APPENDIX A

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California Solar Initiative
Multifamily Affordable Solar Housing Program

The Multifamily Affordable Solar Housing (MASH) Program offers rebates for solar installations on existing multifamily affordable housing that meet the definition of low-income residential housing established in Pub. Util. Code § 2852.[1] The program will pay incentives towards solar energy systems on qualifying properties in the service areas of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company, where solar energy systems meet the definition established in Public Resources Code § 25781(e) as "a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one [kilowatt] of electricity, and not more than five [megawatts], alternating current rated peak electricity, and that meets or exceeds the eligibility criteria established pursuant to § 25782."

The goals of the MASH program are:

- 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; and
- Increase awareness and appreciation of the benefits of solar among affordable housing occupants and developers.

Energy Division may recommend program adjustments to the assigned Commissioner or Administrative Law Judge (ALJ) of this or any successor proceeding. The Assigned Commissioner and/or ALJ will determine if suggested program changes require modification of a Commission order, and if so, the change would be considered by the full Commission, following notice to parties and an opportunity to comment.

[1] All statutory references are to the Public Utilities Code, unless otherwise noted.

Incentive Structure

To qualify for incentives under this program, a property must meet the definition of low-income residential housing in § 2852 and have an occupancy permit for at least two years prior to applying for incentives.

Applicants – namely affordable housing building owners and/or operators – may apply for incentives under either Track 1 or Track 2.

Track 1

Track 1 provides fixed, up front, capacity-based incentives for qualifying solar energy systems, using the Expected Performance Based Buydown (EPBB) methodology adopted in Decision 06-08-028. The EPBB methodology estimates solar system performance based on system orientation and design. Incentives under Track 1 vary depending on whether the system offsets common area usage of the property or individual tenant usage. The incentives are as follows:

Adopted Track 1 Incentive Rates

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

A property may receive both Track 1A and 1B incentives for the same project if the project will offset both common area and tenant load. Track 1A and Track 1B incentives will be paid based on how the system provides electricity. For example, if a 100 kilowatt (kW) solar installation offsets both common area and tenant load, and 60% of the electricity output of the system is dedicated to common area load and 40% of the electricity output is dedicated to tenant load, the applicant will receive Track 1A incentives for 60 kW, and Track 1B incentives for 40 kW. The Program Administrators shall pay incentives only after verification that system installation is complete and the solar energy system is operable.

The Commission will periodically evaluate incentive levels and may adjust them as needed based on solar costs or other relevant market factors. The assigned ALJ in Rulemaking 08-03-008 or any successor proceeding may reduce MASH incentive levels by up to 10% per year, following notice and an opportunity for parties to comment. Increases to incentives, or reductions larger than 10%, will be handled by Commission order.

Track 2

Track 2 allows applicants to compete with other applicants for higher incentives if they can demonstrate the installation will provide a quantifiable "direct tenant benefit," which is defined as any operating cost savings from solar, including energy efficiency investments or upgrades, shared with tenants of affordable housing through a recurring payment or financial credit.

The Program Administrators shall develop a statewide application and review process for Track 2 applications. Track 2 applications will be accepted through a competitive process, with applications reviewed every 6 months by each Program Administrator for projects in its service area. Applications will be evaluated based on direct tenant benefits, cost-effective use of program funds, outreach and training. Program Administrators may award no more than 20% of their Track 2 budgets during each six month application cycle, although they may file an advice letter to request deviations from this limit. The Program Administrators shall pay incentives only after verification that system installation is complete and the solar energy system is operable.

Budget

The MASH budget is $108.34 million and is funded by PG&E, SCE and SDG&E according to the following percentages:

Adopted MASH Budget

	PG&E	SCE	CCSE	Total
Budget %	43.7%	46%	10.3%	
Track 1A and 1B	32,923,230	34,656,032	7,759,938	75,339,200
Track 2 (20%)	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

We allocate 20% of program funds for Track 2 incentives, but the ALJ may increase this allocation by ruling, following notice and an opportunity for parties to comment, with the restriction that total Track 2 incentives cannot exceed $30 million. Any increase to Track 2 incentive funds will decrease funding available for Track 1 incentives. Program Administrators shall ensure that incentive awards under Track 1A or Track 1B do not consume more than 80% of the Track 1 budget.

The administrative budget is 12% of program funds. Program Administrators shall spend 2% on evaluation (which includes inspection and verification of system installation), but may split the remaining 10% between general administration and marketing and outreach at their discretion.

The Program Administrators shall submit to Energy Division semi-annual reports of administrative expenditures incurred for the MASH program. The report should provide detail of administrative expenditures by category (i.e., marketing and outreach, evaluation, and other administration), with separate accounting from the general market CSI program. The report should also describe VNM implementation expenses. The Program Administrators should submit this report as part of their semi-annual administrative expense report under the general market CSI program. SDG&E shall submit its own administrative expense report describing VNM implementation expenses.

The program will operate until December 31, 2015, or until budgeted funds are exhausted, whichever occurs sooner. Any money unspent on January 1, 2016, shall be used for "cost-effective energy efficiency measures in low-income residential housing" as required by § 2852(c)(3).

Administration

The MASH program shall be administered by the current CSI Program Administrators, namely PG&E, SCE, and the California Center for Sustainable Energy (CCSE). The Program Administrators shall coordinate with the Program Manager for the Low Income Single Family solar incentive program to ensure consistency in marketing and outreach and other activities, where applicable.

The Program Administrators shall conduct marketing, outreach, and education services for the MASH program in cooperation or under contract with entities with experience in affordable housing. The Program Administrators should work with community stakeholders to develop training strategies for reaching disadvantaged communities in order to incorporate green job creation into the MASH program. Each Program Administrator shall augment its current CSI marketing plan filings, submitted to Energy Division every six months, to include MASH marketing and outreach budgets and plans. The MASH marketing plan should contain a description of the proposed budget and plans for marketing and outreach services and green job creation strategies, including the entities the Program Administrator expects to contract with and for what services.

Energy Efficiency Requirements

Applicants must meet the energy audit, information, and disclosure requirements required for residential applicants under the general market CSI program. These requirements are contained in the CEC's "Guidelines for California's Solar Electric Incentive Programs Pursuant to SB 1."

Applicants for MASH incentives shall provide information concerning Low Income Energy Efficiency (LIEE) programs to their tenants to encourage their participation in these programs, and shall allow eligible and willing tenants to participate in LIEE to the extent feasible.

Virtual Net Metering

PG&E, SCE, and SDG&E shall file tariffs to implement Virtual Net Metering (VNM) for MASH participants. VNM will allow the electricity produced by a single solar energy system on an affordable housing property to be credited to the benefit of multiple tenants of the building as well as building common areas, without requiring the system to be physically interconnected to each tenant's meter. Once the Commission approves VNM tariffs for the utilities, MASH participants may take part in this tariff offering.

The utilities may recover their reasonable costs for implementation of VNM from the administrative budget for the general market CSI program. Energy Division shall monitor expense reports on VNM and may request the Assigned Commissioner or ALJ to initiate further proceedings to examine, and potentially disallow, any disputed expenditures.

Program Evaluation

The MASH program should reach the following milestones:

1. 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.
2. By the end of 2012, 50 affordable housing buildings should install solar energy systems through the program.
3. 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 Program Administrators shall submit joint semi-annual reports to the Director of the Energy Division on progress of the MASH program. The semi-annual reports should include the following items, but Energy Division may modify this list as it deems appropriate:

- Number of applications received
- Number of applications accepted
- Incentives paid under Tracks 1A, 1B and 2
- Size of installations and expected annual output
- Total system cost in $/kilowatt before subsidy
- Progress of installations
- Geographic areas served
- Incentive dollars paid by each utility
- Installer used (if applicable)
- Administrative and marketing expenditures

The Program Administrators shall add all projects that apply for Track 1 incentives to the public CSI database, but they shall separately monitor and track data regarding Track 2 projects.

The Program Administrators shall submit to an annual audit of program expenditures, due one year from the date that MASH applications are first available. The purpose of the audit is to ensure program funds are paid to legitimate and verified installations of solar energy systems on qualifying multifamily affordable housing and that administrative funds, including funds to implement VNM, are spent in a reasonable and appropriate manner.

Every two years, Energy Division shall select an independent evaluator through a Request for Proposal (RFP) process to review both the Program Administrators and the MASH program. The evaluation should include, but is not limited to, the following factors:

- Number of multifamily buildings served
- Number of low income households served
- Cost of program per multifamily building (both incentive costs and total costs including Program Administration)
- Overall cost of program and cost of program components (i.e., administration, marketing, and incentives)
- Participation levels within Track 1A and 1B and Track 2 to assess whether incentive levels and budget allocations are appropriate
- Average system costs and incentives paid under Track 2
- The average amount energy bill is reduced per residence/tenant (both in dollars and kilowatt hours)
- Other, non-solar energy saving measures building owners/tenants have implemented along with their solar installation
- Customer satisfaction
- Turnover of low income tenants within participating multifamily buildings
- Location of buildings served

- Location of eligible buildings not served
- Geographic coverage across the state
- The effectiveness of tenant education programs on solar and energy efficiency
- The effectiveness of marketing and outreach efforts
- The effectiveness of energy efficiency measures as related to PV systems
- System performance and maintenance adequacy

The program evaluation will rely upon Commission adopted evaluation protocols as adopted for utility energy efficiency programs. In particular, the evaluation should draw upon:

- Impact Evaluation protocols
- Process Evaluation protocols

(END OF APPENDIX A)

APPENDIX B

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Virtual Net Metering Tariff Requirements

Each utility's Virtual Net Metering (VNM) tariff must comply with Pub. Util. Code § 2827 and at a minimum:

- Allow for the allocation of net energy metering benefits from a single solar energy system to all meters on an individually metered multifamily affordable housing property, without adversely impacting building tenants.
- Allow the building owner/manager to determine the percentage of solar energy credits allocated to common area meters versus individual tenant meters, and this allocation shall remain fixed for at least five years.[1]
- The annual solar energy credits allocated to common area and to each of the tenant meters may not exceed the associated estimated load (in kilowatt hours) for the coming year.
- The percentage of solar energy credits (in kilowatt hours) allocated to individual tenant meters should be credited across all individual meters based on the relative size of the tenant's unit. Credits (in dollars) should be applied at the otherwise applicable rate for each meter.
- The building owner/manager shall be responsible for, and shall bear all costs associated with, installing a generator output meter capable of recording solar energy system output in 15-minute increments, if required, to insure appropriate customer credits.
- Excess credits should be carried forward monthly according to standard net energy metering rules, as set forth in § 2827.
- The VNM tariff may not apply any additional charges or administration fees on tenants who benefit from the VNM tariff.

(END OF APPENDIX B)

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[1] For example, the owner could decide to split the solar energy credits between tenant and common areas in a 30/70 proportion, or 50/50.