

Regional Renewable Choice

(Enhanced Community Renewables)

Bidders Webinar



November 19, 2018

Topics

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Intermission

Q & A

Presenter

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Team



Objective

The purpose of this webinar is to provide information to participants who may submit Offers to PG&E's Regional Renewable Choice (RRC) Request for Offers (RFO).

This webinar will not cover other procurement programs.



Q&A / List of Attendees / Audio Replay

- At any time during this presentation Participants should e-mail their questions to the following mailbox:

GTSRprocurement@pge.com

- Questions will be answered at the end of the Webinar or posted Q&A
 - PG&E may not address all of the questions during the Q&A portion of the Webinar.
After the Webinar, PG&E will compile and post a Q&A document on PG&E's website at: https://www.pge.com/en_US/for-our-business-partners/energy-supply/electric-rfo/wholesale-electric-power-procurement/regional-solar-choice-program.page
 - PG&E will be posting a list of attendees on PG&E's website. If you do not want your name or the name of your company published, please let us know by sending us an email to the RFO mailbox at GTSRprocurement@pge.com by November 21st.
- The audio portion of the Webinar will be posted on PG&E's website at the website above.

- This presentation is intended to be a summary level discussion of the information and requirements established in the RFO materials (it does not include all of the detailed information in the auction materials).
- To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the RFO materials, the **RFO materials shall govern.**
- PG&E encourages participants to carefully review:
 - Regional Renewable Choice Program Rider and Amendment to The Renewable Auction Mechanism (RAM) Power Purchase Agreement “RRC Rider”
 - RAM Power Purchase Agreement
 - Winter 2018 Regional Renewable Choice Protocol
 - CPUC Decision 15-01-051, Decision 16-05-006 and Decision 17-07-007
 - Monitor the Q&A link on PG&E’s Regional Renewable Choice RFO websites
- **Given that the Power Purchase Agreement is non-negotiable, PG&E urges bidders to submit clarifying questions regarding the PPA and Rider prior to submittal of an offer under this RFO.**



Public Disclosure of Information

- By participating in this solicitation, each Participant acknowledges and expressly authorizes PG&E to publicly disclose the following information as required by the CPUC's Renewable Auction Mechanism Decision:
 - Names of the companies that submitted Offers into PG&E's RFO
 - Number of Offers received from each company
 - Number of Offers received and selected by PG&E
 - Project size
 - Participating technologies
 - Location of bids by county; and
 - Progression of each executed contract's project development milestones
- PG&E will provide periodic updates to the CPUC on each RRC project's progress toward the achievement of project development milestones



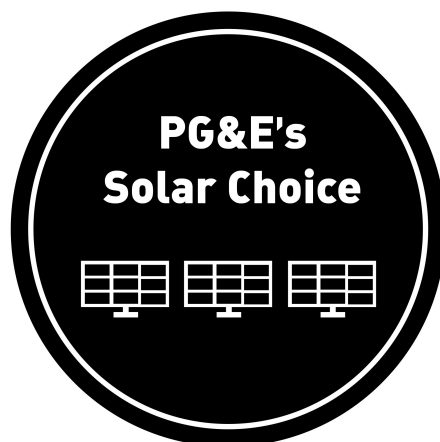
Program Overview

What is Green Tariff Shared Renewables?

Green Tariff Shared Renewables: **Two** related but distinct programs

(From CPUC Decision 15-01-051 & Resolution E-4734 to implement Senate Bill 43)

1.



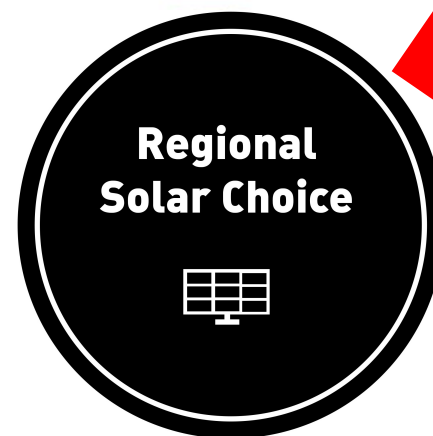
Regulatory name = Green Tariff
PG&E's brand name = PG&E's Solar Choice

Customer subscribes to a pool of projects through PG&E

PG&E procures solar resources and retires RECs on behalf of participating customers.

Procurement Process = RAM Tool

2.



Regulatory name = Enhanced Community Renewables
PG&E's brand name = Regional Renewable Choice

Customer subscribes to a portion of the output of one project directly through the developer

Three party structure which involves a transaction among all parties (described in more detail later)

Procurement Process = RAM Tool

Megawatts

- 600 MW statewide allocation to Green Tariff Shared Renewables
- 272 MW allocated to PG&E
- No bifurcation of MW allocated between the Green Tariff and Regional Renewable Choice programs
- PG&E procured 52.75 MW of dedicated resources to serve its PG&E's Solar Choice program in an 'advance procurement' solicitation
- PG&E has procured 1.66 MW of dedicated resources to serve its Regional Renewable Choice program
- 45 MW reserved for procurement in disadvantaged communities, designated "Environmental Justice" projects
- 45 MW allocated to residential customers
- Remaining capacity of the PG&E's GTSR program is 217.59.

272 MW

**227 MW
Unspecified**

**45 MW
EJ**

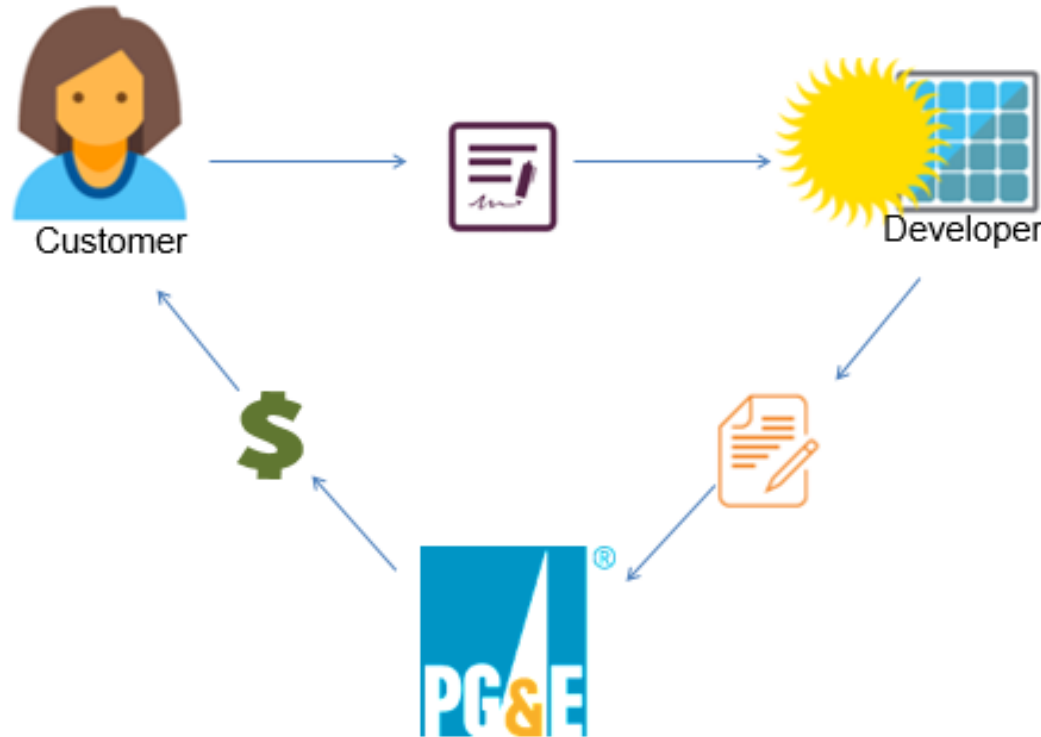


What is Regional Renewable Choice?

Allows developers to work directly with customers to develop new community-based renewable projects located in PG&E's service area.

Customer Developer Agreement (CDA)

- Customers contract directly with developers to subscribe to a specific project.
- Customer enrolls for a portion or all of their energy needs.
- Developer and customers are free design their own CDA transaction structure.



Power Purchase Agreement

- Marketing Materials approved.
- Meets community interest and securities opinion requirements.
- Signs a RAM 6 PPA + RRC Rider.
- PG&E only pays developer for unsubscribed (energy output not subscribed by customers pursuant to subscription requirements).

Customer Energy Statement Credit

- Customer receives a credit on their PG&E energy statement based on the calendar month output of their subscription to the project.



Program Specific Requirements

Green-e Energy Compliance

- Under Senate Bill 43, the Regional Renewable Choice program is required to be Green-e Energy-certified, as administered by the nonprofit Center for Resource Solutions.
- Under the California Regional Renewable Choice program, renewable energy project developers take on the responsibility of marketing their projects directly to customers and, as such, agree to comply with Green-e Energy environmental and consumer protection standards.
- Green-e Energy compliance requirements include guidelines on all product marketing and to provide end-use customer with accurate and sufficient disclosures regarding the projects.
- For more information on Green-e Energy developer requirements under Senate Bill 43, please visit Green-e Energy's [California Enhanced Community Renewables Information for Developers and Generators](#).



Energy

GREEN-E® ENERGY ATTESTATION FROM GENERATOR PARTICIPATING IN A TRACKING SYSTEM

I. Facility and Registration Information

Name of Generation Facility ("Facility"): _____

Renewable Resource Type (e.g. Wind, Solar, Geothermal): _____

Company or Person that Owns Facility ("Owner"): _____

Address of Facility: _____

North American Electricity Reliability Corporation (NERC) region in which Facility is located:¹ _____

Tracking System in which Facility is registered ("Tracking System"): _____

Facility Registration or ID Number within Tracking System: _____

First Month and Year of Facility's Generation Tracked in Tracking System: _____

Facility ID:² ☐ EIA or ☐ QP? (check one)

Date Facility was First Operational: _____

Nameplate Capacity (MW): _____

Date of Capacity Upgrade: _____

Contact Name: _____

Title: _____

Telephone: _____

Email Address: _____

This form governs generation at Facility beginning on ("Start Date") (check one):

☐ January 1 in the year of signature (this is the default if neither checked)

☐ Other (specify): _____

This form will expire on ("Expiration Date") (check one):

☐ December 31 of the year 2 years after Start Date³ (this is the default if neither checked)

☐ Date earlier than December 31 of the year 2 years after Start Date (specify): _____

Statements on this form apply to all generation occurring between Start Date and Expiration Date ("Effective Period").⁴

If none of the generation from Facility that occurs between Start Date and the following June is used in a Green-e Energy certified product, Facility's designation as "Green-e Energy Eligible" in the Tracking System and on the Green-e website will be removed.⁵

¹ If you are unsure of which region Facility is in, see <http://www.nerc.com/regional/>

² Enter Energy Information Administration (EIA) identification number for the generating facility; if no EIA number, enter the utility-assigned Qualifying Facility (QF) identification number

³ For example, if the Start Date is May 1, 2010, Expiration Date will be December 31, 2012.

⁴ Except in the case noted in footnote 7 below.

⁵ If this happens, Facility may reapply and must demonstrate that it is selling its output to a Green-e Energy program participant in order for the application to be approved.



Program Specific Requirements

Marketing Materials Review

- The CPUC's final GTSR Decision 15-01-051 states that PG&E must review all developer marketing materials before they are used to market to customers.
- Developer marketing materials must comply with:
 - Green-e Energy Developer Requirements.
 - The California Public Utility Commission's Community Choice Aggregation Code of Conduct, which includes marketing and outreach requirements relative to Community Choice Aggregation.
 - Must be truthful, accurate and not false or misleading.
 - PG&E Disclaimer and Logo Usage Guidelines.
- Developer marketing materials submissions must include:
 - All materials the developer intends to use for marketing Phase One: Community Interest or Phase Two: Customer Enrollment as provided in the Green-e Energy Developer Requirements.
 - Marketing Compliance Attestation.
 - A summary of all claims and factual statements made in marketing materials.

Marketing materials should be submitted to SolarChoiceMarketing@pge.com.



Program Specific Requirements

Community Interest Requirements

1. Documentation that community members have:
 - Committed to enroll in 30 percent of the project's capacity or
 - Provided expressions of interest in the project sufficient to reach 51 percent of the project's capacity
2. Demonstration that at least 50% (by number of customers) and at least 1/6th (by load) of the demonstrated community interest in the project is from residential subscribers, and
3. Demonstration that projects sized from 3 to 20 MWs have the minimum number of required subscribers, which should be increased as projects size increases by at least one customer for each additional MW of project capacity (for example, 3 subscribers for 3 MW projects but 20 subscribers for 20 MW projects). Note: Municipalities or counties may provide a guaranteed subscription rate to demonstrate community interest. This guarantee is subject to the requirements listed above.

For purposes of the community interest requirements, community members/subscribers must be located within the same municipality or county or within ten miles of the project's address. Community members/subscribers must also meet the other customer eligibility criteria as defined in [E-ECR](#).

Developers must inform customers committing to enroll of an estimated price, when the project is expected to come online and a contract term. An expression of interest does not require disclosure of these elements. For both the commitment to enroll and expression of interest, documentation must be either in the form of a physical signed document, or digital e-signature technology.



Program Specific Requirements

Environmental Justice

- Pursuant to SB 43, 100 MW of the 600 MW program cap for the GTSR program is reserved for Environmental Justice (EJ) Projects, further defined in D.15-01-051 as the 20% most impacted communities based on the CalEnviroScreen Version 3.0 screening tool.
- Both PG&E's Solar Choice program and Regional Renewable Choice have mechanisms in the procurement process to prioritize EJ projects.
- In the Regional Renewable Choice solicitation, EJ projects will be evaluated in their own 'bucket', separate from otherwise eligible RRC projects.
- PG&E filed and posted on its website a list of eligible census tracts for EJ projects that qualify for participation in the EJ Bucket.
- Project must be sized 0.5-1.0 MW and located within an eligible census tract.

Securities Opinion

- Decision 17-07-007 modified D.15-01-051 to replace the requirement to obtain a securities opinion from an AmLaw100 firm with:
 - (i) The lawyer primarily responsible for the issuance of the opinion has, within the last eight (8) years, practiced federal and California securities law as a significant portion of their practice (meaning at least five (5) full-time years), and such experience included registering or qualifying offerings or sales of securities, effecting private placements of securities, and/or advising issuers or sellers of securities with respect to exemptions from qualification and registration requirements.
 - (ii) The lawyer primarily responsible for issuance of the opinion is licensed to practice law in California and the lawyer's license is active and not under suspension.
 - (iii) The law firm issuing the opinion carries a minimum of \$10 million in professional liability insurance coverage that includes coverage for securities practice.

PPA Payments

- The RRC developer only receives payment from PG&E for unsubscribed energy.
- The payment for unsubscribed energy varies depending on whether the project meets the minimum subscription requirements.

Year of Operation	Minimum Subscription Requirement
1 st Contract Year	45%
2 nd Contract Year	70%
3 rd Contract Year	90%
Remaining Delivery Term	95%

- RRC projects with customer subscriptions above the minimum subscription requirements are paid the RRC Contract Price as adjusted by the time-of-delivery (“TOD”) factors for unsubscribed energy.
- RRC projects with subscriptions below the minimum subscription requirements (taking into account the five percent margin) are paid for unsubscribed energy at the lesser of:
 - (1) the RRC PPA price as adjusted by the TOD factors, or
 - (2) the Default Load Aggregation Point (“DLAP”) price plus a \$10 Renewable Energy Credit (“REC”) value.



Program Specific Requirements

PPA Payments - Examples

Year of Operation	Minimum Subscription Requirement
1 st Contract Year	45%

Example #1

Project is 40% subscribed during the month of March of the 1st Contract Year

- PG&E pays the remaining 60% of 'unsubscribed energy'
- But at what price?
- The developer did not meet the minimum subscription requirement so they are paid the lesser of the Contract Price or the DLAP+ REC value for 60% of the projects output

Example #2

Project is 60% subscribed during the month of May of the 1st Contract Year

- PG&E pays the remaining 40% of 'unsubscribed energy'
- But at what price?
- The developer met the minimum subscription requirement so they are paid the Contract Price for 40% of the projects output.

Example #3

Project is 100% subscribed by customers for the month of June of the first Contract Year

- There is no payment from PG&E to the developer

Solicitation Overview

- Procurement target of 197.59 MW less any MW from executed contracts resulting from the 2018 Summer RRC RFO
- Two Buckets, each with three eligible products
 1. RRC Main: As-available peaking, As-available non-peaking and baseload
 2. Environmental Justice: As-available peaking, As-available non-peaking and baseload.
- PG&E is not accepting storage offers in the RRC program.

Date/Time	Event
November 13, 2018	Solicitation launched
November 19, 2018	Participants' Webinar
December 13, 2018 by 1:00 P.M. PST	Deadline for Participants to submit Offers through Power Advocate
February 4, 2019	PG&E notifies selected Participants and any waitlisted Participants
February 11, 2019	Submittal of Signed PPA. Participants that wish to continue participation in PG&E's RFO must return a signed PPA and required documentation
April 5, 2019	Demonstration of Community Interest & Securities Opinion
May 10, 2019	Target timeframe of Execution of final Agreements
June 10, 2019	Target Advice Letter filing date for CPUC approval



Independent Evaluator (IE)

- Primary role of the IE is to:
 - Monitor RFO processes to ensure fair and equal treatment of all potential counterparties.
 - Monitor evaluation processes to ensure PG&E has implemented the methodology as described and that Offers are treated consistently.
 - Report on RFO process and proposed transactions to CPUC when filed for CPUC approval.
- The IE may review all proposal data and communications with Participants
- RRC Independent Evaluator is Arroyo Seco Consulting. Contact is:
 - Lewis Hashimoto (arroyosecoconsulting@gmail.com)



RRC Eligibility Requirements



Technology	RPS eligible technologies
Size	0.5-20 MW EJ Projects: 0.5-1.0 MW
Location	PG&E's service territory EJ Projects: Must be located within designated census tract (Attachment H).
Vintage	Only new project are eligible
Interconnection	Executed Interconnection Agreement (including SFA), Phase II Study or equivalent (e.g. Facilities Study), passed WDT/CAISO Fast Track screens at the time of Offer submittal
Interconnection System	Connected to PG&E's distribution or transmission system
Deliverability	Full Capacity Deliverability Status, Partial Capacity or Energy Only

Note: Full Capacity Deliverability Status required for all solicitations launched in 2019 and beyond

GCOD	36 months with 6 month permitted extension
Delivery Term	10, 15, or 20 years
Transaction	Full buy/sell only
Max Bid Award Price	Based on executed post-TOD contract price



RRC Eligibility Requirements, con't.

Other Incentives Project that has previously received incentives under the California Solar Initiative (CSI) or the Self-Generation Incentive Program (SGIP) is ineligible

Developer Experience At least one member of the development team must have Completed or begun construction of at least one project of similar technology and capacity. Specific role and contribution of that team member must be outlined and submitted with Offer.

Commercialized Technology Project must employ technology currently in use at a minimum of two operating facilities of similar capacity worldwide.

Site Control Applicant must have 100% Site Control for the Project and submit a map showing the boundary of the Site for which the Applicant has control

Marketing Material Review As policy, in order to meet the community interest demonstration in the required timeframe, Participants submitting into this RFO must demonstrate completed review of marketing materials for the Project upon Offer submittal.

Demonstration of Community Interest Within 60 days of the Notification Date, participant must meet the requisite Demonstration of Community Interest.

Securities Opinion Securities opinion from a law firm stating that the arrangement complies with securities law, and that the IOU and its ratepayers are not at risk for securities claims associated with the project.





Eligibility Requirements – Deliverability

- Projects can bid as Energy Only, Partially Deliverable (PCDS), or Fully Deliverable (FCDS). PG&E is not requiring, nor has it stated a preference for, deliverable projects.
- **Please Note:** All solicitations launched in 2019 and beyond will require that projects have FCDS to participate in an RRC RFO.
- Projects bid in as Partially or Fully Deliverable must achieve the corresponding deliverability status by their selected Deliverability Date or face penalties and/or default.
 - Participants are encouraged to submit an Energy Only bid (instead of or in addition to their deliverability bid) if there is any chance the deliverability date may be outside of the required 36 month window.
 - PG&E will review the timing of when the Offer is likely to achieve the offered deliverability status for eligibility.
 - Projects bidding as Fully or Partially Deliverable must provide documentation that the Project has received FCDS/PCDS or has completed the Phase II study with FCDS/PCDS cost estimates.
 - An application for deliverability through any CAISO annual process is not sufficient unless there is a finding of deliverability at the time of Offer submittal.

Power Purchase Agreement (PPA) Overview

- **Power Purchase Agreement (PPA) =
RAM 6 PPA + RRC Rider**
- **Terms and conditions are non-negotiable.**
- **Please review the PPA for full terms and conditions**

Green-e Energy Certification

- RRC developers must meet all Green-e® Energy National Standard requirements, in addition to Green-e® Energy marketing requirements.
- Developer agrees to complete, sign and return the Green-e® Energy Tracking Attestation for electricity and RECs

Representations, Warranties and Indemnities

- The RRC Rider includes additional representations and warranties related to requirements of D.15-01-051. Examples include:
 - customer subscription levels,
 - Green-e® Energy requirements,
 - marketing,
 - contents of the customer-developer agreement,
 - a prohibition against selling subscriptions exceeding 100 percent of project capacity,
 - a requirement that all instructions and customer information provided to PG&E are accurate
 - a prohibition against having an existing PPA with an Investor Owned Utility (“IOU”) or another party for the RRC project.

Provisions Required in the Customer-Developer Agreement (“CDA”)

- Also referred to as a Customer Seller Agreement (“CSA”) in the Rider
- As provided in the D.10-01-051, the RRC Rider includes the following customer protections: program intent provisions, buyer beware provisions, customer complaint provisions, notification of status provisions, and provisions providing customer payments to the developer are refundable until the RRC project is operational

Securities Opinion

- Prior to the IOU’s acceptance of any project that contains a customer-developer contract, the developer must include a securities opinion stating that the arrangement complies with securities law, and that the IOU and its ratepayers are not at risk for securities claims associated with the project.

Excess Sale Arrangements

- Site host electrical demand is not constant month-to-month and could vary widely under some circumstances (including using all of the electrical output of a facility), the energy available to meet customer subscription levels could not be guaranteed.
- This provision of the standard RAM PPA has been removed as a customer protection.

Security Requirements and Damage Payment Calculation

- These provisions were based on expected revenues and due to the RRC structure where revenues come from customers, these were modified in the Rider.
- Delivery Term Security
 - 3 MW or less = \$20/kW x Contract Capacity
 - Greater than 3 MW, As-Available peaking = \$120/kW x Contract Capacity
 - Greater than 3 MW, Baseload = \$180/kW x Contract Capacity
- Damage Payment
 - \$60 per kW for As-Available facilities or \$90 per kW for Baseload facilities

Guaranteed Commercial Operation Date (“GCOD”)

- Pursuant to D.14-11-042 for the post-RAM 6 applications of the RAM Tool, RRC projects have 36 months to achieve commercial operations with a 6-month permitted extension.

Time of Delivery Factors (“TOD”)

- The Time of Delivery factors are consistent with the factors approved in PG&E’s 2017 RPS Plan



PPA: Standard Terms Overview

Product

- Seller must deliver all Product to PG&E. “Product” means:
 - All electric energy produced by or associated with the Generating Facility net of Station Use (and Site Host Load as applicable); and
 - All renewable attributes, Renewable Energy Credits, Capacity Attributes and Green Attributes produced by or associated with the generating facility.
 - Note: Energy Only projects do not have to pursue any deliverability studies.

Commercial Operation Deadline

- Failure to meet the Guaranteed Commercial Operation Date after any excused delay is an Event of Default, which would allow PG&E to terminate the PPA and retain the Project Development Security as damages for the Seller’s default.



PPA: Standard Terms Overview

Delivery Shortfalls

- Sellers must agree to deliver a minimum quantity of Energy (Guaranteed Energy Production or GEP):
 - **As-available products:** 160% of the average Contract Quantities over 2 years
 - **Baseload:** 90% of the Contract Quantity over one year
 - Contract Quantity is the estimated amount of MWhs of Energy that the Project will generate on an annual basis. If Seller fails to meet GEP, then Seller may be required to pay PG&E liquidated damages. If Seller repeatedly fails to meet GEP, then PG&E may default the Seller and terminate the PPA.

Curtailment

- Seller must curtail energy deliveries in response to curtailment requests from the CAISO, PTO or Buyer. **Review the PPA carefully** to better understand under what circumstances Seller will or will not be reimbursed for curtailed energy deliveries.
- PG&E has the right to require the seller to curtail energy deliveries during the Buyer Curtailment Period for unlimited hours per year and PG&E will pay for such curtailed energy at the Contract Price.
- Seller is required to respond to electronic signals from PG&E or the CAISO to curtail.

Evaluation Methodology

- PG&E will screen Offers on a “pass-fail” basis against the eligibility criteria discussed in the Eligibility Requirements section of this presentation.
- Eligible Offers will be selected based on Least Cost Best Fit (LCBF) criteria
- Primary quantitative criterion is Net Market Value
- Portfolio Adjusted Value has limited impact for this RFO

$$\text{(Adjusted) Net Market Value} = E + C + S - (P + T + G + I)$$

- **E - G = Energy benefit – Congestion Cost**
 - Based on market prices and Locational Marginal Pricing (LMPs) multipliers applied to reflect congestion and losses
 - Includes energy value from Buyer Curtailments for avoiding (presumably negative) wholesale market price for the Offer's energy delivery
- **C = Capacity benefit** is based on
 - PG&E's internal estimate of avoided cost of capacity, and
 - Offer's contribution to meeting PG&E's future Resource Adequacy requirements
- **S = Ancillary Service benefit** based on Offer's Ancillary Service capability. Assumed to be zero for non-dispatchable offers.
- **P = Post TOD Adjusted PPA Price** based on Offer's contract price and TOD factors and includes debt equivalence
- **T = Refundable Transmission Network Upgrade Cost** based on study results or interconnection agreement
- **I = Integration Cost** calculated pursuant to D. 14-11-042. Not applicable to baseload resources

Market Valuation (Capacity)

- Transmission Network Upgrade Costs (\$/MWh): will be taken from applicable study.
 - Energy Only projects: Only the reimbursable portion of the costs associated with reliability network upgrades required for will be used.
 - Fully Capacity Deliverability Status and Partial Capacity Deliverability Status projects: Will use the reimbursable portion of the reliability network upgrade cost and the deliverability network upgrades net of the Project's resource adequacy value.
- PG&E assumes that all projects will achieve Full Capacity Deliverability Status or Partial Capacity Deliverability Status by the date provided in the Offer Form.
 - Resource Adequacy (RA) benefit will be included from the date indicated through the remaining delivery term of the PPA.
- RA benefits will be evaluated by applying the Net Qualifying Capacity (NQC) to the avoided capacity costs forecast.



Offer Submittal Process and Offer Form

- Offers must be submitted via the online platform at Power Advocate. Only accepted registrants are permitted to submit offers.
 - Register through Power Advocate at <https://www.poweradvocate.com/pR.do?okey=82644&pubEvent=true> .
 - PG&E strongly encourages you to register well in advance of Offer due date of **December 13th at 1:00 PM (PPT)**.
- PG&E will only consider Offers that, as of the submittal deadline, are complete and conforming Offers.
 - Only correction of clear administrative errors will be allowable to this Offer Form after it is submitted.
 - PG&E reserves the right to reject an offer if the Offer Form has a substantial number of errors.
- By submitting an Offer into this RFO, each Participant is required to abide by the confidentiality obligations specified in Section IX of the RRC Protocol.



Key to a Successful Proposal

- Sellers may choose the option to bid a single project with four (4) variations. Variations include:
 - Size
 - Delivery Term
 - Fixed Price vs. Escalating Price
 - Full (or Partial) Capacity Deliverability Status vs. Energy Only²
- Submit a competitively priced Offer – **price refreshes are not allowed.**
- Submit a complete Offer including:
 - Most recent Interconnection Study or Interconnection Agreement, where applicable

²Participants are encouraged to submit an Energy Only bid (instead of or in addition to their deliverability bid) if there is any chance the deliverability date may be outside of the required 36 month window.



Required Offer Submission Forms

- Offer package must be in the format as specified in the RRC Protocol.
- Fully Completed Offer Form; includes Developer Experience and Supply Chain Responsibility Questionnaire. Format: MS Excel.
- Demonstration of Developer Experience. Format: MS Word
- Completed PPA Cover Sheet and Appendix XIII (Appendix A). Format: MS Word.
- Site Control Questionnaire and Attestation (Appendix C). Format: PDF and applicable GIS data file format.
- Acknowledgement and Commitment of Site Owner (Appendix D). Format: PDF.
- Interconnection Studies. Format: PDF or MS Word.
- Single Line Diagram. Format: PDF

Note: PG&E will review and ensure that the PPA cover sheet and required Appendix XIII are complete and meet the terms of the PPA during the bid evaluation process. Incomplete documentation will require additional communication to resolve any issues.



Communications and Website

- RFO [website](#) provides everything you need to submit an offer, including (but not limited to) the following:
 - RFO Documents for the solicitation
 - Detailed instructions for submitting Offers(s) using Power Advocate
 - Announcements, updates and Q&A
- All solicitation communications should be directed to:
GTSRprocurement@pge.com with a copy to the Independent Evaluator at arroyosecoconsulting@gmail.com



Offer Form Structure

- Instructions
- Validation Worksheet
- Participant Information and Developer Experience
- Project Description and Contract Information
- Energy Pricing Sheet
- Estimated Energy Production Profile
- Supply Chain Responsibility
- File Name

Instructions	Validation	Developer Experience	Product Description	Energy Pricing	Gen Profile	Supply Chain Responsibility	FileName
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Offer Form - Instructions

- Be sure to enable macros when opening the Offer Form.
- Instruction tab provides clear directions on completing the offer form.
- Please make sure you save and submit the form in Microsoft Excel “.xlsb” format.
No other formats will be accepted.
- Each cell with a yellow background must be filled out. Once completed the yellow background will disappear.
- Grayed out cells are auto-calculated cells.
- If the word “Complete” does not appear at the top of the page the form will be deemed invalid and returned to you.



Offer Form – Developer Experience

Counterparty Information

Counterparty/Legal Entity Name	ABC Renewables		
Street Address	123 Main Street		
City	Renewables	State	CA Zip Code 12345
Country	USA		
Website			

Legal entity is the legal name that will be signing the PPA

Developer Information

Developer Name:	ABC Renewables		
Street Address	123 Main Street		
City	Renewables	State	CA Zip Code 12345
Authorized Contact #1		Authorized Contact #2	
First Name		First Name	
Last Name		Last Name	
Title		Title	
Phone 1		Phone 1	
Phone 2		Phone 2	
Email		Email	

The participant must provide evidence that one member of the development team has completed at least one project of similar technology and capacity. Specific role and contribution of that team member on the submitted project should be included in the outline, with links to project information.

Key Team Members	Project Developer	Project Title/Role	Project Name	Technology Type	Size (MW)	COD
Jane Doe	Jane Doe	Principal Developer	Solar Project 1	Photovoltaic	10.00	1/1/2012
Jane Doe	Jane Doe	Project Manager	Solar Project 2	Photovoltaic	20.00	5/1/1995



Offer Form – Developer Experience

Please be sure to read each attestation and affirmation on the Developer Experience tab. A number of these items are specific to and/or new to this RFO.

Attestation	
By providing the electronic signature, below, Participant hereby attests that all information provided in this Offer Form and in response to this RRC RFO is true and correct to the best of Participant's knowledge as of the date such information is provided.	
Electronic Signature	Select "Yes" to certify that the typed name acts as your electronic signature
Title	
Affirmation of ability to perform all obligations under the PPA	
I have read and understand the PPA and attest that we are able to perform all obligations under the PPA and Protocol.	
Electronic Signature	Select "Yes" to certify that the typed name acts as your electronic signature
Title	
Affirmation of project capacity capability to comply with Section 3.9(q)	
This Project has the capability to comply with Section 3.1(q) (Seller Equipment Required for Curtailment Instruction Communications) of the PPA.	
Electronic Signature	Select "Yes" to certify that the typed name acts as your electronic signature
Title	
Marketing Materials	
All marketing materials used to solicit customer interest or enrollment for the proposed project have been reviewed by PG&E. No substantive changes shall be made to the marketing plans and marketing materials reviewed by PG&E without PG&E's prior review throughout the Delivery Term of the RRC PPA.	
Community Choice Aggregation Code of Conduct	
Participant has received and read Attachment 1 of the CCA Code of Conduct Decision (D.12-12-036), and will not circumvent it.	
Green-E Energy Code of Conduct and Developer Requirements	
Participant has received and read the Green-E Energy Code of Conduct and Green-E Energy Requirements for Developers Participating in the California Regional Renewable Choice Program, and will abide by them and not circumvent them. The proposed project meets the marketing, reporting and other requirements of the Green-e® Energy Program to be able to produce Green-e® Energy eligible product in accordance with the Green-e® Energy National Standard in effect at the time of RRC PPA execution.	
Demonstration of Community Interest	
Participant acknowledges that they will have to comply with the Demonstration of Community Interest and Securities Options requirements outlined in the Project Viability Eligibility Requirements in Section III of the RRC Protocol prior to execution of an RRC PPA, if awarded.	



Offer Form – Product Description



Participant Proposal Project Description and Contract Information

There are 44 input errors.

Project Information					
Project Name					
Street Address					
Project Location					
City		State	CA		
County		Zip Code			
Latitude		degrees	Longitude		degrees
CREZ (Click here for CREZ map)	<Choose>	CREZ Location			
Select Facility Status	<Choose>				
Is the project site subject to restrictions under the Williamson Act?	<Choose>				
Project Description					

Offer Information	
Product Type	<Choose>
Transaction Type	<Choose>
Capacity Type	<Choose>
Project Size (MW)	
Expected Commercial Operation Date	
Delivery Term (months)	<Choose>
Avg Pre-TOD Price (\$/MWh)	

Environmental Justice (the information displayed here is dependent upon the Project S

This project is NOT qualified for the 'Environmental Justice' bucket as part of the Region

Technology	
ERR Type	<Choose>
Solar Technology	
Describe Other Solar Technology	
Cooling Method	
Solar Module Detail	
Company Name	
Tracking and Orientation	
If filed with the CEC for precertification, enter application date:	

Technology Operating Experience		
	Site #1	Site #2
Project Name		
Location (City, St)		
Capacity (MW)		
Website		

Site Control	
Type of Site Control	<Choose>
Enter Site Control Date:	
Site Owner Name (current):	
Ownership Type over Term:	<Choose>
Site Owner Address:	
Site Owner City:	
Site Owner State:	<Choose>
Site Owner ZipCode:	
Site Owner Phone #:	



Offer Form – Product Description

Interconnection Information

Offer Information	
Product Type	As-Available Peaking
Transaction Type	Full Buy/Sell Only
Capacity Type	Full Capacity Deliverability
Project Size (MW)	20.00
Expected Commercial Operation Date	7/20/2019
Deliverability Date	7/20/2019
Delivery Term (months)	240.00
Avg Pre-TOD Price (\$/MWh)	-

If Partial or Full Capacity Deliverability are selected, be sure to fill in the Deliverability Date based on your interconnection documentation.

An estimate of average pre-TOD price will be automatically populated after the calculator is run.

Interconnection details are required in the Electrical Interconnection Information section.

Electrical Interconnection Information			
Interconnection App. Status	Phase II study or equivalent complete		
Interconnecting Utility	PG&E	Point of Interconnection	Interconnection Point
Interconnection Agrmt. Type Name	WDAT	Closest Substation	Substation X
Participating Transmission Owner	PG&E	Status of Interconnection Point	<Choose>
Queue Number	WD-xxxx		
Interconnection Net Capacity	20	MW	
Capacity Deliverability/Energy Only?	Full Capacity Deliverability		
Interconnection part of Cluster 5 or Later Studies?	No		
Interconnection Deliverability Option		Direct Assigned Cost (\$)	
		Area Delivery Network Upgrade Costs (\$)	\$0.00
		Local Delivery Network Upgrade Costs (\$)	\$50,000.00
		Reliability Network Upgrade Costs (\$)	\$0.00
		Total Network Upgrade Costs (\$)	\$50,000.00
		Network Upgrade Construction Time (months)	
Interconnection Voltage	220	kV	
Interconnection Level	Transmission		
Delivery Market	NP15		
Other Characteristics			

Offer Form – Energy Pricing

TOD Factors for each TOD Period

Period	1. Peak	1. Mid-Day	3. Night
A. July - September	1.546	0.653	1.222
B. October - February	1.505	0.753	1.299
C. March - June	1.315	0.200	1.016

Select either fixed or escalating Pricing Type. Fixed pricing requires inputting only first year price whereas Escalated pricing requires first year price and annual escalation rate.

Pricing Type

<Choose>

← Step 1

Contract Year Number	Contract Year Start Date (mm/dd/yyyy)
1	01/01/00
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

Contract Year Stop Date (mm/dd/yyyy)
12/31/00

Contract Capacity (MW)	Expected Annual Capacity Factor (%)	Contract Quantity: Expected Annual Net Energy (MWh)

0.00%

0

Contract Price (\$/MWh)

\$0.00

← Step 2



Offer Form – Generation Profile

IMPORTANT:

- 1) Please provide a generation profile forecast of the project's average-day net output energy production, stated in MW by hour, by month and by year. Generation entered here should exclude onsite use and should be entered in calendar year format.
- 2) The template is designed and defaulted such that the generation profile should reflect the project's average-day net output at full capacity before degradation. The template defaults that the only changes to the generation profile through the term of the contract will be caused by annual degradation.

Annual Degradation (%)

1%

[Click to Import or Clear a Generation Profile](#)

Month	0100	0200	0300	0400	0500	0600	0700	0800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
Jan									18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00						
Feb								18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00					
Mar							17.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Apr							17.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
May						8.00	17.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Jun					8.00	17.00	18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Jul					8.00	17.00	18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Aug					8.00	17.00	18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Sep					8.00	17.00	18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Oct						17.00	18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00	14.00				
Nov							18.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	18.00					
Dec								18.00	18.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00						

Calculate

You must calculate (or recalculate) before submitting this offer

Instruction:

To calculate the remaining fields in the Energy Pricing tab please ensure the following information is completed:

- 1) Full generation profile pertaining to all the contract years.
- 2) Pricing.



Offer Form – File Name

A File Name must be generated.

This offer form will not be accepted if the steps outlined below have not been followed!

A new File Name must be generated via the steps below for each offer submitted. If submitting multiple offers, please repeat these steps for each offer submitted.

These steps will create a unique, correctly formatted name that must be given to this offer form file before it is submitted. If you are submitting multiple offers and you employing "Save As" on a form you previously populated to create a new offer it is essential that a new/different file name be generated for each additional offer you create.

When you are ready to submit this form...

1) Click this button ►

2) Copy this text ▼ via the button at right and use it AS IS as the name of the file you submit.

3) Once you have named this offer form via the steps above and submitted this form to PG&E keep it unchanged in a secure location where you can refer to it should PG&E have questions. If a PG&E representative contacts you regarding this offer form they will reference the file name.

These instructions must be exercised just prior to actual submission of the form. The file name composed above must be created after you have finalized the rest of the form.

The functionality on this tab is not available until the following fields have been populated on other tabs.

- Developer Name
- Project Name
- Term
- Project Size (MW)
- ECOD Year
- Offering Name (default)
- Date/Time Stamp (calculated)

Appendix A - Version 2018.101

Interconnection



Interconnection Overview

- Tariffs
 - PG&E Rule 21 (not applicable for this RFO)
 - PG&E Wholesale Distribution (< 60 kV)
 - CAISO Generator Interconnection and Deliverability Allocation Procedures GIDAP (≥ 60 kV)
- Study Processes
 - Fast Track (FT)
 - Independent Study (ISP)
 - Cluster
- RFO Requirements
 - Phase II or equivalent study at time of offer
 - Can offer Energy Only (EO), Partial Capacity Deliverability Status (PCDS) or Full Capacity Deliverability Status (FCDS)



Typical Study Timelines

Application to completion of Phase II Study

Add ~4 months for Interconnection Agreement negotiation and execution

Grid Controller	Fast Track	Independent Study	Cluster
CAISO*	~1 month	6 months (SIS + FAS combined)	1.5 years (Phase I and II)
PG&E	1 month (IR only) 2 months (IR + SR, if required)	3 months (SIS only) 6 months (SIS + optional FAS)	1.25 years (Phase I and II)

*Subject to CAISO Tariff.



Intermission

Email questions to:
GTSRprocurement@pge.com

Q&A

Thank You

