

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program
and Other Distributed Generation Issues.

Rulemaking 12-11-005
(Filed November 8, 2012)

**REPLY COMMENTS OF GRID ALTERNATIVES REGARDING THE STAFF PROPOSAL
DATED JULY 2, 2014 FOR ASSEMBLY BILL 217 IMPLEMENTATION**

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Table of Contents

I. INTRODUCTION..... 2

II. RESPONSE TO COMMENTS ON STAFF RECOMMENDATIONS

A.) Program Funding (Budget allocation between SASH and MASH)..... 3

B.) Incentive levels in SASH/MASH..... 6

C.) MW goals between SASH and MASH..... 8

III. RESPONSE TO COMMENTS ON STAFF QUESTIONS

A.) Job training component (Q1) 8

B.) Competitive bidding for SASH administrator services (Q7)..... 9

C.) Third-party ownership (TPO) considerations in SASH (Q9)..... 9

IV. CONCLUSION 10

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I. INTRODUCTION

On July 2, 2014, the California Public Utilities Commission (CPUC or Commission) issued an *Administrative Law Judge's Ruling (1) Incorporating Staff Proposal into the Record (2) Requesting Comments from Parties and (3) Setting Comment Dates* (ALJ Ruling). GRID Alternatives provided opening comments regarding the *Staff Proposal for the Implementation of Assembly Bill 217* ("Staff Proposal") on July 22, 2014 and is pleased to offer its reply comments herein addressing specific issues posed by other parties and commenters to the proceeding.

GRID Alternatives has served as the statewide Program Administrator for the SASH program since its inception. The overarching goal of both the SASH and MASH programs is to make solar more accessible to underserved markets. The SASH program has not only met its goals for installations and incentives – exceeding the timeframes that were set – but has also provided additional and important benefits that the CA Legislature recognized and incorporated into AB 217. These benefits include SASH's focus on job training and energy efficiency that are now legislatively mandated for the continuation of the programs under AB 217 funding.

As the sponsor of AB 217, GRID Alternatives recognized that – despite reduced solar equipment pricing in recent years and the maturation of innovative leasing/Power Purchase Agreement (PPA) financing models, low-income communities will remain on the sidelines of the clean energy economy without continued price support. The ambitious goal of AB 217 is modeled after a 50/50 split of doing the same amount of solar as the existing SASH and MASH program but with half the budget. In its simplest form, everything stays the same, just the incentives are split in half. Halved incentives will still enable projects to work in both programs, MW goals to be attained, and ratepayer benefit to be maximized by capitalizing on existing program efficiencies, developed

public-private-nonprofit partnerships, and mature financing options such as third-party ownership models (“TPO”) for SASH.

II. RESPONSE TO COMMENTS ON STAFF RECOMMENDATIONS

A.) Program Funding (Budget allocation between SASH and MASH)

Staff proposes, and GRID Alternatives and MASH program administrator the Center for Sustainable Energy (CSE) agree, that the \$108M budget should be split evenly between the two programs. Two commenters, the MASH Coalition and Everyday Energy, suggest the MASH program should receive a significantly higher allocation of the AB 217 funds. The two other MASH program administrators, Pacific Gas & Electric (PG&E) and Southern California Edison (SCE), recommend that MASH receive slightly more funding than MASH to meet MW installation goals. GRID Alternatives offers the following comments in reply to the MASH Coalition, Everyday Energy, and PG&E/SCE.

1) Reply Comments to MASH Coalition

One commenter, the MASH Coalition, argues that MASH should receive more incentive funding than SASH because it is the more “cost-effective” of the two low-income solar programs. However, all of the assumptions made by the MASH Coalition to support its argument are based on either a misinterpretation of AB 217’s intent, incomplete factual information, or information taken out of context. The intent of AB 217 is not solely to achieve a MW target, but to reach equally important goals of creating statewide job training opportunities, implementation of energy efficiency measures, community engagement though solar in disadvantaged neighborhoods, and access to the benefits of solar by low-income families. As such, the success of AB 217’s implementation should be measured by its contributions toward achieving all of these aims, not simply by the quantity of MW installed on qualified affordable housing.

GRID specifically replies to the following comments made by MASH Coalition:

- *MASH Coalition states that SASH is not fully utilized (75% subscribed).* The SASH program was thoughtfully and intentionally designed to run through 2016, has exceeded the expectation, and will be fully reserved before that target end date. There remains overwhelming demand on the single-family side. Even given continued funding under AB 217, there remains a larger pool of eligible participants than the SASH program can serve.

- *MASH Coalition states that SASH produced no outside leverage.* At its inception, SASH was designed not to leverage the largest federal incentive available to other solar projects, the Investment Tax Credit (ITC), and associated MACRS depreciation benefits. Incentive levels were deliberately set to exclude TPO models by the PUC and with stakeholder input. The ITC and MACRS depreciation that many of the MASH projects have leveraged can represent 30% or more of all project costs. By opening SASH up to TPO and reducing the incentive to \$3/W, as recommended in the Staff Proposal, SASH will also by necessity transition to a position of having approximately a 1-to-1 leverage.
- *MASH Coalition states that MASH produced about 3x as many kW as SASH.* This statement is no surprise, considering that the average SASH system is 3kW – a small sized residential system reflecting the modest sized homes of low-income participants. The primary goal of the SASH and MASH programs is to make solar accessible to underserved populations by incentivizing the growth of the low-income market segment. Installed capacity goals, though important, are not the driving factor of low-income solar policy, contrary to the MASH Coalition’s interpretation of these policies. Staff recognize this in the proposal:

“As was established in prior Commission decisions on CSI issues, these programs [SASH/MASH] are primarily undertaken to ensure access to solar power for low income Californians, not to maximize the number of megawatts that could, in theory, be built.”

The purpose of the low-income solar programs is to create a well-designed public policy that invests in targeted communities and has a positive multiplier benefit that goes beyond MW installed per unit of funding. Though there are evident cost benefits and economies of scale benefits from larger systems,¹ it is equally important to have development of all market segments. The PUC has supported this position in the general market and Staff recommends to continue support on the low-income program side².

- *The MASH Coalition states that the Staff proposal is flawed in its reasoning.* MASH Coalition claims that “the correct metric is PV installed per unit of funding – results.”³ However, the SASH program has many metrics of success that AB 217 was modeled after,

¹ California Solar Statistics, 7/30/2014 dataset; “Cost by System Size.”

² Staff Proposal, pg. 14.

³ Comments of the MASH Coalition Regarding AB 217 Implementation Staff Proposal, pg. 9.

including making solar accessible to single-family low-income households, incorporating job training and energy efficiency into every installation, fostering broad community engagement with solar in low-income communities, and providing important consumer education and training around solar PV. For instance, the SASH program has made, and will continue to make, significant and unique contributions toward developing a highly trained solar workforce in California, a metric supporting a sustainable and growing industry sought by the California Solar Initiative. Every SASH project has at a minimum 1-2 job trainees on site, and up to entire teams of 12 job trainees at some installations⁴, which is equivalent to a minimum 5,000-10,000 job training opportunities⁵. On the other hand, MASH would create only 500-1,000 job training opportunities at the currently proposed track requirements.⁶ If this metric is used to compare program efficacy to determine funding allocations, SASH should receive 10 to 1 of program funds. This example illustrates that California's low-income solar programs are much more complex and include numerous metrics – not just a single metric as identified by the MASH Coalition. Given that AB 217 includes requirements for job training and energy efficiency, it is clear that the Legislature intended for comprehensive metrics to be used for program implementation.

- *The MASH Coalition references to Navigant's Low-Income Solar Program Evaluation.* Navigant's Cost-Benefit Report ("C-B Report") published in 2011⁷ evaluated the SASH Program for cost-effectiveness, utilizing California's Standard Practice Manual (SPM). The SPM, however, has limitations to evaluating low-income programs. According to SPM section 4.2 (6),

⁴ All projects installed in SASH's Sub-contractor Partnership Program are required to have at least one paid job trainee on site. All projects installed using the volunteer-based installation model have at least 2 Team Leaders (GRID Alternatives' job training program for experienced volunteers) on site in addition to other volunteers/job trainees, and ~20% of projects have entire installation crews comprised of students and participants in local job training programs and schools.

⁵ Assuming similar number of SASH installations under AB 217 as current SASH program (~5,000 projects).

⁶ Assuming future number of MASH applications under AB 217 match the existing 395 installed and pending projects (California Solar Statistics, 7/30/2014 dataset). If every future project meets Track 1B requirement for more than one job trainee, with 2 job trainees, the program would only create 790 job training opportunities. At proposed incentive structure, likely that not all projects would have more than the one job trainee required for track 1A.

⁷ Navigant Consulting, "California Solar Initiative-Low Income Solar Program Evaluation: Program Impacts and Cost-Benefit Report Program Years 2009-2010," prepared for the Commission, August 24, 2011.

“Non-energy benefits for low income program: The low income programs are social programs which have a separate list of benefits included in what is known as the ‘low income public purpose test’. This test and the specific benefits associated with this test are outside the scope of this manual.”⁸

The published C-B Report was conducted when the SASH Program had only completed approximately 50 of its 4,000 installations and the Report omitted considerations of broad program benefits outside of the limited standard practice manual tests. The PUC recognizes these limitations and is working with Navigant to include other measures of cost-effectiveness and Non-Energy Benefits in the present program evaluation cycle.

The SASH program is groundbreaking, unique, and one-of-its-kind. It provides access to solar for low-income homeowners in PUC Code 2852-compliant affordable housing, provides job training opportunities at every installation, and creates broad community engagement with solar in low-income communities, and the following:

- The SASH program helps develop a sustainable solar industry through its workforce development and job training component. 100% of SASH projects have a workforce development component, including both volunteer opportunities and paid employment positions through the Sub-contractor Partnership Program.
- The SASH program provides very unique consumer education on solar and energy efficiency technologies through volunteerism on solar installations. Over 13,700 individuals have completed the volunteer orientation and the majority have gone on to participate in a SASH solar installation.
- The SASH program allows cross-marketing and outreach for the California Alternative Rate for Energy (CARE) and Energy Savings Assistance (ESAP) programs.
- The SASH program was designed so that 100% of the incentive dollars would go toward reducing the energy expense for low-income families throughout California.
- The SASH program reaches all corners of the investor-owned utility (IOU) service territories and not just the urban areas where multi-family housing is typically located.

GRID supports the Staff Proposal and recommends that the Commission embrace the comprehensive goals outlined in AB 217, not the narrow and misguided recommendations of the MASH Coalition.

2) Reply Comments to Everyday Energy

⁸ California Standard Practice Manual, Economic Analysis of Demand-Side Programs and Projects, p 21. http://www.cpuc.ca.gov/NR/rdonlyres/004ABF9D-027C-4BE1-9AE1-CE56ADF8DADC/0/CPUC_STANDARD_PRACTICE_MANUAL.pdf.

Everyday Energy proposes a split of \$31.25M for SASH and \$70.5M for MASH.⁹ However, Everyday Energy does not explain or justify how adjusting the allocation advances the Commission's goals. The SASH program, just as the MASH program, provides direct tenant benefits, reduces local stress on the grid in low income neighborhoods, and reduces overall peak demand. With no rationale for deviating from Staff's proposal, the Commission should dismiss Everyday Energy's recommendation to increase funding allocation to MASH.

3) Reply Comments to PG&E and SCE

Both PG&E and SCE advise a split of incentives of \$58M to MASH and \$50M to SASH, while also supporting the Staff's MW split proposal (37.5MW MASH; 12.5MW SASH). The increased amount to MASH is to account for the potential that all applications are Track 1B at the higher incentive amount (\$1.40/W). GRID Alternatives believes that the Commission could adopt a cap on the number of MASH applications accepted at Track 1B, so that the incentive budget is not exhausted before capacity targets are reached. Similar to the precedent established in the first MASH Decision, track allocations can be reevaluated depending on program uptake and program administrators may set budget limits for each track in a given time period.¹⁰

GRID Alternatives agrees with comments submitted by CSE and the Staff recommendation for program funding – that an even distribution of the AB 217 budget between SASH and MASH should occur, and suggests that simple program design elements in MASH could alleviate the potential for Track 1B to be oversubscribed and the program to experience a budget shortfall.

B.) Incentive levels in SASH/MASH

i.) SASH

No party objected to Staff's proposed \$3/W flat incentive for SASH except Everyday Energy who proposes two-tiered SASH incentive levels based on solar asset ownership.¹¹ GRID Alternatives opposes a two-tiered approach because it pre-determines the amount of funding available to customer-owned and TPO solar installations. The SASH program has not allowed TPO models in the past, so it is difficult to predict the ratio of third-party owned to customer-owned solar in the extended program. Additionally, it would be arbitrary to place the incentives a \$2/W and \$3/W

⁹ Comments of Everyday Energy Regarding AB 217 Staff Proposal and Energy Division Questions, pg. 16.

¹⁰ Decision (D.)08-10-036 at pg. 13-15; 23.

¹¹ Comments of Everyday Energy Regarding AB 217 Staff Proposal and Energy Division Questions, pg. 16.

for TPO and customer-owned solar without a market-based rationale. As noted in the Staff Proposal, the \$3/W recommended for SASH by Staff already factors in the potential proceeds from TPO into the need for a \$3 across-the-board incentive,¹² and GRID Alternatives supports the Staff Proposal.

ii.) MASH

GRID Alternatives believes the Commission should consider capping the additional incentive available for a Track 1B projects (“Track 1B Adder”), at \$10,000 to account for the additional job training requirements and incurred costs on installers. To illustrate, a 150 kW MASH system for Track 1B would receive a \$75,000 additional incentive received compared to the same project in Track 1A, but the only additional expense requirement on the Track 1B projects is adding at least one additional job trainee.¹³ Awarding \$75,000 for a single additional job trainee does not align with the intent of AB 217 to create real job training opportunities. Capping the Track 1B Adder at \$10,000 per project would be sufficient to cover the cost to hire the additional trainees for one project.

In contrast, the SASH Sub-contractor Partnership Program requires one job trainee per project and often has 2 or more paid job trainees per project on its 1-4 kW systems, not 150kW systems. GRID Alternatives would like to express its concern that the MASH job training requirement is too low to advance AB 217’s workforce development goals and recommends the Commission increase the requirement and/or cap the Track 1B Adder. GRID agrees with the comments of CSE¹⁴ that the differential between the tracks could be broadened or enhanced to further incentivize real energy efficiency and job training opportunities.

Both the MASH Coalition and Everyday Energy support MASH incentives that are at the same rate or higher than the existing MASH program¹⁵ which hugely ignores the legislative premise of AB 217 to capitalize on existing program efficiencies, market trends, and public-private-nonprofit partnerships to install the same solar capacity but with half of the incentive budget. Recommending a MASH incentive at or near the same level as a SASH incentive also does not account for the

¹² Staff Proposal, pg. 29.

¹³ Staff Proposal pg. 22-23. The Track 1B’s required energy audit is proposed to be paid for by MASH, not the contractor. Also the energy efficiency audit, though itself required, is non-binding and no measures actually have to be implemented. Therefore the main difference, aside from the pre-determined % of affordable units, is the addition of one single job trainee.

¹⁴ Comments of the Center for Sustainable Energy (CSE) regarding the Administrative Law Judge’s Ruling incorporating Staff Proposal into the record, pg. 10.

¹⁵ Comments of the MASH Coalition Regarding AB 217 Implementation Staff Proposal, 7/22/2014, pg. 11; Comments of Everyday Energy Regarding AB 217 Staff Proposal and Energy Division Questions, pg. 16.

higher costs of single-family installations on a \$/W basis noted in the Staff proposal nor the additional barriers single-family homeowners face in accessing solar:

“In terms of access to solar power, low income single-family homeowners face daunting financial barriers, especially in a solar marketplace where an emphasis on credit scores and creditworthiness are an important (if often overlooked) prerequisite to many residential solar financing options. Staff believe that the relatively easier access that affordable housing developers have to a wider variety of financing options and to solar power in general—at least under the current tariff structure—should be taken into account.”¹⁶

Keeping the MASH incentives at or above their present level is nonsensical in the context of AB 217 and today’s solar market. As such, these proposed incentive levels should not be considered a reasonable option by the Commission.

C.) MW goals between SASH and MASH

GRID Alternatives supports the Staff Proposal’s split for MW goals among programs (12.5MW for SASH; 37.5MW for MASH) and would like clarify that the SASH program’s goal should be increased from 12.5MW to 15MW. This would leave 35MW and 50% of the budget for the MASH program to meet the 50MW goal. GRID Alternatives also would like to note that the 50MW legislatively mandated in AB 217 is a floor, not a ceiling, and believes that the programs should be designed to effect the highest volume of installations with the greatest impact in the low-income communities the programs are designed to serve.

Some stakeholders including Everyday Energy and the MASH Coalition have implied concern about being able to meet the MASH MW goal at the proposed incentive levels. While GRID Alternatives supports a 50/50 split of program budgets, if it is determined by the Commission to be problematic for MASH to meet its MW goals, GRID Alternatives believes that the SASH program could be expanded. As described above, the SASH Program can install at least 15MW at the \$3/W incentive level and the 50/50 budget split. If the Commission believes that the MASH program could not be successful with a reduced incentive and wishes to explore alternative proposals, GRID Alternatives would be open to exploring the expansion of the SASH program either in this proceeding or a future proceeding.

III. RESPONSE TO COMMENTS ON STAFF QUESTIONS (Appendix B)

A.) Job training component (Q1)

¹⁶ Staff Proposal, pg. 14.

Many commenters (MASH Coalition, SCE, CalSEIA) point to the need to keep job training requirements simple, transparent, and flexible so as not to add burdensome costs and administration to projects. GRID Alternatives generally agrees, and would like to add further clarification that the job training requirement in SASH for sub-contractors has not been a deterrent for companies to be able to participate and meet pricing targets. By keeping the requirement flexible, and by assisting contractors by providing resources and contacts for eligible job training programs, all sub-contractors have been able to meet or exceed the requirement of having job trainees on site. GRID Alternatives reiterates its position in the opening comments that both the paid SPP workdays and SASH projects installed using GRID Alternatives' volunteer and job trainee-based installation model meet AB 217's objective to "provide job training and employment opportunities in the solar energy and energy efficiency sectors of the economy"¹⁷ and should satisfy the legislative mandate.

B.) Competitive bidding for SASH administrator services (Q7)

All parties who commented opposed an RFP for SASH program administration services with the exception of PG&E who supported an RFP in SASH only if the Commission decided to have an RFP for MASH. As noted in Staff Proposal, there are potential efficiencies to be gained by keeping a single statewide program administrator and SASH has already institutionalized these efficiencies. The SASH program already went through the RFP competitive bidding process in 2008 whereas MASH did not. Therefore, tying the SASH RFP this time to the Commission's decision to pursue a single program administrator in MASH does not logically follow. The Commission should dismiss PG&E's argument to do a SASH RFP simply because one may be required for MASH. All other respondents (Greenlining, CalSEIA, and CSE) support GRID Alternatives continuing its successful, established role in administering the SASH program and point out various metrics demonstrating GRID Alternative's success to date in the role.

C.) Third-party ownership (TPO) considerations in SASH (Q9)

Parties agree, given the constraints of AB 217 incentive funding and the maturation of TPO models, that some allowance of TPO in SASH should occur. PG&E, SEIA, and SCE point out concerns around consumer protection, consumer education, and homeowner savings and benefit with TPO models in SASH – concerns shared by GRID Alternatives that have shaped the development of its TPO model. GRID Alternatives' TPO model (delineated in its opening comments), was designed

¹⁷ The text of AB 217 is available at:
http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB217.

with a “families-first” perspective that maximizes homeowner benefit and consumer protection and addresses many of the issues that parties such as PG&E and SCE raise related to consumer protection and homeowner benefit. GRID Alternatives best understands the needs of low-income homeowners and should be tasked with leading the development effort for a SASH TPO model with the PUC. GRID Alternatives’ experience has proven that cash-owned systems are unlikely to occur at a lower incentive level as homeowners do not have available assets to pay for gap financing. PG&E’s suggestion of a low-interest loan is interesting, but outside of the scope of this proceeding. Over the past several years, GRID Alternatives has continuously left open the option for a loan product, though today’s difficult lending environment, the inability for low-income families to qualify for low-interest loans, or their inability to assume more debt has not allowed for serious consideration of the loan option. SEIA supports the PUC working with GRID Alternatives to develop an appropriate TPO model in SASH that will assure consumer protection and maximum savings to homeowners.¹⁸

IV. CONCLUSION

GRID Alternatives appreciates the opportunity to provide these reply comments to parties’ opening comments regarding the Staff Proposal to implement Assembly Bill 217 and hopes that they are helpful to the Commission. GRID Alternatives looks forward to working collaboratively with the Commission and stakeholders throughout the AB 217 implementation process.

Respectfully submitted,



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¹⁸ Comments on the Solar Industries Association on Staff Proposal for the Implementation of AB 217, pg. 2.