Bioenergy Market Adjusting Tariff (BioMAT) Public Webinar

November 20, 2015



Legal Disclaimers: Anti-Trust Guidelines & Document Conflict

Anti-trust:

• All participants in today's meeting shall comply with anti-trust guidelines. These guidelines direct meeting participants to avoid discussions of topics or behavior that would result in anti-competitive behavior, including restraint of trade and conspiracy to create unfair or deceptive business practices or discrimination, allocation of production, imposition of boycotts and exclusive dealing arrangements.

Document Conflict:

• This presentation is intended to be a summary level discussion of the market adjusting pricing mechanism established for the BioMAT program. To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the BioMAT Tariff and PPA, the BioMAT Tariff and PPA shall govern.



Reminders

- This presentation is intended to provide only summary level information on the BioMAT Program.
- To fully understand the BioMAT program, both the BioMAT Tariff and BioMAT Power Purchase Agreement (PPA) must be read.
- All communications and program materials will be posted on the BioMAT web sites listed on slide 26. Once the web sites are available, all questions should be asked, and will be answered, through the web sites.
- During each question section, the operator will moderate questions from the participants.



Agenda

Торіс	Presenter (s)	
1. Introduction	Byron (PG&E)	
2. Supplier Diversity	Byron	
3. What is BioMAT?	Andrea (PG&E)	
4. Questions?		
5. PPA Terms	Shawn (SCE)	
6. BioMAT Queue/Program Period Process	Shawn	
7. PPR (Application)	Ted (SCE)	
8. Questions?		
9. BioMAT Online Platform Overview	Andrea	
10. Interconnection Overview	Tina (SDG&E)	
11. IOU Contact Information		
12. Final Questions?		





Supplier Diversity



Supplier Diversity

- The IOUs encourage Women, Minority, Disabled Veteran, Lesbian, Gay, Bisexual and Transgender Business Enterprises ("Diverse Business Enterprises" or "DBEs") to participate in the BioMAT Program.
- Applicants can help the IOUs achieve General Order (GO) 156 goals and comply with same as follows:
 - Qualified DBE [Applicant] (Tier 1 direct contracting with the IOU), as certified by appropriate agency.
 - Qualified Tier 2 DBE (subcontractors to a Tier 1 [Applicant]) that perform work or deliver materials related to a project that is under contract with one of the IOU, as certified by appropriate agency.
- GO 156
 - Adopted by the CPUC in 1986, with electric procurement added in 2012.
 - Promotes greater competition among utility suppliers by expanding the available supplier base and to encourage greater economic opportunity for DBEs historically left out of utility procurement.
 - Sets the rules governing among other things, goals, annual reporting, and annual planning in the development of programs to increase participation of DBEs in procurement of contracts from utilities as required by CPUC Code.
- For additional information, please visit:
 - PG&E: <u>www.pge.com/supplier_diversity</u>.
 - SCE: <u>www.sce.com/SD</u>; guidance is also available at <u>www.sce.com/EnergyProcurement</u> under the heading "Help & Guidance"
 - SDG&E: <u>http://www.sempra.com/about/supplier-diversity</u>





What is **BioMAT**?

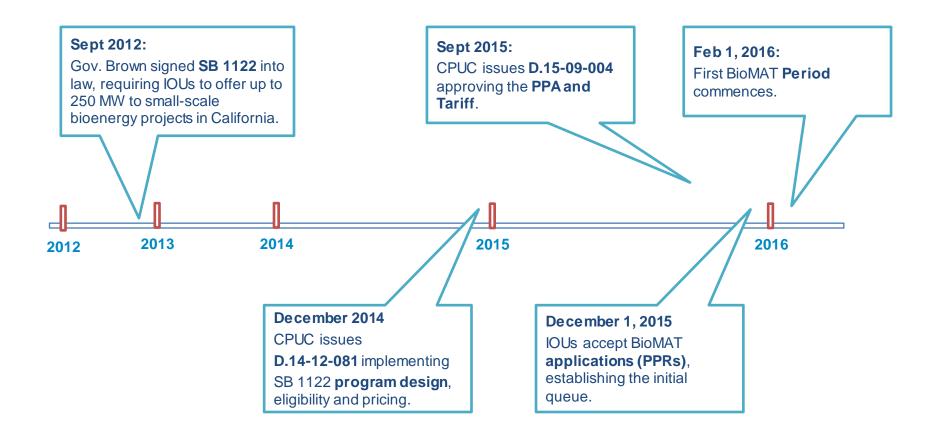


What is BioMAT?

- Legislation: Implements Senate Bill (SB) 1122, which amended Public Utilities Code 399.20
- **Procurement Obligation:** Requires California's three investor-owned utilities (Pacific Gas and Electric, San Diego Gas & Electric, and Southern California Edison, or collectively, "IOUs") to award up to 250 MW statewide to eligible bioenergy generators sized up to 3 MW under long-term wholesale power purchase agreements ("PPAs").
- **Program Design:** The Bioenergy Market Adjusting Tariff ("BioMAT") is modeled largely after the existing Renewable Market Adjusting Tariff ("ReMAT"), which implements SB 32 for all renewable generators.
- **Program Duration:** The program is available for up to 5 years (until February 2021), provided that capacity remains in the program.
- **Transaction:** Generators can export all output (Full buy/sell) or serve onsite load first and export the rest to the IOU (Excess Sale) under PPAs of 10, 15 or 20 year terms.
- **Pricing:** Available contract price will start at \$127.72/MWh in Period 1 (February 2016). Once PPA is executed, the Contract Price is fixed over the Delivery Term. Available prices have the potential to adjust every 2 months and are set according to market acceptance and market depth on a statewide (all IOU) basis.



Implementation Timeline





Bioenergy Fuel Resource Categories

Fuel Resource Category Description

		Allocation
	• wastewater treatment facilities used in the reclamation of sewage or industrial wastes.	
Category 1 Various	 diversion of organic solid wastes from disposal at solid waste landfills. 	110 5404
Biogas	 waste or by-products of food processing or manufacturing facilities. 	110 MW
	 anaerobic digestion of biodegradable substrates ("codigestion"). 	
Category 2 Dairy/Ag	 anaerobic digestion of dairy waste. biogas or biomass from facility on other agricultural premises, utilizing waste or by-products of growing crops, raising livestock or growing horticultural products. 	90 MW
Category 3 Forest Mgmt	 fuel reduction activities, per applicable regulations infrastructure clearance activities. other approved sustainable forest management. 	50 MW



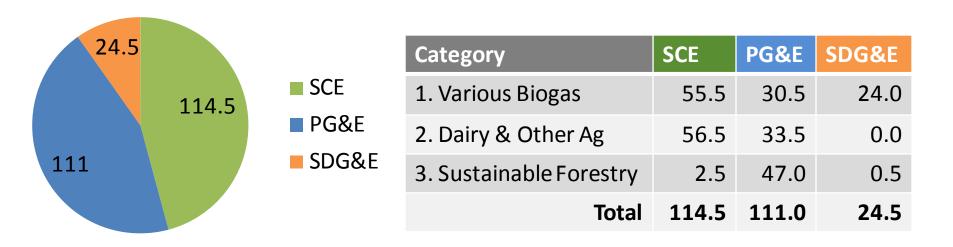


Statewide

A 11 . . .

250 MW Statewide Allocation

IOU Allocation (MW)





Basic Eligibility Criteria

Physical Location	Applicable IOU's Service Territory.		
Maximum Capacity	3 MW for generator's nameplate capacity.		
Site Control	Must have site control (ownership, option, lease).		
Interconnection	Project must be interconnected to distribution system and have passed the Fast Track screens, or completed a System Impact Study (Independent Study Process) or completed a Phase 1 Study (Distribution Group or Cluster Study Process).		
Fuel Requirements	100% of Fuel Use must be from an eligible Fuel Resource Category with at least 80% from the applicable Fuel Resource Category. Exception: For Category 2 (Dairy), 100% of Fuel Use must come from the dairy digester.		
Commercial Online Date	Must occur on or after June 1, 2013.		
ReMAT	Project cannot concurrently participate in ReMAT.		
Application Fee	\$2/kW.		
Project documents	Must provide a single line diagram, facility layout, site map, initial fuel use attestation, table of major equipment, and ownership documentation.		

Reference: Eligibility outlined in Section D of the BioMAT Tariff.



Other Eligibility Criteria

Developer Experience	At least one member of the development team must have completed at least one project of similar technology and capacity.
Daisy-Chaining	The Project must be the only exporting project being developed, owned, or controlled by the Applicant on any single or contiguous pieces of property.
Metering	Projects must be electrically independent and separately metered.
Qualifying Facility	The Project must be a Qualifying Facility, as defined by the Federal Energy Regulatory Commission. This classifies BioMAT as a PURPA PPA.
Other Incentives	A Project that received Self Generation Incentive Program (SGIP) incentives within the past 10 years is ineligible to participate in BioMAT.
Net Energy Metering (NEM)	If awarded a BioMAT PPA, Applicant must terminate participation in NEM for the Project prior to the BioMAT PPA's Execution Date.

Reference: Eligibility outlined in Section D of the BioMAT Tariff.





PPA Terms



High-Level PPA Terms (1 of 2)

- Non-modifiable PPA terms are non-modifiable. Modifications to the facility as described in the Cover Sheet require IOU approval.
- Maximum Capacity 24 months to achieve Commercial Operation with possible 6 month extension (Section 1).
 - **Transaction** Full Buy/sell or Excess Sale transactions (Section 2.3).
 - **Delivery Term** 10, 15, or 20-year Delivery Term (Section 2.5).
 - **Product** IOU is entitled to full Product: Energy, Renewable Energy Credits via WREGIS, Resource Adequacy Benefits, Capacity Attributes (Section 3.2).
 - **Certifications** CEC Eligible Renewable Resource, FERC Qualifying Facility (Sections 4.3.2, 2.5).

References: BioMAT PPA (Note: PPA section references above may not encompass all related terms. Please review the PPA thoroughly for all PPA obligations)





High-Level PPA Terms (2 of 2)

Fuel Requirements (Verification TBD)	Must use at least 100% of fuel from BioMAT biogas/biomass with 80% from the applicable bioenergy Category. Dairy must use 100% of fuel from dairy digester gas. (Section 4.4) Additionally, CPUC's Energy Division Director is required to explore 3 rd party verification not later than 6 months after the first Program Period (August 2016) (D.14-12-081).
CAISO Tariff/Metering	Facilities 500 kW and over must be a CAISO market participant: obtain an CAISO meter, PGA, MSA and be in compliance with the CAISO Tariff. (Sections 5.1, 5.2).
Guaranteed Energy Production	Must meet Guaranteed Energy Production, which is 180% of the seller-designated Annual Contract Quantity (MWh/year) over a two-year period throughout the Delivery Term (Section 11, Appendix F).
Collateral Requirement	Must post/maintain \$20/kW Collateral Requirement (Section 12).
Forecasting/Scheduling	Forecasting obligations; IOU is Scheduling Coordinator (Appendix D).

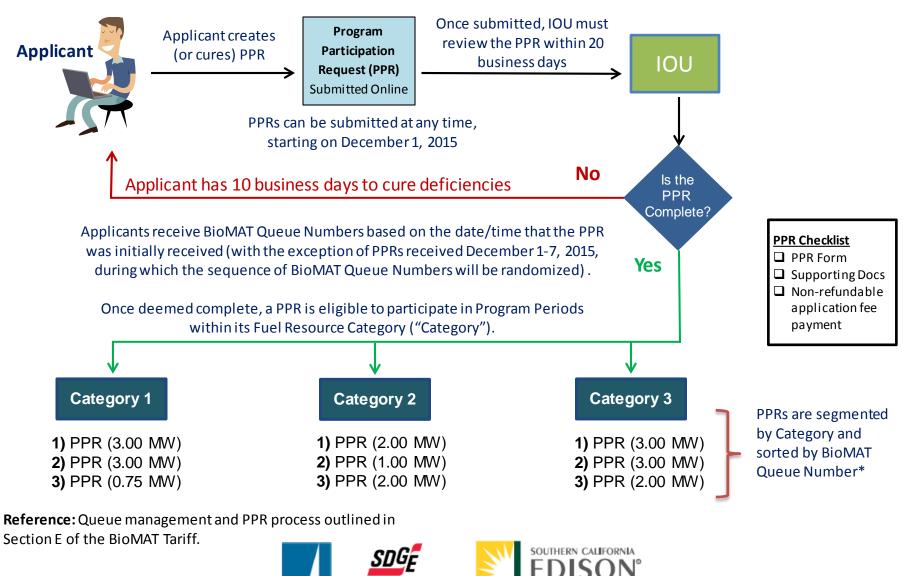
References: BioMAT PPA (Note: PPA section references above may not encompass all related terms. Please review the PPA thoroughly for all PPA obligations)



BioMAT Queue/Program Period Process



Application ("PPR") Process



An EDISON INTERNATIONAL® Company

PPA Awarding Process

- Every two months ("Period"), each IOU offers its "Available Allocation" for each Category: 6 MW (SCE, PG&E) or 3 MW (SDG&E), unless the IOU's remaining capacity for the applicable Category is less.
- 2. Applicants have 10 business days to accept or reject the available Contract Price.
- 3. IOUs award PPAs to PPRs in their respective queues by BioMAT Queue Number and price acceptance ("Subscription").
- 4. If the Contract Capacity of the next PPR that accepts the price is larger than the Available Allocation, the IOU will be "Deemed Fully Subscribed".

Example: SCE Category 1 Queue

Queue	PPR (Project)	MW	Accept Price?	РРА
1	WWTP A	3.0	Yes	✓
2	Food Processing Plant A	0.5	No	N/A – remains in queue
3	WWTP B	2.0	No	N/A – remains in queue
4	Codigester A	2.0	Yes	✓
5	Codigester B	2.0	No	N/A – remains in queue
7	WWTP D	3.0	Yes	🗴 - remains in queue

Total Capacity Awarded: 5 MW

References: BioMAT Tariff Section G.2 and I.





Pricing: Background

- Market Adjusting Tariff pricing is intended to reflect the market response from Applicants in the applicable Category queue.
- Starting price of \$127.72/MWh at program launch is based on weighted average post-TOD bioenergy bid prices in the IOUs' first four Renewable Auction Mechanism (RAM) auctions.
- The price for each Category queue will adjust independently in each bi-monthly Program Period based on market response within each queue.





Pricing: Market Depth

- Market Depth Requirement for Price Adjustment .
 - Initially, a price adjustment will only be triggered if there are 3 projects from 3 unaffiliated applicants in each Statewide Pricing Queue.
 - After one Project in a Statewide Pricing Queue accepts the Contract Price, a price adjustment will only be triggered if there are at least 5 projects from 5 unaffiliated applicants in each Statewide Pricing Queue.
- The Statewide Pricing Queues and Statewide Pricing Categories for Category 2 (Dairy) and Category 2 (Other Agriculture) are independent of each other and must separately meet these market depth requirements.

PPAs awarded by **Fuel Resource Category** in the IOUs' respective queues

- Category 1
- Category 2
- Category 3





- Category 1
- Category 2 (Dairy)
- Category 2 (Other Ag)
- Category 3





Pricing: Price Adjustment Details

- Price adjustments are based on **Statewide Subscription** and **Statewide Available Allocation**
- **Statewide Subscription** = the total capacity of Projects for which Applicants accept the Contract Price in each applicable Statewide Pricing Queue
- Statewide Available Allocation for each Statewide Pricing Category =
 - Total of each IOU's Available Allocation for the applicable Fuel Resource Category
 - Except, Category 2 (Dairy) and Category 2 (Other Agriculture) are each defined as onehalf of the cumulative total of each IOU's Available Allocation for Category 2 for the applicable Period
- For each Statewide Pricing Category, the Statewide Subscription Rate in a Period =
 - Statewide Subscription (MW) divided by the lesser of:
 - (i) Statewide Available Allocation (MW)
 - or (ii) the total capacity (MW) in the Statewide Pricing Queue
- Statewide Subscription Rate percentage price adjustment thresholds:

Price Adjustment Thresholds	Price Adjustment
< 20%	Price Increases
\geq 20% and < 100%	No Price Adjustment
≥100%	Price Decreases



Pricing: Price Adjustment Increments

- Price Adjustment Increments
 - Subject to the market depth and Statewide Subscription Rate requirements, the Contract Price for each Statewide Pricing Category adjusts independently in each subsequent Program Period
 - The price adjustment increments are \$4/MWh, then \$8/MWh, then \$12/MWh, with a cap of \$12/MWh, in an uninterrupted series of increases or decreases
 - Increases or decreases after a Period in which the Contract Price was unchanged will reset and begin at \$4/MWh.



Pricing: Key Differences from ReMAT

Key differences from ReMAT	Why?	
Statewide Pricing: Subscription and market depth are assessed on a statewide basis to determine BioMAT pricing for each Category.	To address concerns over nascent stage of small-scale bioenergy industry.	
Category 2 Price Screen: While Dairy or Other Agriculture share the same allocation under Category 2, Contract Prices for these subcategories can adjust independently from each other.	To maximize the opportunities for both types of projects given differences in expected LCOEs.	

Reference: CPUC Decision 14-12-081



PPR (Application)



Keys to a Successful PPR (Application)

- Familiarize yourself with the applicable IOUs' BioMAT website
- Schedule BioMAT (the Tariff), the PPA, PPR templates and other helpful documents can be found on the 3 IOUs' BioMAT websites:
 - PG&E: <u>www.pge.com/rfo/biomat</u>
 - SCE: <u>https://scebiomat.accionpower.com/BioMAT/home.asp</u>
 - SDG&E: <u>http://www.sdge.com/procurement/bioenergy-market-adjusting-tariff-bio-mat</u>
- Ask questions
- Complete all sections of the PPR and upload all required documents
- Read instructions carefully



Required Supporting Documentation

- 1. Fuel Use Description
- 2. Table of Major Components
- 3. Facility Layout Drawing
- 4. Single Line Drawing
- 5. Legal Description of the Site
- 6. Site Map

Why are these documents important?

• The IOUs expect the as-built Facility and Site to be as described.



Required Supporting Documentation (continued)

General Issues

- Project name on PPA does not match project name in some or all supporting docs.
- Equipment and related details are inconsistent among the various supporting docs.
- Mismatch in project size or other major details with interconnection document.
- Any known discrepancies should be explained in a letter accompanying the PPR.
- If generating facility design varies from what appears in the interconnection document, Transmission Provider must provide an assurance letter that design changes will not impact COD or Network Upgrades costs.
- Even if GIA is executed, the interconnection document should still be included with the PPR.

• Site Plan Drawing

- Equipment locations must be clear (e.g., digesters, gasifiers, interconnection equipment, etc.).
- Clearly illustrate the boundaries of the site and any adjacent generating facilities.
- Legal Description of the Site and Site Map
 - Clearly illustrate the boundaries of the site and any adjacent generating facilities .
 - Equipment locations must be clear (e.g., digesters, gasifiers, , meters, transformers, interconnection equipment, interconnection point, etc.).
 - In legal description, only list APNs that are part of the Site or include a note linking the site map to the legal description.





Required Supporting Documentation (continued)

• Single Line Drawing

- Be sure to include and adequately describe all major equipment.
- Common missing items are:
 - Interconnection point (substation name, equipment type and number, circuit name, etc.);
 - Transformer specifications;
 - Substation station light and power;
 - Generating Facility station service (auxiliary) transformer;
 - Metering (Transmission Provider, CAISO, SCE, Seller);
 - Typical generating unit diagram;
 - Type of generator (synchronous, asynchronous, inverter, etc.).
- Key Takeaways
 - Refer to the BioMAT instructions when preparing your documents.
 - Label everything and err on the side of inclusiveness.
 - Pay attention to the details, we look at these documents very closely.





BioMAT Online Platform Overview



BioMAT Online Platform



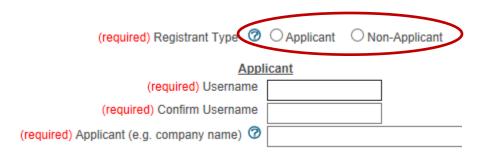
- Each IOU maintains its own platform, hosted by Accion Power.
- **Purpose:** Accept and manage submitted PPRs, administer bi-monthly Program Period, award PPAs, post program materials and communicate with Applicants.
- A more in-depth **tutorial** is provided on each IOU's platform. Please read the tutorial before you begin the PPR process. Many of your questions may be answered in the tutorial.
- **Note**: It is highly recommended that you use <u>Internet Explorer</u> as your browser.





Registration

You may register on the online platform as either an Applicant or a Non-Applicant



To Register as an Applicant:

Applicants
 Have full access to the site
 May create and submit PPRs and participate in Program Periods.
 Non-Applicants:

 Receive program updates via email
 May send messages to PG&E
 CANNOT use the PPR Management or Program Period sections of the platform.

- Select username
- Enter Applicant name (e.g. company name) the Applicant is the organization (legal entity) that will be submitting a PPR and owns/controls the Project. Consultants may register on behalf of an Applicant, but must be authorized to submit legally-binding acknowledgments and attestations on behalf of the Applicant.
- Provide contact information
- Attest that profile information will be kept up-to-date



Applicant Profile

BioMAT Home	Profile	Messag	jes	PPR Manager	nent	Program Periods
FAQs	Tutor	ial	al Log Off			

- An Applicant's Profile automatically populates with information provided upon registration.
- Applicants can update contact information in the profile as needed.
- Applicants can manage notification preferences.
- For market depth purposes, Applicants are required to identify any additional participating BioMAT Projects ("Facilities") submitted in other Applicants' profiles in which the Applicant has any ownership interest. Applicants must keep this information up-to-date throughout participation in the BioMAT program.

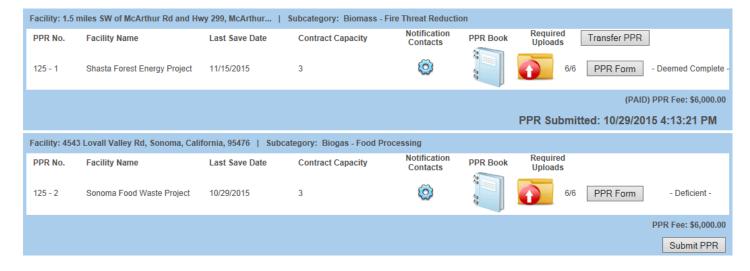


PPR Management: Create PPR



Among other functionality, on the PPR Management tab you can:

- 1) Create a new PPR
- 2) View an archive of all your PPRs
- 3) Updated documents and other PPR data
- 4) See the status of your PPRs
- 5) Withdraw or transfer your PPRs







Create New PPR

View All PPRs



Create PPR: Acknowledgments/Attestations

Complete the acknowledgements and attestations (partial snapshot).

Acknowledgements and Attestations Form

A new Acknowledgements and Attestations Form ("Form") outlining acknowledgments and attestations must be completed for each Project submitted to the BioMAT program. This Form is part of a complete Program Participation Request ("PPR"). Once saved and submitted this Form cannot be edited by an Applicant If an Applicant cannot in good faith attest to and make the following acknowledgements at any point following PPR submission, the Applicant may not participate in the BioMAT program.

Pacific Gas and Electric (PG&E) Bioenergy Market Adjusting Tariff ("BioMAT")

1. Overview

- Completion of the PPR does not bind PG&E to enter into a power purchase agreement ("the BioMAT PPA") with Applicant. Capitalized terms used in this Form, but not defined herein, have the meanings set forth in the BioMAT PPA and Electric Schedule BioMAT (or the "BioMAT Tariff"). PG&E does not guarantee that Applicant will be awarded a BioMAT PPA. PG&E will not be deemed to have accepted Applicant's offer and will not be bound by any term thereof, unless and until authorized representatives of Applicant and PG&E execute a BioMAT PPA and related collateral and other required agreements.
- Applicant is solely responsible for all costs it incurs for preparing to participate and participating in the BioMAT program including, without limitation, filling out and submitting this PPR. Applicant is solely responsible for the Project's permitting, licensing, and interconnection costs.

2. General Program Governance

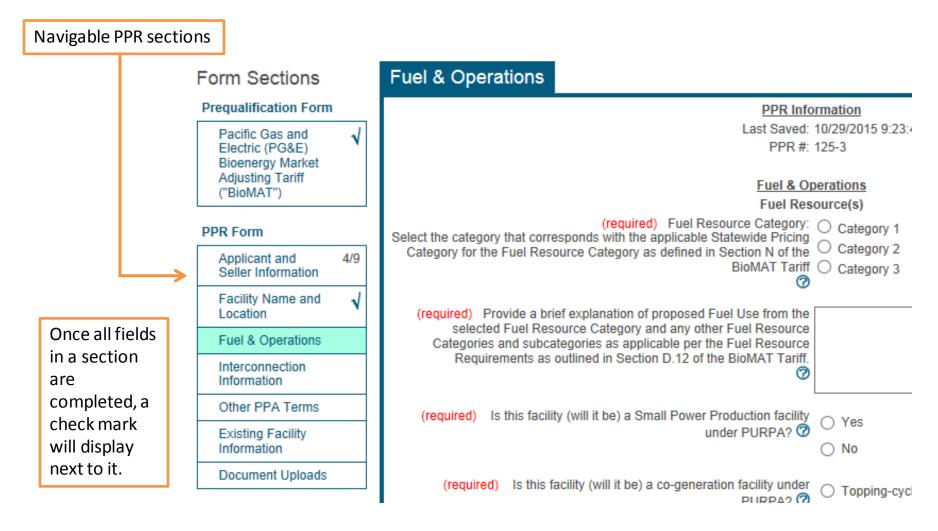
- The BioMAT program is governed by PG&E's BioMAT Tariff and BioMAT PPA, and is subject to the requirements of California Public Utilities Commission [("CPUC")] Decisions ("D")[D] 14-12-081, as modified, and D. XX-XX-XXX. The BioMAT PPA at all times shall be subject to such modifications as the CPUC may direct from time to time in the exercise of its jurisdiction.
- Applicant acknowledges that PG&E's BioMAT Tariff is available for review online in PG&S's web tariff book under BioMAT at http://www.pge.com/tariffs/ERS.SHTML#ERS.
- Applicant acknowledges that all purchases will be made according to the terms and conditions set forth in the form BioMAT PPA. Copies of PG&E's BioMAT PPA can be found at http://www.pge.com/tariffs/ERS.SHTML#ERS
- Applicant acknowledges that information applicable to the BioMAT program is available on PG&E's website www.pge.com/rfo/remat. Information concerning BioMAT program elements contained on PG&E's website is not meant to provide a substitute for a careful review of the BioMAT Tariff and the BioMAT PPA (together, the "BioMAT Documents"). In case of any conflict between PG&E's website, this online platform and the BioMAT Documents, the BioMAT Documents will control.

3. Eligibility Criteria

Applicant must submit a complete PPR.



Create PPR: PPR Navigation







PPR Form (1 of 3)

1) Applicant and Seller Information

- a. Applicant info pre-populated from registration profile
- b. Seller name (legal entity that will be the PPA counterparty under the PPA) and address
- c. Supplier Diversity information
- d. Additional owner information

2) Facility Name and Location

- a. Facility name
- b. Address and latitude/longitude
- c. Parcel numbers, existing land use

3) Fuel and Operations

- a. Fuel Resource Category
- b. Fuel Use description
- c. PURPA qualification questions
- d. Operational characteristics for Curtailment Orders





PPR Form

Applicant and Seller Information

Facility Name and Location

Fuel & Operations

Interconnection Information

Other PPA Terms

Existing Facility Information

Document Uploads

PPR Form (2 of 3)

4) Interconnection Information

- a. Interconnection Queue Number
- b. Interconnection and Delivery Point
- c. Service Voltage
- d. Estimated Interconnection Commercial Operation Date
- e. Network Upgrade amount

5) Other PPA Terms

- a. Expected PPA Commercial Operation Date
- b. Contract Capacity (MW)
- c. Full buy/sell or Excess Sale?
- d. Delivery Term (10, 15 or 20 years)
- e. Contract Quantity (MWh/year)

6) Existing Facility Information

- a. Existing facility?
- b. NEM facility?
- c. Existing PG&E PPA?





PPR Form

Applicant and Seller Information

Facility Name and Location

Fuel & Operations

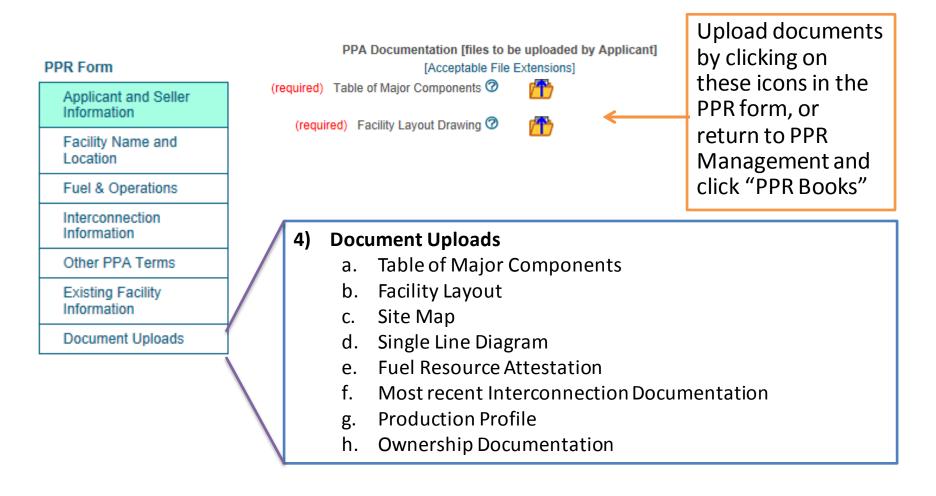
Interconnection Information

Other PPA Terms

Existing Facility Information

Document Uploads

PPR Form (3 of 3)







PPR Management: Submit PPR

Facility: 4543 Lovall Valley Rd, Sonoma, California, 95476 Subcategory: Biogas - Food Processing								
PPR No.	Facility Name	Latitude	Longitude	Notification Contacts	PPR Book	Required Uploads		
125 - 2	Sonoma Food Waste Project	38.30123615678	-122.402690381476	Ô	20 00	6/6	PPR Form	- Draft - Delete
								PPR Fee: \$6,000.00
							\langle	Submit PPR

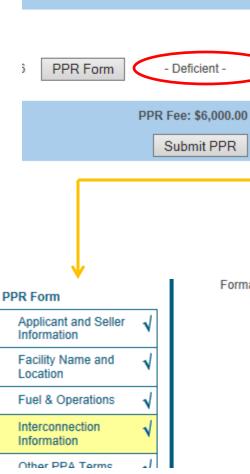
You can save your work at any time, but the PPR is not submitted to the IOU until you click "Submit"

Upon submitting a PPR, you will be asked for your preferred method of payment (check or wire). Instructions for both methods of payment will be emailed to you.





PPR Management – Cure Deficiencies



Next Steps:

You will receive an email notification if your PPR has been marked deficient. You will have 10 business days to cure any deficiencies.

PPR form sections that contain deficiencies will be highlighted in yellow. Deficient data fields are unlocked for you to correct. In the PPR Form, you will see notes from the IOU in red that describe the deficiency.

Format is generally ####-XX. If this is an existing facility, enter N/A ര (required) Interconnection Point on Distribution Network: 7 Interconnection point

Provide the name of the distribution line and circuit.

(required) Service voltage: 21





Program Period

BioMAT Program Periods

Note: PG&E awards up a combined total of 6,000 kW for Category 2: Dairy and Other Agriculture.





Messages

Questions related to activity on the online platform should be sent using the messaging function.

FIT Home	Profile	Messages	PPR Management	Program Periods	Calendar	Announcements	Program Documents	FAQs	Tutorial	Log Off
			•	Manag	e Message	s				
	Send a new i	message to PG&	E Administrator:							
	Re	eference PPR (op	tional): N/A 💌							
		S	subject:							
Ν	/lessage:							r		
							<u> </u>			
							•			
	Send									

If you have any technical difficulties related to the online platform, please contact Accion Group, as instructed on the platform.



Interconnection Overview



Interconnection Requirements

Jurisdictions	FERC (WDT or WDAT) or Rule 21 studies and agreements accepted.				
Study Options	 Passed Fast Track screens or Supplemental Review; or Completed one of the following IOU-specific: (i) System Impact Study in the Independent Study Process, (ii) Distribution Group Study Phase 1 Interconnection Study in the Distribution Group Study Process, or (iii) Phase 1 Study in the Cluster Study Process; or Use an existing interconnection agreement to the extent permitted by the IOU's BioMAT tariff. 				
Distribution System	The Project must be interconnected to the IOU's distribution system.				
Timing	Study or Agreement must affirmatively support the Project's ability to interconnect within 24 months of BioMAT PPA execution.				
Transmission System Network Upgrades	To the extent the cost of transmission system Network Upgrades incurred in connection with the Project exceed \$300,000, the Applicant will bear the actual costs in excess of \$300,000 in accordance with the BioMAT PPA.				
Interconnection Options	Rule 21 or IOU-specific Wholesale Distribution Access Tariff - if both are applicable, the Project can choose which to pursue. If the CPUC makes a determination requiring the use of either option, all Projects that have not yet submitted a PPR at the time of that determination must pursue interconnection pursuant to the CPUC's direction.				

Reference: Eligibility outlined in Section D of the BioMAT Tariff.





IOU Interconnection Information

- PG&E
 - Wholesale Electric Generation Interconnection Webpage: <u>http://www.pge.com/en/b2b/interconnections/exportpower/index.page</u>
 - Interconnection Map (referred to as PV map, but applies to all generators): <u>http://www.pge.com/en/b2b/energysupply/wholesaleelectricsuppliersolicitation/PVRFO/pvmap/index.page</u>
 - Interconnection Contact: <u>wholesalegen@pge.com</u>
- SCE
 - Grid Interconnections Webpage: <u>https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections</u>
 - Interconnection Map: <u>http://www.arcgis.com/home/webmap/viewer.html?webmap=e62dfa24128b4329bfc8b27c452</u> <u>6f6b7</u>
 - Interconnection Contact: interconnectionQA@sce.com or (626) 302-3688
- SDG&E
 - Interconnection Map: <u>http://www.sdge.com/generation-interconnections/interconnection-information-and-map</u>
 - Interconnection Contact: Ken Parks (858-636-5581)





IOU BioMAT Contact Information



IOU BioMAT Contact Information

- PG&E
 - BioMAT Website: <u>www.pge.com/rfo/biomat</u>
 - BioMAT Accion Platform: <u>https://pgebiomat.accionpower.com</u>
 - BioMAT Email (for non-registered users of Accion): feed-intariffs@pge.com
- SCE
 - BioMAT Website: <u>https://scebiomat.accionpower.com/BioMAT/home.asp</u>
 - BioMAT Email: contact SCE through the SCE BioMAT website
- SDG&E
 - BioMAT Website: <u>http://www.sdge.com/procurement/bioenergy-market-adjusting-tariff-bio-mat</u>
 - BioMAT Email: SDG&EFiT@semprautilities.com



Appendix





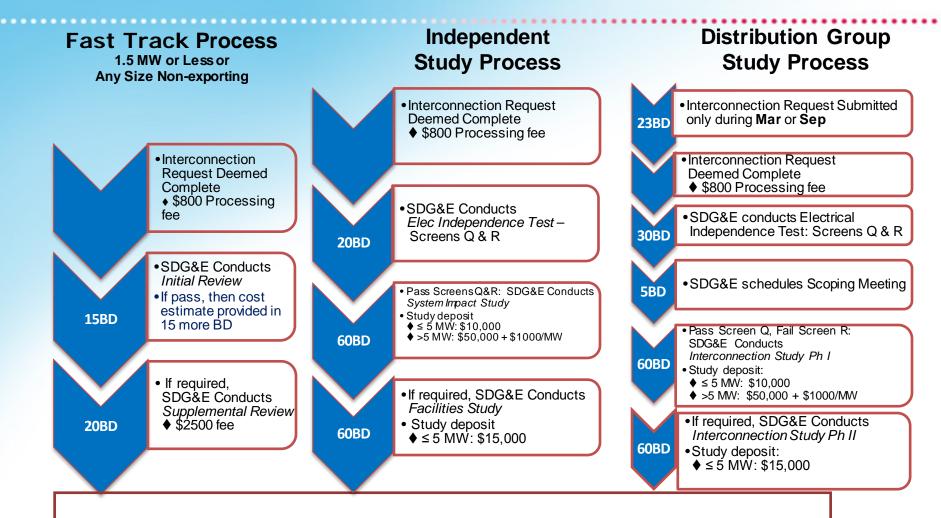
Rule 21 & WDAT Process Review



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Rule 21 Study Process Timelines

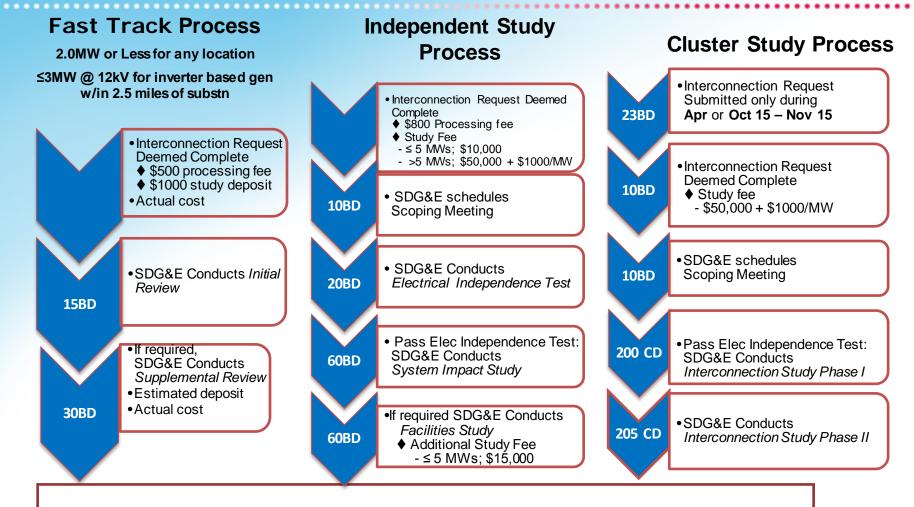




Interconnection Agreement

WDAT Study Process Timelines





Interconnection Agreement

Overview of PG&E Interconnection Processes

Categories	Wholesale Distribution	Rule 21		
Export/Non-Export	Export	Export & Non-Export		
Voltage level	<60kV	All		
Tariff	WDT (FERC)	Rule 21(CPUC)		
Interconnection Agreement	FERC	FERC or CPUC		
Interconnection Study Processes ¹	 Fast Track; Independent Study Process; Cluster Study Process 	 Fast Track; Detailed Study Process; Distribution Group Study Process 		

¹ Interconnection study process eligibility criteria, cost estimates, and timing estimates can be found in the applicable tariff for Wholesale Distribution and Rule 21 interconnections. See the PG&E <u>Rule 21</u> or the <u>Wholesale Distribution</u> web pages for further information about the study processes. Please refer to the <u>Rule 21 Tariff</u> or Attachment I of the <u>Wholesale Distribution Tariff</u> for specific regulatory requirements and timelines.

Reference: Eligibility outlined in Section D of the BioMAT Tariff.

SCE Interconnection Study Process Tracks

Cluster Study Process

- Default study process
- No size limit
- Studies groups of electrically-related generation
- Cost of upgrades allocated among group based on contribution
- Deliverability options

Independent Study Process (ISP)

- CAISO test for electrical independence
- SCE test for electrical independence
- No size limit
- Deliverability options (deliverability assessed in cluster study process)

Fast Track Process

- Screening process to determine eligibility
- Limited to 2MW or less on distribution system, 5MW or less on transmission system
- Customer options meeting and supplemental review if fail Fast Track screens
- Energy-only deliverability status

- 2 open windows per year (3/1-3/31 and 10/15-11/15)
- One study cycle per year 2 Phases
- Study deposit: \$50,000 plus\$1,000 per MW; Max \$250,000
- 3-step security postings
 - Betw een Phase I and II
 - After Phase II

⁼eatures

Features

Features

- At Start of Construction
- Apply any time of year
- System impact study and facilities study
- Study deposit: \$50,000 plus \$1,000 per MW; Max \$250,000
- 3-step security postings
- Deliverability assessment performed in cluster study process
- If pass screens, go directly to interconnection agreement
 - If fail screens, options meeting to evaluate
 - Changes to generation facility
 - Changes to distribution system
 - Or resubmit to ISP or cluster

Please refer to Interconnection 101 Presentation at: https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections