Multifamily Affordable Solar Housing

Semi-Annual Report

January 20, 2010

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Multifamily Affordable Solar Housing Semi-Annual Report

The California Center for Sustainable Energy (CCSE), on behalf of the California Solar Initiative (CSI) Program Administrators (PAs), submits this 2010 Semi-Annual Report for the Multifamily Affordable Solar Housing (MASH) Program, in compliance with the California Public Utilities Commission (CPUC or Commission) Decision (D.) 08-10-036, which requires the PAs to submit joint semi-annual reports to the Director of the Energy Division on the progress of the MASH Program.[1]

The first MASH semi-annual report, dated January 20, 2010, captures administrative expense and program data from program inception through December 31, 2009, and includes the items appearing in the following outline, requirements identified in Appendix A of D.08-10-036, and other data that Energy Division has requested.

1. Executive Summary

The MASH Program is one of the CSI's two low-income programs and is administered by Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and the California Center for Sustainable Energy (CCSE) in San Diego Gas and Electric territory (SDG&E) territory. The MASH Program provides incentives for the installation of solar photovoltaic (PV) generating systems on low-income multifamily housing, as defined in California Public Utilities Code (PUC) Section 2852. The MASH Program has two incentive tracks both of which are paid in the Expected Performance Based Buydown (EPBB) format:

1. Track 1 provides fixed, capacity-based rebates at $3.30 per watt for solar PV generating systems that offset common area electrical load (Track 1A) or at $4.00 per watt for solar PV generating systems that offset tenant common area electrical load (Track 1B). Track 1 applications are reviewed on a first-come first-served basis.

2. Track 2 is a competitive application process and provides variable rebates up to 100% of system and ongoing maintenance costs. To be awarded Track 2 funds, an applicant must demonstrate direct tenant benefit. Track 2 consists of two application cycles per year.

The PAs began accepting applications for Track 1 in February 2009 and conducted the first round of Track 2 application evaluations between July and December 2009. PG&E, SCE, and SDG&E began to offer a Virtual Net Metering (VNM) utility tariff option in June 2009 to simplify the installation of solar PV generating systems in multifamily housing.

[1] D.08-10-036, Ordering Paragraph No. 9 and Appendix A. In addition, the PAs will file a more detailed reporting of MASH expenses, including VNM implementation, as part of the CSI semi-annual administrative expense report that is due on January 29, 2010. D.08-10-036, Ordering Paragraph No. 7 and Appendix.

The PAs received and processed the following numbers of applications in 2009:

- 384 MASH applications received
- 179 Track 1 applications reserved
- 1 Track 2 application reserved

PG&E and CCSE received applications that exceeded funds available in their respective Track 1 budgets for 2009, and both created a wait list. SCE received applications for over 90% of its Track 1 budget[2]. Currently SCE has 100% of its Track 2 budget available, PG&E has 90% and CCSE has 80%.

2. Background

In D.06-01-024, the Commission adopted the Staff proposal to set aside a minimum of 10% of CSI Program funds for projects installed by low-income residential customers and affordable housing projects.[3] In 2006, the California Legislature codified this requirement in Senate Bill (SB) 1[4] and Assembly Bill (AB) 2723.[5] Subsequently, in D.06-12-033, the Commission directed the PAs to conform the CSI Program to SB 1 and AB 2723 requirements and directed that 10% of the total ten-year CSI budget would be reserved for the low-income residential solar incentive programs that are now referred to as MASH and the Single-Family Affordable Solar Homes (SASH) Programs.

On October 16, 2008, in D.08-10-036, the Commission established the $108.34 million MASH Program as a component of the CSI Program. The MASH Program provides incentives "for solar installations on existing multifamily affordable housing that meet[s] the definition of low income residential housing established in Pub. Util. Code § 2852."[6]

The Commission adopted a two-track incentive structure, "with Track 1 providing up front incentives to systems that offset either common area or tenant load, and Track 2 providing an opportunity to compete for higher incentives through a grant program."[7]

PG&E, SCE, and CCSE, in SDG&E's service territory, administer incentives under the MASH Program. The Commission selected the general market CSI PAs because the target customers of the MASH Program, which are affordable housing building owners, are similar to the

[2] SCE exceeded its Track 1 budget in January 2010 and has started a waitlist
[3] D.06-01-024, *mimeo*., pp. 5 and 27, Conclusion of Law 9 at p. 43 (*see also* Appendix A, pp. 2-3)
[4] SB 1 (Murray & Levine), *Chapter 132, Statutes of 2006*, sets forth specific CSI program requirements regarding program budget, conditions for solar incentives, and eligibility criteria.
[5] AB 2723 (Pavley), Chapter 864, Statutes 2006, required the Commission to ensure that not less than 10% of the CSI funds are used for the installation of solar energy systems on low-income residential housing and authorized the Commission to incorporate a revolving loan or loan guarantee program for this purpose.
[6] D.08-10-036, Appendix A, *mimeo*., p. 1
[7] D.08-10-036, *mimeo*., p. 9.

commercial and non-profit customers of the general market CSI Program. The resulting synergy allowed the PAs to incorporate MASH into their existing CSI administrative structures and to implement MASH in a quick and cost-effective manner.[8]

The overall goals for the MASH Program are to:

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

The MASH Program will operate either until January 1, 2016, or when all funds available from the program's incentive budget have been allocated, whichever event occurs first. PUC Section 2852(c)(3) requires that any program dollars remaining unspent on January 1, 2016, are to be used for Low Income Energy Efficiency programs.

2.1. Incentive Types: Track 1 (A and B) and Track 2

The MASH Program is designed to substantially subsidize solar PV generating systems in multifamily housing. Incentivizing the installation of solar PV generating systems in the MASH Program is not as straightforward as the general market CSI Program. Although affordable housing building owners are the target market, two different categories of customers may receive the benefits from an installed system: the building owners and the tenants. The Commission ensured in the design of the incentive structure and rebate levels in the MASH Program that benefits of the installed systems would accrue to both categories of customers.

To accomplish this goal, MASH incentives are divided into two different tracks: Track 1 and Track 2. Track 1 is similar to the general market CSI Program in that the rebate amount is both fixed and capacity-based. As shown in Table 2.1, Track 1 offers different incentives for solar PV generating systems that cover the electric load for common and tenant areas. The rebates are based only on the EPBB method, which is a one-time lump sum payment after verification of system installation. EPBB incentive rates are fixed and do not automatically decline as the MASH Program progresses. The Administrative Law Judge assigned to the CSI proceeding, however, has the authority to reduce MASH Track 1 incentives by up to 10% each year.[9]

[8] D.08-10-036, p. 24-25
[9] D.08-10-036, p. 14

Table 2.1: MASH Track 1 Incentive Rates in $/Watt

Track 1A: PV System Offsetting Common Area Load	Track 1B: PV System Offsetting Tenant Area Load
$3.30/Watt	$4.00/Watt

Although different incentive rates exist for systems offsetting common or tenant area electrical load, no requirement mandates that either Track 1A or Track 1B solar PV generating systems provide any direct tenant benefit or decrease the monthly expenses or financial burden for the low-income tenants. On the other hand, Track 2 incorporates a direct tenant benefit requirement.

Track 2 is a competitive grant-style structure that does not include a fixed rebate amount. Track 2 grants are awarded to applicants who provide quantifiable "direct tenant benefits" (i.e., any operating costs savings from solar that are shared with their tenants). Other categories of benefits that are considered in determining an award include energy efficiency improvements, green job creation or training, outreach and education for tenants on sustainability topics.

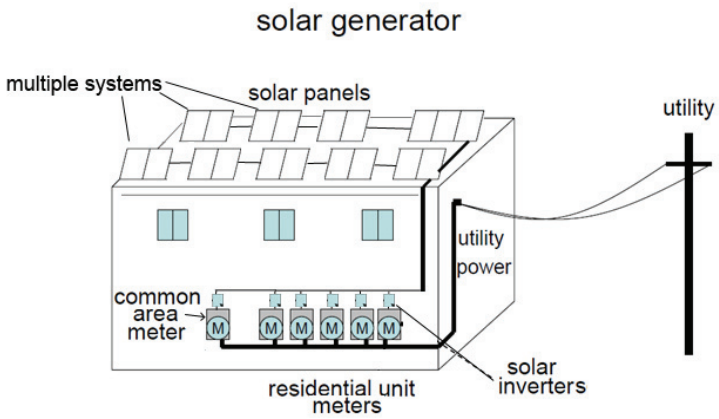
Two award cycles exist each year, and the PAs can award up to 20% of the total Track 2 budget in any given cycle. Awards are not guaranteed during any cycle however. For each winning application, a PA can award up to 100% of capital costs of the project as well as ongoing operation and maintenance costs.

To ensure that the PAs apply consistent criteria in evaluating Track 2 applications, the PAs developed a standardized statewide Track 2 application and review process with consultation from members of the affordable housing community.

2.2. Virtual Net Metering

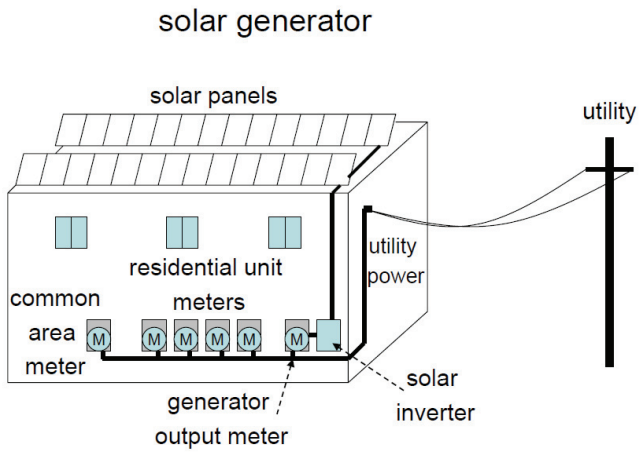
In December 1981, following adoption of D.93586, most utilities closed their Master Meter/Submeter Tariffs to new installations. PUC Section 780.5 required individual utility metering in multi-unit residential buildings that received building permits after July 1, 1982. While this setup encourages tenants to conserve energy, it can make it more challenging for building owners who want to install solar PV generating systems intended to serve tenants. In order to offset energy usage in tenant units, an owner would have to create a separate system with its own inverter for every meter on the property.

Figure 2.1: Conventional Solar Systems on Individually- Metered Multifamily Housing



In order to encourage solar installations on multi-unit affordable housing properties through the MASH Program, D. 08-10-036 directed SCE, PG&E and SDG&E to file tariffs for a VNM, which is a tariff that allows MASH participants to install a single solar PV generating system to cover the electricity load of the owner's common areas and the tenants' individual meters in a building. The electricity generated by the system is fed back into the grid through a Generator Output Meter, which measures the kWh produced. The participating utility then allocates bill credits resulting from the energy produced by the solar PV generating system to both the building owner's and tenants' individual utility accounts, based on a pre-arranged allocation agreement (see Figure 2.2). The VNM tariff that PG&E, SCE, and SDG&E offers is currently limited to those customers that receive incentives through either the MASH Program or the California Energy Commission's New Solar Homes Partnership Program (affordable housing only).

Figure 2.2: Virtual Net Metering System on Individually-Metered Multifamily Housing



2.3. Eligibility

Eligibility for the MASH Program is based on the characteristics of the affordable housing development rather than on the characteristics of the current individual residents. If a development qualifies, then all of the residents qualify whether or not they are low-income. Individual low-income residents in multifamily housing are not eligible to apply on their own. To qualify, a building must:

1. Meet the definition of "low income residential housing" as provided in PUC Section 2852;
2. Have an occupancy permit for at least two (2) years; and
3. Be within the service territories of SCE, PG&E, or SDG&E.

2.4. Budget

In an Assigned Commissioner's Ruling dated February 5, 2007, in R.06-03-004, one-half of the $216 million low income CSI budget adopted by the Commission in D.06-12-033 ($108 million) was reserved for the MASH Program. This budget, shown in Table 2.2, was adopted by the CPUC in D.08-10-036. For information on MASH Program expenditures to date, see Table 4.9.

The incentive allocation equates to 88% of each PA's budget while the remaining 12% is reserved for marketing and outreach, evaluation, and other administrative expenditures. The PAs must spend 2% on evaluation; however, the remaining 10% can be split between general administration and marketing and outreach at the PA's discretion.

Table 2.2: MASH Budget Allocations by Utility Territory

	PG&E	SCE	CCSE	Total
Budget %	43.7%	46%	10.3%	100%
Track 1A and 1B	32,923,230	34,656,032	7,759,938	75,339,200
Track 2	8,740,000	9,200,000	2,060,000	20,000,000
Administration (12%)	5,681,350	5,980,368	1,339,082	13,000,800
Total	**47,344,580**	**49,836,400**	**11,159,020**	**108,340,000**

3. Program Progress

The MASH PAs have made significant progress since the creation of the program. This section of the report presents program achievements and milestones to December 31, 2009.

3.1. Program Implementation to December 31, 2009

The Commission presented an implementation plan for the MASH program in D.08-10-036 and its Appendix A. The requirements of the implementation plan (shown in italics) and the progress to December 31, 2009, are identified below:

- *Within 60 days the Program Administrators shall jointly file an advice letter with proposed amendments to the CSI Handbook to incorporate the MASH program. The handbook should address Track 1 incentives and all elements of the MASH program necessary for implementation of Track 1.*

    - On behalf of the PAs, CCSE filed CCSE Advice 2, SCE Advice 2297-E, and PG&E Advice 3378-E with the Commission on December 15, 2008, which was approved on January 22, 2009 with an effective date of January 14, 2009. This advice filing implemented the MASH section in the CSI Handbook, which describes Track 1 and associated requirements.

- *Within 90 days of this order, the Program Administrators shall jointly file an advice letter with a standardized statewide Track 2 application and review process as well as the handbook changes necessary to implement Track 2.*

    - On behalf of the PAs, PG&E filed PG&E Advice 3402-E, SCE Advice 2310, and CCSE Advice 4 with the Commission on January 14, 2009, which proposed modifications to the CSI Handbook to incorporate Track 2 of the MASH Program.

    - The Energy Division issued an Advice Letter Suspension Notice on February 11, 2009, because the filing did not include the Track 2 application and review process.

    - On behalf of the PAs, PG&E filed PG&E Advice 3402-E-A, SCE Advice 2310-E-A, and CCSE Advice 4-A on March 11, 2009, which included the Track 2 application and review process requested by Energy Division. The Commission approved the advice filing on May 27, 2009, with an effective date of May 22, 2009.

- *PG&E, SCE, and SDG&E shall each file an advice letter, within 120 days of this order, proposing a VNM tariff applicable to individually metered multifamily affordable housing properties that install a solar energy system through the MASH program.*

Each utility's VNM tariff must comply with § 2827 and Appendix B of this order.

- On February 13, 2009, PG&E filed Advice 3422-E, Establishment of Rate Schedule NEMVNM - Virtual Net Energy Metering Tariff in Compliance with Decision 08-10-036. A supplemental filing (Advice 3422-E-A), Establishment of Schedule NEMVNMA – Virtual Net Energy Metering (VNM) Service for Individually Metered Residential Units and Owners with Housing Receiving Incentives from the Multifamily Affordable Solar Housing (MASH) Program or the New Solar Homes Partnership (NSHP) Affordable Housing Program was filed on April 10, 2009. Energy Division approved Advice 3422-E-A on June 12, 2009, with an effective date of June 8, 2009.

- SCE filed Advice 2322-E establishing a MASH Virtual Net Metering schedule (MASH-VNM) with the Energy Division on February 13, 2009, and filed supplemental Advice 2322-E-A on April 14, 2009, to incorporate revisions to the tariff sheets as advised by the Energy Division. Energy Division approved Advice 2322-E-A on June 12, 2009, with an effective date of June 8, 2009.

- On February 13, 2009, SDG&E filed Advice Letter 2064-E, Establishment of Schedule VNM-A in compliance with D.08-10-036. Per the request of the Energy Division, a supplemental filing (2064-E-A) was submitted to the Commission on April 17, 2009, to provide additional clarifications to SDG&E's Virtual Net Energy Metering proposal. Advice Letter 2064-E-A was approved by the Energy Division on June 12, 2009 with an effective date of June 8, 2009.

- *Within four months from the Commission order adopting the program, the MASH shall be implemented in the service territories of PG&E, SCE, and SDG&E such that applications are available to the public.*

  - On February 17, 2009, the PAs launched MASH Track 1 and made the Track 1 Reservation Request Form, Proof of Project Milestone Form and Incentive Claim Form, along with a list of the necessary supporting documents available on their respective web sites.

- *By the end of 2010, the Program Administrators shall have made reasonable efforts to identify the eligible population across the state within the PG&E, SCE, and SDG&E service territories, and have attempted to contact them about the MASH program.*

  - The PAs immediately reached out to affordable housing community. In the first six months after launch of the MASH Program, the PAs held workshops, served on panels in relevant statewide and local affordable housing conferences, and met with representatives of the affordable housing community to discuss their concerns with the MASH Program as designed. The PAs also reached out to key

stakeholders, including the United States Department of Housing and Urban Development and non-profit developers, and leveraged upon their respective Low Income Energy Efficiency departments within each service territory.

- *By the end of 2012, 50 affordable housing buildings should install solar energy systems through the program.*
    - While the PAs have not yet reached this milestone, 179 applications have been reserved and, assuming they meet their installation deadline as listed in their respective reservation confirmation letters, approximately 179 projects should be installed by the deadline. Currently, two projects have been successfully interconnected to the electrical grid in SCE's service territory.

3.2. Program Waitlist

As of October 26, 2009, PG&E had received more applications than sufficient to exhaust its Track 1 allotted budget of $32.9M in its service territory and created a waitlist for all new applications. Each day that PG&E receives project applications, a lottery is conducted to determine an individual application's position on the waitlist. PG&E funds waitlisted projects as funding becomes available through attrition or system size reduction for reserved projects.

As of December 31, 2009, PG&E has a waitlist of 63 projects totaling $15.2 million. On December 28, 2009 CCSE began a waitlist following the same procedures as PG&E. As of December 31, 2009 CCSE has a waitlist of 1 project totaling $137,050.

As of January 1, 2010, PG&E is not accepting new applications for its MASH Track 1 Waitlist. If sufficient projects drop out or if more funding is added to the PG&E budget, PG&E will again begin to accept new applications for MASH Track 1 incentives.

3.3. How the Data Questions Called for in D.08-10-036 were Addressed

Data points noted in D.08-10-036[10] were discussed in detail with the Energy Division to ensure clarity and consistency in reporting for all Program Administrators. New or revised data points are indicated in Section 4.1 and have been added at the discretion of the Energy Division.

[10] D-08-10-036, Appendix A, p. 6

4. Program Progress

The MASH program began accepting applications for Track 1 incentives in February 2009 and Track 2 applications in July 2009. Program progress as illustrated from various data points is shown in Table 4.1.

Table 4.1: MASH Applications by Month (2009)

Month	Feb	Mar	Apr	May	Jun	Jul[11]	Aug[12]	Sep[13]	Oct[14]	Nov[15]	Dec[16]	Total
PG&E	13	2	0	1	29	5	22	52	80	21	15	**240**
SCE	3	3	1	0	0	0	0	11	12	32	59	**121**
CCSE	0	0	0	1	0	0	0	3	11	8	0	**23**
Total	**16**	**5**	**1**	**2**	**29**	**5**	**22**	**66**	**103**	**61**	**74**	**384**

Table 4.2: Summary Data: MASH Applications by Status

Summary Data (Track 1)				
	CCSE	**PG&E**	**SCE**	**Total**
# Projects reserved	5	162	12	179
# Projects Under Review	16	3	107	125
Total Reserved Capacity	0.392 MW	8.832 MW	1.025 MW	10.297 MW
Total Under Review Capacity[17][18]	1.672 MW	0.401 MW	8.247 MW	10.273 MW
Total Reserved Incentives ($)	$ 1,261,278	$ 31,005,861	$ 3,794,340	$ 36,217,889
Total Under Review Incentives ($)	$ 6,498,660	$ 1,324,083	$ 28,632,454	$ 36, 298,787
# Projects Paid	0	0	2	2
Total Incentives Paid ($)	$ 0	$ 0	$ 208,339	$ 208,339
# Projects Waitlisted	1	63	0	64
Total Waitlisted Capacity	0.042 MW	4.189 MW	0	4.231 MW
Total Waitlisted Incentives ($)	$ 137,050	$ 14,206,027	$ 0	$ 14,343,077
Average Project Costs ($/Watt)	$ 8.67/Watt	$ 8.75/Watt	$ 8.04/Watt[19]	N/A
Total Master-Metered (Reserved)	0	8	4	12
Total Individually Metered (Reserved)	5	154	8	167

[11] Includes 1 PG&E Track 2 application
[12] Includes 1 PG&E Track 2 application
[13] Includes 22 PG&E Track 2 applications, 5 SCE Track 2 Applications & 2 CCSE includes Track 2 Applications
[14] Includes 28 PG&E waitlisted projects
[15] All PG&E projects are waitlisted
[16] All PG&E projects are waitlisted
[17] All capacity measured in CEC-AC
[18] Approximately $700k in Track 1 will go to Waitlisted projects in 2010
[19] Only includes reserved and paid projects

Table 4.2 provides a detailed breakdown of the "Reserved," "Paid," and "Under Review" capacity (in CEC-AC MW) for all MASH applications received between program inception on February 17, 2009 and December 31, 2009.

Table 4.2: Detailed Data: MASH Applications by Status

Detailed Breakdown				
Track 1A				
	CCSE	**PG&E**	**SCE**	**Total**
Track 1a: Total Reserved Capacity	0.263 MW	5.474 MW	0.348 MW	6.085 MW
Track 1a: Total Reserved Incentives ($)	$ 720,413	$ 18,289,576	$ 1,130,049	$ 20,140,038
Track 1a: # Projects Paid	0	0	1	1
Track 1a: Total Incentives Paid ($)	$ 0	$ 0	$ 124,317	$ 124,317
Track 1B				
Track 1b: Total Reserved Capacity	0.129 MW	3.358 MW	0.677 MW	4.212 MW
Track 1b: Total Reserved Incentives($)	$ 540,865	$ 12,716,285	$ 2,664,291	$ 16,077,851
Track 1b: # Projects Paid	0	0	1	1
Track 1b: Total Incentives Paid ($)	$ 0	$ 0	$ 84,022	$ 84,022
Track 2				
Track 2: # Projects Awarded	1	1	0	2
Track 2: Total Awarded Capacity	.063 MW	.177 MW	0 MW	0.240 MW
Track 2: Total Awarded Incentives($)	$ 412,000	$ 871,799	0	$ 1,283,799
Track 2: # Projects Paid	0	0	0	0
Track 2: Total Incentives Paid ($)	0	0	0	0
Waitlist				
Track 1a: Total Waitlisted Capacity	0.042 MW	2.712 MW	0 MW	2.754 MW
Track 1a: Total Waitlisted Incentives ($)	$ 137,050	$ 9,081,653	$ 0	$ 9,218,703
Track 1b: Total Waitlisted Capacity	0 MW	1.468 MW	0 MW	1.468 MW
Track 1b: Total Waitlisted Incentives ($)	$ 0	$ 5,124,374	$ 0	$ 5,124,374

Table 4.3: MASH Applications by County

CCSE		PG&E		SCE	
County	**# of Apps**	**County**	**# of Apps**	**County**	**# of Apps**
San Diego	21	San Francisco	53	Los Angeles	48
		Alameda	50	Riverside	17
		Contra Costa	23	San Bernardino	15
		Santa Clara	22	Santa Barbara	14
		Marin	21	Orange	10
		Monterey	10	Tulare	8
		Fresno	6	Ventura	7
		Santa Barbara	5		
		Sacramento	5		
		Sutter	4		
		Other/Unspecified[20]	29		

Table 4.4: MASH Applications by County (Capacity)

CCSE		PG&E		SCE	
County	**Capacity (MW)**	**County**	**Capacity (MW)**	**County**	**Capacity (MW)**
San Diego	2.064	San Francisco	3.312	Los Angeles	3.705
		Alameda	2.129	Riverside	1.797
		Contra Costa	1.514	San Bernardino	1.190
		Santa Clara	1.314	Ventura	0.824
		Santa Barbara	0.645	Orange	0.818
		Monterey	0.621	Santa Barbara	0.732
		Marin	0.621	Tulare	0.206
		Sacramento	0.594		
		Fresno	0.534		
		San Mateo	0.330		
		Other/Unspecified	1.745		

[20] Includes all counties not in the top 10

Table 4.5: MASH Applications by County ($)

CCSE		PG&E		SCE	
County	Incentive ($)	County	Incentive ($)	County	Incentive($)
San Diego	$ 7,759,938	San Francisco	$ 12,137,593	Los Angeles	$ 12,851,230
		Alameda	$ 7,165,294	Riverside	$ 6,225,220
		Contra Costa	$ 5,097,387	San Bernardino	$ 4,047,702
		Santa Clara	$ 4,704,296	Ventura	$ 3,044,899
		Santa Barbara	$ 2,506,211	Santa Barbara	$ 2,831,953
		Monterey	$ 2,234,689	Orange	$ 2,758,816
		Fresno	$ 1,885,703	Tulare	$ 666,974
		Marin	$ 1,633,837		
		Sacramento	$ 1,498,274		
		San Mateo	$ 1,056,680		
		Other/Unspecified	$ 5,801,524		

Table 4.6: MASH Applications by City

CCSE		PG&E		SCE	
City	# of Apps	City	# of Apps	City	# of Apps
Escondido	12	San Francisco	51	Goleta	10
San Diego	7	San Jose	21	Lancaster	9
Oceanside	1	Oakland	10	San Bernardino	7
Vista	1	Richmond	10	Santa Barbara	4
		Novato	9	Palm Springs	4
		San Rafael	6	Compton	4
		Hayward	5	Inglewood	3
		Morgan Hill	5	Palmdale	3
		West Sacramento	5	Signal Hill	3
		Berkeley	4	Victorville	3
		Davis	4	West Covina	3
		Fremont	4	Santa Monica	2
		Yuba City	4	Irvine	2
		Chico	3	Camarillo	2
		Fresno	3	Cathedral City	2
		Gilroy	3	Desert Hot Springs	2
		Salinas	3	Duarte	2
		Walnut Creek	3	Indian Wells	2
		Bakersfield	2	Los Angeles	2
		Brentwood	2	Norco	2
		Emeryville	2	Oxnard	2

Table 4.6: MASH Applications by City (Cont'd)

CCSE		PG&E		SCE	
		Freedom	2	Pomona	2
		Guadalupe	2	Porterville	2
		Livermore	2	Rosamond	2
		Marina	2	Rosemead	2
		Monterey	2	Santa Ana	2
		Oakdale	2	Simi Valley	2
		Oakley	2	Tulare	2
		Pleasant Hill	2	Woodlake	2
		Point Reyes Station	2	Long Beach	1
		San Leandro	2	Huntington Beach	1
		Santa Maria	2	Corona	1
		Union City	2	Temecula	1
		Angles Camp	1	Apple Valley	1
		Antioch	1	Baldwin Park	1
		Arvin	1	Beaumont	1
		Belvedere	1	Bell Gardens	1
		Carmel	1	Blythe	1
		Clayton	1	Carson	1
		Clovis	1	Downey	1
		Colusa	1	El Monte	1
		Corte Madera	1	Fullerton	1
		Dixon	1	La Mirada	1
		Dublin	1	La Palma	1
		East Palo Alto	1	La Verne	1
		Fowler	1	Lakewood	1
		Greenfield	1	Lindsey	1
		Hercules	1	Midway City	1
		Hollister	1	Moreno Valley	1
		Kingsburg	1	Morongo Valley	1
		Larkspur	1	Ojai	1
		Los Banos	1	Pico Rivera	1
		Los Gatos	1	Rialto	1
		Madera	1	Ridgecrest	1
		Manteca	1	Torrance	1
		Martinez	1	Upland	1
		Oliverherst	1	Ventura	1
		Pajaro	1	Westminster	1
		Parlier	1	Whittier	1
		Pinole	1		
		Pleasanton	1		

Table 4.6: MASH Applications by City (Cont'd)

CCSE		PG&E		SCE	
		Red Bluff	1		
		Rhonert Park	1		
		Rocklin	1		
		Rodeo	1		
		San Jose	1		
		San Bruno	1		
		San Pablo	1		
		Santa Barbara	1		
		Santa Rosa	1		
		Seaside	1		
		Selma	1		
		Shafter	1		
		Sonora	1		
		St Helena	1		
		Stockton	1		
		Tiburon	1		
		Tracy	1		

Table 4.7: MASH Applications by City (Capacity)

CCSE		PG&E		SCE	
City	Capacity(MW)	City	Capacity(MW)	City	Capacity(MW)
San Diego	1.464	San Francisco	2.864	Lancaster	0.887
Escondido	0.406	San Jose	1.318	Goleta	0.654
Vista	0.164	Richmond	0.639	San Bernardino	0.628
Oceanside	0.030	Santa Maria	0.594	Rosamond	0.569
		West Sacramento	0.511	Corona	0.494
		Oakland	0.448	Oxnard	0.419
		Davis	0.351	Cathedral City	0.399
		Kingsburg	0.341	Palmdale	0.350
		Carmel	0.335	Camarillo	0.255
		Hayward	0.330	Palm Springs	0.253
		San Bruno	0.287	Long Beach	0.234
		Clayton	0.286	Pomona	0.225
		Gilroy	0.282	Indian Wells	0.219
		Marina	0.206	Irvine	0.184
		Novato	0.196	Duarte	0.179
		Salinas	0.191	West Covina	0.173
		Fremont	0.180	La Palma	0.136
		Morgan Hill	0.158	Victorville	0.129
		Pleasant Hill	0.156	Compton	0.127
		Yuba City	0.154	Santa Ana	0.115

Table 4.7: MASH Applications by City (Capacity) (Cont'd)

CCSE		PG&E		SCE	
		San Rafael	0.145	Inglewood	0.115
		Oliverherst	0.142	Morongo Valley	0.113
		San Jose	0.137	Westminster	0.112
		Bakersfield	0.135	Blythe	0.105
		Pleasanton	0.135	Los Angeles	0.103
		Brentwood	0.125	Norco	0.099
		Guadalupe	0.124	Fullerton	0.092
		Manteca	0.123	La Verne	0.091
		Greenfield	0.107	Simi Valley	0.091
		Rhonert Park	0.106	Desert Hot Springs	0.088
		Arvin	0.105	Huntington Beach	0.087
		Hercules	0.102	Signal Hill	0.086
		San Leandro	0.097	Santa Monica	0.086
		Emeryville	0.096	Upland	0.085
		Walnut Creek	0.095	Santa Barbara	0.078
		Fresno	0.091	Whittier	0.076
		Clovis	0.087	Rialto	0.074
		Corte Madera	0.083	La Mirada	0.074
		Berkeley	0.082	Ventura	0.072
		Union City	0.082	Apple Valley	0.068
		Tracy	0.079	Beaumont	0.066
		Seaside	0.070	Rosemead	0.063
		Antioch	0.063	Temecula	0.062
		Freedom	0.061	Bell Gardens	0.058
		Los Banos	0.060	Tulare	0.056
		Livermore	0.058	Porterville	0.056
		Stockton	0.058	Baldwin Park	0.055
		Chico	0.056	Carson	0.055
		Dublin	0.053	Pico Rivera	0.053
		Oakley	0.050	El Monte	0.050
		Angles Camp	0.045	Woodlake	0.043
		Pinole	0.043	Torrance	0.039
		Colusa	0.040	Ojai	0.036
		Oakdale	0.039	Midway City	0.032
		Sonora	0.037	Downey	0.030
		Martinez	0.036	Lakewood	0.027
		Madera	0.036	Ridgecrest	0.025
		Pajaro	0.035	Lindsey	0.025
		Santa Barbara	0.035	Moreno Valley	0.012
		St Helena	0.034		

Table 4.7: MASH Applications by City (Capacity) (Cont'd)

CCSE		PG&E		SCE	
		Fowler	0.032		
		Monterey	0.030		
		Parlier	0.030		
		Hollister	0.029		
		San Pablo	0.028		
		Rodeo	0.027		
		Point Reyes Station	0.024		
		East Palo Alto	0.023		
		Dixon	0.021		
		Red Bluff	0.020		
		Shafter	0.015		
		Selma	0.015		
		Belvedere	0.015		
		Rocklin	0.013		
		Los Gatos	0.005		
		Larkspur	0.005		
		Santa Rosa	0.005		
		Tiburon	0.004		

Table 4.8: MASH Applications by City ($)

CCSE		PG&E		SCE	
City	Incentive($)	City	Incentive($)	City	Incentive($)
San Diego	$ 5,427,159	San Francisco	$ 10,596,383	Lancaster	$ 3,268,995
Escondido	$ 1,566,685	San Jose	$ 4,221,499	Goleta	$ 2,548,470
Vista	$ 649,425	Richmond	$ 2,120,172	Rosamond	$ 2,224,244
Oceanside	$ 116,669	Santa Maria	$ 1,984,246	San Bernardino	$ 2,112,210
		West Sacramento	$ 1,498,274	Corona	$ 1,583,931
		Oakland	$ 1,458,659	Oxnard	$ 1,507,878
		Davis	$ 1,274,830	Cathedral City	$ 1,498,185
		Kingsburg	$ 1,245,363	Palmdale	$ 1,191,664
		Carmel	$ 1,167,798	Camarillo	$ 964,876
		Hayward	$ 1,084,707	Indian Wells	$ 877,156
		San Bruno	$ 1,056,680	Palm Springs	$ 865,841
		Clayton	$ 1,043,758	Long Beach	$ 765,215
		Gilroy	$ 812,109	Pomona	$ 713,068
		Marina	$ 720,288	Irvine	$ 617,868
		Novato	$ 713,366	Duarte	$ 586,693
		Salinas	$ 700,157	West Covina	$ 558,733
		Fremont	$ 639,862	La Palma	$ 440,355

Table 4.8: MASH Applications by City ($) (Cont'd)

CCSE		PG&E		SCE	
		Morgan Hill	$ 615,397	Morongo Valley	$ 426,590
		Pleasant Hill	$ 560,716	Victorville	$ 421,891
		Yuba City	$ 513,024	Santa Ana	$ 418,921
		San Rafael	$ 504,411	Compton	$ 396,960
		Oliverherst	$ 494,094	Inglewood	$ 374,173
		Sa n Jose	$ 491,004	Westminster	$ 351,201
		Bakersfield	$ 489,581	Blythe	$ 345,794
		Pleasanton	$ 468,956	Los Angeles	$ 336,560
		Brentwood	$ 460,304	Huntington Beach	$ 327,944
		Guadalupe	$ 412,320	Simi Valley	$ 321,088
		Manteca	$ 410,531	Norco	$ 308,194
		Greenfield	$ 389,043	Fullerton	$ 304,844
		Rhonert Park	$ 382,566	La Verne	$ 300,340
		Arvin	$ 354,008	Desert Hot Springs	$ 291,350
		Hercules	$ 340,863	Santa Barbara	$ 283,483
		San Leandro	$ 337,363	Santa Monica	$ 277,088
		Emeryville	$ 300,554	Upland	$ 274,528
		Walnut Creek	$ 279,309	Ventura	$ 270,243
		Fresno	$ 264,506	Apple Valley	$ 269,669
		Clovis	$ 261,980	Signal Hill	$ 267,389
		Corte Madera	$ 261,944	Whittier	$ 248,949
		Berkeley	$ 260,030	La Mirada	$ 243,612
		Union City	$ 225,367	Rialto	$ 242,474
		Tracy	$ 216,845	Beaumont	$ 212,576
		Seaside	$ 213,876	Rosemead	$207,543
		Antioch	$ 207,630	Temecula	$ 204,085
		Freedom	$ 202,673	Bell Gardens	$ 192,647
		Los Banos	$ 200,505	Porterville	$ 181,091
		Livermore	$ 196,144	Baldwin Park	$ 180,454
		Stockton	$ 196,129	Tulare	$ 179,164
		Chico	$ 191,977	Carson	$ 177,900
		Dublin	$ 187,407	Pico Rivera	$ 171,234
		Oakley	$ 156,737	El Monte	$ 162,921
		Angles Camp	$ 151,808	Woodlake	$ 143,438
		Pinole	$ 141,075	Ojai	$ 139,805
		Colusa	$ 135,891	Torrance	$ 126,291
		Oakdale	$ 130,907	Lakewood	$ 115,170
		Sonora	$ 127,241	Midway City	$ 105,036
		Martinez	$ 120,526	Downey	$ 97,383
		Madera	$ 118,480	Ridgecrest	$ 84,058

Table 4.8: MASH Applications by City ($) (Cont'd)

CCSE		PG&E		SCE	
		Pajaro	$ 112,174	Lindsey	$ 79,223
		Santa Barbara	$ 109,645	Moreno Valley	$ 38,108
		St Helena	$ 108,649		
		Fowler	$ 101,812		
		Monterey	$ 99,151		
		Parlier	$ 96,535		
		Hollister	$ 93,545		
		San Pablo	$ 93,374		
		Rodeo	$ 77,421		
		Point Reyes Station	$ 75,237		
		East Palo Alto	$ 66,228		
		Dixon	$ 62,317		
		Red Bluff	$ 56,417		
		Shafter	$ 50,879		
		Selma	$ 50,233		
		Belvedere	$ 47,338		
		Rocklin	$ 41,300		
		Los Gatos	$ 19,484		
		Larkspur	$ 17,681		
		Santa Rosa	$ 16,335		
		Tiburon	$ 13,860		

Table 4.9: MASH Program Expenditures by Program Administrator

MASH Program Expenditure Data Oct 16, 2008[21] to December 31, 2009				
	CCSE	PG&E	SCE	Total
Expenditure Type	**Expenditure $**	**Expenditure $**	**Expenditure $**	**Expenditure $**
Administrative	$ 109,100	$ 209,940	$ 259,093	$578,133
Marketing	$ 17,546	$ 19,638	$ 17,039	$54,223
Measurement & Valuation	$ 0	$ 0	$ 0	$ 0
Incentive	$ 0	$ 0	$ 208,339	$ 208,339

[21] Date of Decision 08-10-036

5. Conclusions and Program Recommendations

- The PAs have satisfied all of the program implementation guidelines and milestones set forth in D.08-10-036.

- Participation by the affordable housing community was initially slow, but the volume of applications rapidly increased, which resulted in almost complete subscription of Track 1 funds.

- As expected, applications were concentrated in larger cities. Nevertheless, the PAs received applications from locations throughout their respective territories.

- Track 2 did not satisfy program goals in the first funding cycle because submitted applications generally did not provide the tenant benefits required to receive incentives above the Track 1 level.

- Given the speed of MASH Track 1 subscriptions, the PAs would support a review of the Track 1 incentive amount in order to ensure that the optimal number of eligible low-income customers may participate in the MASH program.