Multifamily Affordable Solar Housing

Semi-Annual Progress Report

July 26, 2010

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Multifamily Affordable Solar Housing Semi-Annual Progress Report

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

This second MASH semi-annual report, dated July 26, 2010, captures administrative expenses and program data from program inception on February 17, 2009 through June 30, 2010, 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 CCSE in San Diego Gas and Electric territory (SDG&E) service 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 a one-time lump sum payment referred to as the Expected Performance Based Buydown (EPBB).

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 affordable housing.

Currently, Track 1 funds across all PA territories have been fully allocated. PG&E and SCE's waitlist has been closed. CCSE is currently accepting applications for its waitlist.

[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 July 30, 2010. D.08-10-036, Ordering Paragraph No. 7 and Appendix.

The PAs received and processed the following numbers of Track 1 applications from program inception through 6/30/2010:

- 404 MASH Track 1 applications received
- 303 MASH Track 1 applications reserved

After completing two application cycles for Track 2, the PAs received and awarded the following numbers of applications:

- CCSE has received a total of 2 applications and has awarded incentives to 1 application totaling $412,000.
- PGE has received a total of 37 applications and has awarded incentives to 7 applications totaling $2.6M.
- SCE has received a total of 8 applications and has awarded incentives to 4 applications totaling $4.7M.

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.[2] In 2006, the California Legislature codified this requirement in Senate Bill (SB) 1[3] and Assembly Bill (AB) 2723.[4] 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."[5]

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."[6]

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[2] D.06-01-024, *mimeo*., pp. 5 and 27, Conclusion of Law 9 at p. 43 (*see also* Appendix A, pp. 2-3)
[3] 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.
[4] 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.
[5] D.08-10-036, Appendix A, *mimeo*., p. 1
[6] D.08-10-036, *mimeo*., p. 9.

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, who are affordable housing building owners and are therefore similar to the 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.[7]

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 low-income 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 incentive structure and rebate levels of the MASH Program were designed so that benefits of the solar systems could 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 offset the electric load for common and tenant areas. The rebates are based only on the Expected Performance Based Buy-down (EPBB) method, which is a one-time lump sum payment after verification of system installation. In the MASH Program, the EPBB incentive rates are fixed and do not automatically decline as they do in the general market CSI program; however, the Administrative Law Judge assigned to the CSI proceeding has the authority to reduce MASH Track 1 incentives by up to 10% each year.[8]

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

Under Track 1, incentives are available for solar system installations that offset common area and/or tenant unit electrical load. There is no mandate requiring property owners to install systems that offset tenant unit load in order to qualify for Track 1A incentives. Property owners can qualify for Track 1A incentives without providing direct benefits to tenants. On the other hand, Track 2 requires tenants to directly benefit from the solar system project.

Unlike the fixed incentive rates in Track 1, Track 2 allows applicants to compete for higher incentives above Track 1 rates if the installation provides a quantifiable "direct tenant benefit" (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.

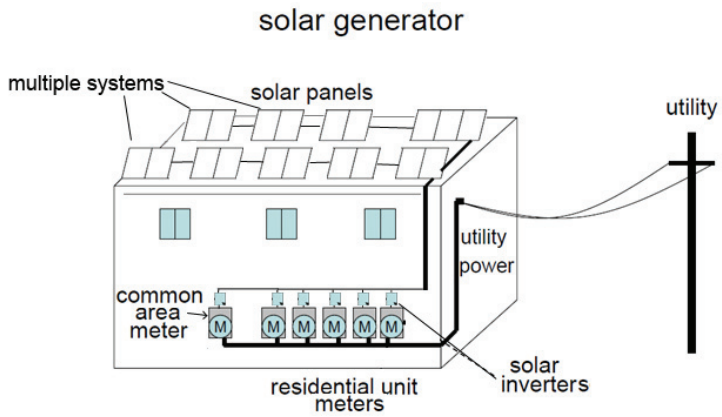
Two award cycles exist each year, and the PAs can award up to 20% of the total Track 2 budget in any given cycle. Awards are not guaranteed during any cycle however. For each winning application, a PA can award up to 100% of capital costs of the project as well as ongoing operation and maintenance costs.

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. The application is available on the PA's MASH webpages.

2.2. Virtual Net Metering

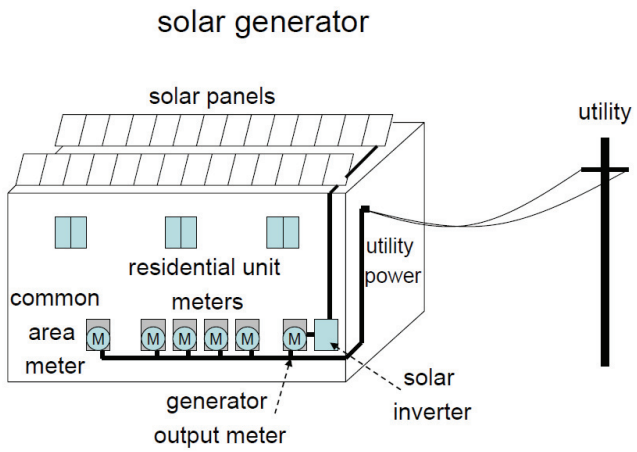
In December 1981, following adoption of D.93586, most utilities closed their Master Meter/Submeter Tariffs to new installations. PUC Section 780.5 required individual utility metering in multi-unit residential buildings that received building permits after July 1, 1982. While this setup encourages tenants 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 Virtual Net Metering (VNM), which is a tariff that allows MASH participants to install a single solar PV generating system per service delivery point 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 offer is currently available 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



As MASH VNM projects begin their initial system design, it is important for the customer and the solar contractor to understand the requirements of the VNM tariff for each utility prior to the installation. MASH Program Administrators work closely with the contractors and/or the customers to ensure compliance with the tariff.

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 Rulemaking (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 formally adopted by the CPUC in D.08-10-036. For information on MASH Program expenditures to date, see Table 2.3.

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**

From program inception through June 30, 2010, total MASH program expenditures are $2,571,699. The table below illustrates the detailed expenditures by Program Administrator.

Table 2.3: MASH Program Expenditures by Program Administrator

MASH Program Expenditure Data Oct 16, 2008[9] to June 30, 2010				
Expenditure Type	**CCSE**	**PG&E**	**SCE**	**Total**
Administrative	$190,975	$292,995	$290,441	$774,411
Marketing	$24,254	$25,652	$19,255	$69,161
Measurement & Valuation	$0	$0	$0	$0
Incentive	$0	$349,726	$1,378,401	$1,728,127
Total	**$215,229**	**$668,373**	**$1,688,097**	**$2,571,699**

3. Program Milestones

The MASH PAs have made significant progress since the creation of the program. This section of the report presents program achievements and milestones through June 30, 2010.

3.1. Program Implementation to June 30, 2010

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 June 30, 2010, are identified below. The most recent milestone achievements are listed first while completed deliverables that were reported in the January 2010 MASH Semi-Annual report is noted

[9] Date of Decision 08-10-036

at the end of this section.

- *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.

  - With Track 1 funding fully subscribed across all PA territories, continued efforts to reach out to the affordable housing community is made to inform them of Track 2 availability. Effort to further identify eligible population across the state has been minimized due to the availability of incentive funding and the vast network that has been established throughout the affordable housing community by the PAs as well as synergies built in with the general market CSI outreach and marketing programs.

- *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, 303 applications have been reserved and, assuming they meet their installation deadline as listed in their respective reservation confirmation letters, approximately 303 applications should be installed by the deadline. Currently, 9 applications have been successfully interconnected across all PA territories.

Completed Milestones (reported in the January MASH Semi-Annual report)

- *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, and the advice letter 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 3422E-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.

4. Legislative/Regulatory Update

- AB 920: Expands the current net-metering programs for wind and solar, to allow the net-metered customers to sell any excess electricity they produce over the course of a year to their electric utility.

- On March 5, 2010. SCE filed Advice Letter 2447-E proposing to revise and amend the MASH-VNM schedule to provide that eligible customer-generators may elect compensation for net surplus electricity generated during a 12-month period. The Advice Letter was approved by the Energy Division on June 11, 2010.

- On March 24, 2010, PG&E filed Advice Letter 3638-E proposing to revise rate schedule NEMVNMA, Virtual Net Energy Metering for Multifamily Affordable Housing (MASH/NSHP) with Solar Generator(s), to provide an alternative metering option. The Advice Letter was approved by the Energy Division on May 5, 2010.

- On May 14, 2010, SCE filed Advice Letter 2472-E requesting for an increase in the Track 2 award limit per cycle and it was approved by the Energy Division on June 22, 2010.

5. 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 6.

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

6. Program Progress

As shown in Table 4, there are a total of 303 MASH Track 1 applications with reserved incentives of over $65 million and an estimated capacity of 19.1 MW as of June 30, 2010. An additional 16 applications are under review, representing approximately 2.1 MW of capacity. Of the 303 reserved projects, thirty-three are master-metered and 268 are individually metered.

In addition, as shown in Table 4 the MASH Program has three completed Track 1 projects paid in PG&E territory and six projects paid in SCE territory, with projects in San Diego nearing completion. At this time, more than $1.7 million of incentives have been paid to MASH Track 1 projects.

MASH Track 2 continues to attract customers since the program began accepting applications on July 2009. As shown in Table 5, incentive totaling $7.7 million have been awarded to 12 projects to date.

6.1. MASH Track 1 Fully Subscribed

The MASH program began accepting applications for Track 1 incentives in February 2009. As of the end of June 2010, all three Program Administrator budgets were fully subscribed for Track 1 incentives. PG&E received sufficient applications to exhaust its Track 1 budget in October 2009, SCE in January 2010 and CCSE in June 2010. As shown in Table 4, there are 76 applications with a combined capacity of 4.9 MW and requested incentive dollars of $16.4 million that have been waitlisted across the state since Track 1 incentives have been fully subscribed. As Track 1 funds become available (as a result of application drop-outs, decreases in reserved system sizes, or if more funding is added to the Track 1 budget), waitlisted applications are moved into the “active” status category and reviewed by the respective Program Administrator. . Active status as defined in this report is those applications that are either under review, reserved or completed.

Table 4: Summary Data: MASH Track 1 Applications by Status

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Summary Data (Track 1)	CCSE	PG&E	SCE	Total
UNDER REVIEW APPLICATIONS				
Application (Number)	0	3	13	**16**
Capacity (MW)	0	0.207	1.877	**2.084**
Incentives	$0	$747,140	$7,106,831	**$7,853,971**
RESERVED APPLICATIONS				
Application (Number)	29	163	111	**303**
Capacity (MW)	2.042	9.353	7.752	**19.147**
Incentives	$7,759,938	$31,809,865	$26,170,800	**$65,740,603**
COMPLETED APPLICATIONS				
Application (Number)	0	3	6	**9**
Capacity (MW)	0	0.102	0.371	**0.473**
Incentives	$0	$349,726	$1,378,401	**$1,728,127**
WAITLIST APPLICATIONS				
Application (Number)	0	54	22	**76**
Capacity (MW)	0	3.957	0.940	**4.897**
Incentives	$0	$13,043,347	$3, 306,055	**$16,349,402**
OTHER DETAILS				
Average Project Costs ($/Watt) Reserved	$8.34	$8.33	$7.78	**$8.15**
Total Master-Metered (Reserved)	13	5	15	**33**
Total Individually Metered (Reserved)	16	156	96	**268**

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW.

6.2. MASH Track 2

The MASH Program began accepting Track 2 applications in July 2009 that met the Track 2 criteria. As shown in Table 5, a total of $7.7 million have been awarded to 12 projects across all PA territories. In the initial application cycle, two applications were awarded, one in CCSE and other in PG&E territory. In the subsequent cycle, the MASH PAs offered workshops in March 2010 to affordable housing developers and stakeholders to familiarize them with the program's expectations. The workshops and continued outreach efforts resulted in incentive awards to six applications in PG&E territory and four in SCE territory. In same previous cycle, SCE received a large volume of Track 2 applications that met the program's standards and therefore SCE was granted authority to increase its Track 2 incentive budget to fund additional projects above its per cycle Track 2 allocation.

Table 5: Summary Data: MASH Track 2 Applications by Status

Summary Data (Track 2)				
	CCSE	**PG&E**	**SCE**	**Total**
AWARDED APPLICATIONS				
Application (Number)	1	7	4	**12**
Capacity (MW)	0.062	0.513	0.699	**1.274**
Incentives ($ Million)	$412,000	$2,598,023	$4,733,376	**$7,743,399**
Incentive Budget Remaining	$1,648,000	$6,141,977	$4,466,624	**$12,256,601**

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW.

6.3. MASH Track 1 Activity

The charts and tables in this section illustrate detailed MASH Track 1 activity based on several data points such as application status, statewide and PA top 10 rankings relative to total number of active applications, system capacity and incentive dollars. Active status is defined as applications that are either under review, reserved or completed.

Table 6: Detailed Data: MASH Track 1A (Common Area) Applications by Status

	CCSE	PG&E	SCE	Total
UNDER REVIEW				
Capacity (MW)	0	0.101	0.593	**0.694**
Incentives	$0	$325,195	$2,147,011	**$2,472,206**
RESERVED				
Capacity (MW)	0.494	5.299	5.811	**11.604**
Incentives	$1,663,126	$16,617,911	$18,616,237	**$36,897,274**
COMPLETED				
Capacity (MW)	0	0.050	0.100	**0.150**
Incentives	$0	$168,655	$324,081	**$492,736**
WAITLISTED				
Capacity (MW)	0	2.599	0.543	**3.142**
Incentives	$0	$8,168,312	$1,765,223	**$9,933,535**

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW

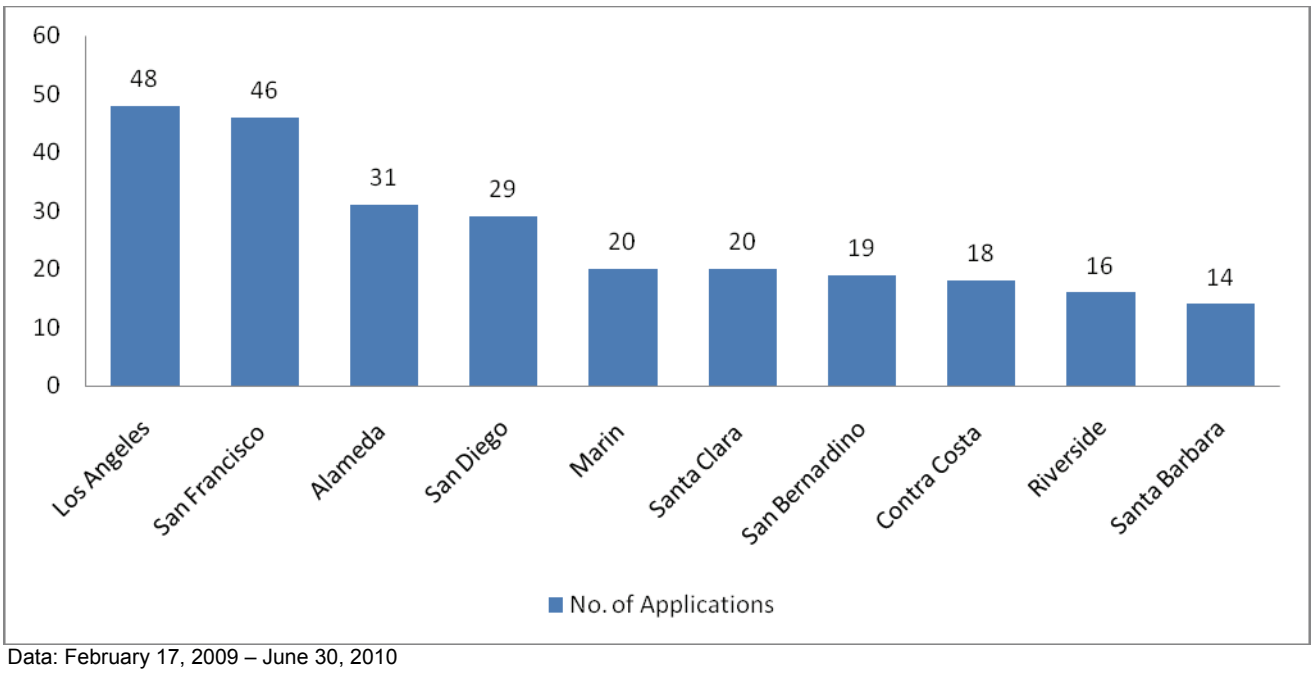
Table 7: Detailed Data: MASH Track 1B (Tenant) Applications by Status

	CCSE	PG&E	SCE	Total
UNDER REVIEW				
Capacity (MW)	0	0.106	1.284	**1.390**
Incentives	$0	$421,604	$4,959,820	**$5,381,424**
RESERVED				
Capacity (MW)	1.548	4.049	1.941	**7.538**
Incentives	$6,096,812	$15,191,954	$7,554,563	**$28,843,329**
COMPLETED				
Capacity (MW)	0	0.050	0.271	**0.321**
Total Incentives	$0	$181,071	$1,054,320	**$1,235,391**
WAITLISTED				
Capacity (MW)	0	1.356	0.397	**1.753**
Incentives	$0	$5,163,704	$1,540,832	**$6,704,536**

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW

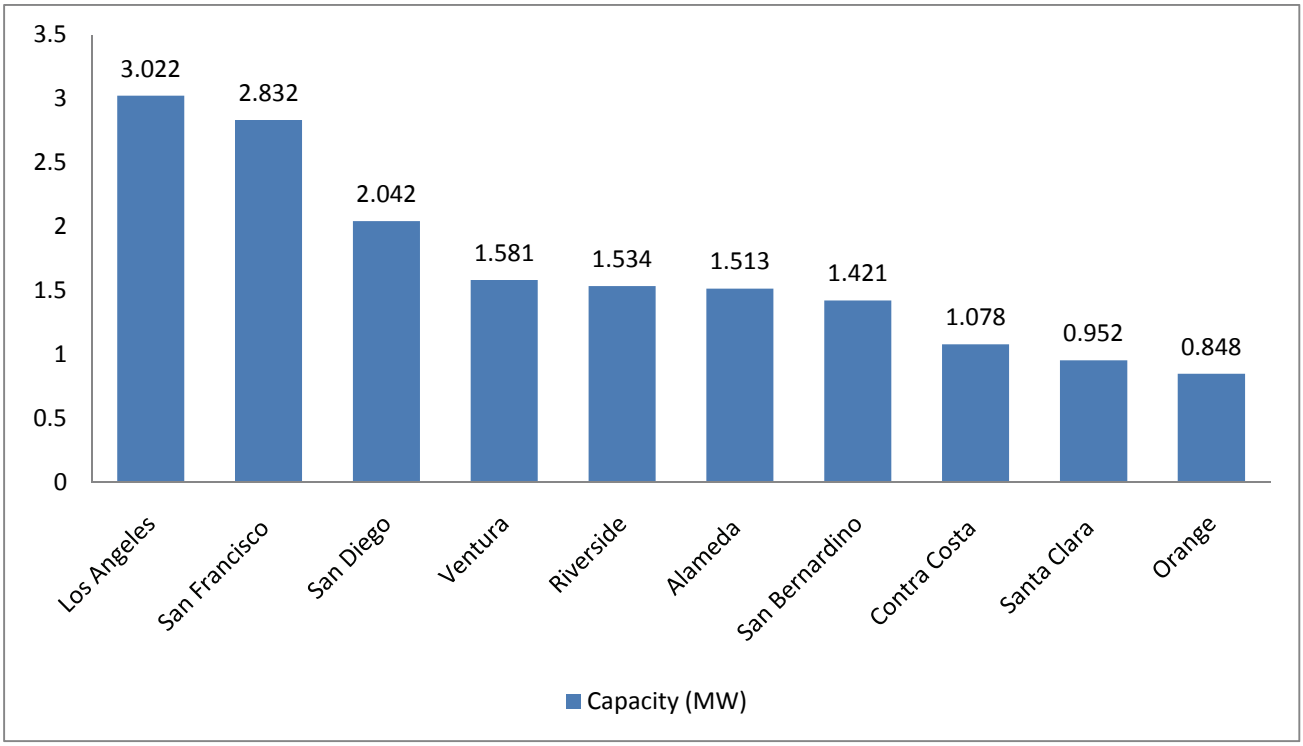
The following charts, Chart 1, 2 and 3 illustrate the Top 10 ranking counties statewide based on the volume of active Track 1 applications, system capacity and incentive dollars. Active status is defined as applications that are either under review, reserved or completed.

Chart 1: Top 10 Counties (by Applications)



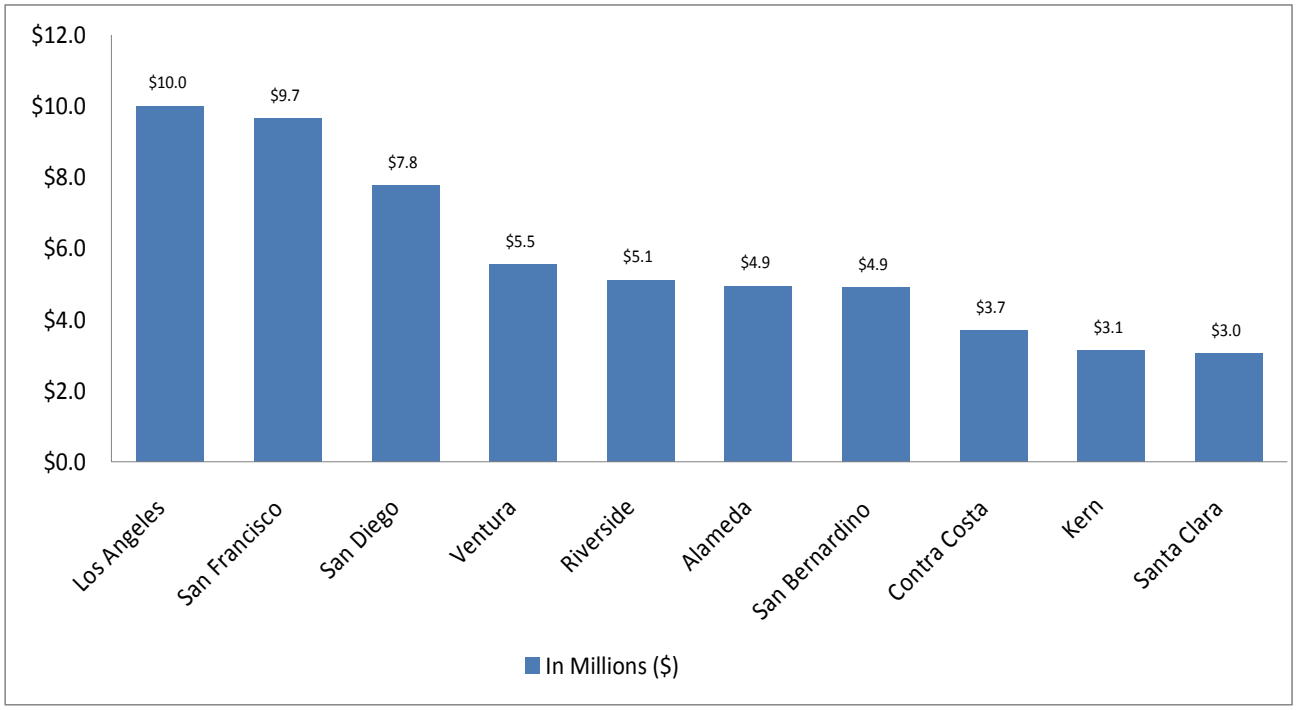
Data: February 17, 2009 – June 30, 2010

Chart 2: Top 10 Counties by Capacity



Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW.

Chart 3: Top 10 Counties by Incentive Dollars



Data: February 17, 2009 – June 30, 2010

Tables 8 to 13 below provide a detailed breakdown of active Track 1 applications for each Program Administrator territory by Top 10 Counties and Cities. Active applications are defined as Track 1 applications that are either under review, reserved or completed.

Table 8: MASH Track 1 Applications by County

CCSE		PG&E		SCE	
County	**# of Apps**	**County**	**# of Apps**	**County**	**# of Apps**
San Diego	29	San Francisco	46	Los Angeles	48
		Alameda	31	San Bernardino	19
		Marin	20	Riverside	16
		Santa Clara	20	Santa Barbara	14
		Contra Costa	18	Orange	11
		Fresno	7	Ventura	10
		Santa Barbara	5	Tulare	8
		San Joaquin	3	Kern	4
		Other/Unspecified	16		

Data: February 17, 2009 – June 30, 2010

Table 9: MASH Track 1 Applications by County (Capacity)

CCSE		PG&E		SCE	
County	**Capacity (MW)**	**County**	**Capacity (MW)**	**County**	**Capacity (MW)**
San Diego	2.042	San Francisco	2.832	Los Angeles	3.022
		Alameda	1.513	Ventura	1.581
		Contra Costa	1.078	Riverside	1.534
		Santa Clara	0.952	San Bernardino	1.421
		Santa Barbara	0.645	Orange	0.848
		Fresno	0.554	Kern	0.827
		Marin	0.430	Santa Barbara	0.556
		Monterey	0.416	Tulare	0.210
		San Mateo	0.330		
		San Joaquin	0.241		
		Other	0.672		

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW.

Table 10: MASH Track 1 Applications by County ($)

CCSE		PG&E		SCE	
County	Incentive ($)	County	Incentive ($)	County	Incentive($)
San Diego	$7,759,938	San Francisco	$9,651,012	Los Angeles	$10,001,227
		Alameda	$4,945,562	Ventura	$5,542,920
		Contra Costa	$3,685,681	Riverside	$5,113,950
		Santa Clara	$3,049,087	San Bernardino	$4,905,169
		Santa Barbara	$2,507,248	Kern	$3,138,872
		Fresno	$1,910,762	Orange	$2,895,352
		Marin	$1,493,597	Santa Barbara	$2,139,989
		Monterey	$1,396,296	Tulare	$665,757
		San Mateo	$1,056,680		
		San Joaquin	$823,505		
		Other	$2,368,869		

Data: February 17, 2009 – June 30, 2010

Table 11: MASH Track 1 Applications by City

CCSE		PG&E		SCE	
City	# of Apps	City	# of Apps	City	# of Apps
Chula Vista	3	San Francisco	46	Goleta	10
El Cajon	1	San Jose	16	Lancaster	7
Escondido	13	Novato	8	San Bernardino	6
Imperial Beach	2	Oakland	8	Compton	4
San Diego	8	Richmond	7	Oxnard	4
Santee	1	Berkeley	6	Palm Springs	4
Vista	1	San Rafael	6	Palmdale	4
		Hayward	4	Santa Barbara	4
		Fremont	3	Apple Valley	3
		Fresno	3	Inglewood	3
		Morgan Hill	3	Pomona	3
		Other	59	Rosamond	3
				Signal Hill	3
				Victorville	3
				West Covina	3
				Other	66

Data: February 17, 2009 – June 30, 2010

Table 12: MASH Track 1 Applications by City (Capacity)

CCSE		PG&E		SCE	
City	Capacity(MW)	City	Capacity(MW)	City	Capacity(MW)
Chula Vista	0.223	San Francisco	2.832	Oxnard	1.160
El Cajon	0.018	San Jose	0.850	Rosamond	0.802
Escondido	0.265	Santa Maria	0.511	Corona	0.566
Imperial Beach	0.030	Richmond	0.414	Lancaster	0.550
San Diego	1.248	Oakland	0.350	Goleta	0.482
Santee	0.093	Kingsburg	0.346	San Bernardino	0.419
Vista	0.161	Carmel	0.345	Apple Valley	0.394
		San Bruno	0.330	Pomona	0.349
		Hayward	0.292	Cathedral City	0.311
		Clayton	0.291	Palmdale	0.294
		Other	3.102	Other	4.672

Data: February 17, 2009 – June 30, 2010
Note: All system capacity measured in CEC-AC MW

Table 13: MASH Track 1 Applications by City ($)

CCSE		PG&E		SCE	
City	Incentive($)	City	Incentive($)	City	Incentive($)
San Diego	$4,756,168	San Francisco	$9,651,012	Oxnard	$4,121,971
Escondido	$1,022,020	San Jose	$2,723,393	Rosamond	$3,054,814
Chula Vista	$867,737	Santa Maria	$1,984,246	Lancaster	$1,980,621
Vista	$639,292	Richmond	$1,416,491	Goleta	$1,868,941
Santee	$302,085	Kingsburg	$1,245,363	Corona	$1,795,385
Imperial Beach	$113,029	Carmel	$1,165,157	Apple Valley	$1,543,821
El Cajon	$59,607	Oakland	$1,107,025	San Bernardino	$1,350,898
		San Bruno	$1,056,680	Cathedral City	$1,126,577
		Clayton	$1,043,758	Pomona	$1,103,156
		Hayward	$1,011,995	Palmdale	$945,308
		Other	$10,483,179	Other	$15,511,744

Data: February 17, 2009 – June 30, 2010

7. 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 complete subscription of Track 1 funds in all three Program Administrator territories.

- The fully subscribed Track 1 incentive program and the extensive Track 1 application waitlist demonstrate the high market demand for Track 1 at current incentive amounts. The PA's would support a proposal to reallocate unreserved funds from the MASH Track 2 incentive program or other funding sources into the Track 1 incentive program to enable waitlisted applications to move forward with their PV installation, thus increase the adoption of PV by the multifamily affordable housing community.

- In addition to reallocating funds to the Track 1 incentive program, the PA's support a review of potentially reducing the Track 1 incentive rates to enable the program to fund more PV installation projects in the affordable housing community under the MASH program.