

PG&E's Participants' Webinar

PG&E's Long-Term Bundled RPS Energy Sale Solicitation

November 7, 2019

Q&A / Audio Replay

- At any time during this presentation participants should e-mail their questions to the Solicitation mailbox: RECSolicitations@pge.com
- There will be time to answer questions at the end of the webinar
 - 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: <http://www.pge.com/rfo> under “Long-Term Bundled RPS Energy Sale Solicitation”
- The audio portion of the webinar will also be posted on PG&E’s website as noted above.

Objective and Agenda

- The purpose of this webinar is to provide information to participants who may submit bids into PG&E's Long-Term Bundled RPS Energy Sale Solicitation.
- **Topics**
 - Introduction
 - Solicitation Overview
 - Agreement
 - Bid Evaluation
 - Bid Submittal Process
 - Intermission
 - Q & A

Document Conflicts

- This presentation is intended to be a summary level discussion of the information and requirements established in the Solicitation materials (it does not include all of the detailed information in the Solicitation materials).
- To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the Solicitation materials, the **Solicitation materials shall govern.**
- PG&E expressly disclaims all warranties and conditions of any kind, express or implied, regarding the accuracy and completeness of the Data Room materials. A Participant should make its own independent decision to participate in the Solicitation based on the Participant's own judgment and due diligence.
- PG&E encourages participants to carefully review:
 - Long-Term Bundled RPS Energy Sale Solicitation Protocol
 - Long-Term Bundled RPS Energy Sale EEI Master Agreement Confirmation that is posted on PG&E's website as Appendix A
- **PG&E urges bidders to ask clarifying questions regarding the Agreement prior to submittal of a bid under this Solicitation.**

Solicitation Overview

Overview

PG&E is conducting a solicitation to sell Long-Term bundled Renewable Portfolio Standard (RPS) – eligible energy and corresponding Renewable Energy Credits (RECs) pursuant to an Agreement.

Product	<ul style="list-style-type: none"> PG&E delivers a percentage of Bundled RPS-eligible energy and associated RECs from a specific RPS resource (“Resources”)
Pricing	<ul style="list-style-type: none"> Index Price Energy (“Index Price Option”) <ul style="list-style-type: none"> Energy – settled at the day-ahead Index (Locational Marginal Price) REC – fixed price OR Fixed Price Energy (“Fixed Price Option”) <ul style="list-style-type: none"> One price for bundled energy & REC Product
Resources Offered	<ul style="list-style-type: none"> Solar PV and Solar Thermal
Volume	<ul style="list-style-type: none"> Unit-contingent (As-Available) – Buyer receives actual generation of Resource(s) <ul style="list-style-type: none"> No guaranteed minimum or maximum quantity
Delivery Shape	<ul style="list-style-type: none"> Hourly – matching actual production of the Resource
Delivery Term	<ul style="list-style-type: none"> 10 years Delivery start date: Later of (a) 1/1/2021 and (b) the first day of the month following satisfaction of the Conditions Precedent, as defined in the Agreement.

Solicitation Schedule

PG&E encourages all Participants to **begin any internal approval processes at the earliest opportunity possible**, in anticipation of the expedited timelines described below.

Date/Time	Event
November 7, 2019	Participants' Webinar
November 15, 2019	Deadline for Participants to provide comments on the Agreement to PG&E via upload to the online platform at Power Advocate by 1 PM (PPT).
December 3, 2019	PG&E posts updated Agreement to Website
December 17, 2019	Bids Due. Participants must submit Bid(s) to the online platform at Power Advocate by 1 PM (PPT).
Week of January 6 th , 2020	PG&E notifies Participants of status of submitted Bids
Week of January 27 th , 2020	PG&E and each qualified Participant execute an Agreement, which shall be subject to "CPUC and Bankruptcy Court Approvals," as provided in the Agreement.
January/February 2020	PG&E submits Agreements for CPUC and Bankruptcy Court Approvals.

Independent Evaluator (IE)

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

Agreement Overview

General Guidelines

- Bidders are required to have an EEI Master Agreement in place with PG&E to execute an Agreement.
- **If you have, or intend to submit a bid, and do not have an EEI Master Agreement in place with PG&E, please reach out as soon as possible so we can begin initiating the process to execute one.**
- PG&E has a strong preference for standardized Agreements.
- PG&E encourages all Participants to **begin any internal approval processes at the earliest opportunity possible.**

Transaction

- Product: Electric Energy and associated Green Attributes from the Project
- Compensation: Contract Price (\$/MWh) based on quantity of Delivered Energy
- Quantity:
 - For Electric Energy: percentage of Electric Energy produced by the Project and delivered to the Delivery Point
 - For Green Attributes: volume of Green Attributes associated with the Delivered Energy
- Energy Delivery Period:
 - **Start**: Later of (a) January 1, 2021 and (b) satisfaction of the Conditions Precedent (CPUC Approval, Green Attributes Conditions Precedent, Bankruptcy Court Approval)
 - **End**: Earlier of (a) 120 calendar months from the start date or (b) termination of Seller's PPA with the Project

Delivery of Product

- Seller, or a qualified third party designated by Seller, is Scheduling Coordinator
- Electric Energy: delivered at the applicable Pricing Node of the Project as specified by the CAISO
- Green Attributes: transferred to Buyer, in the form of WREGIS Certificates associated with Delivered Energy, within 25 Business Days following the occurrence of both:
 - The deposit of WREGIS certificates into to Seller’s WREGIS account for the applicable energy delivery month
 - Buyer’s payment of the Monthly Cash Settlement Amount
- Seller’s delivery and conveyance obligations for Product under this Agreement are limited solely to Product delivered from the Project to Seller pursuant to Seller’s PPA with the Project

Monthly Cash Settlement Amount – Index Price Option

- The “Monthly Cash Settlement Amount” for the Index Price Option is equal to the sum of (a) plus (b) minus (c), where:
 - **(a)** equals the sum, over all hours of the Calculation Period, of the Energy Price for each applicable hour multiplied by the quantity of Delivered Energy for each applicable hour
 - **(b)** equals the Green Attributes Price multiplied by the quantity of Green Attributes (in MWhs) associated with the Delivered Energy for the Calculation Period
 - **(c)** equals the sum, over all hours of the Calculation Period, of the Energy Price for each applicable hour multiplied by the quantity of Delivered Energy for each applicable hour

Monthly Cash Settlement Amount – Fixed Price Option

- The “Monthly Cash Settlement Amount” for the Fixed Price Option is equal to the sum of (a) minus (b), where:
 - **(a)** equals the sum, over all hours of the Calculation Period, of the Contract Price for each applicable hour multiplied by the quantity of Delivered Energy for each applicable hour
 - **(b)** equals the sum, over all hours of the Calculation Period, of the Index Price for each applicable hour multiplied by the quantity of Delivered Energy for each applicable hour

Early Termination Rights

- Either Party may terminate if CPUC Approval or Bankruptcy Court Approval is not received within 365 days from the date of filing for CPUC Approval and Bankruptcy Court Approval (whichever is later)
- Seller may terminate if Seller's PPA with the Project is terminated

Credit Requirements

- Credit Requirements are bilateral and apply to both Buyer and Seller
- **Index Price Option:** Green Attributes Price * 1.5% of forecasted Energy Quantity¹
- **Fixed Price Option:** Contract Price * 5% of forecasted Energy Quantity
- Illustrative Example
 - Assumptions:
 - Project = Resource A
 - Percentage of Resource awarded to Buyer = 10%
 - Forecasted total generation for Resource A over the 2021-2030 period based on PG&E's 2018 RPS Compliance Report = 1,000,000 MWh
 - Credit Requirements calculation:
 - Index Price Option = Green Attributes Price * 1.5% * 10% * 1,000,000 MWh
 - Fixed Price Option = Contract Price * 5% * 10% * 1,000,000 MWh

¹ For the purposes of calculating the credit requirements, forecasted Energy Quantity will be determined by using Forecasted Data for the 2021 – 2030 period from Appendix A of PG&E's 2018 Annual RPS Compliance Report. This report can be found on the CPUC's website at: <https://www.cpuc.ca.gov/General.aspx?id=3856>. PG&E is providing this data for use in the Solicitation, but such data should not be relied on for actual delivery amounts.

Agreement Comments/Redlines

- Participants may provide PG&E written feedback on the Agreement, which must be submitted electronically via Power Advocate by **November 15, 2019 at 1 PM (PPT)**
- PG&E will review market feedback on the Agreement from Participants and, at its sole discretion, may incorporate feedback into a revised and updated Agreement, which will be posted to the solicitation website (tentatively December 3, 2019)
- Participants shall use the updated Agreement posted by PG&E, when submitting their Bid(s)

Evaluation Methodology

Evaluation Methodology

- PG&E will evaluate Bids primarily based on Bid price, using the evaluation criteria outlined below.
- **Quantitative criteria**
 - Net Market Value (NMV) compare a Bid's costs to its market value. Market value may include components related to energy, REC values, and other factors.
- **Qualitative criteria**
 - Financial Strength
 - Counterparty diversity
 - Existence of an executed EEI Master Agreement between PG&E and the Participant
 - Previous commercial experience with the Participant
 - Completeness of Bid

Data Room

Data Room

- PG&E has established an “electronic” data room in which the following Resource information may include (but is not limited to):
 - Copies of executed Power Purchase Agreements as amended (PPAs) between PG&E and the PPA Counterparty, redacted to ensure confidentiality where relevant; and
 - Average historical operational data on the Resources based on hourly generation from the past 24-36 months, if available.
 - Forecasted generation data of the Resources based on PG&E’s 2018 RPS Compliance Report¹
- **Data Room Access**
 - The data room is located on the Power Advocate platform
 - Participant must submit executed Confidentiality Agreement
 - PG&E will verify the Confidentiality Agreement and then grant access to the data room

¹ Forecasted generation data is based on the Forecasted Data for the 2021 – 2030 period from Appendix A of PG&E’s 2018 Annual RPS Compliance Report. This report can be found on the CPUC’s website at: <https://www.cpuc.ca.gov/General.aspx?id=3856>. PG&E is providing this data for use in the Solicitation, but such data should not be relied on for actual delivery amounts.

Power Advocate

PowerAdvocate

- Power Advocate will be used to host the data room and to submit Bids. Only registered Participants are permitted to view the data room and submit Bids:
 - Register through Power Advocate at:
<https://www.poweradvocate.com/pR.do?okey=97929&pubEvent=true>
 - PG&E strongly encourages Participants to register ASAP to give adequate time to review the Resource information in the data room.
 - Power Advocate instructions and all Bid documents are available on PG&E's Solicitation website, and must be completed and included with each PowerAdvocate Bid submission.
- By submitting a Bid into this Solicitation, each Participant is required to abide by the confidentiality obligations specified in Section VI of the Solicitation Protocol and their Confidentiality Agreement.

Bid Submittal Process

Required Bid Submission Forms

- PG&E will only consider Bids that, as of the submittal deadline, are complete and conforming Bids.
- Bid package must be in the format as specified in the Long-Term Bundled RPS Energy Sale Solicitation Protocol.
 - Fully Completed Agreement (Attachment A); Format: PDF
 - PG&E may host a future webinar to walk through Agreement modifications and completing the Agreement for Bid submittal.
 - Attestation of Volume (Attachment B); Format: PDF
 - Documentation of Entity Legal Status from the California Secretary of State
 - A webpage screenshot verifying Participant or end-user counterparty’s “Active” legal status via the California Secretary of State’s webpage is acceptable. The California Secretary of State website is located at <https://businesssearch.sos.ca.gov/>.

Bid Submittal Requirements

Number of Bids Allowed

1. Each Participant may submit up to a maximum of 10 Bids
 - Each Participant may submit any combination of Fixed Price Option and Index Price Option Bids (e.g., 6 Index Price Option Bids and 4 Fixed Price Option Bids).

Number of Resources per Bid Allowed

1. Can only submit one bid per resource for each Price Option
 - (e.g., Participant cannot submit 2 Fixed Price Option bids for a unique Resource)

Single Price Requirement

1. Only one Bid price is allowed for all Index Price Option Bids submitted by each Participant.
 - (e.g., if the Participant submits 6 Index Price Option Bids, all 6 Bids **must** have the same Bid price)
2. Only one Bid price is allowed for all Fixed Price Option Bids submitted by each Participant.

Maximum Volume

1. Participant must provide the maximum volume that they are willing to purchase by submitting the Attestation of Volume (Attachment B) as part of Bid submittal.
 - The maximum volume stated in the Attestation of Volume cannot be greater than the sum of the forecasted volume from the Resources identified in the Bids submitted.

Bid Submittal Example - Eligible

Example 1 - Eligible Bid Submittal

	Resource 1	Resource 2	Resource 3	Resource 4	Resource 5	Resource 6	Total # Bids
Index Price Option							
# of Bids	1	1	1	1	1	0	5
Price (\$/MWh)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	n/a	
% of Resource	25%	50%	75%	100%	25%		
Fixed Price Option							
# of Bids	1	1	0	1	1	1	5
Price (\$/MWh)	\$2.00	\$2.00	n/a	\$2.00	\$2.00	\$2.00	
% of Resource	10%	20%		30%	40%	50%	
							10

Number of Bids Allowed (PASS)

- Explanation: Participant submitted 10 Bids total, which is equal to the maximum number of Bids allowed per Participant of 10.

Number of Resources per Bid Allowed (PASS)

- Explanation: Participant submitted no more than one Bid for each Resource per pricing option.

Single Price Requirement (PASS)

- Explanation: Participant submitted one Bid price for all Index Price Option Bids and one Bid Price for all Fixed Price Option Bids.

Bid Submittal Example - Ineligible

Example 2 - Ineligible Bid Submittal

	Resource 1	Resource 2	Resource 3	Resource 4	Resource 5	Resource 6	
1							
2	Index Price Option						
3	2 B	1	1	1	1	0	6
4	\$1.00; \$1.00	\$1.00	\$1.00	\$1.00	\$1.00	n/a	
5	25%	50%	75%	100%	25%		
6	Fixed Price Option						
7	1	1 C	0	1	1	1	5
8	\$2.00	\$1.00	n/a	\$2.00	\$2.00	\$2.00	
9	10%	20%		30%	40%	50%	
10							11 A

Number of Bids Allowed (FAIL) **A**

- Explanation: Participant submitted 11 Bids total, which exceeds the maximum number of Bids allowed per Participant of 10.

Number of Resources per Bid Allowed (FAIL) **B**

- Explanation: Participant submitted multiple (2) Index Price Option Bids for Resource 1

Single Price Requirement (FAIL) **C**

- Explanation: Participant submitted multiple Bid prices for all Fixed Price Option Bids submitted.

Communications and Website

- PG&E's website at <http://www.pge.com/rfo> under “Long-Term Bundled RPS Energy Sale Solicitation” provides everything you need to submit a bid, including (but not limited to) the following:
 - Solicitation Documents for the Solicitation
 - Solicitation Schedule
 - EEI Master Agreement & draft PG&E Cover Sheet
- All solicitation communications should be directed to: RECSolicitations@pge.com with a copy to the Independent Evaluator at arroyosecoconsulting@gmail.com.

Intermission

Q & A