilities of similar capacity worldwide.

5. Commencement of Commercial Operation Deadline

New Projects must achieve commercial operation within 36 months of the Effective Date of the associated PPA, subject to a six month extension for the specific reasons described in the PPA. Existing Projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA. Sellers can request a one-time request for this extension by providing a notice 60 days prior to the guaranteed commercial operation date. Sellers that cannot place the Project into commercial operation by this deadline will be in default under the PPA.

Participation in Other Procurement Programs

Neither the Participant nor the owner of the site may sell any Product from the Project, either currently or at any time during the term of the PPA, pursuant to the Net Energy Metering tariff.

Participation in Future Solicitations

A Participant may submit offers for a Project in a future solicitation notwithstanding the Participant's withdrawal of the Project's Offer from this RFO prior to the execution of a PPA. Additionally, Offers that are not selected in this RFO may be bid again into future solicitations.

IV. Evaluation Criteria

Once Participants have met the eligibility requirements set forth in Section III, above, PG&E will use the evaluation criteria discussed in Section IV as the factors in selecting Offers.

PG&E will use the Commission approved LCBF methodology, pursuant to D.14-11-042, which includes a preference for shorter delivery terms.[12] Additionally, preference will be given to projects that commit to exceeding the minimum fuel requirements.[13] Consideration will also be given to project proximity to high hazard fuel zones.

Least-Cost-Best-Fit

PG&E will evaluate and select eligible Offers based on LCBF criteria, which includes Market Valuation, Transmission Network Upgrade Costs, Location, PAV and Supplier Diversity.

[12] Attachment K from the 2014 RPS RFO Protocol outlines a complete and detailed description of PG&E's Least Cost Best Fit Evaluation Criteria and is available at: http://www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricsuppliersolicitation/RPS2014/Attachment_K_LCBF_01052015.pdf. Note that Table 1 may be updated. PG&E's LCBF methodology includes a qualitative preference for Offers of less than 20 years in duration (p. 15) and allows for qualitative consideration of a project's location consistent with RPS goals (p. 16). In the case of this solicitation, PG&E intends to exercise its discretion to consider location to give a qualitative preference for facilities in closer proximity to high hazard fuel zones, consistent with the goals of the Governor's Emergency Proclamation dated October 31, 2015.

[13] Resolution E-4770 at p. 12.

Each Offer will be assessed on each of the criteria described in this section.

A. Market Valuation

Market Valuation compares an Offer's costs to its market value. Pursuant to D.12-11-016, NMV is calculated for each Offer as follows:

Net Market Value: R = (E+C)-(P+T+G+I)

Adjusted Net Market Value: A = R+S

Where:

E = Energy Value
C = Capacity Value
P = Post-Time-Of-Delivery (TOD) Adjusted Power Purchase Agreement (PPA) Price
T = Transmission Network Upgrade Cost
G = Congestion Cost
I = Integration Costs[14]
S = Ancillary Service Value

The risks and uncertainties associated with an Offer's costs and benefits will be considered as part of Market Valuation. These costs and benefits do not include the costs and benefits associated with an Offer's impact on PG&E's portfolio.

1. Energy Value

PG&E will assess the market value of the energy deliveries based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and delivery location. The market value of the energy will be based on the appropriate forward price curves for the corresponding Trading Hub. The Loss multipliers will be used to incorporate losses specific for the location. With Buyer Curtailment, the energy value will include the expected value of Buyer Curtailments for avoiding (presumably negative) wholesale market spot price for the generation from the project.

2. Capacity Value

The value of capacity, including local reliability benefits, associated with each Offer will be determined based on the projected monthly quantity of qualifying capacity. Resources with an expected finding of full capacity deliverability from the CAISO will be attributed the full capacity value. To the extent that an Offer provides flexible capacity, the capacity that is expected to count for flexible RA will be evaluated at the projected monthly

[14] Integration Costs are assumed to be zero for baseload resources.

premium for flexible RA and added to the Capacity Benefit. It will be assumed that the qualifying capacity is zero for energy-only deliveries.

3. Ancillary Services

Ancullary Services (A/S) value will be assessed based on the A/S capability of the Offer. For Offers that provide PG&E the ability to schedule A/S and receive market revenues, the incremental benefit of having A/S capability will be captured, not to be double counted with the Energy Value.

4. Post-Time-Of-Delivery (TOD) Adjusted Power Purchase Agreemetn (PPA) Price

PG&E will calculate the Post-TOD Adjusted PPA Price, including debt equivalence costs, based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and the Offers contract price. For Dispatchable products, fixed payment calculated from the fixed capacity and Offer's fixed capacity price ($/kW-yr) under the Offer will also be added to the Post-TOD Adjusted PPA price after being levelized by the energy quantity.

5. Transmission Network Upgrade Cost

PG&E will use results from Participants' interconnection studies to calculate the Transmission Network Upgrade Cost adder. The refundable portion of the costs of Network Upgrades are included in transmission rates and paid by customers. Transmission cost adders reflect the cost of incremental, refundable Network Upgrades borne by customers. For projects that are fully deliverable, PG&E will consider the refundable portion of both Reliability and Delivery Network Upgrades. For energy-only Projects, PG&E will consider only the refundable portion of Reliability Network Upgrades when calculating a transmission adder.

6. Congestion Cost

Congestion cost will be calculated based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and delivery location. The Congestion Cost will be positive if the project is located in an area where the transmission lines are constrained due to serving loads outside of the area from the generation within the area. The Congestion Cost will be negative if the project is located in an area where the transmission lines are constrained due to serving loads within the area from the generation outside of the area. Congestion Cost multipliers will be used to incorporate congestion costs specific for the location.

B. Portfolio Adjusted Value

Portfolio Adjusted Value ("PAV") consists of several components, however with respect to the BioRAM solicitation, location will be the primary quantitative consideration.

1. Location

PG&E has a preference for projects in its service territory. This preference is influenced by constraints in the market that may limit the amount of capacity in SP15 that PG&E can count toward its RA requirement. Capacity located closer to PG&E's load is likely to have more value for PG&E's bundled electric portfolio, even when market forward prices indicate that energy delivered farther away has greater Market Value. The long-term risk for PG&E's customers is less when resources are located within PG&E's service territory rather than outside of PG&E's service territory. The calculation of PAV effectuates this by adjusting the value of energy and capacity for offers from resources in SP15. Offers for RPS energy from resources in NP15 will have an equal or higher PAV than comparable offers from resources in SP15.

PG&E reserves the right to reject Offers if they are uncompetitive with other options, including offers received in other PG&E non-RAM solicitations, or if there is evidence of market manipulation.

Resource Adequacy Benefit

For Projects that provide full or partial deliverability, PG&E will assume that new resources achieve full or partial capacity deliverability status on the date of the deliverability stated in the Offer, and the applicable RA benefit will be included from this date through the remaining term.

As described in Resolution E-4489, PG&E will evaluate the capacity benefits of a proposal by applying the monthly Net Qualifying Capacity ("NQC") to PG&E's forecast of avoided capacity costs. Due to the RA capacity constraint that currently exists on projects that are located in SP15, PG&E currently discounts the capacity value of SP15 resources and is expected to assign different values to projects that have delivery points located in NP15 versus SP15. This constraint may change in the future.

Supplier Diversity

It is the policy of PG&E that Women-, Minority-, 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") shall have the maximum practicable opportunity to participate in this RFO and other competitive solicitations. PG&E will evaluate each offer and how it contributes to PG&E's supplier diversity goals. The supplier diversity evaluation will take into account the Participant's status as a WMDVLBE and/or intent to subcontract to WMDVLBEs. Offers must include documentation of the Participant's WMDVLBE status in the offer form provided at Appendix A to this solicitation. The PPA has been updated to require compliance with PG&E's Supplier Diversity program and periodic reporting on diverse spend.

V. Guidelines for Offer Development

Price

Participants must submit with their Offer their best and final price using the Energy Pricing Sheet of the Offer Form in Appendix A to this solicitation. PG&E will not consider updated or "refreshed" price offers submitted after the Offer submittal deadline. The Product price must be stated in annual $/MWh and may be escalated over the term of the PPA. Product quantities can vary annually to reflect degradation of the facility, if applicable.

Pursuant to the PPA, Sellers will be paid the contract price multiplied by the applicable TOD factor for each hour. For purposes of bid evaluation, PG&E will levelize bid prices after applying the applicable standard Time of Delivery ("TOD") factors as specified below to compare all offers on a consistent basis.

The price submitted by Participant for an Offer must include, without limitation, the following: (a) all awards, subsidies, and tax credits with respect to the Project, (b) all other benefits that Participants expects to apply, (c) any costs incurred by Participant, including any interconnection costs, (d) the acceptance, without reservation or revision, of the non-price terms and conditions in the PPA and fuel acquisition costs, and (e) the assumption that the Product price will be adjusted in each hour of delivery by the Time of Delivery (TOD) factors set forth in the table below by PG&E.

Existing resources bidding in a five-year Delivery Term with Extension Option should include 10 years worth of prices in their offer to address the possibility of a PPA extending beyond 5 years. PG&E has the right to exend PPAs from existing facilities that have an executed PPA for a five-year Delivery Term with Extension Option on a year-by-year basis up to a cumulative total of ten years so long as the State of Emergency remains in effect.

Time of Delivery

Time of Delivery (TOD) Periods and Factors

TOD FACTORS FOR EACH TOD PERIOD			
Period	**1. Peak**	**2. Mid-Day**	**3. Night**
A. July - September	1.479	0.604	1.087
B. October - February	1.399	0.718	1.122
C. March - June	1.270	0.280	1.040

TOD factors shown are consistent with factors approved in the 2015 RPS Decision D.15-12-025.

Definitions:

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 for all days in the applicable Monthly Period.

3. **Night** = hours ending 23-09 PPT all days in the applicable Monthly Period.

PPA Terms and Conditions

PG&E strongly encourages all Participants to review the form PPA and expects all Participants to be able to perform ALL obligations under the PPA.

Any successful Offers must be formalized by the execution of a final PPA. PG&E has provided a form PPA in Appendix B to this solicitation, and the summary of certain terms within the PPA provided in this section of the protocol is not meant to provide a substitute for a careful review of the actual PPA. In the case of any conflict between this protocol and the PPA, the PPA will control.

The terms and conditions of the form PPA are non-negotiable. All project-specific information should be included in the cover sheet.

PG&E will provide a five year contract as an option for existing facilities, and Buyer will have the right to extend the five-year contract term for one year at a time, up to a cumulative total of ten years as long as the State of Emergency remains in effect. The delivery term will commence on the first date that the Participant delivers the Product to PG&E from the Project.

The PPA requires PG&E's counterparty to submit a project development milestone timeline (Section B(i)(b) in the Cover Sheet of the PPA) upon execution of the PPA and to provide progress reports to PG&E (as outlined in Section 3.9(a)(vii) and 3.9(a)(viii) in the PPA) on the Project's progress towards the achievement of the development milestones until the project begins energy deliveries.

For Projects being bid as fully or partially deliverable, the PPA includes an estimate of when full or partially capacity deliverability status will be attained. Seller is contractually bound by the estimate. If Seller has not achieved full or partial capacity deliverability status consistent with that in the Offer by the designated time, then the

Seller will be subject to contractual penalties.

The PPA requires a Participant to post collateral in the form of cash or letter of credit from a reputable U.S. bank in the following amounts and by the time discussed below:

> **Project Development Security:** $90 per kW for Baseload facilities, due within five (5) Business Days following CPUC Approval of the PPA. The development deposit will be refunded upon Commercial Operation Date or applied to the subsequent Performance Deposit.
>
> **Delivery Term Security:** An amount equal to the higher of 5% of expected total Project revenues, or one year of revenue at (Contract Price $/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.

Under the PPA, the Project Development Security will be retained by PG&E in the event that the Project should fail to come online by the contractual deadline. Delivery Term Security will be held throughout the delivery term.

VI. Information Regarding Interconnection to PG&E's Electric System and Interconnection Screens

Many factors influence the feasibility and cost of interconnecting generating facility systems to an electric system. These factors include, but are not necessarily limited to, the size and type of the system, substation and circuit load and capability, voltage regulation and voltage flicker.

Electric Generation Interconnection Services

New facilities must achieve commercial operation within 36 months of the Effective Date of the associated PPA. For existing facilities, projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA.

Sellers are responsible for understanding the relevant interconnection procedures and ensuring they can interconnect within the mandated timelines.

Information regarding interconnection to the PG&E Electric Grid is available at the following site: http://www.pge.com/wholesale/. Any interconnection questions should be directed to PG&E's Electric Generation Interconnection department at the email address: wholesalegen@pge.com.

Any application for interconnection to the transmission system must be directed to the CAISO in accordance with the CAISO Tariff. For more information, please refer to the CAISO Tariff via the CAISO website at:

http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx.

For interconnection applications to SCE's or SDG&E's Distribution Grid, seller should contact the applicable Distribution Provider representative.

VII. Required Information

Submission Overview

All Offer submittal information pertaining to this RFO will be hosted on the Power Advocate site. In order to participate in this RFO, Participants must register through Power Advocate at the Public Registration Link:

https://www.poweradvocate.com/pR.do?okey=58234&pubEvent=true

PG&E strongly encourages Participants to register with Power Advocate well before Offers are due. PG&E will be posting the detailed instructions for submitting Offer(s) and using the on-line platform on PG&E's website prior to Offer submittal.

Electronic Documents: The electronic documents for the attachments must be in a Microsoft Word, Excel file or Adobe Acrobat PDF file as applicable. The Participant should not provide documents in other electronic formats and versions. For each document, please include a company name in each file name. **Telephonic, hardcopy or facsimile transmission of an Offer is not acceptable.**

Required Forms

The following documents, which are located in the Appendices to this solicitation, must be completed and included with each Offer:

1. **Completed Offer Form, Developer Experience Form and Supplier Diversity Form (Appendix A to this solicitation).** Participant must provide a complete Offer form. Please provide all applicable information requested in the form and include the Project's expected generation profile, CAISO or utility cost estimate for the needed network upgrade costs. Participant must also include the interconnection queue position, WMDVLBE and if any plans to engage in activites that support PG&E's supplier diversity goals on the Offer form. Format: MS Excel

2. **A Completed PPA Cover Sheet (Appendix B to this solicitation).** The cover sheet includes spaces for contract capacity, project vintage, milestones, and supplier diversity spend. Other mark-ups are not permitted and will result in rejection of the Offer. Format: MS Word

3. **A Completed PPA Appendix XIII of the PPA.** This appendix includes spaces for all of the project specifications. Other mark-ups are not permitted and will result in rejection of the Offer. Format: MS Word.

4. **Site Control Questionnaire and Attestation (Appendix C to this solicitation)**. Participant must attest to site control and provide a map showing site location and key project facilities. The map should show the project boundary, and gen-tie route from the project to the first point of interconnection with the electric grid. The map should be provided in one of the following file formats: (1) Google kml/kmz, (2) ESRI geodatabase (mdb or .gdb) (3) a shapefile with file extension .shp plus at least the 3 supporting files (.shx, .dbf, .sbn). Format: Applicable GIS data file format

5. **Acknowledgement and Commitment of Site Owner Letter (Appendix D to this solicitation)**. **This only applies to projects that are 5 MW or less.** The owner of the site on which Participant's Project is proposed to be located must attest to familiarity with NEM alternatives, as applicable. The Participant and the owner of the site must also commit not to sell Product from the Project under this program alternative throughout the term of the PPA, if executed. Format: PDF
6. **Interconnection Studies**. Participants must have an executed Interconnection Agreement, a completed Phase II interconnection study[15] (or equivalent[16]), or documentation showing that the Project passed the Distribution Provider or CAISO Fast Track screens[17] at the time of Offer submittal. Format: PDF or MS Word.

   Participants offering fully or partially deliverable resource must provide documentation that the Project has received the FCDS or PCDS or provide documentation that the project is in the process of obtaining that deliverability, including any submitted requests for deliverability to the CAISO. The Participant must provide evidence of at least one of the following:

   a) An executed Interconnection Agreement or Amendment to an Interconnection Agreement that reflects the offered deliverability status[18];
   b) Application for deliverability with a **completed** deliverability study (i.e., Phase II study or equivalent) with a deliverability status that matches the Offer;
   c) A **completed** deliverablity assessment in the annual process that indicates that the project is deliverable pursuant to ISO Tariff Section 9.2 of Appendix DD; or

[15] Passing of an Electrical Independence Test is not sufficient unless the Project has a completed Phase II interconnection study or equivalent.
[16] For example, a Facilities Study.
[17] *Submission* of an Interconnection Request into a Fast Track process is not sufficient unless the project has *passed* the Fast Track screens or has a completed study equivalent to a Phase II interconnection study.
[18] Where the Interconnection Agreement does not reflect the Deliverability offered, the Participant must provide additional documentation from the CAISO verifying the deliverability

d) Documentation that the Project has **received** deliverability through the CAISO's Deliverability for Distribution pursuant to ISO Tariff Section 40.4.6.3.

Providing documentation that an application or request for FCDS or PCDS has been submitted through any CAISO annual process is **not** sufficient **unless** there is a finding of deliverability at the time of Offer submittal. Projects bid in as fully-deliverable must be fully deliverable by the date of deliverability designated in the Offer and need not be fully deliverable as of commercial operation.

Projects bidding as energy-only do not have to provide any deliverability studies.

VIII. Offer Selection

PG&E will select Offers according to the evaluation criteria described in Section IV. PG&E plans to notify selected Participants by e-mail according to the schedule described above.

PG&E may place some offers on a waitlist. Any waitlisted Participants would be selected in order of priority should any one of the selected Offers fail to return an executed PPA pursuant to the schedule outlined above.

IX. Regulation

Confidentiality

After contract execution, PG&E plans to submit executed PPAs to the CPUC for approval via a Tier 2 advice letter filing. By participating in the RFO, each Participant acknowledges and expressly authorizes PG&E to publicly disclose the following information as required by the Commission RAM Decision 10-12-048: (1) names of the companies that submitted Offers into PG&E's RAM RFO; (2) number of Offers received by each company; (3) number of Offers received and shortlisted by PG&E; (4) Project size; (5) participating technologies; (6) the number of Projects which passed the project viability screen; (7) location of bids by county level shown in a map format; and (8) the progression of each executed contract's project development milestones.

Except with PG&E's prior written consent, no Participant shall collaborate on or discuss with any other Participant or potential Participant bidding strategies, the substance of any Offer(s), including without limitation the price or any other terms or conditions of any Offer(s), or whether an Offer has been selected.

All information and documents in Participant's Offer clearly identified and marked by Participant as "Proprietary and Confidential" on each page on which confidential information appears, shall be considered confidential information. PG&E shall not disclose such confidential information and documents to any third parties except for PG&E's employees, agents, counsel, accountants, advisors, or contractors who have a need to know such information and have agreed to keep such information confidential and except as provided otherwise in this section. In addition, Participant's Offer will be disclosed to the IE.

Notwithstanding the foregoing, it is expressly contemplated that the information and documents submitted by Participant in connection with this RFO may be provided to the CPUC, its staff, and the Procurement Review Group ("PRG"), established pursuant to D. 02-08-071. PG&E retains the right to disclose any information or documents provided by Participant to the CPUC, the PRG, the California Energy Commission ("CEC") and to any other entity 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 PG&E at any time even in the absence of a protective order, confidentiality agreement, or nondisclosure agreement, as the case may be, without notification to Participant and without liability or any responsibility of PG&E to Participant. PG&E cannot ensure that the CPUC will afford confidential treatment to Participant's confidential information, or that confidentiality agreements or orders will be obtained from and/or honored by the PRG, the CEC, or the CPUC. By submitting an Offer, Participant agrees to the confidentiality provisions described in this section.

The treatment of confidential information described above shall continue to apply to information related to Projects that are selected in this RFO and formalized through execution of a PPA.

Changes to RFO

By responding to this RFO, each Participant agrees to be bound by all terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E.

X. Communications

PG&E has established the BioRAM RFO website at www.pge.com/rfo/BioRAM where Participants may register and where all the RFO documents, information, announcements and Q&As are posted and available to Participants.

To promote accuracy and consistency of the information provided to all Participants, PG&E encourages Participants to submit any inquiries via e-mail directed to RAMRFO@pge.com for matters related to BioRAM procurement. With respect to matters of general interest raised by any Participant, PG&E may, without reference to the specific Participant raising such matter or initiating the inquiry, post responses on its website. PG&E may, in its sole discretion, decline to respond to any email or other inquiry without liability or responsibility.

Any exchange of material information regarding this RFO between Participant and PG&E must be submitted to both PG&E and the Independent Evaluator. The IE for this RFO is Lewis Hashimoto from Arroyo Seco Consulting. Participants should copy Lewis Hashimoto at arroyosecoconsulting@gmail.com.

PG&E may elect to respond to inquiries or comments by individual Participants concerning purely procedural or administrative matters, but may also decline to do so in its sole discretion without liability or responsibility.

XI. Submission of Signed PPAs

Within ten (10) calendar days of Offer selection, Participants that wish to continue in this RFO must submit a signed PPA and required documentation for each selected Project meeting all RFO conditions via the Power Advocate on-line platform.

XII. Procurement Review Group Review

Following completion of the evaluation and rankings of Offers, PG&E will submit the results of the evaluation and its recommendations to its PRG members. PG&E will consider any alternative recommendations proposed by the PRG. PG&E, in its sole discretion, shall determine whether any alternatives proposed by the PRG should be adopted. PG&E has no obligation to obtain the concurrence of the PRG with respect to any Offer.

PG&E assumes no responsibility for the actions of the PRG, including actions that may delay or otherwise affect the schedule for this Solicitation, including the timing of the selection of Offers and the obtaining of Regulatory Approval.

XIII. Regulatory Approval

The effectiveness of any executed PPA is expressly conditioned on PG&E's receipt of final and non-appealable CPUC Approval of such PPA.

XIV. Participant's Waiver of Claims and Limitations of Remedies

Except as expressly set forth in this Protocol, by submitting an Offer, Participant knowingly and voluntarily waives all remedies or damages at law or equity concerning or related in any way to the RFO, the RFO Protocol and/or any attachments to the RFO Protocol ("Waived Claims"). The assertion of any Waived Claims by Participant may, to the extent that Participant's Offer has not already been disqualified, automatically disqualify such Offer from further consideration in the Solicitation or otherwise.

By submitting an Offer, Participant agrees that the only forums in which Participant may assert any challenge with respect to the conduct or results of the RFO is in the proceeding related to D.10-12-048 adopted on December 17, 2010, or through the alternative dispute resolution ("ADR") services provided by the CPUC pursuant to Resolution ALJ-185, August 25, 2005. The ADR process is voluntary in nature, and does not include processes, such as binding arbitration, that impose a solution on the disputing parties. However, PG&E will consider the use of ADR under the appropriate circumstances. Additional information about this program is available on the CPUC's website at the following link:

www.cpuc.ca.gov/PUBLISHED/Agenda_resolution/47777.htm.

Participant further agrees that other than through the ADR process, the only means of challenging the conduct or results of the Solicitation is a protest to an Advice Letter seeking approval of one or more PPAs entered into as a result of the RFO, that the sole basis for any such protest shall be that PG&E allegedly failed in a material respect to conduct the RFO in accordance with this Protocol, and the exclusive remedy available to Participant in the case of such a protest shall be an order of the CPUC that PG&E again conduct any portion of the RFO that the CPUC determines was not previously conducted in accordance with the RFO Protocol. Participant expressly waives any and all other remedies, including, without limitation, compensatory and/or exemplary damages, restitution, injunctive relief, interest, costs, and/or attorneys fees. Unless PG&E elects to do otherwise in its sole discretion during the pendency of such a protest or ADR process, the RFO and any related regulatory proceedings related to the RFO will continue as if the protest had not been filed, unless the CPUC has issued an order suspending the RFO or PG&E has elected to terminate the RFO.

Participant agrees to indemnify and hold PG&E harmless from any and all claims by any other Participant asserted in response to the assertion of a Waived Claim by Participant or as a result of a Participant's protest to an advice letter filing with the CPUC resulting from the RFO.

Except as expressly provided in this Protocol, nothing herein, including Participant's waiver of the Waived Claims as set forth above, shall in any way limit or otherwise affect the rights and remedies of PG&E. Nothing in this Protocol is intended to prevent any Participant from informally communicating with the CPUC or its staff regarding this RFO or any other matter.

XV. Termination of the RFO-Related Matters

PG&E reserves the right at any time, in its sole discretion, to terminate the RFO for any reason whatsoever without prior notification to Participants and without liability of any kind to or responsibility of PG&E or anyone acting on PG&E's behalf. Without limitation, grounds for termination of the RFO may include the assertion of any Waived

Claims by a Participant or a determination by PG&E that, following evaluation of the Offers, there are no Offers that are cost competitive.

PG&E reserves the right to terminate further participation in this process by any Participant, to evaluate the qualifications of any Participant, and to reject any or all Offers, all without notice and without liability to PG&E or anyone acting on PG&E's behalf.

In the event of termination of the RFO for any reason, PG&E will not reimburse the Participant for any expenses incurred in connection with the RFO regardless of whether such Participant's Offer is selected, not selected, rejected or disqualified.

Unless earlier terminated, the RFO will terminate automatically upon the execution of one or more PPAs by selected Participants as described herein. In the event that no PPAs are executed, then the RFO will terminate automatically on 12 months after issuance of the RFO.

XVI. Participant's Representations and Warranties

Breach by any Participant of the representations and warranties of the RFO Attachments is, in addition to any other remedies that may be available to PG&E under applicable law, grounds for immediate disqualification of such Participant from participation in the RFO, and depending on the nature or severity of the breach, may also be grounds for terminating the RFO in its entirety.

Attachment B

Revised BioRAM Rider

(Clean Version)

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 payed 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 and 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) <u>End to Governor's Proclamation</u>

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) <u>Event of Default and Termination</u>.

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) "<u>Contract Price</u>" 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. <u>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.</u>

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: ______________________	Signature: ______________________
Name: ______________________	Name: ______________________
Title: ______________________	Title: ______________________
Date: ______________________	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 ***[or alternative provider pursuant to Section 3.10(b)(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

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[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")	Name: Pacific Gas and Electric Company, a California corporation ("Buyer" or "PG&E")
All Notices: ***[Seller to complete]***	All Notices:
Delivery Address:	Delivery Address:
Street:	77 Beale Street, Mail Code N12E
City: State: Zip:	San Francisco, CA 94105-1702

Mail Address: (if different from above) Attn: Phone: Facsimile: Email:	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:	DUNS: Federal Tax ID Number:
Invoices: Attn: Phone: Facsimile: Email:	**Invoices:** Attn: Azmat Mukhtar (ASM3@pge.com) Manager, Electric Settlements Phone: (415) 973-4277 Facsimile: (415) 973-2151
Scheduling: Attn: Phone: Facsimile: Email:	**Scheduling:** Attn: Day-Ahead Operations (DAEnergy@pge.com) Phone: (415) 973-1971 Facsimile: (415) 973-4500
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: PG&E Risk Credit Team (pgeriskcredit@exchange.pge.com) Manager, Credit Risk Management Phone: (415) 973-4144 Facsimile: (415) 973-4071
With additional Notices of an Event of	**Contract Manager:**

Default to Contract Manager:

Attn: ______________________________

Phone: ____________________________

Facsimile: _________________________

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

Attachment C

Revised BioRAM Protocol

(Redlined Version)

Bioenergy Renewable Auction Mechanism (BioRAM) Request for Offers

-June~~April~~ 3~~7~~, 2016
(Filing Date)

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List of Appendices

I. Overview

Overview

Pacific Gas and Electric Company ("PG&E") is issuing a Bioenergy Renewable Auction Mechanism (BioRAM) Request for Offers ("RFO") in response to the Governor's Emergency Proclamation on drought and tree mortality. This protocol outlines the parameters governing the solicitation.

This solicitation is governed by Commission Decision ("D.") 14-11-042 and Resolution E-4770 (the "BioRAM Decision").

PG&E seeks Offers for the sale of Product[1] for a contract term of either 5 years, with or without an E~~e~~xtension O~~o~~ption (existing facilities only); or~~up to~~ 10, 15, or 20 years for either existing or new facilities. For new facilities, the Project must be commercially operational no later than 36 months following final and non-appealable CPUC Approval of the PPA associated with the Project. ~~For existing facilities, PG&E will seek offers for sale of product for a contract term of five years with PG&E option for year-to-year extension up to 10 years.~~ For existing facilities, ~~T~~the Project must begin deliveries no later than 12 months following final and non-appealable CPUC Approval of the PPA associated with the Project.

For existing facilities that choose the five year contract term with Extension O~~o~~ption, PG&E will have a contractual option to extend the contract for consecutive one-year terms, up to a cumulative total of 10 years. As described in PG&E's most recently Commission approved least-cost-best-fit ("LCBF") methodology, PG&E has a preference for Offers with terms of less than 20 years.[2]

The solicitations for all three Investor Owned Utilities ("IOUs") will be conducted simultaneously. An entity submitting a bid into this RFO (a "Participant") may bid into all three IOU's solicitations. However, if PG&E notifies a Participant its Offer has been selected, the Participant must submit a signed PPA and provide all required documentation as shown in Appendix VIII to the PPA to PG&E within 10 calendar days of selection notification and withdraw from the other RFOs. PG&E reserves the ability to place some Offers on a waiting list to account for the potential that some selected Offers could be withdrawn prior to submission of signed PPA.

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[1] Product means the electricity generated by a Project (the eligible renewable energy resource described in an Offer, together with all capacity and ancillary products, services or attributes which can be produced by or associated with the Project, and any other attributes required by the California Public Utilities Commission ("CPUC") and/or the California Energy Commission ("CEC") to count the electricity toward PG&E's Renewable Portfolio Standard ("RPS") requirements.

[2] PG&E's Final 2014 RPS Procurement Plan, Apprndix H (2014 RPS Solicitation Protocol), Attachment K (LCBF Description), p. 15 (describing contract tenor consideration).

For the purpose of this solicitation, reference to the term "PPA" may jointly refer to the Bioenergy Procurement Rider and Amendment Form and PG&E's RAM 6 PPA.

Schedule

1. Schedule Overview

The BioRAM Decision requires that the three IOUs hold their BioRAM auctions simultaneously. The final RFO schedule is subject to change to conform to any CPUC requirement and otherwise at the discretion of PG&E at any time. PG&E will endeavor to notify Participants of any schedule change via notification on PG&E's BioRAM RFO Website.[2]

As further described below, Participants may register at PG&E's RFO website to receive notice of these and other RFO changes by electronic mail. PG&E will have no liability or responsibility to any Participant for any change in the schedule or for failing to provide notice of any change.

The expected launch for this RFO is May 15, 2016 if:

- CAL FIRE provides the initial high hazard zone designations, and
- The Commission approves the IOUs Tier 2 Advice Letter by May 1, 2016

Otherwise, the launch for this solicitation will be two weeks after both conditions are met.

The expected schedule for this RFO is (all times are in Pacific Prevailing Time ("PPT")):

Date/Time[3]	**Event**
Ongoing	Participants may register online to receive notices regarding the RFO.
2 week after two conditions have been met	PG&E issues the RFO (Issuance Date).
TBD	Bidders' Conference for RFO (via webinar).
Issuance Date + 30 days	Offers Due. Offer(s) must be submitted to the online platform at Power Advocate. Offer evaluation begins.
Issuance Date + 75 to 100 days	PG&E selects offers. PG&E notifies Selected Participants and any Waitlisted Participants (Notification Date).

[2] http://www.pge.com/rfo

[3] Dates after the notification date are subject to change.

Date/Time[3]	Event
Notification Date + 5 days	Submittal of Signed PPA. Selected Participants that wish to continue participation in PG&E's RFO must return a signed PPA and required documentation as shown in Appendix VIII of the PPA via Power Advocate.
Notification Date + 30 days	PG&E executes PPAs (Execution Date).
Execution Date + 30 days	Advice Letter Filing for executed PPAs.

2. RFO Process

a. Registration. Participants may register online to receive announcements and updates about this RFO. Go to the BioRAM RFO Website and click on RFO Bidder Registration. Alternatively, go directly to www.pge.com/rfo.

b. Bidders' Webinar. PG&E will hold a Bidders' Webinar to review key Protocol and PPA items related to this solicitation.

c. Offers Due. Participant's Offer must be submitted via Power Advocate and must include all of the documents described in Section VII. By responding to this RFO, the Participant agrees to be bound by all of the terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E.

d. PG&E Selects Offers. Participants whose Offers have been selected will be notified via email. PG&E will select Offers within the Product Category described below according to the evaluation criteria described in Section IV. Some of the next-best Offers beyond those selected may be placed on a waiting list to be selected in order of priority should any selected Offers fail to complete the RFO process.

e. Submittal of Signed PPA. Participants with selected Offers must submit a signed PPA with all required documentation in accordance with the timeline described above. If a Participant fails to submit a signed PPA with required documentation for one or more Selected Offers as described above, PG&E will disqualify the originally selected Offer and will select the next-best Offer on the waiting list. A waitlisted Participant whose Offer is selected must return a signed PPA and the required documentation in accordance with the timeline described above.

f. Execution and Regulatory Approval. Once PG&E has fully executed each of the PPAs resulting from this RFO, it will submit all such PPAs to the CPUC for approval via a Tier 2 advice filing.

Disclaimers for Rejecting Offers and/or Terminating this RFO

This RFO does not constitute an offer to buy and creates no obligation to execute any PPA or to enter into a transaction under a PPA as a consequence of the RFO. PG&E shall retain the right at any time, at its sole discretion, to reject any Offer on the grounds that it does not conform to the terms and conditions of this RFO and reserves the right to request information at any time during the solicitation process.

PG&E retains the discretion, subject to, if applicable, the approval of the CPUC, to: (a) reject any Offer on the basis, including but not limited to the basis that an Offer is the result of market manipulation or is not cost competitive or any other reason; (b) modify this RFO with the approval of the CPUC, the form PPA as it deems appropriate to implement the RFO and to comply with applicable law or other decisions or direction provided by the CPUC; and (c) terminate the RFO should the CPUC not authorize PG&E to purchase Products in the manner proposed in this RFO. In addition, PG&E reserves the right to either suspend or terminate this RFO at any time if such suspension is required by or with the approval of the CPUC. PG&E will not be liable in any way, by reason of such withdrawal, rejection, suspension, termination or any other action described in this paragraph to any Participant, whether submitting an Offer or not.

II. RFO Goals

PG&E is seeking to procure a minimum of 20 MW in this solicitation.

In addition to the product definitions set forth in the PPA, and without implying any amendment to those product definitions, Products from BioRAM Projects must fall within the Baseload Product Category definition:

- "Baseload" Projects will have a generation profile demonstrating an annual capacity factor of 80% or greater (e.g., geothermal/biomass).
- Further, only facilities ~~wood~~ burning woody biomass ~~facilities~~ are eligible to participate in this solicitation.

Additionally, as more particularly described in the PPA, each Offer should be identified as a full buy/sale transaction or an excess sales transaction, as follows:

- "Full buy/sale" transaction means 100% of the energy production, net of station use, is sold by the generator to PG&E.
- "Excess sales" transaction means that the output from the Project serves the generating facility's own on-site load first and then sells the remaining energy production to PG&E.

New BioRAM Projects must achieve commercial operation within 36 months of the Effective Date of the associated PPA. Existing projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA. However, the

Resolution states that preference in the evaluation process can be given to projects with either an earlier online date, or commitment to meet the fuel requirements specified on an accelerated basis.

III. Eligibility

PG&E is seeking Products that meet the specific eligibility requirements below. The Participant's Offer must demonstrate that the Project meets each of the items in this Section III for the BioRAM program. PG&E will not be entertaining any storage related offers in this solicitation and will select from eligible Offers only.

All Projects must have the capability to comply with Section 3.1(q) (Seller Equipment Required for Curtailment Instruction Communications) of the PPA.

Project Design Eligibility Requirements: BioRAM

1. Existing and new generation facilities are eligible. An existing generating facility must be certified as an eligible renewable resource ("ERR").[4] PG&E encourages new resources to apply for pre-certification.

   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. PG&E will agree to early termination of existing legacy Standard Offer Power Purchase Agreements (PPA) subject to minimum damage payments specified in the PPA (e.g. Section 2 and Appendix E-11 of the Interim Standard Offer Four PPA). Existing contracts must a) expire within 24 months of execution, or b) have been subject to a current or expired fixed pricing amendment.

2. The Project must be located within California and directly connected to the CAISO or dynamically scheduled into the CAISO.

3. Neither the Project's nameplate capacity nor the Offer's contract capacity may be less than 3 MW. There is no cap on maximum eligible project size.

4. ~~Only w~~Wood burning facilities ~~utilizing forest fuelstock~~ are eligible. Multi-fuel facilities restricted to woody biomass fuel are also ~~not~~ eligible.

5. Facilities must demonstrate that they will be able to meet the following minimum

[4] The CEC is responsible for certifying ERRs for purposes of compliance with the RPS program. The CEC has published Guidebooks to explain its criteria for RPS eligibility and process for ERR certification. The CEC's "Renewable Portfolio Standard Eligibility Guidebook" 7th Edition publication number CEC-300-2010-007-CMF, January edition, is available at: http://www.energy.ca.gov/renewables/documents/.

levels of the fuel source that should come from CAL FIRE designated high hazard zones as approved by the CPUC[5] in the specified year of operation of the contract: 40% in 2016, 50% in 2017, 60% in 2018, and 80% for each subsequent year. Quarterly fuel attestations signed by both Seller and a Registered Professional Forester (or other mutually agreed-upon process) must be submitted as evidence of having met the minimum percentages of High Hazard fuel.

6. New resources must begin delivery within 36 months of the Effective Date. Existing resources must begin delivery within 12 months of the Effective Date.

Project Viability Eligibility Requirements

1. Interconnection

In order to participate in this RFO, Participants must have an executed Interconnection Agreement, a completed Phase II interconnection study[6] (or equivalent[7]), or documentation showing that the Project passed the Distribution Provider or CAISO Fast Track screens[8] at the time of Offer submittal.

Participants that bid in to the RFO must remain active in the applicable interconnection queue until the project's required network upgrades have been completed. Participants must submit the applicable interconnection study with any applicable appendices with the Offer. If an interconnection agreement for the Project exists, it should be submitted along with the most recent interconnection studies.

PG&E is accepting offers for projects with Full Capacity Deliverability Status ("FCDS"), Partial Capacity Deliverability Status ("PCDS"), and energy-only ("EO") status.

Participants offering fully or partially deliverable resource must provide documentation that the Project has received the FCDS or PCDS or provide documentation that the project is in the process of obtaining that deliverability, including any submitted requests for deliverability to the CAISO. The Participant must provide evidence of at least one of the following:

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[5] High hazard zones are areas of the state representing a high risk for wildfire and falling trees, resulting from severe drought conditions and bark beetle infestation.
[6] Passing of an Electrical Independence Test is not sufficient unless the Project has a completed Phase II interconnection study or equivalent.
[7] For example, a Facilities Study.
[8] *Submission* of an Interconnection Request into a Fast Track process is not sufficient unless the project has *passed* the Fast Track screens or has a completed study equivalent to a Phase II interconnection study.

a) An executed Interconnection Agreement or Amendment to an Interconnection Agreement that reflects the offered deliverability status[9];
b) Application for deliverability with a **completed** deliverability study (i.e., Phase II study or equivalent) with a deliverability status that matches the Offer;
c) A **completed** deliverablity assessment in the annual process that indicates that the project is deliverable pursuant to ISO Tariff Section 9.2 of Appendix DD; or
d) Documentation that the Project has **received** deliverability through the CAISO's Deliverability for Distribution pursuant to ISO Tariff Section 40.4.6.3.

Providing documentation that an application or request for FCDS or PCDS has been submitted through any CAISO annual process is **not** sufficient **unless** there is a finding of deliverability at the time of Offer submittal. Projects bid in as fully-deliverable must be fully deliverable by the date of deliverability designated in the Offer and need not be fully deliverable as of commercial operation.

Projects bidding as energy-only do not have to pursue any deliverability studies.

Repowering projects must provide an attestation that their plans can be accommodated under the existing interconnection agreement, or that they have received their completed Phase II study for any increased capacity at the time of offer submittal. *In addition, projects must provide an acknowledgment that they understand they will be in default under the PPA if the CAISO does not act as expected and they miss their online date after excused delays.* For further information, refer to Section 12 of the CAISO Business Practice Manual (BPM) for Generator Management.[10]

Existing projects will need to ensure that they can participate in the CAISO markets prior to commercial operation. Existing projects will therefore need to fulfill a set of requirements listed in the CAISO's New Resource Implementation Checklist[11], ensure all required CAISO metering and telemetry is installed, and potentially convert their Interconnection Agreement to a wholesale interconnection agreement under FERC jurisdiction.

Projects must obtain a wholesale interconnection agreement under FERC jurisdiction prior to operation. Note that Electric Rule No. 21 is not under FERC jurisdiction and does not result in a wholesale interconnection agreement under FERC jurisdiction. Wholesale procedures, both the CAISO and PG&E Wholesale Distribution Tariff

[9] Where the Interconnection Agreement does not reflect the Deliverability offered, the Participant must provide additional documentation from the CAISO verifying the deliverability
[10] http://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Generator%20Management

[11]CAISO's new resource implementation process is described at: http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx

generation interconnection procedures, can also be viewed on the PG&E website at: http://www.pge.com/wholesale/.

2. Site Control

Participants must attest that they have secured site control for the entire delivery term of their Project as part of their Offers. Requirements to demonstrate such site control are detailed in Appendix C to this solicitation. Examples of site control include: (1) ownership of the site, a leasehold interest, or a right to develop a site for the purpose of constructing a generating facility; (2) an option to purchase or acquire a leasehold site for purposes of constructing a generating facility; and (3) any other business relationship that, in the sole discretion of PG&E, amounts to the same right to develop property as provided in examples (1) or (2) above, between the Participant and another entity that has the right to sell, lease, or grant the right to possess or occupy the site for such a purpose.

Please note that these site control requirements may differ from those required in the interconnection process to achieve a deemed complete status.

3. Experience

A minimum level of developer experience is required for participation in this solicitation. Specifically, the Participant and/or a member of Participant's project development team must have either completed or begun construction of at least one other project of similar technology and capacity. PG&E considers a project to have begun construction if the developer has issued a full notice to proceed to its EPC contractor.

4. Commercialized Technology

The Participant must show that the Project employs technology currently in use at a minimum of two operating facilities of similar capacity worldwide.

5. Commencement of Commercial Operation Deadline

New Projects must achieve commercial operation within 36 months of the Effective Date of the associated PPA, subject to a six month extension for the specific reasons described in the PPA. Existing Projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA. Sellers can request a one-time request for this extension by providing a notice 60 days prior to the guaranteed commercial operation date. Sellers that cannot place the Project into commercial operation by this deadline will be in default under the PPA.

Participation in Other Procurement Programs

Neither the Participant nor the owner of the site may sell any Product from the Project, either currently or at any time during the term of the PPA, pursuant to the Net Energy Metering tariff.

Participation in Future Solicitations

A Participant may submit offers for a Project in a future solicitation notwithstanding the Participant's withdrawal of the Project's Offer from this RFO prior to the execution of a PPA. Additionally, Offers that are not selected in this RFO may be bid again into future solicitations.

IV. Evaluation Criteria

Once Participants have met the eligibility requirements set forth in Section III, above, PG&E will use the evaluation criteria discussed in Section IV as the factors in selecting Offers.

PG&E will use the Commission approved ~~least-cost best-fit~~LCBF methodology, pursuant to D.14-11-042, which includes a preference for shorter delivery terms.[12]~~.~~ Additionally, preference will be given to projects that commit to exceeding the minimum fuel requirements.[13] Consideration will also be given to project proximity to high hazard fuel zones.

Least-Cost-Best-Fit

PG&E will evaluate and select eligible Offers based on ~~least-cost best-fit (~~LCBF~~)~~ criteria, which includes Market Valuation, Transmission Network Upgrade Costs, Location, PAV

[12] Attachment K from the 2014 RPS RFO Protocol outlines a complete and detailed description of PG&E's Least Cost Best Fit Evaluation Criteria and is available at: http://www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricsuppliersolicitation/RPS2014/Attachment_K_LCBF_01052015.pdf. Note that Table 1 may be updated. PG&E's LCBF methodology includes a qualitative preference for Offers of less than 20 years in duration (p. 15) and allows for qualitative consideration of a project's location consistent with RPS goals (p. 16). In the case of this solicitation, PG&E intends to exercise its discretion to consider location to give a qualitative preference for facilities in closer proximity to high hazard fuel zones, consistent with the goals of the Governor's Emergency Proclamation dated October 31, 2015.

[13] Resolution E-4770 at p. 12.

and Supplier Diversity.

Each Offer will be assessed on each of the criteria described in this section.

A. Market Valuation

Market Valuation compares an Offer's costs to its market value. Pursuant to D.12-11-016, NMV is calculated for each Offer as follows:

Net Market Value: R = (E+C)-(P+T+G+I)

Adjusted Net Market Value: A = R+S

Where:

E = Energy Value
C = Capacity Value
P = Post-Time-Of-Delivery (TOD) Adjusted Power Purchase Agreement (PPA) Price
T = Transmission Network Upgrade Cost
G = Congestion Cost
I = Integration Costs[14]
S = Ancillary Service Value

The risks and uncertainties associated with an Offer's costs and benefits will be considered as part of Market Valuation. These costs and benefits do not include the costs and benefits associated with an Offer's impact on PG&E's portfolio.

1. Energy Value

PG&E will assess the market value of the energy deliveries based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and delivery location. The market value of the energy will be based on the appropriate forward price curves for the corresponding Trading Hub. The Loss multipliers will be used to incorporate losses specific for the location. With Buyer Curtailment, the energy value will include the expected value of Buyer Curtailments for avoiding (presumably negative) wholesale market spot price for the generation from the project.

2. Capacity Value

The value of capacity, including local reliability benefits, associated with each Offer will be determined based on the projected monthly quantity of qualifying capacity. Resources with an expected finding of full capacity deliverability from the CAISO will be attributed the full capacity value. To the extent that an Offer provides flexible capacity, the capacity

[14] Integration Costs are assumed to be zero for baseload resources.

that is expected to count for flexible RA will be evaluated at the projected monthly premium for flexible RA and added to the Capacity Benefit. It will be assumed that the qualifying capacity is zero for energy-only deliveries.

3. Ancillary Services

Ancullary Services (A/S) value will be assessed based on the A/S capability of the Offer. For Offers that provide PG&E the ability to schedule A/S and receive market revenues, the incremental benefit of having A/S capability will be captured, not to be double counted with the Energy Value.

4. Post-Time-Of-Delivery (TOD) Adjusted Power Purchase Agreemetn (PPA) Price

PG&E will calculate the Post-TOD Adjusted PPA Price, including debt equivalence costs, based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and the Offers contract price. For Dispatchable products, fixed payment calculated from the fixed capacity and Offer's fixed capacity price ($/kW-yr) under the Offer will also be added to the Post-TOD Adjusted PPA price after being levelized by the energy quantity.

5. Transmission Network Upgrade Cost

PG&E will use results from Participants' interconnection studies to calculate the Transmission Network Upgrade Cost adder. The refundable portion of the costs of Network Upgrades are included in transmission rates and paid by customers. Transmission cost adders reflect the cost of incremental, refundable Network Upgrades borne by customers. For projects that are fully deliverable, PG&E will consider the refundable portion of both Reliability and Delivery Network Upgrades. For energy-only Projects, PG&E will consider only the refundable portion of Reliability Network Upgrades when calculating a transmission adder.

6. Congestion Cost

Congestion cost will be calculated based on the hourly generation profile of the Offer, initial energy delivery date, delivery term of the Transaction, and delivery location. The Congestion Cost will be positive if the project is located in an area where the transmission lines are constrained due to serving loads outside of the area from the generation within the area. The Congestion Cost will be negative if the project is located in an area where the transmission lines are constrained due to serving loads within the area from the generation outside of the area. Congestion Cost multipliers will be used to incorporate congestion costs specific for the location.

B. Portfolio Adjusted Value

Portfolio Adjusted Value ("PAV") consists of several components, however with respect to the BioRAM solicitation, location will be the primary quantitative consideration.

1. Location

PG&E has a preference for projects in its service territory. This preference is influenced by constraints in the market that may limit the amount of capacity in SP15 that PG&E can count toward its RA requirement. Capacity located closer to PG&E's load is likely to have more value for PG&E's bundled electric portfolio, even when market forward prices indicate that energy delivered farther away has greater Market Value. The long-term risk for PG&E's customers is less when resources are located within PG&E's service territory rather than outside of PG&E's service territory. The calculation of PAV effectuates this by adjusting the value of energy and capacity for offers from resources in SP15. Offers for RPS energy from resources in NP15 will have an equal or higher PAV than comparable offers from resources in SP15.

PG&E reserves the right to reject Offers if they are uncompetitive with other options, including offers received in other PG&E non-RAM solicitations, or if there is evidence of market manipulation.

Resource Adequacy Benefit

For Projects that provide full or partial deliverability, PG&E will assume that new resources achieve full or partial capacity deliverability status on the date of the deliverability stated in the Offer, and the applicable RA benefit will be included from this date through the remaining term.

As described in Resolution E-4489, PG&E will evaluate the capacity benefits of a proposal by applying the monthly Net Qualifying Capacity ("NQC") to PG&E's forecast of avoided capacity costs. Due to the RA capacity constraint that currently exists on projects that are located in SP15, PG&E currently discounts the capacity value of SP15 resources and is expected to assign different values to projects that have delivery points located in NP15 versus SP15. This constraint may change in the future.

Supplier Diversity

It is the policy of PG&E that Women-, Minority-, 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") shall have the maximum practicable opportunity to participate in this RFO and other competitive solicitations. PG&E will evaluate each offer and how it contributes to PG&E's supplier diversity goals. The supplier diversity evaluation will take into account the Participant's status as a WMDVLBE and/or intent to subcontract to WMDVLBEs. Offers must include documentation of the Participant's WMDVLBE status in the offer form provided at Appendix A to this solicitation. The PPA has been updated to require compliance with PG&E's Supplier Diversity program and periodic reporting on diverse spend.

V. Guidelines for Offer Development

Price

Participants must submit with their Offer their best and final price using the Energy Pricing Sheet of the Offer Form in Appendix A to this solicitation. PG&E will not consider updated or "refreshed" price offers submitted after the Offer submittal deadline. The Product price must be stated in annual $/MWh and may be escalated over the term of the PPA. Product quantities can vary annually to reflect degradation of the facility, if applicable.

Pursuant to the PPA, Sellers will be paid the contract price multiplied by the applicable TOD factor for each hour. For purposes of bid evaluation, PG&E will levelize bid prices after applying the applicable standard Time of Delivery ("TOD") factors as specified below to compare all offers on a consistent basis.

The price submitted by Participant for an Offer must include, without limitation, the following: (a) all awards, subsidies, and tax credits with respect to the Project, (b) all other benefits that Participants expects to apply, (c) any costs incurred by Participant, including any interconnection costs, (d) the acceptance, without reservation or revision, of the non-price terms and conditions in the PPA and fuel acquisition costs, and (e) the assumption that the Product price will be adjusted in each hour of delivery by the Time of Delivery (TOD) factors set forth in the table below by PG&E.

Existing resources bidding in a five-year Delivery Term with Extension O~~o~~ption should include 10 years worth of prices in their offer to address the possibility of a PPA extending beyond 5 years. PG&E has the right to exend PPAs from existing facilities that have an executed PPA for a five-year Delivery Term with Extension Option on a year-by-year basis up to a cumulative total of ten years so long as the State of Emergency remains in effect.~~.~~

Time of Delivery

Time of Delivery (TOD) Periods and Factors

TOD FACTORS FOR EACH TOD PERIOD			
Period	**1. Peak**	**2. Mid-Day**	**3. Night**
A. July - September	1.479	0.604	1.087
B. October - February	1.399	0.718	1.122

C. March - June	1.270	0.280	1.040

TOD factors shown are consistent with factors approved in the 2015 RPS Decision D.15-12-025.

Definitions:

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 for all days in the applicable Monthly Period.

3. **Night** = hours ending 23-09 PPT all days in the applicable Monthly Period.

PPA Terms and Conditions

PG&E strongly encourages all Participants to review the form PPA and expects all Participants to be able to perform ALL obligations under the PPA.

Any successful Offers must be formalized by the execution of a final PPA. PG&E has provided a form PPA in Appendix B to this solicitation, and the summary of certain terms within the PPA provided in this section of the protocol is not meant to provide a substitute for a careful review of the actual PPA. In the case of any conflict between this protocol and the PPA, the PPA will control.

The terms and conditions of the form PPA are non-negotiable. All project-specific information should be included in the cover sheet.

PG&E will provide a five year contract as an option for existing facilities, and Buyer will have the right to extend the five-year contract term for one year at a time, up to a cumulative total of ten years as long as the State of Emergency remains in effect. The delivery term will commence on the first date that the Participant delivers the Product to PG&E from the Project.

The PPA requires PG&E's counterparty to submit a project development milestone timeline (Section B(i)(b) in the Cover Sheet of the PPA) upon execution of the PPA and to provide progress reports to PG&E (as outlined in Section 3.9(a)(vii) and 3.9(a)(viii) in the PPA) on the Project's progress towards the achievement of the development milestones until the project begins energy deliveries.

For Projects being bid as fully or partially deliverable, the PPA includes an estimate of when full or partially capacity deliverability status will be attained. Seller is contractually bound by the estimate. If Seller has not achieved full or partial capacity deliverability status consistent with that in the Offer by the designated time, then the Seller will be subject to contractual penalties.

The PPA requires a Participant to post collateral in the form of cash or letter of credit from a reputable U.S. bank in the following amounts and by the time discussed below:

> **Project Development Security:** $90 per kW for Baseload facilities, due within five (5) Business Days following CPUC Approval of the PPA. The development deposit will be refunded upon Commercial Operation Date or applied to the subsequent Performance Deposit.
>
> **Delivery Term Security:** An amount equal to the higher of 5% of expected total Project revenues, or one year of revenue at (Contract Price $/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.

Under the PPA, the Project Development Security will be retained by PG&E in the event that the Project should fail to come online by the contractual deadline. Delivery Term Security will be held throughout the delivery term.

VI. Information Regarding Interconnection to PG&E's Electric System and Interconnection Screens

Many factors influence the feasibility and cost of interconnecting generating facility systems to an electric system. These factors include, but are not necessarily limited to, the size and type of the system, substation and circuit load and capability, voltage regulation and voltage flicker.

Electric Generation Interconnection Services

New facilities must achieve commercial operation within 36 months of the Effective Date of the associated PPA. For existing facilities, projects must be able to begin commercial operation within 12 months of the Effective Date of the associated PPA.

Sellers are responsible for understanding the relevant interconnection procedures and ensuring they can interconnect within the mandated timelines.

Information regarding interconnection to the PG&E Electric Grid is available at the following site: http://www.pge.com/wholesale/. Any interconnection questions should be directed to PG&E's Electric Generation Interconnection department at the email address: wholesalegen@pge.com.

Any application for interconnection to the transmission system must be directed to the CAISO in accordance with the CAISO Tariff. For more information, please refer to the

CAISO Tariff via the CAISO website at:

http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx.

For interconnection applications to SCE's or SDG&E's Distribution Grid, seller should contact the applicable Distribution Provider representative.

VII. Required Information

Submission Overview

All Offer submittal information pertaining to this RFO will be hosted on the Power Advocate site. In order to participate in this RFO, Participants must register through Power Advocate at the Public Registration Link:

https://www.poweradvocate.com/pR.do?okey=58234&pubEvent=true

PG&E strongly encourages Participants to register with Power Advocate well before Offers are due. PG&E will be posting the detailed instructions for submitting Offer(s) and using the on-line platform on PG&E's website prior to Offer submittal.

Electronic Documents: The electronic documents for the attachments must be in a Microsoft Word, Excel file or Adobe Acrobat PDF file as applicable. The Participant should not provide documents in other electronic formats and versions. For each document, please include a company name in each file name. **Telephonic, hardcopy or facsimile transmission of an Offer is not acceptable.**

Required Forms

The following documents, which are located in the Appendices to this solicitation, must be completed and included with each Offer:

1. **Completed Offer Form, Developer Experience Form and Supplier Diversity Form (Appendix A to this solicitation).** Participant must provide a complete Offer form. Please provide all applicable information requested in the form and include the Project's expected generation profile, CAISO or utility cost estimate for the needed network upgrade costs. Participant must also include the interconnection queue position, WMDVLBE and if any plans to engage in activites that support PG&E's supplier diversity goals on the Offer form. Format: MS Excel

2. **A Completed PPA Cover Sheet (Appendix B to this solicitation).** The cover sheet includes spaces for contract capacity, project vintage, milestones, and supplier

diversity spend. Other mark-ups are not permitted and will result in rejection of the Offer. Format: MS Word

3. **A Completed PPA Appendix XIII of the PPA.** This appendix includes spaces for all of the project specifications. Other mark-ups are not permitted and will result in rejection of the Offer. Format: MS Word.

4. **Site Control Questionnaire and Attestation (Appendix C to this solicitation)**. Participant must attest to site control and provide a map showing site location and key project facilities. The map should show the project boundary, and gen-tie route from the project to the first point of interconnection with the electric grid. The map should be provided in one of the following file formats: (1) Google kml/kmz, (2) ESRI geodatabase (mdb or .gdb) (3) a shapefile with file extension .shp plus at least the 3 supporting files (.shx, .dbf, .sbn). Format: Applicable GIS data file format

5. **Acknowledgement and Commitment of Site Owner Letter (Appendix D to this solicitation)**. **This only applies to projects that are 5 MW or less.** The owner of the site on which Participant's Project is proposed to be located must attest to familiarity with NEM alternatives, as applicable. The Participant and the owner of the site must also commit not to sell Product from the Project under this program alternative throughout the term of the PPA, if executed. Format: PDF
6. **Interconnection Studies**. Participants must have an executed Interconnection Agreement, a completed Phase II interconnection study[15] (or equivalent[16]), or documentation showing that the Project passed the Distribution Provider or CAISO Fast Track screens[17] at the time of Offer submittal. Format: PDF or MS Word.

   Participants offering fully or partially deliverable resource must provide documentation that the Project has received the FCDS or PCDS or provide documentation that the project is in the process of obtaining that deliverability, including any submitted requests for deliverability to the CAISO. The Participant must provide evidence of at least one of the following:

   a) An executed Interconnection Agreement or Amendment to an Interconnection Agreement that reflects the offered deliverability status[18];
   b) Application for deliverability with a **completed** deliverability study (i.e., Phase II study or equivalent) with a deliverability status that matches the Offer;

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[15] Passing of an Electrical Independence Test is not sufficient unless the Project has a completed Phase II interconnection study or equivalent.
[16] For example, a Facilities Study.
[17] *Submission* of an Interconnection Request into a Fast Track process is not sufficient unless the project has *passed* the Fast Track screens or has a completed study equivalent to a Phase II interconnection study.
[18] Where the Interconnection Agreement does not reflect the Deliverability offered, the Participant must provide additional documentation from the CAISO verifying the deliverability

c) A **completed** deliverablity assessment in the annual process that indicates that the project is deliverable pursuant to ISO Tariff Section 9.2 of Appendix DD; or
d) Documentation that the Project has **received** deliverability through the CAISO's Deliverability for Distribution pursuant to ISO Tariff Section 40.4.6.3.

Providing documentation that an application or request for FCDS or PCDS has been submitted through any CAISO annual process is **not** sufficient **unless** there is a finding of deliverability at the time of Offer submittal. Projects bid in as fully-deliverable must be fully deliverable by the date of deliverability designated in the Offer and need not be fully deliverable as of commercial operation.

Projects bidding as energy-only do not have to provide any deliverability studies.

VIII. Offer Selection

PG&E will select Offers according to the evaluation criteria described in Section IV. PG&E plans to notify selected Participants by e-mail according to the schedule described above.

PG&E may place some offers on a waitlist. Any waitlisted Participants would be selected in order of priority should any one of the selected Offers fail to return an executed PPA pursuant to the schedule outlined above.

IX. Regulation

Confidentiality

After contract execution, PG&E plans to submit executed PPAs to the CPUC for approval via a Tier 2 advice letter filing. By participating in the RFO, each Participant acknowledges and expressly authorizes PG&E to publicly disclose the following information as required by the Commission RAM Decision 10-12-048: (1) names of the companies that submitted Offers into PG&E's RAM RFO; (2) number of Offers received by each company; (3) number of Offers received and shortlisted by PG&E; (4) Project size; (5) participating technologies; (6) the number of Projects which passed the project viability screen; (7) location of bids by county level shown in a map format; and (8) the progression of each executed contract's project development milestones.

Except with PG&E's prior written consent, no Participant shall collaborate on or discuss with any other Participant or potential Participant bidding strategies, the substance of any Offer(s), including without limitation the price or any other terms or conditions of any Offer(s), or whether an Offer has been selected.

All information and documents in Participant's Offer clearly identified and marked by Participant as "Proprietary and Confidential" on each page on which confidential information appears, shall be considered confidential information. PG&E shall not disclose such confidential information and documents to any third parties except for PG&E's employees, agents, counsel, accountants, advisors, or contractors who have a need to know such information and have agreed to keep such information confidential and except as provided otherwise in this section. In addition, Participant's Offer will be disclosed to the IE.

Notwithstanding the foregoing, it is expressly contemplated that the information and documents submitted by Participant in connection with this RFO may be provided to the CPUC, its staff, and the Procurement Review Group ("PRG"), established pursuant to D. 02-08-071. PG&E retains the right to disclose any information or documents provided by Participant to the CPUC, the PRG, the California Energy Commission ("CEC") and to any other entity 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 PG&E at any time even in the absence of a protective order, confidentiality agreement, or nondisclosure agreement, as the case may be, without notification to Participant and without liability or any responsibility of PG&E to Participant. PG&E cannot ensure that the CPUC will afford confidential treatment to Participant's confidential information, or that confidentiality agreements or orders will be obtained from and/or honored by the PRG, the CEC, or the CPUC. By submitting an Offer, Participant agrees to the confidentiality provisions described in this section.

The treatment of confidential information described above shall continue to apply to information related to Projects that are selected in this RFO and formalized through execution of a PPA.

Changes to RFO

By responding to this RFO, each Participant agrees to be bound by all terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E.

X. Communications

PG&E has established the BioRAM RFO website at www.pge.com/rfo/BioRAM where Participants may register and where all the RFO documents, information, announcements and Q&As are posted and available to Participants.

To promote accuracy and consistency of the information provided to all Participants, PG&E encourages Participants to submit any inquiries via e-mail directed to RAMRFO@pge.com for matters related to BioRAM procurement. With respect to matters of general interest raised by any Participant, PG&E may, without reference to the specific Participant raising such matter or initiating the inquiry, post responses on its website. PG&E may, in its sole discretion, decline to respond to any email or other inquiry without liability or responsibility.

Any exchange of material information regarding this RFO between Participant and PG&E must be submitted to both PG&E and the Independent Evaluator. The IE for this RFO is Lewis Hashimoto from Arroyo Seco Consulting. Participants should copy Lewis Hashimoto at arroyosecoconsulting@gmail.com.

PG&E may elect to respond to inquiries or comments by individual Participants concerning purely procedural or administrative matters, but may also decline to do so in its sole discretion without liability or responsibility.

XI. Submission of Signed PPAs

Within ten (10) calendar days of Offer selection, Participants that wish to continue in this RFO must submit a signed PPA and required documentation for each selected Project meeting all RFO conditions via the Power Advocate on-line platform.

XII. Procurement Review Group Review

Following completion of the evaluation and rankings of Offers, PG&E will submit the results of the evaluation and its recommendations to its PRG members. PG&E will consider any alternative recommendations proposed by the PRG. PG&E, in its sole discretion, shall determine whether any alternatives proposed by the PRG should be adopted. PG&E has no obligation to obtain the concurrence of the PRG with respect to any Offer.

PG&E assumes no responsibility for the actions of the PRG, including actions that may delay or otherwise affect the schedule for this Solicitation, including the timing of the selection of Offers and the obtaining of Regulatory Approval.

XIII. Regulatory Approval

The effectiveness of any executed PPA is expressly conditioned on PG&E's receipt of final and non-appealable CPUC Approval of such PPA.

XIV. Participant's Waiver of Claims and Limitations of Remedies

Except as expressly set forth in this Protocol, by submitting an Offer, Participant knowingly and voluntarily waives all remedies or damages at law or equity concerning or related in any way to the RFO, the RFO Protocol and/or any attachments to the RFO Protocol ("Waived Claims"). The assertion of any Waived Claims by Participant may, to the extent that Participant's Offer has not already been disqualified, automatically disqualify such Offer from further consideration in the Solicitation or otherwise.

By submitting an Offer, Participant agrees that the only forums in which Participant may assert any challenge with respect to the conduct or results of the RFO is in the proceeding related to D.10-12-048 adopted on December 17, 2010, or through the alternative dispute resolution ("ADR") services provided by the CPUC pursuant to Resolution ALJ-185, August 25, 2005. The ADR process is voluntary in nature, and does not include processes, such as binding arbitration, that impose a solution on the disputing parties. However, PG&E will consider the use of ADR under the appropriate circumstances. Additional information about this program is available on the CPUC's website at the following link:

www.cpuc.ca.gov/PUBLISHED/Agenda_resolution/47777.htm.

Participant further agrees that other than through the ADR process, the only means of challenging the conduct or results of the Solicitation is a protest to an Advice Letter seeking approval of one or more PPAs entered into as a result of the RFO, that the sole basis for any such protest shall be that PG&E allegedly failed in a material respect to conduct the RFO in accordance with this Protocol, and the exclusive remedy available to Participant in the case of such a protest shall be an order of the CPUC that PG&E again conduct any portion of the RFO that the CPUC determines was not previously conducted in accordance with the RFO Protocol. Participant expressly waives any and all other remedies, including, without limitation, compensatory and/or exemplary damages, restitution, injunctive relief, interest, costs, and/or attorneys fees. Unless PG&E elects to do otherwise in its sole discretion during the pendency of such a protest or ADR process, the RFO and any related regulatory proceedings related to the RFO will continue as if the protest had not been filed, unless the CPUC has issued an order suspending the RFO or PG&E has elected to terminate the RFO.

Participant agrees to indemnify and hold PG&E harmless from any and all claims by any other Participant asserted in response to the assertion of a Waived Claim by Participant or as a result of a Participant's protest to an advice letter filing with the CPUC resulting from the RFO.

Except as expressly provided in this Protocol, nothing herein, including Participant's waiver of the Waived Claims as set forth above, shall in any way limit or otherwise affect the rights and remedies of PG&E. Nothing in this Protocol is intended to prevent any Participant from informally communicating with the CPUC or its staff regarding this RFO or any other matter.

XV. Termination of the RFO-Related Matters

PG&E reserves the right at any time, in its sole discretion, to terminate the RFO for any reason whatsoever without prior notification to Participants and without liability of any kind to or responsibility of PG&E or anyone acting on PG&E's behalf. Without limitation, grounds for termination of the RFO may include the assertion of any Waived Claims by a Participant or a determination by PG&E that, following evaluation of the Offers, there are no Offers that are cost competitive.

PG&E reserves the right to terminate further participation in this process by any Participant, to evaluate the qualifications of any Participant, and to reject any or all Offers, all without notice and without liability to PG&E or anyone acting on PG&E's behalf.

In the event of termination of the RFO for any reason, PG&E will not reimburse the Participant for any expenses incurred in connection with the RFO regardless of whether such Participant's Offer is selected, not selected, rejected or disqualified.

Unless earlier terminated, the RFO will terminate automatically upon the execution of one or more PPAs by selected Participants as described herein. In the event that no PPAs are executed, then the RFO will terminate automatically on 12 months after issuance of the RFO.

XVI. Participant's Representations and Warranties

Breach by any Participant of the representations and warranties of the RFO Attachments is, in addition to any other remedies that may be available to PG&E under applicable law, grounds for immediate disqualification of such Participant from participation in the RFO, and depending on the nature or severity of the breach, may also be grounds for terminating the RFO in its entirety.

Attachment D

Revised BioRAM Rider

(Redlined Version)

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~~, which is~~ 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.

~~"Damage Payment" means (for up to 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.~~

"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" ~~has~~means that date that the ~~meaning set forth in Section 3.10(d).~~Seller is switched from being payed the Contract Price to the Amended Price.

"Fuel Switching Notification" has the meaning set forth in Section 3.10(d).

"Fuel Use" means the ~~forest~~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 ~~dead or dying trees~~ 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~~) and~~), (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 sentences in the RAM PPA shall be amended to remove the strikeout words:~~

~~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;~~

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 ~~previous~~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 ~~Contract~~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 ~~B~~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's designated recipient~~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 ~~fuel~~High Hazard Fuel was harvested and the percentage of total ~~fuel~~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 and 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 30^{th} 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 3^{rd}, 6^{th}, 9^{th} or 12^{th} 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 ~~pursuant to Article Thirteen~~, 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. ~~A new~~ 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, ~~Seller~~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)).

~~XIII.~~ 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: ____________________________	Signature: ____________________________
Name: ____________________________	Name: ____________________________
Title: ____________________________	Title: ____________________________
Date: ____________________________	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 ***[or alternative provider pursuant to Section 3.10(b)(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 ~~Switch~~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, ~~wood burning~~woody biomass facilities only

Annual High Hazard Fuel Percentage: The Seller is contractually ~~boundat~~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:

~~Existing Projects: _______~~☐ five (5) Contract Years~~(not to exceed 5)~~
~~New Projects : _______~~☐ five (5) Contract Years ~~(not to exceed~~ 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	

Contract Year	Contract Price ($/MWh)
19	
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")	Name: Pacific Gas and Electric Company, a California corporation ("Buyer" or "PG&E")
All Notices: ***[Seller to complete]***	All Notices:
Delivery Address:	Delivery Address:
Street: City: State: Zip:	77 Beale Street, Mail Code N12E San Francisco, CA 94105-1702

Mail Address: (if different from above)	Mail Address: P.O. Box 770000, Mail Code N12E San Francisco, CA 94177
Attn:	Attn: Candice Chan (CWW9@pge.com) Director, Contract Mgmt & Settlements
Phone: Facsimile: Email:	Phone: (415) 973-7780 Facsimile: (415) 972-5507
DUNS: Federal Tax ID Number:	DUNS: Federal Tax ID Number:
Invoices: Attn: Phone: Facsimile: Email:	**Invoices:** Attn: Azmat Mukhtar (ASM3@pge.com) Manager, Electric Settlements Phone: (415) 973-4277 Facsimile: (415) 973-2151
Scheduling: Attn: Phone: Facsimile: Email:	**Scheduling:** Attn: Day-Ahead Operations (DAEnergy@pge.com) Phone: (415) 973-1971 Facsimile: (415) 973-4500
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: PG&E Risk Credit Team (pgeriskcredit@exchange.pge.com) Manager, Credit Risk Management Phone: (415) 973-4144 Facsimile: (415) 973-4071
With additional Notices of an Event of	**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

PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

AT&T
Albion Power Company
Alcantar & Kahl LLP
Anderson & Poole
Atlas ReFuel
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Braun Blaising McLaughlin & Smith, P.C.
Braun Blaising McLaughlin, P.C.
CENERGY POWER
CPUC
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties
Calpine
Casner, Steve
Center for Biological Diversity
City of Palo Alto
City of San Jose
Clean Power
Clean Power Research
Coast Economic Consulting
Commercial Energy
Cool Earth Solar, Inc.
County of Tehama - Department of Public Works
Crossborder Energy
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Dept of General Services
Division of Ratepayer Advocates
Don Pickett & Associates, Inc.
Douglass & Liddell
Downey & Brand
Ellison Schneider & Harris LLP
Evaluation + Strategy for Social Innovation
G. A. Krause & Assoc.
GenOn Energy Inc.
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Charge Networks
Green Power Institute
Hanna & Morton
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Leviton Manufacturing Co., Inc.
Linde
Los Angeles County Integrated Waste Management Task Force
Los Angeles Dept of Water & Power
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenna Long & Aldridge LLP
McKenzie & Associates
Modesto Irrigation District
Morgan Stanley
NLine Energy, Inc.
NRG Solar
Nexant, Inc.
ORA
Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Praxair
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
SCE
SDG&E and SoCalGas
SPURR
San Francisco Water Power and Sewer
Seattle City Light
Sempra Energy (Socal Gas)
Sempra Utilities
SoCalGas
Southern California Edison Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners, LLC
Tiger Natural Gas, Inc.
TransCanada
Troutman Sanders LLP
Utility Cost Management
Utility Power Solutions
Utility Specialists
Verizon
Water and Energy Consulting
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
YEP Energy