

# **Multifamily Affordable Solar Housing (MASH) Program Webinar**

**Presented by: Caitlin S. Henig**



**The slides for today's presentation can be  
downloaded/printed at [www.pge.com/solareducation](http://www.pge.com/solareducation)**

# PG&E and our Business

## What we do:

- *Deliver safe, reliable, and environmentally responsible gas and electricity to approximately 15 million Californians*

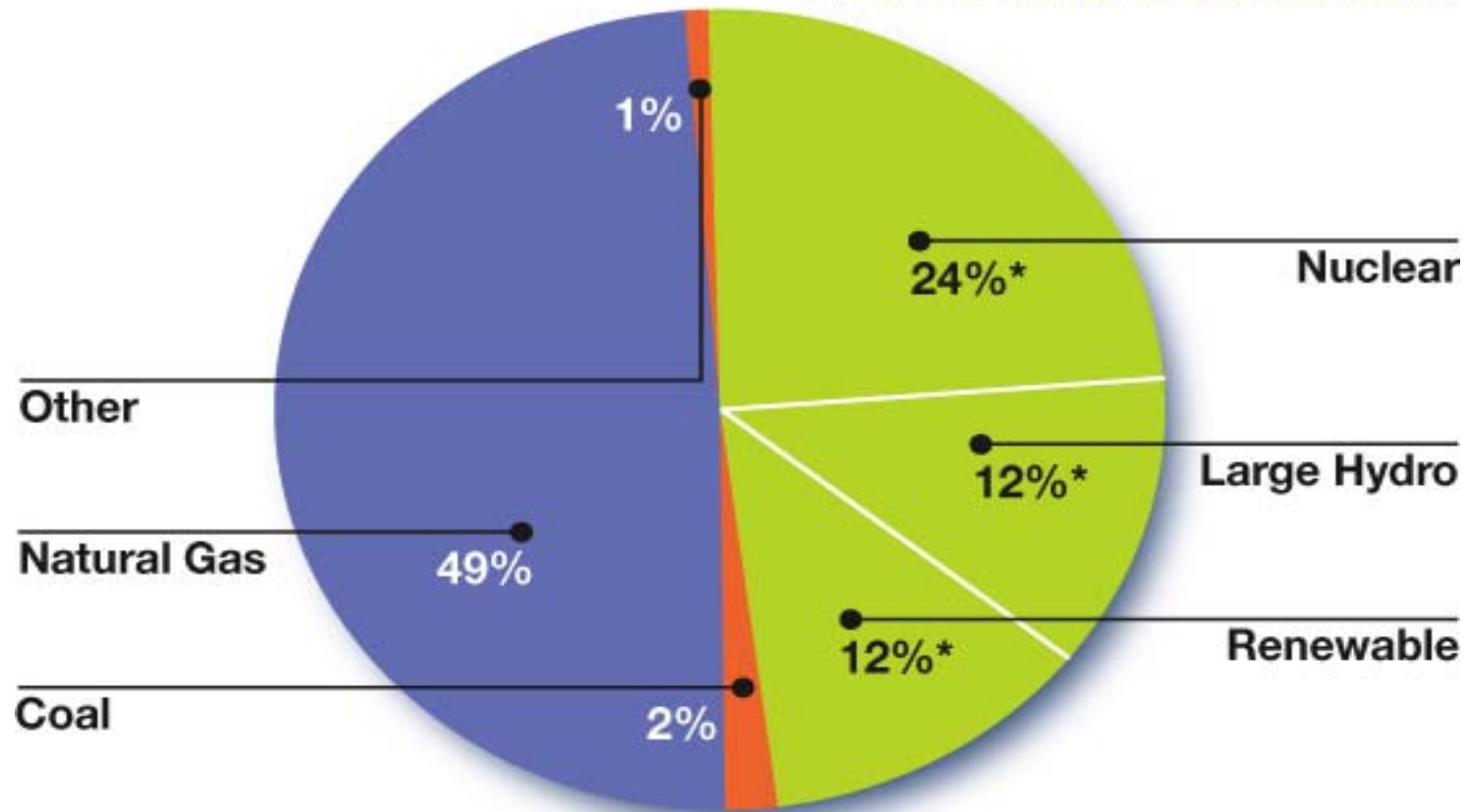


|   |                            |
|---|----------------------------|
| Electric and gas distribution customers | 5.1 MM electric 4.2 MM gas |
| Electric transmission circuits          | 18,610 miles               |
| Gas transmission backbone               | 6,136 miles                |
| Electric generation capacity            | 6,000 MW                   |

## PG&E's 2008 Electric Delivery Mix

*--on average over 50% of the energy PG&E delivers comes from sources that emit almost no carbon dioxide*

**\*These resources are climate neutral and/or renewable**



## Objective

***The purpose of this webinar is to provide an understanding of the Multifamily Affordable Solar Housing Program and its requirements. We will take you through the application process and also give an overview of the Track 2 application process. More details about the CSI Program Requirements are included in monthly CSI Workshops.***

***\*\*Please note: This is not an instructional class on how to install solar\*\****

If you are interested in learning to install solar or getting into the solar industry, please visit the following websites for information:

Interstate Renewable Energy Council-Renewable Energy Training Catalog:

•<http://irecusa.org/trainingCatalog/>

The North American Board of Certified Energy Practitioners (NABCEP):

•<http://www.nabcep.org/certificates/entry-level-certificate-program/for-students>

Grid Alternatives (non-profit providing hands-on training for volunteers)

•[www.gridalternatives.org](http://www.gridalternatives.org)

•Also check with local community colleges and universities

# Webinar Content

- **Overview of Multifamily Affordable Solar Housing Program**
- **Program Status**
- **MASH Application Process**
- **Track 2**
- **Q&A Session**

# SB 1

**CPUC**  
(CA Public Utilities Commission)

**CEC**  
(California Energy Commission)

*Retrofit Residential  
Retrofit Commercial  
Commercial New Construction*

*Retrofit Low  
Income*

*Residential New  
Construction*

**1. California Solar Initiative (CSI)**

**Low Income Solar (LISP)**

**4. New Solar Homes Partnership (NSHP)**

**2. Multi-family**

**3. Single Family**

**Program Administrators**

**Grid Alternatives**

**Program Administrators**

PG&E

SCE

CCSE

PG&E

SCE

SDG&E

BVES

## Low Income Solar Program Background

The Low Income Solar Program will provide education and incentives for installing solar PV systems in eligible low income structures (single-family homes and multifamily housing)

- \$216 M (10% of the ratepayer funded CSI Budget) was set aside for Low Income Solar
  - \$108M for Single Family Affordable Solar Housing Program (SASH)
    - Administered statewide by GRID Alternatives
  - \$108M for Multifamily Affordable Solar Housing Program (MASH)
    - Administered by PG&E, SCE and CCSE
- Goal
  - Promote participation and provide access to solar power to low income households living in retrofit housing structures
  - Decrease energy use and electric bills without increasing monthly household expenses

## MASH Program Goals

- **Stimulate adoption of solar power** in the affordable housing sector
- **Improve energy utilization** and overall quality of affordable housing through application of solar and energy efficiency technologies
- **Decrease electricity use and costs** without increasing monthly household expenses for affordable housing building occupants
- **Increase awareness and appreciation** of the benefits of solar among affordable housing occupants and developers

## MASH Eligibility

- Project site must be within service territory and receive retail electric service from Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas and Electric (administered by the CCSE)\*
  
- Retrofit Residential Multifamily Projects that meet the definition of low income residential housing per Public Utilities Code 2852 (either of the following):
  - (A) Residential housing financed with low-income housing tax credits, tax-exempt mortgage revenue bonds, general obligation bonds, or local, state, or federal loans or grants, and for which the rents of the occupants who are lower income households, as defined in Section 50079.5 of the Health and Safety Code, do not exceed those prescribed by deed restrictions or regulatory agreements pursuant to the terms of the financing or financial assistance.
  - (B) A residential complex in which at least 20 percent of the total units are sold or rented to lower income households, as defined in Section 50079.5 of the Health and Safety Code, and the housing units targeted for lower income households are subject to a deed restriction or affordability covenant with a public entity that ensures that the units will be available at an affordable housing cost, as defined in Section 50052.5 of the Health and Safety Code, or at an affordable rent, as defined in Section 50053 of the Health and Safety Code for a period of at least 30 years.
  
- Must have an occupancy permit of 2 years or more
  - ❖ If you are working on a major rehab, check with New Solar Homes Partnership for eligibility

\*Municipal electric utility customers, please check with your provider for any solar incentives or CSI updates.

\*\* New construction residential projects are eligible under the New Solar Homes Partnership Program

## MASH Eligibility Ctd

- Must use new and eligible equipment approved on CEC list
  - New inverter not required, new panels can be added to an existing inverter
- Minimum System Size of 1 kW
- Maximum System Size of 5 MW
  - Incentives will be capped at the **First** MW
- System size: production must be  $\leq$  previous 12 month usage history (kWh)
  - Documentation can be provided for added load: new appliances, added square footage, etc.
  - Residential systems 5 to 9.9 kW in size, square footage can be used (2 watts x square feet = maximum CEC-AC system size)

\*Municipal electric utility customers, please check with your provider for any solar incentives or CSI updates.

\*\* New construction residential projects are eligible under the New Solar Homes Partnership Program

# MASH Incentive Structure

There is one type of MASH Incentive:

**Expected Performance-Based Buydown (EPBB)** - EPBB is a one time, up-front payment based on an estimate of the system's future performance

| <b><u>Three levels of incentives</u></b> |                               |                                 |
|--|-------------------------------|---------------------------------|
| Track 1A: Common Load Offset             | Track 1 B: Tenant Load Offset | Track 2: Grant-style incentives |
| \$3.30/Watt                              | \$4.00/Watt                   | \$/Watt Varies                  |

***MASH Incentives are not subject to a MW Trigger***

## Virtual Net Metering (VNM)

- New Tariff available to MASH and NSHP (affordable housing) participants
- Credits from a single solar system at a Site are allocated across multiple accounts
- The Investor Owned Utilities (IOUs) filed a proposed VNM tariff on 2/13/09
  - Advice Letter was approved by the CPUC on 6/8/09; VNM is now available!
  - MASH Decision directed CPUC to consider expansion of VNM to all multitenant buildings

## MASH Program Status

- Track 1 launched February 17, 2009
  - 22 applications received (as of 6/25), all Track 1a
  - 952 kW; \$3.5M
- Track 2 launches today!

# Before Applying

## Application Terminology:

- **Host Customer:** the utility customer of record (person listed on the bill) at the location where the generating equipment will be located. If there are multiple utility customers (tenants and owner), the building owner may be the Host Customer for a MASH application.
- **System Owner:** the owner of the generating equipment at the time the incentive is paid.
- **Applicant:** is the entity/person that completes and submits the CSI Program application and serves as the main contact person for the CSI Program.
- **Project Site:** the physical site where the system is going to be installed as listed with PG&E.



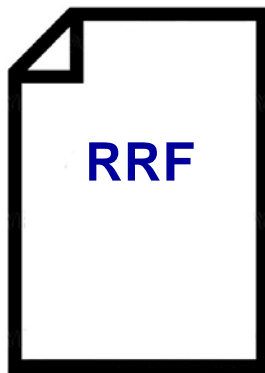
# 3 Step Application Process

# 3 Step Application

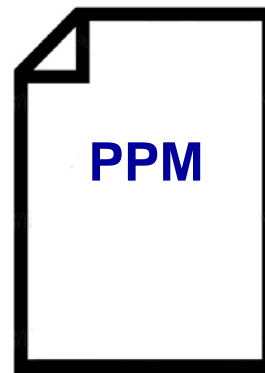
**Step 1. Reserve Funding**

**Step 2. Show Progress**

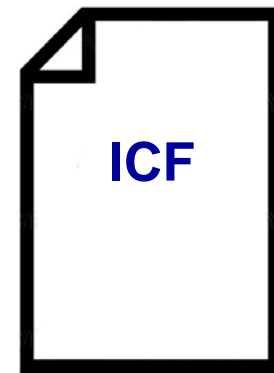
**Step 3. Claim Incentive**



**Submit**  
**Reservation Request**  
**Form**



**Submit**  
**Proof of Project**  
**Milestone**



**Submit**  
**Incentive Claim**  
**Form**

# Step 1 of 3: Reservation Request Required Documents

1. Completed Reservation Request Form and Program Contract with Original Signature
  - Application listing the customer, installer, project site, requested incentive amount, etc
2. Documentation of an Energy Efficiency Audit (or Title 24 documentation or other exemptions)
  - Can be done on PG&E website, phone, onsite or mail
3. Copy of Signed, Energy Efficiency Disclosure form
4. Printout of EPBB Tool Calculation ([www.csi-epbb.com](http://www.csi-epbb.com))
  - Each array requires a separate printout to determine correct incentive
5. Documentation of Low Income Status
  - Any documentation to demonstrate that the building meets the definition of low income per CPUC Code 2852
6. Proof of occupancy greater than 2 years
  - May be demonstrated in the form of 2 years of utility bills

## **Step 1 of 3: Reservation Request Required Documents, IF APPLICABLE**

**If annual kWh on EPBB Calculator > previous 12 month usage history**

### 7. Electrical System Sizing Documentation

- Square footage, list of new equipment/appliances with the wattage and expected use, or engineer calculations

## **Step 2 of 3: Proof of Project Milestone Required Documents**

1. Completed Proof of Project Milestone Checklist
  - The purpose of this checklist is to assist in the completion of information materials required for review of Proof of Project Advancement
2. Copy of Executed Agreement of Solar System Purchase and Installation
  - Purchase/installation contract between involved parties
3. Copy of Request For Proposal (RFP) of Solicitation
  - Notice to Invite Bids, of similar solicitation issued for the installation, lease, and/or purchase of the system proposed for the project

### **If System Owner is different than Host Customer**

4. Copy of executed alternative System Ownership agreement
  - Listing involved parties, terms, length of time, signatures, etc.

### **If applicable**

5. Revised EPBB Calculation Printout (if applicable)
  - If the proposed system has changed at all please submit a new EPBB calculation printout

## **Step 3 of 3: Incentive Claim** **Required Documents**

1. Complete Incentive Claim Form and Original Signatures
  - Application indicating installed equipment and final incentive amount
2. Final Project Cost Breakdown Worksheet
  - Itemized listing of project cost for modules, inverters, installation, etc.
3. Copy of Executed Performance Monitoring & Reporting Service Contract and Performance Data Provider Letter
  - Performance Meter make, model & serial number; name of provider; terms & conditions; etc.
  - Communication to the performance meter should be completed prior to ICF

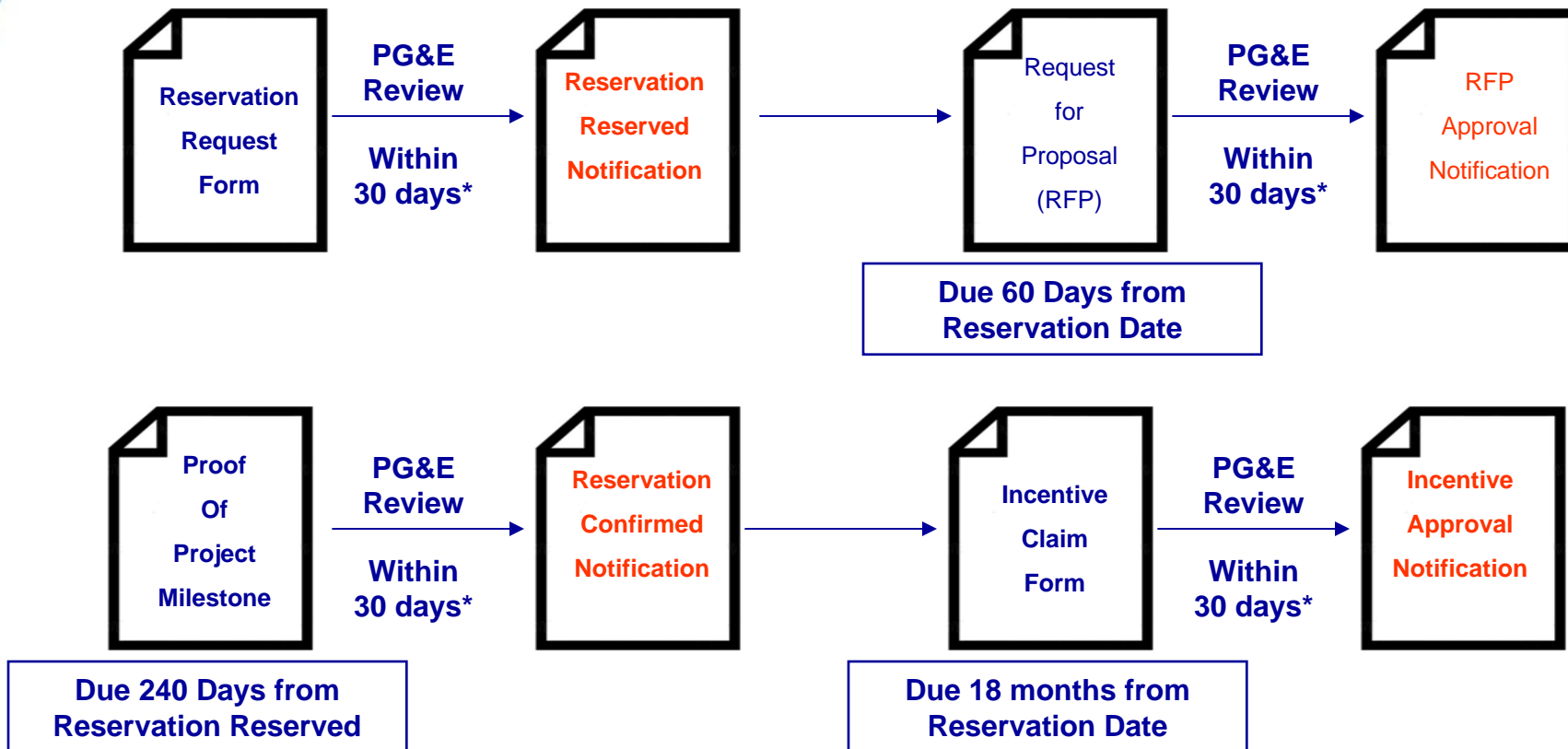
### **Or If exempt:**

3. PMRS Cost Cap Exemption Documentation
  - Same as above or If exempt, copy of quote from eligible PMRS provider showing cost

### **If applicable:**

4. Revised EPBB Calculation Printout
  - Required if installed equipment is different than proposed equipment in Reservation (Step 1)

## 3 Step Process and Timeframe



**\*Please note: Timeframes are approximate.  
Missing or Incorrect information/documents cause indefinite delays.**

## Track 2 Overview

- Competitive application process for higher incentives above the Track 1 level.
- Primary objective is to foster innovation in the low-income market segment and stimulate partnerships that ultimately provide benefits to tenants.
- Applicants propose their own ideas for expanding a solar project to include additional quantifiable direct tenant benefits.
- 2 Application Cycles per year
  - Q1/3: PAs will accept Track 2 applications
  - Q2/4: All Track 2 applicants will be notified
- Track 2 follows the regular 3-step process

## Track 2 Budget

| <u>SCE</u>                             | <u>PG&amp;E</u>                                | <u>CCSE</u>                          |
|--|--|--------------------------------------|
| Total Budget<br>\$9,200,000            | <b>Total Budget<br/>\$8,740,000</b>            | Total Budget<br>\$2,060,000          |
| Maximum Award Per<br>Cycle \$1,840,000 | <b>Maximum Award Per<br/>Cycle \$1,748,000</b> | Maximum Award Per<br>Cycle \$412,000 |

# Track 2 Grant Proposal Form

## Section 1 - Organizational Information

## Section 2 - Project Overview

- **Direct tenant benefit:** Any operating cost saving from the project that is shared with tenants of affordable housing buildings through:
  - A recurring payment or financial credit.
  - Implementation of energy efficiency measures that reduce the building's overall energy demand and the savings are passed on to the tenants.
- **Education and Outreach**
- **Green Job Creation and/or Training**

## Section 3- Project Timeline

## Section 4 - Budget

## Section 5 - Need Statement

## Section 6 - Goals and Objectives

# Track 2 Scoring

The PAs will use the below scoring criteria and weighting for evaluating Track 2 submissions.

Projects will be rated on a ten-point scale for each weighted category as described below. A minimum score of 60 is required for Track 2 eligibility. In the event of a tie, preference will be given to the more innovative project.

| Scoring Criterion  | Weighting |
|--|-----------|
| Cost-Reducing Benefits Shared with Tenants                             | 45%       |
| Effective Outreach and Education and/or Green Job Creation or Training | 20%       |
| Population Served  | 15%       |
| Cost Effective Use of MASH Funds                                       | 10%       |
| Experience and Track Record  | 5%        |
| Completeness and Clarity of Proposal                                   | 5%        |

## How to Apply

- **Download forms from website**  
**[www.pge.com/lowincomesolar](http://www.pge.com/lowincomesolar)**
- **Coming Soon**
  - **Access online database PowerClerk**

# Resources

To Learn More...

## Other Solar Webinars

- **CSI Workshop**
- **Basics of Photovoltaic Systems for Grid-Tied Applications**
- **Photovoltaic Site Analysis and System Sizing**
- **Interconnection Process**
- **Solar and Energy Efficiency**
- **Solar for the Entrepreneur**
- **Performance Data Provider and Performance Monitoring and Recording Service**
- **Solar Data Updates**

***\*\*Please refer to the Pacific Energy Center training website for the next available Internet class:***

***<http://www.pge.com/solarclasses>***

## Resources cont'd...

### Applications:

[www.pge.com/lowincomesolar](http://www.pge.com/lowincomesolar)

To request marketing materials:  
[solar@pge.com](mailto:solar@pge.com)

### EPBB Calculation Tool:

[www.csi-epbb.com](http://www.csi-epbb.com)

### California Energy Commission:

[www.gosolarcalifornia.ca.gov](http://www.gosolarcalifornia.ca.gov)

### Energy Efficiency:

#### Energy Partners

[www.pge.com/energypartners](http://www.pge.com/energypartners)

#### Rebates for Multifamily Properties

[www.pge.com/multifamily](http://www.pge.com/multifamily)

### Virtual Net Metering Application (VNM):

[www.pge.com/standardnem/](http://www.pge.com/standardnem/)



# Questions?