

# Renewable Market Adjusting Tariff (ReMAT) Feed-In Tariff (FIT)

**Review of Program Details**

**September 26, 2013**

Date (2013)	Event
July 23	E-PWF & E-SRG closed to new participants
July 24	E-ReMAT became effective
August 8	Webinar 1 – Program Overview
August 16	Webinar 2 – Application & Program Period Process with Intro to Online Platform
August 20 – 30	“Test launch” of online platform
<b>September 26</b>	<b><i>Webinar 3 – Review of Program Details</i></b>
<b>October 1</b>	<b>Begin accepting ReMAT applications (PPRs)</b>
<b>November 1</b>	<b>Start of the <u>first</u> bi-monthly Program Period</b>
<b>November 14</b>	<b>Deadline for Applicants to accept/ not accept Contract Prices offered during the first Program Period</b>
<b>January 2, 2014</b>	<b>Start of the <u>second</u> Program Period</b>

Topic	Presenter
<b>Key ReMAT Program Details</b>	Carlos Abreu, Renewable Energy
<b>Appendix E Documentation</b>	Brad Crotteau, Energy Contract Management
<b>Intermission</b>	--
<b>Q&amp;A</b>	PG&E Team

- Participants should e-mail their questions to the Feed-in Tariffs mailbox at [Feed-inTariffs@pge.com](mailto:Feed-inTariffs@pge.com) during the webinar.
- Questions will be answered during the Q&A session at the end of the Webinar. PG&E may not address all of the questions at that time.
- After the Webinar, PG&E will compile and post a Q&A document on PG&E's website at: [www.pge.com/rfo/remat](http://www.pge.com/rfo/remat)
- The audio portion of the Webinar will be posted on PG&E website at: [www.pge.com/rfo/remat](http://www.pge.com/rfo/remat)

- To fully understand the ReMAT FIT program, both the E-ReMAT Tariff and ReMAT Power Purchase Agreement (PPA) must be read.
- This presentation is not a substitute for reading both the Tariff and the PPA. The Tariff and PPA contain more detail than discussed in this presentation.
- To the extent that there are any inconsistencies between the information provided in this presentation and the E-ReMAT Tariff and ReMAT PPA, the Tariff and PPA shall govern.

# Review of Key ReMAT Program Details

Key Requirements	
<b>Project Location</b>	The Project must be physically located within PG&E’s electric service territory.
<b>Eligible Renewable Energy Resource</b>	The Project must be an Eligible Renewable Energy Resource as defined in PUC Section 399.12.
<b>Project Size/Contract Capacity</b>	The Contract Capacity for the Project cannot exceed 3.0 MW (AC).
<b>Interconnection</b>	<ul style="list-style-type: none"> <li>• Project must be interconnected to PG&amp;E’s distribution system.</li> <li>• Wholesale Distribution Tariff (WDT) or CPUC Rule 21 can be used.</li> <li>• Must have completed Phase I or System Impact Study, or passed Fast Track screens or Supplemental Review.</li> <li>• Must meet definition of “strategically located”.               <ul style="list-style-type: none"> <li>- Defined as (transmission system) Network Upgrades of \$300,000 or less.</li> </ul> </li> </ul>
<b>Site Control</b>	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.
<b>Developer Experience</b>	At least one member of the development team must have completed at least one project of similar technology and capacity.

Key Requirements	
<b>Daisy-Chaining</b>	The Project must be the only exporting project being developed, owned, or controlled by the Applicant on any single or contiguous pieces of property.
<b>Metering</b>	Projects must be electrically independent and separately metered.
<b>Qualifying Facility</b>	The Project must be a Qualifying Facility, as defined by the Federal Energy Regulatory Commission. This classifies ReMAT as a PURPA PPA.
<b>Other Incentives</b>	Project cannot have received California Solar Initiative (CSI) or Self Generation Incentive Program (SGIP) incentives within the past 10 years.
<b>Net Energy Metering (NEM)</b>	If awarded a ReMAT PPA, Applicant must terminate participation in NEM for the Project prior to the ReMAT PPA's Commercial Operation Date.
<b>Commercial Operation Date (COD)</b>	If awarded a ReMAT PPA, the estimated Commercial Operation date must not exceed 24 months following execution of the PPA.
<b>Deliverability</b>	Projects may be Energy-Only or have Full Capacity Deliverability Status. However, different Time of Delivery (TOD) Payment Allocation Factors will be applicable.

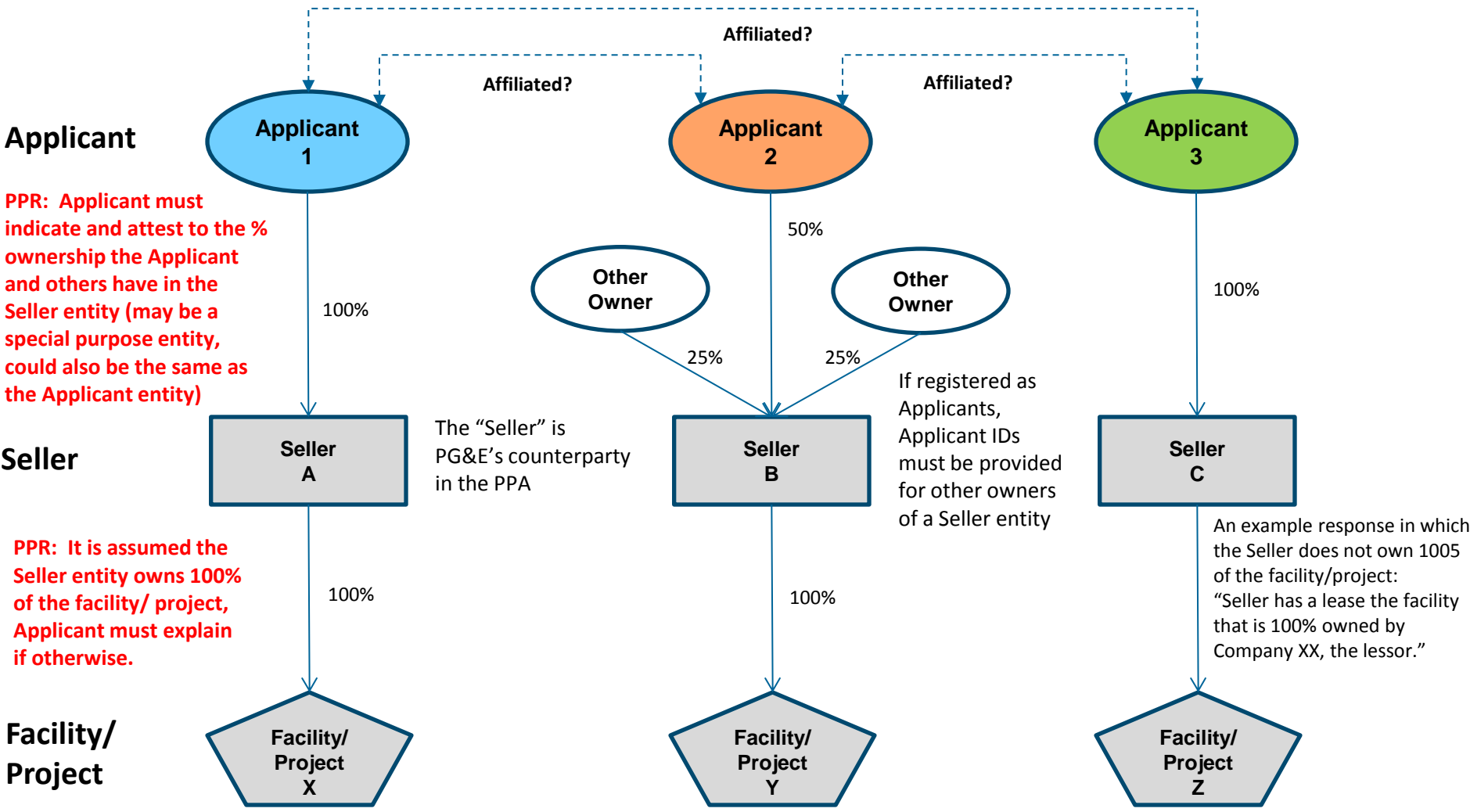


Key Requirements	
<b>Program Participation Request (PPR)</b>	A Program Participation Request or PPR (i.e. application) must be submitted to participate in ReMAT. A PPR includes the PPR Form, Supporting Documentation, and the payment of a non-refundable PPR Fee
<b>Maintaining PPR Information/ Program Eligibility</b>	<ul style="list-style-type: none"> <li>• After a PPR has been Deemed Complete:               <ul style="list-style-type: none"> <li>• Only the information identified by PG&amp;E may be modified . A list of editable PPR fields is available on PG&amp;E’s ReMAT online platform. The Applicant must keep PPR information updated.</li> <li>• Any new or amended Interconnection Study or Interconnection Agreement must be submitted to PG&amp;E within five (5) business days of receipt.</li> </ul> </li> <li>• If a PPR previously deemed eligible to participate in ReMAT no longer meets the Eligibility Criteria, the Applicant must immediately notify PG&amp;E and relinquish its ReMAT Queue Number.</li> </ul>
<b>PPA Execution</b>	<ul style="list-style-type: none"> <li>• A PPA will only be awarded/executed, if the PPR/ project is eligible</li> <li>• Beyond the requirements already discussed, please note the following:               <ul style="list-style-type: none"> <li>• The facility’s most recent interconnection documentation must demonstrate that the facility’s interconnection commercial operation date can occur within 24 months of the execution date of a ReMAT PPA</li> <li>• If the facility has an existing contract, the expiration date (or the effective date of the exercise of a Seller termination right) of the existing contract must occur within 24 months of the execution date of a ReMAT PPA</li> </ul> </li> </ul>

Key PPA Terms	
<b>Standard PPA</b>	The ReMAT PPA is not negotiable
<b>Delivery Term</b>	The Seller can select a 10, 15, or 20 year Delivery Term
<b>Contract Price</b>	The Contract Price in the PPA is fixed for the Delivery Term
<b>Transaction</b>	The Seller may select a full buy/sell or excess sale arrangement
<b>Commercial Operation Date</b>	<p>The project must achieve Commercial Operation no later than 24 months of PPA execution (Guaranteed Commercial Operation Date)</p> <ul style="list-style-type: none"> <li>• A six month extension may be granted for a Permitting Delay, Transmission Delay, or Force Majeure Delay</li> <li>• The Seller may also pay Daily Delay Liquidated Damages to extend the Guaranteed Commercial Operation Date</li> </ul>
<b>Contract Capacity</b>	PG&E is not obligated to pay for Delivered Energy, in any hour, that exceeds 110% of the Contract Capacity
<b>Contract Quantity</b>	<p>The seller indicates the amount of expected energy to be delivered for each Contract Year in the Delivery Term</p> <ul style="list-style-type: none"> <li>• In any Contract Year, if Delivered Energy exceeds 120% of the Contract Quantity, PG&amp;E pays 75% of the Contract Price for the amount in excess of 120%</li> </ul>
<b>TOD Payment Allocation Factors</b>	Different Time of Delivery (TOD) Payment Allocation Factors are available, depending on whether the project has Full Capacity Delivery Status or is Energy Only

Key PPA Terms	
<b>Guaranteed Energy Production (GEP)</b>	<p>Over two consecutive Contract Years (Performance Measurement Period) Seller is required to deliver no less than the following %'s of Contract Quantity (adjusted for Seller Excuse Hours):</p> <ul style="list-style-type: none"> <li>• 140% for wind As-Available</li> <li>• 170% for all other As-Available</li> <li>• 180% for Baseload</li> <li>• % reasonably acceptable to Buyer based on Facility characteristics to be proposed by Seller for hydro</li> </ul>
<b>Curtailement</b>	<ul style="list-style-type: none"> <li>• PG&amp;E can curtail without any payment obligation in the event of a CAISO or Transmission Owner instruction to curtail or system emergency</li> <li>• PG&amp;E can order curtailment for any other purpose but will have a payment obligation for energy that could have been delivered</li> </ul>
<b>Collateral Requirement</b>	<ul style="list-style-type: none"> <li>• Due no later than 30 days after the Execution Date</li> <li>• Seller to post and maintain a Collateral Requirement of twenty dollars (\$20.00) for every kW of the Contract Capacity. For example, the Collateral Requirement for a 3 MW project is \$60,000</li> </ul>

**Applicant Registration :** Applicants are required to provide, attest to, and update information regarding what other Applicants in PG&E's ReMAT program are Affiliates\* of the Applicant



\* Definition of "Affiliate" in ReMAT PPA: With respect to a Party, any entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with that Party.

## Energy-Only Payment Allocation Factors

Monthly Period	Super-Peak	Shoulder	Night
Jun – Sep	1.157	1.011	0.951
Oct- Dec, Jan & Feb	1.071	1.018	0.963
Mar – May	0.907	0.937	0.987

## Full Capacity Deliverability Payment Allocation Factors

Monthly Period	Super-Peak	Shoulder	Night
Jun – Sep	2.097	1.069	0.798
Oct- Dec, Jan & Feb	0.952	0.857	0.808
Mar – May	1.041	0.819	0.828

### Time of Delivery (TOD) Period Definitions

- **Super-Peak**
  - Hours ending 13-20 PPT Monday – Friday in the applicable Monthly Period, except NERC Holidays<sup>1</sup>
- **Shoulder**
  - Hours ending 7-12, 21 and 22 PPT Monday – Friday except NERC Holiday<sup>2</sup>; and hours ending 7-22 PPT Saturday, Sunday and all NERC Holidays<sup>1</sup> in the applicable Monthly Period
- **Night**
  - Hours ending 1-6, 23 and 24 PPT all days in the applicable Monthly Period

<sup>1</sup> Please see **Appendix C of the PPA** on our [ReMAT website](#) for the most up to date **TOD Payment Allocation Factors**

<sup>2</sup> NERC Holidays are New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

## As-Available

“As-Available Facility” means a generating facility that is powered by one of the following sources, except for a de minimis amount of Energy from other sources: (a) wind, (b) solar energy, (c) hydroelectric potential derived from small conduit water distribution facilities that do not have storage capability, or (d) other variable sources of energy that are contingent upon natural forces other than geothermal. ([ReMAT PPA](#))

- **As-Available Peaking**

- Have a generation profile demonstrating intermittent energy delivery with 95% or more of the expected output generated in the super-peak and shoulder periods. PG&E reserves the right to request a generation profile and supporting information for the Project to confirm the generation profile. ([E-ReMAT Tariff](#))

- **As-Available Non-Peaking**

- Have a generation profile demonstrating intermittent energy delivery with less than 95% of the expected output in the super-peak and shoulder periods. PG&E reserves the right to request a generation profile and supporting information for the Project to confirm the generation profile. ([E-ReMAT Tariff](#))

## Baseload

“Baseload Facility” means a generating facility that does not qualify as an As-Available Facility. ([ReMAT PPA](#))

- A PPR cannot be Deemed Complete and eligible to participate in Program Periods until PG&E has received payment
- Per the E-ReMAT tariff, this non-refundable PPR fee is \$2.00 per kW of project capacity
- **Payment should be made as soon as possible.**

## Paying by Wire Transfer

- Be sure to include “ReMAT PPR [insert PPR ID]” in your wire transfer memo.
- You are responsible for any fees assessed by your bank.
- You will still receive an invoice in the mail if you pay by wire. Please disregard it.

## Paying by Check

- Include “ReMAT PPR [insert PPR ID]” and invoice number in your check’s memo field.
- You will receive an invoice in the mail at the address provided in your Applicant profile. The invoice will contain payment instructions.
- NOTE: Processing check payments is expected to take significantly longer than wire transfer payments.

# Review of Appendix E Documentation



- **What is included in Appendix E?**
  1. Facility Description
  2. Facility Drawing
  3. Site Map
  4. Single Line Diagram
  5. Forecast and dedicated uses of the Facility's useful thermal output (for CHP facilities only - not discussed here)
- **Why is Appendix E important?**
  - PG&E expects as-built Facility and Site to be as described in Appendix E
  - Appendix E documentation and the PPR Form must be deemed complete and the PPR Fee received in order to participate in ReMAT Program Periods.

## 1. Facility Description

A narrative description (not to exceed 1 page) that includes a summary of the major components and attributes of the Facility. Please make sure to include the following:

- Name and address of the Facility
- Parcel numbers (APNs) that are part of the Site
- Latitude and longitude of the centroid of the Site
- Existing land use
- Project Capacity  $MW_{AC}$  and  $MW_{DC}$
- Transaction: Full Buy/Sell or Excess Sale
- Brief Renewable Resource/Technology description:
  - e.g. Solar Photovoltaic (Single axis tilt, poly-crystalline); Biogas generation (cattle waste digester); Biomass (woodchips); Hydroelectric (run-of-river)
- Interconnection Point – substation name and circuit number
- Interconnection voltage (kV)
- Estimated Interconnection Commercial Operation Date
- Any known discrepancies among Appendix E documents should be explained in the Facility Description

## 1. Facility Description (continued)

Also include a table of major components with technical descriptions - examples by resource below:

Solar PV	
Equipment	Description
PV modules	Wattage, type, manufacturer
Inverters	Capacity, manufacturer
Step-up transformer	Capacity, voltage levels
Project Substation Transformer (if applicable)	Capacity, voltage levels
(other)	

Biogas – Generation	
Equipment	Description
Digester	Size (gallons or acres)
Lagoon	
Engine	Number, type, manufacturer
Generators	Type, manufacturer, capacity
Transformer (other)	Capacity, voltage levels

Biomass	
Equipment	Description
Boiler	
Turbine	
Generator	Type, manufacturer, capacity
Transformer	Capacity, voltage levels
(other)	

Hydro - Generation	
Equipment	Description
Turbine/Penstock	Type
Generator	Type, manufacturer, capacity
Transformer	Capacity, voltage levels
(other)	

## 2. Facility Drawing

The Facility Drawing must illustrate the general layout of the facility. Please include the following:

- Relative positions of the project's major components.
- Voltage related to interconnection and the point of the interconnection.

## 3. Site Map (may overlay with Facility Drawing)

The Facility Drawing must illustrate the general layout of the facility. Please include the following:

- A clearly labeled perimeter of the Project Site (i.e. site control boundary).
- Clearly labeled nearby roads, including the nearest intersection.
- If the primary site map is too close to display the nearest intersection, please also provide a supplementary map at a larger scale so that nearby roads and landmarks can be seen.

## 4. Single Line Diagram

The Single Line Diagram must illustrate internal equipment and connections as well as the components for interconnection of the Facility to PG&E's electric distribution system. At minimum, include information for the following components:

- Name and address of the facility. These should match what is in the PPR.
- Electrical system components, cabling and connections for all AC and DC systems with associated labeling (voltage levels, AC or DC, overhead or underground, etc). For solar PV projects, each typical solar array must be shown or described.
- Generators and/or inverters (including capacity and voltage designations)
- Transformers – for generation system and/or interconnection and station power (A station service transformer is for the generating facility's station use and must be on the project's side of the meter.)
- Metering (e.g., CAISO revenue meters and/or Utility meters)
- Fuses and Breaker
- Disconnects and/or switches
- All other switchgear.

## Common Issues

- Facility name in PPR does not match what is provided in Appendix E documents
- Facility address in PPR does not match what is provided in Appendix E documents
- Equipment and related details are inconsistent among the various Appendix E docs
- Mismatch in project size or other major details with Interconnection Study

## Key Takeaways

- Refer to the ReMAT 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

# Intermission

Q&A