

## **Attachment A**

# **Revised Disadvantaged Communities- Single-Family Solar Homes (DAC-SASH) Program Implementation Plan (Clean)**

**June 18, 2019**

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Appendix A. Program Budget by Function and Year

## **I. Introduction**

The Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) program is overseen by the California Public Utilities Commission (CPUC, or Commission) and provides incentives for photovoltaic (PV) solar systems to qualifying low-income homeowners located in disadvantaged communities within the service territories of Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric (SDG&E), (collectively, the California investor-owned electric utilities or IOUs). DAC-SASH is largely designed based on the existing Single-family Affordable Solar Homes (SASH) program, which has successfully operated in California's IOUs since 2008. Like SASH, the DAC-SASH program is deliberately structured to reduce and eliminate barriers for low-income homeowners to access the benefits of on-site solar, ensure maximization of benefits to participants, include iron-clad consumer protection measures, and create broad community co-benefits through the program's workforce development initiatives and community focus. The purpose of this DAC-SASH Program Implementation Plan (PIP) is to provide the Commission and stakeholders with a comprehensive roadmap of program design and implementation strategies the DAC-SASH Program Administrator, GRID Alternatives, will be undertaking to successfully implement and launch the program throughout the three IOU service territories.

Legislative and Regulatory Background: Assembly Bill (AB) 327 (Perea), Stats. 2013, ch. 611 directed the California Public Utilities Commission (Commission) to develop a successor to then-existing Net Energy Metering (NEM) tariffs, and also required the Commission to develop specific alternatives designed to increase adoption and growth of renewable generation in disadvantaged communities (DACs). The Commission issued Decision (D.) 18-06-027 (Decision) on June 21, 2018, which adopted three new programs intended to promote the installation of renewable generation among residential customers in disadvantaged communities (DACs): the DAC-Single-family Solar Homes (DAC-SASH) program, the DAC-Green Tariff program, and the Community Solar Green Tariff program.

The Decision describes the intent with the creation of the DAC-SASH program:<sup>1</sup>

“The DAC – Single-family Solar Homes (DAC-SASH) program, modeled after the Single-family Affordable Solar Homes (SASH) program, will provide assistance in the form of up-front financial incentives towards the installation of solar generating systems on the homes of low-income homeowners. The DAC-SASH program will be available to low-income customers who are resident-owners of single-family homes in DACs. Unlike traditional SASH, eligibility for DAC-SASH is not limited to designated affordable housing units, and so will be available to a broader group of homeowners than the current SASH program. The incentives provided through DAC-SASH will assist low-income customers in overcoming barriers to the installation of solar energy, such as a lack of up-front capital or credit needed to finance solar installation.”

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<sup>1</sup> D. 18-06-027: Alternate Decision Adopting Alternatives to Promote Solar Distributed Generation in Disadvantaged Communities. 21 June 2018, p. 2-3

The Commission's experience with a non-utility Program Administrator (PA) successfully managing the SASH program over the last decade informed its decision to have the DAC-SASH program managed by a single statewide PA, selected through a competitive bidding process.<sup>2</sup> The DAC-SASH PA Request for Proposals (RFP) was released on October 19, 2018 and the PA role subsequently awarded to GRID Alternatives (GRID, or PA) on January 4, 2019.

GRID is a 501c(3) non-profit organization that, since 2004, has functioned as a direct service organization working exclusively with lower income families by providing access to renewable energy technologies in communities where market solutions typically fall short. GRID has administered the existing SASH program since 2008, and will apply its experience and leverage the program model developed for SASH to ensure the broad success and impact of the DAC-SASH program.

In D. 18-06-027, the Commission directed the designated DAC-SASH Program Administrator to submit a Tier 3 Advice Letter containing a program implementation proposal that will include, at minimum<sup>3</sup>:

- a. Application procedures;
- b. Requirements for documentation of building and project eligibility;
- c. A program budget that includes line items for incentives and administrative activities, including but not limited to marketing, education, and outreach;
- d. Specific job training requirements consistent with those discussed in Appendix A;
- e. Specific energy efficiency requirements consistent with those adopted in Appendix A; and
- f. Data collection and reporting requirements, including report formats.

In addition to these directives, GRID offers additional program details and plans around the DAC-SASH program's consumer protection measures, installation quality control, and outreach methodology in this PIP in order to provide a comprehensive, high-level overview of the DAC-SASH program.

GRID appreciates the stakeholder feedback received at the April 8, 2019 DAC-SASH program introductory webinar and subsequent responses to the guided questions published to the Rulemaking (R.) 14-07-002 service list. GRID published stakeholder input and GRID's responses to the R. 14-07-002 service list on May 10, 2019. These responses will additionally be made available on GRID's DAC-SASH website: <https://gridalternatives.org/what-we-do/program-administration/dac-sash>.

GRID hopes the information contained in this PIP is useful for the Commission, Energy Division, and program stakeholders.

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<sup>2</sup> D. 18-06-027, p. 33

<sup>3</sup> D. 18-06-027, p. 101

### **A. Program Goals and Model**

The overall goal of DAC-SASH is to provide opportunities for low-income homeowners within disadvantaged communities to overcome barriers to accessing on-site, solar PV systems to decrease electricity usage and bills without increasing monthly household expenses<sup>4</sup>. Low-income families face myriad barriers to accessing solar, including financial; lack of marketing and outreach; educational and linguistic; distrust of outside entities and governments; and structural barriers like housing types and roof condition. GRID's experience has demonstrated that dedicated, carefully designed and executed low-income solar programs can overcome these barriers and provide not just access but also meaningful benefits. GRID has designed the DAC-SASH program to build off the success of the existing SASH program in broadly addressing the primary barriers to solar access for this market segment.

GRID's program model represents a comprehensive, holistic approach for a very hard-to-reach population. GRID's model for DAC-SASH, based on SASH, is an integrated, turn-key model in which GRID takes responsibility for the entire project process from client outreach through contracting and system installation. The approach incorporates energy education, referrals to complementary services, and workforce development opportunities into the program. This proven model ensures efficient program delivery while maximizing benefits to participating families and communities and maintaining iron-clad consumer protections for a vulnerable and hard-to-reach population.

GRID's DAC-SASH program model will focus on the following key objectives:

- *Maximize financial savings for low-income households who need it the most.*
- *Enhance long-term economic self-sufficiency in low-income communities by providing community members with access to "green jobs" training and solar employment opportunities.*
- *Ensure consumer protection and long-term participant benefit.*
- *Provide education on energy efficiency and existing programs that can provide further benefits to families.*
- *Increase data collection and public reporting.*
- *Ensure robust participation and access across IOU territories.*

While the Decision does not include guidance on megawatt (MW) targets for the DAC-SASH program, GRID has established a goal of installing 34.6 MW CEC-AC of solar generating capacity on eligible properties over the lifetime of the program, based on the total incentive budget for the program.<sup>5</sup> GRID will publicly report on progress to this target through the DAC-SASH semiannual reporting, and on the California DG Stats website (<https://www.californiadgstats.ca.gov/>). Further detail on reporting can be found in Section VIII, Reporting, Accounting, and Evaluation.

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<sup>4</sup> D. 18-06-027, Appendix A-1

<sup>5</sup> See Appendix A for the proposed DAC-SASH incentive budget by year.

## B. Overall Program Funding and IOU Allocations

The Commission has authorized \$10M per year to be collected for DAC-SASH, beginning on January 1, 2019, and continuing through December 31, 2030. The total \$120M program will be funded by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) according to these percentages:

Utility	PG&E	SCE	SDG&E	Total
Percentage	43.7%	46.0%	10.3%	100.0%

The Decision describes that the IOUs will first collect DAC-SASH program funding through available greenhouse gas (GHG) allowance revenues. In the event that there are insufficient funds available from the GHG allowance revenue, then the DAC-SASH program will be funded through customer rates via public purpose funds.<sup>6</sup>

The Decision also delineates that program funding will be allocated to primary program functions per the percentages below:<sup>7</sup>

Administration	10%
Marketing and Outreach	4%
Evaluation	1%
Incentives	85%

GRID provides additional details on the DAC-SASH program budget and budget activities in Section X, Program Budget Overview.

## C. Consumer Protection Framing

GRID Alternatives strongly believes iron-clad consumer protection measures must be implemented in all facets of the DAC-SASH program operation in order to ensure a net positive experience for program participants and community members. GRID's proven, turnkey model and values-based approach will ensure maximum possible benefit for the participants and communities it was designed to serve. In addition to acting as a consumer advocate to ensure participants receive the maximum household savings and other benefits from DAC-SASH, GRID will provide a fully supported experience, from assisting with application processing and ensuring that participants understand contracts, to monitoring installation quality and providing ongoing post-installation service.

GRID will provide thorough education on the DAC-SASH program, including a review of all program requirements, to prospective clients in order to allow them to make an informed

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<sup>6</sup> D. 18-06-027, p. 31

<sup>7</sup> D. 18-06-027, Appendix A-6

decision about whether this program is right for them. GRID will provide comprehensive energy efficiency education to all clients, and referrals to related energy programs. GRID will conduct an on-site assessment of every qualified property and provide comprehensive information to the homeowners about their solar site suitability, review solar designs, and discuss savings estimates. All DAC-SASH clients will receive direct assistance and guidance through the contract review process, and all contractual obligations will be laid out clearly, in a way that is accessible to individuals with disabilities and non-native English speakers. GRID will ensure that all customers will receive current and future consumer protection guidance and documents required by the Commission and by the Contractor State Licensing Board (CSLB), and when possible, GRID will exceed these requirements to ensure the customer fully understands their agreement to authorize the solar installation. GRID will provide a 10-year warranty on all equipment and will commit to assisting clients with any service call during this time period. In order to further protect DAC-SASH clients, GRID will carefully vet any partners that assist with program delivery, including Community-Based Organizations (CBOs) and any solar subcontractors.

The DAC-SASH program description in D.18-06-027 includes specific “Customer Protection” standards for a Third-party Ownership (TPO) model that were developed in the implementation of Assembly Bill 217 (Bradford, 2013) for the SASH program<sup>8</sup>; these TPO requirements are further detailed in Section III, Project Financing. As there is no explicit mention of consumer protection measures for non-TPO projects, to the extent possible, GRID will expand the SASH TPO consumer protection requirements to all systems installed under DAC-SASH, not just those related to a third-party ownership structure, ensuring that households who obtain a host-customer owned system will enjoy equivalent consumer protection measures. Key protections include full financial benefit of the system, no credit requirements, and no financial liability to GRID or any other party for the cost of the system. Host-customer owners will still be responsible for operations and maintenance costs after the 10-year warranty term; GRID will ensure all program participants are aware of any potential costs beyond the warranty period. Through its integrated program administrator and program implementer model, GRID will ensure all program elements are conducted with a goal of ensuring maximum benefit to program participants, and comprehensive consumer protection measures are integrated into all aspects of program administration.

## **II. Application Procedures and Eligibility Verification**

### **A. DAC-SASH Eligibility Requirements**

In order to qualify for the DAC-SASH program, homeowners must:

1. Be in the service territory of PG&E, SCE, or SDG&E;

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<sup>8</sup> Decision 15-01-027. Decision Extending the Multifamily Affordable Solar Homes and Single Family Affordable Solar Homes Programs Within the California Solar Initiative. 29 January, 2015. p. 52-53



2. Own and occupy single-family homes in a designated disadvantaged community (DAC)<sup>9</sup>; and,
3. Meet the income-eligibility requirements of either the California Alternate Rate for Energy (CARE) or Family Electric Rate Assistance (FERA) programs.<sup>10</sup>

## **B. Application Process and Documentation**

GRID has established processes for qualifying homeowners for SASH and will modify these processes and documentation requirements as needed for DAC-SASH. GRID will customize its standard pre-screening form and program application for the DAC-SASH program.

All prospective DAC-SASH participants will be required to utilize GRID's intake system and application process. GRID will post information about the application process on its website and in program marketing materials, and provide options for both online and phone applications for centralized intake of prospective clients. Information will be provided in multiple languages and will be accessible to individuals with disabilities, as further detailed in Section VII, Marketing, Education, and Outreach.

Specifically, GRID will collect the following documentation, at minimum, from DAC-SASH applicants:

- Proof of income - Federal tax forms (1040) or, if exempt from filing taxes, proof of taxable income for all household members above 18 years old. Federal income tax returns and/or proof of taxable income will be collected from individuals who claim the property as their primary residence, including all family members residing on the property.
- Proof of homeownership - Property taxes, mortgage statement, homeowner insurance, deeds or other homeownership documentation that shows the name of the applicant and the address of the property.
- Recent utility bill - The utility bill is used to show electric and/or distribution service from an IOU and owner-occupancy, and has to be in the applicant's name.
- Electric usage - A full year of the most recent electric usage is needed to design the solar system. If historical usage is not available, GRID will use an estimation tool. As further described in Section VI, B. System Sizing Parameters, potential electric usage savings from energy efficiency measures will be considered for all system sizing in DAC-SASH.

Specific timelines for applications and incentive reservations established in the SASH program and the California Solar Initiative (CSI) program will apply to DAC-SASH:

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<sup>9</sup> A DAC, for the purposes of the DAC-SASH program, is defined as a community that is identified, by using CalEnviroScreen 3.0 (or the latest revision to CalEnviroScreen), as among the top 25 percent of census tracts statewide or 22 census tracts in the highest 5 percent of CalEnviroScreen's Pollution Burden that do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data. A map of these census tracts is here: <http://oehha.maps.arcgis.com/apps/View/index.html?appid=c3e4e4e1d115468390cf61d9db83efc4%20>

<sup>10</sup> CARE and FERA income requirements are subject to annual changes. GRID will publish the most up-to-date income limits for CARE and FERA on its website and in all program marketing materials.



- Client applications in DAC-SASH will remain valid for 12 months from the date of confirmed application completion.<sup>11</sup> If an Applicant does not confirm an incentive reservation within the 12 months of having a valid application, and would like to participate in the program, then they must re-submit an application with updated application documentation to the Program Administrator.
- Incentive funds will be reserved for 18 months. Incentive funds are reserved when the DAC-SASH Program Administrator receives all information and documentation required for the Reservation, the project is approved, and the Applicant signs an installation contract and an Incentive Reservation and Payment Assignment Authorization Form. All reservations must be made prior to December 31, 2030.
- Installations should be completed within 18 months of the confirmed Reservation date. The Applicant may request at one-time, 6 month extension if the installation is not completed in the 18 months. All installations must be completed by September 30, 2031,<sup>12</sup> to be eligible to receive the DAC-SASH Program incentive payment.

Projects are eligible for incentives that meet all program requirements, were completed (interconnected) after January 1, 2019, and have been interconnected for less than 12 months.

The process of verifying the client application requires GRID to obtain some personally-identifiable information (PII), including applicant names, addresses, household income, and utility bill information. GRID will ensure PII is redacted whenever possible; such as, by requiring applicants to remove social security numbers from Federal tax documents before submitting them. GRID will utilize its existing, established information storage systems, data retention policies, and database developed for SASH to ensure all DAC-SASH client information remains confidential and protected.

### **C. Program Handbook**

The DAC-SASH Program Handbook will contain information comparable to the current SASH Program Handbook that GRID created and has maintained for the duration of the SASH program. The DAC-SASH Program Handbook will function as a public guidebook for program participation and include detailed information on all program requirements, application process, incentive structure and incentive payment processes. The DAC-SASH Program Handbook will be filed along with this PIP as a Tier 3 Advice Letter. Any future updates to the DAC-SASH program requirements or processes will be made via a Tier 2 Advice Letter process, and the DAC-SASH Program Handbook refiled so that it always contains the most up-to-date information for the benefit of program participants and stakeholders. The DAC-SASH Program Handbook will be available to the public on GRID's website, as well as the CPUC website.

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<sup>11</sup> Eligibility for DAC-SASH incentives will be established at the time of application completion, not at the time the incentive reservation is completed within 12 months of application completion.

<sup>12</sup> Installations must be complete by September 30, 2031 to ensure incentive payments are finalized by January 1, 2032.

### **III. Project Financing**

#### **A. Gap Financing and GRID Alternatives Fundraising**

Under the \$3/W incentive for DAC-SASH, all projects will currently require additional funding. GRID will apply its expertise and experience in fundraising for gap financing to leverage outside project funding and financing for the DAC-SASH program. Some of the gap financing for DAC-SASH projects is expected to come from Federal Investment Tax Credit (ITC) via GRID's Third-party Ownership (TPO) model, in the years in which the ITC is expected to be available (see Section III. B, Third-Party Ownership Model).

As the Program Administrator of DAC-SASH, GRID will pursue a broad range of funding sources to supplement incentives, including philanthropy, foundation support, in-kind donations, local government support, and other state programs such that solar installations are no-cost or very low cost to participating low-income families. GRID has philanthropic partnerships with a variety of equipment manufacturers that donate substantial quantities of new, fully warranted solar panels, inverters, and other system components to GRID to help low-income families access solar, and GRID will allocate a portion of these donations to DAC-SASH projects. GRID also works closely with local government partners to identify additional sources of funding for solar projects in their communities.

In addition to these known sources of funding, GRID will continue to innovate and explore other financing and funding opportunities that meet DAC-SASH project needs without creating financial liability for participating households.

#### **B. Third-Party Ownership Model**

GRID has developed a Third-party Ownership (TPO) model that is appropriate for low-income households and meets the minimum consumer protection standards adopted in D.15-01-027 for the SASH program, listed below, that are intended to ensure adequate customer protection and maximize customer benefit<sup>13</sup>:

1. Ensure SASH Customers receive at least 50% of the savings, as compared to standard utility rates, from the solar generating equipment;
2. Reduce or eliminate barriers for customers with poor credit (low FICO score) to qualify and participate;
3. Address concerns that homeowners may have about moving or selling their home during the TPO contract term;
4. Cover maintenance, operations, inverter replacement, and monitoring;
5. Prohibit liens on homes;
6. Minimize the risk to the low-income customers that the solar system would be removed for delinquent payments;

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<sup>13</sup> D. 15-01-027, p. 52-53

7. Ensure that all costs are apparent and upfront and that there is no risk that the TPO deal would result in an additional financial burden to the family;
8. Standardize financial terms for low-income customers where possible;
9. Protect the customer against terms that could change after contract signing;
10. Require that TPO agreements note the potential for additional costs associated with the contract, if applicable;
11. Require the TPO provider to clearly explain that rate changes will affect the economics of a power purchase agreement; and
12. Require that TPO agreement provisions spell out what happens in the event that the solar financing company defaults.

In this TPO model, the third-party partner owns the solar system and receives the Federal Solar ITC, which GRID, as a non-profit, cannot leverage. GRID installs the system and pre-pays the third party on behalf of the client for 20 years of power. When the installation is complete, GRID receives a financial credit from the third party, which is used to cover the remaining cost of the project. The client receives the full benefits of the system, including the entire value if the solar credits that the system produces. The client is not obligated financially to the third-party partner or to GRID, and receives monthly bill savings, insurance, maintenance, warranties, and monitoring of the solar system's energy production at no cost.

GRID has an existing, ongoing partnership with the national leader in this space, Sunrun Inc. (Sunrun) to serve as an approved third-party partner. The TPO model and third-party partner were fully vetted by the Commission, and approved for the SASH program in Resolution E-4719 (June 25, 2015) and Resolution E-4829 (March 3, 2017), and will be available for the DAC-SASH program. As such, GRID will not need to seek a new approval to continue working with Sunrun as a TPO partner for DAC-SASH. If GRID enters into an agreement with a new TPO provider, GRID will seek Commission approval through the submission of a Tier 3 Advice Letter, as stated in OP 3 of Resolution E-4719.<sup>14</sup> In the event of any substantive changes to the TPO partner's contracts, Resolution E-4829 requires GRID to submit a Tier 2 Advice Letter demonstrating that the TPO model remains in compliance with the minimum customer protection standards adopted in D.15-01-027.<sup>15</sup>

GRID recognizes that the current 30 percent ITC is expected to ramp down for residential PV projects to 26 percent in 2020, and 22 percent in 2021. GRID notes that recent Federal guidance may allow for the ITC to be utilized at a higher percentage rate if equipment is procured, or project costs are incurred, in an earlier year. This could potentially allow for the full 30 percent ITC to be applicable to DAC-SASH projects beyond the expected ramp-down year noted above.

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<sup>14</sup> Resolution E-4719 Pursuant to Decision 15-01-027, GRID Alternatives (GRID) requests approval of a Third Party Ownership (TPO) model for the Single Family Affordable Solar Homes (SASH) Program. 25 June, 2015. p 17

<sup>15</sup> Resolution E-4829. GRID Alternatives (GRID) requests approval of a second Third Party Ownership (TPO) model provider for the Single Family Affordable Solar Homes (SASH) Program. 2 March, 2017.

If and when the ITC is not available, GRID is confident in its ability to provide gap financing and funding from other sources toward DAC-SASH. Currently, 25 percent of GRID's SASH projects do not qualify for TPO financing, and GRID fills the funding gap from other sources, as discussed in Section III, A. Gap Financing and GRID Alternatives Fundraising. Prior to 2015, GRID operated the SASH program without the ITC and relied on sources such as general philanthropy, equipment donations, and local fundraising to fill project financing gaps.

### **C. Incentive Payment Procedures**

Under GRID's model for both TPO projects and host-customer owned systems, the participant typically assigns the incentive payment (rebate) to GRID, which GRID then packages with other funding sources to fully finance the project on the client's behalf. GRID will work closely with the IOUs in the DAC-SASH program to develop a process for incentive claim review and incentive payments, using an Incentive Reservation and Payment Assignment Authorization Form. As in the existing SASH program, all DAC-SASH rebate claims will be submitted directly by GRID to the respective IOU; participants will not need to submit a rebate claim or file additional rebate paperwork at the completion of their project. As Program Administrator, GRID will ensure that DAC-SASH Incentive payments do not exceed the actual equipment and installation costs of a given project.

GRID will execute agreements with each IOU related to the issuance of DAC-SASH incentive payments. Generally, the following types of information may be submitted to the IOU upon completion of a DAC-SASH project (i.e. once permission to operate has been issued by the electric utility) to demonstrate eligibility for a DAC-SASH incentive:

- Project Identifier (number from GRID's database)
- DAC-SASH Applicant Name and Project Address
- Date of Permission to Operate (PTO) issued by the electric utility
- Original Reservation Incentive Amount
- As-built (Installed) System Size (in kW, CEC-AC) and Incentive Amount
- System Cost and PV Equipment installed (Modules, Inverter(s))
- Modified Design Factor
- Incentive Reservation and Payment Assignment Authorization Form, signed by Applicant
- Other information as may be requested by IOU or included in incentive payment agreements with GRID.

GRID will ensure that incentives paid for DAC-SASH projects in a particular IOU's territory does not exceed the funding allocated for that IOU over the lifetime of the program, and that the IOUs are not obligated to pay incentives until funds are available.

## **IV. Installation**

### **A. GRID's Installation Model**

The majority of DAC-SASH systems will be installed using GRID's well-established nonprofit installation model. Under this "in-house" model, GRID's staff of experienced and licensed professional solar PV installers will train and lead local job trainees and community volunteers to

complete the installations. GRID's construction staff will design and engineer the systems, obtain the building permit, submit the utility interconnection paperwork, and manage the installation, overseeing job trainees, volunteers and homeowners to ensure that each solar PV system is built to industry standards. GRID Alternatives holds C-10 electrical contractor, and C-46 solar contractor licenses and all staff and volunteers are covered through our general liability and volunteer insurance. This approach maximizes efficiency of the installation, and also ensures that community volunteers and job trainees receive valuable hands-on experience that can provide career benefits in the clean energy economy.

**Process:** Following the initial outreach site visit and receipt of a completed DAC-SASH application, GRID will review the homeowner's eligibility and notify the homeowner they have been accepted to the program pending a construction site visit. GRID staff will conduct a construction site visit to comprehensively evaluate the roof and electrical system and take detailed measurements. GRID does not install on properties with less than ten years of roof-life remaining until a roof replacement is needed. Once the GRID construction staff has verified that a PV system can be installed on the home, the homeowner will officially be approved for the DAC-SASH program and will sign a non-financially-binding contract with GRID that will trigger the design and installation of a solar electric system. At that point, GRID outreach staff will work with the homeowner to coordinate the solar PV system installation and any other related home infrastructure improvements, such as roof replacement, roof reinforcement, electrical panel upgrades, or energy-efficiency measures. While these measures cannot be paid for with DAC-SASH funding, GRID will, to the best of its abilities, refer homeowners to state and local programs providing such services.

**Client Education:** Educating low-income homeowners, job trainees and the general community is integral to GRID's model. Prior to the installation, homeowners will receive a solar installation orientation, which reviews the basics of solar electricity and the importance of energy efficiency, with a focus on safety. This orientation requirement can be met if the homeowner attends one of GRID's volunteer trainings, or, if the homeowner is unable to attend the volunteer training, our outreach staff will conduct the orientation for the homeowner in their home. All volunteers and job trainees participating in installation work are also required to attend a solar installation orientation. This training represents a key component of GRID's risk mitigation strategy, ensuring that the client and all additional participants understand the system and know how to operate it safely.

### **B. Subcontractor Partnership Program**

GRID's Subcontractor Partnership Program (SPP) was launched statewide in 2010 under the SASH program and is a proven model for engaging local installers as subcontractors while providing paid work opportunities for job trainees. GRID will utilize this program for DAC-SASH, hiring high-quality, fully vetted installers to install a portion of the DAC-SASH program PV systems, based on a reduced-cost structure and modified scope of work to match the structure of GRID's model.

Under SPP, GRID provides the same homeowner screening, site visits, and education as for GRID-conducted installations, including a dedicated outreach coordinator to serve as an advocate and liaison. GRID will perform up-front due diligence with each new subcontractor prior to entering into contract with them. In addition to being licensed by the CSLB and holding a C-10 or C-46 license, SPP requires that installers:

- Have completed at least 20 installations under their current contractor's license,
- Provide professional and customer references that GRID verifies,
- Provide financials (balance sheet, statement of cash flow and credit verification) which GRID reviews to ensure strong financial positions,
- Pass two Quality Assurance inspections by a third-party inspector on projects selected at random from the 20 installations listed in their SPP application

Each subcontracted installation will be inspected and approved by the local building department, and the subcontractors will provide a 10-year labor warranty for each system, in addition to the manufacturer's warranty on all equipment. One hundred percent of each subcontractor's installations in DAC-SASH will be initially inspected for quality by a third-party inspector, and GRID may modify this percentage for consistently high-performing subcontractors.<sup>16</sup>

In addition, subcontractors will be required to hire at least one paid trainee onto each of their DAC-SASH projects as further detailed in Section V, A. Job Training Requirements. Through the SASH program, SPP has cultivated a network of installers to serve low-income families and communities that typically would be outside of their customer base, and fostered new connections between installers and California's job training programs through its workforce development requirement. For the DAC-SASH program, GRID will target installation companies located in DACs to participate as subcontractors in the program, further deepening community impact. To add to our existing partners, GRID plans to announce a statewide call for subcontractors for DAC-SASH as soon as the program is approved by the Commission.

### **C. Ongoing Monitoring, Oversight, and Quality Controls**

GRID will strive to make the DAC-SASH program implementation transparent, ensuring that there are accountability systems in place to ensure that program dollars are used appropriately to provide low-income homeowners with well-designed, well-installed, properly-warranted solar electric systems for low-income homeowners living in DAC-SASH program-compliant homes. GRID will replicate the system of checks put in place for SASH in the DAC-SASH program, supporting quality control and quality assurance for applications, installations, and customer experience.

Given that GRID both administers the program and installs most of the program's projects in DAC-SASH, it is important there are comprehensive systems in place to evaluate administrative performance, as well as installation quality. These systems can ensure GRID is a good steward of program administrative and incentive funds, and address any conflict of interest concerns due

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<sup>16</sup> GRID maintains a "Preferred Partners" list for consistently high-performing subcontractors. Subcontractors on this list will have an adjusted percentage of installs inspected for quality. Subcontractors may be taken off this list for any work that does not meet GRID's installation standards.



to GRID's dual role in administering the program and contracting and installing projects. The systems in place by GRID to ensure efficient and effective program administration are further described below.

### **1. On-site Project Inspections**

GRID will utilize the established third-party inspection process created for SASH to ensure DAC-SASH installations meet program requirements and industry-standard best practices. Under this process, an independent, third-party inspector conducts on-site field inspections and quality assurance inspections, as described below:

Field Inspections - Conducted post-installation by a third-party to ensure GRID-installed and SPP-installed systems are installed per program specifications and the incentive amount is accurate for the installed system size. Field inspections will be conducted for at least 1 in 12 projects (~8%), in line with the SASH Program.

The system inspection will include but may not be limited to the following information:

- System size and nameplates of equipment used;
- Design considerations: tilt, azimuth, standoff height, shading analysis;
- 85% modified Design Factor, minimum requirement;
- Address and location of system, verifying that it is located in a qualified DAC;
- Operability; on-site inverter production reading

If the independent inspector finds that an installed system does not comply with program guidelines or varies significantly from the data used to calculate the incentive levels, no incentive payment will be made for that system until the system is modified to meet program guidelines or the incentive amount is recalculated.

Quality Assurance (QA) Inspections - Conducted post-installation by a third-party inspection company for projects installed in the Subcontractor Partnership Program (SPP), and a sampling of projects installed using GRID's "in-house" model, to ensure installation quality meets GRID's standards, program requirements, and all industry-standard best practices. QA inspections feature a detailed review of the installation and system components, including the main service panel, conduit runs, racking, and more. The inspector provides photos of the system components and includes a written summary of the inspection, with any recommendations or items for immediate correction.

### **2. Performance Requirements**

Per D. 18-06-027, a DAC-SASH system must meet the minimum performance requirement established in the SASH program of an 85% modified Design Factor (DF) based on a modified Estimated Performance Based Buydown (EPBB) calculation.<sup>17</sup> If the Design Factor is less than 85%, the system does not qualify for program incentives. The DF will be verified at the system design stage to ensure it is greater than 85%, and will be verified post-installation as well as in the Field Inspections noted above.

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<sup>17</sup> D.18-06-027, Appendix A-6.



### **3. Warranties and Long-term Support for Participants**

GRID will provide a standard 10-year warranty for no-cost repair on equipment or labor for all DAC-SASH projects. In addition to this warranty, the solar panels and inverter(s) come with manufacturer warranties that range from 10 years to 25 years, depending on the manufacturer and component. For homeowner-owned solar systems, no other coverage is provided. For TPO solar systems, there is additional coverage provided by the TPO partner, including a five-year roof penetration warranty for leaks caused by the solar system, and a 20 year warranty for solar system components that includes free repairs. Additionally, TPO solar systems are insured by the TPO partner for any and all events (unless damage is caused by the homeowner). GRID Alternatives will make all DAC-SASH Applicants aware of any potential costs of system repair and maintenance beyond the warranty period.

### **4. Application Verification and Eligibility Controls**

GRID will utilize its established system for application verification to ensure Applicants submit complete applications with comprehensive documentation qualifying them for the program. All Applicants will be required to submit a standardized, CPUC-approved DAC-SASH Program Application along with complete documentation of program eligibility, which includes verification of: income for all household members, home ownership, owner-occupancy and electric service. GRID employs an internal review process by which a staff member who did not receive the application materials directly reviews the application and documentation collected by another staff member. This peer review process helps ensure accuracy and eliminates errors. Staff are trained on acceptable formats for documentation, as well as how to identify fraud or altered forms.

### **5. Transparency, Audits and Evaluation**

As part of the DAC-SASH program's biennial third-party independent evaluation, GRID will be evaluated both on its performance as a program administrator, and in ensuring all incentives are paid to qualified Applicants and projects that meet all program requirements. GRID will submit an annual audit of program expenditures to the CPUC and participate in any program audits requested by the Commission. GRID will also make its database available to the CPUC Energy Division and respond to any requests for information or data related to the program. Financial audits, program audits, and third-party evaluations will be made public, thereby supporting transparency and accountability in program operations.

### **6. Data Retention and Security**

All application data will be retained in the DAC-SASH program database during the term of the program. GRID agrees to maintain digital and/or hard copies of all project documents including, but not limited to, work orders, cost data, and completed program participant forms. GRID will keep and back-up documentation pertaining to the DAC-SASH program for five years after the program end date, or for another timeline as determined by the Commission.

## **V. Workforce Development Initiatives**

Workforce development is central to GRID's mission, and GRID will continue the successful integration of job training into our low-income solar program delivery model for SASH into the DAC-SASH program. The following subsections describe the job training requirements, data collection and reporting strategies, and additional job training resources GRID plans to incorporate into the DAC-SASH program.

### **A. Job Training Requirements**

In line with the directives in D.18-06-027,<sup>18</sup> all DAC-SASH projects will incorporate a job training requirement, and include at least one eligible job training participant. Job trainees in DAC-SASH may participate directly on the installation, and/or, they may work on project design, engineering, and/or project management and coordination. Similar to the existing SASH program job training requirements, the job training requirements for DAC-SASH are determined based on the installation model, as detailed below:

#### **1. Job Training Requirements for GRID's in-house installation model:**

Currently in the SASH program, projects installed using GRID's volunteer and job trainee-based "in-house" installation model are required to include a job training workday for either one SolarCorps, one Team Leader, or at least three students from a job training program.<sup>19</sup> These categories were established by the Commission in Decision 15-01-027 (January 29, 2015) implementing Assembly Bill 217 (Bradford, 2013), which extended the SASH and MASH programs from their scheduled sunsets in 2016 until 2021. Since this 2015 AB 217 Implementation Decision, GRID has further developed and integrated two other programs for dedicated job training on its in-house installations - Installation Basics Training (IBT) Program and Design & Construction Internships - that offer a similar level of job training for participants as the established categories and will therefore also meet the DAC-SASH requirement. A brief description of the job training categories for the in-house installation model is included below:

SolarCorps Fellow: SolarCorps opportunities at GRID Alternatives include fellowships in project management, system design, marketing and outreach, communications, job trainee and volunteer management, market development, construction, and fundraising. These are one-year paid fellowships that are based on the AmeriCorps program and are sometimes combined with additional funding from the Corporation for National and Community Service. A minimum of one (1) SolarCorps must participate on the installation to meet the job training workday requirement.

Team Leader: GRID Alternatives' Team Leader Program offers experienced volunteers more comprehensive, in-depth training to further develop their skills and increase employment opportunities in the growing solar jobs market. Team Leaders log a minimum of 40 hours on GRID Alternatives' installations, complete a suite of six certifications on technical skills, attend a leadership skills workshop, and complete two installations to sign-off on skills with a GRID

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<sup>18</sup> D.18-06-027, Appendix A-10.

<sup>19</sup> Single-Family Affordable Solar Homes (SASH) 2.0 Program Handbook, p. 6

installation supervisor. A minimum of one (1) Team Leader must participate on the installation to meet the job training workday requirement.

Job Training Student: Some of GRID Alternatives' in-house installations are reserved for job training groups of students from external job training programs. These are students from community colleges, vocational high schools, or community job training programs that generally have completed a PV-classroom component, but utilize GRID's installation as the hands-on, real-world application of the skills they are learning in a classroom. A minimum of three (3) job training students must participate on the installation to meet the job training workday requirement.

Installation Basics Training (IBT) Participant: GRID's Installation Basics Training (IBT) program awards trainees with certificates for industry-relevant skills learned and demonstrated in GRID's unique, hands-on training environment under the supervision of our professional solar installation staff. GRID currently offers 11 Skills Certificates that cover a variety of array and electrical skills, such as conduit bending and racking installations. To earn all 11 Skills Certificates, IBTs typically need to dedicate 130-300 hours in the field (8-20 complete installations). A minimum of three (3) IBT participants must participate on the installation to meet the job training workday requirement.

Design & Construction Intern: Design and construction internships allow job seekers the opportunity to explore a solar career in a real work environment while being coached through skill development. GRID design & construction interns spend at least 6 weeks and up to 4 months gaining solar installation training and experience on GRID's in-house installations. Depending on their focus, interns may support with site visits, system design, or direct installation. Internships include job search support, hard and soft skills development under the instruction and supervision of experienced GRID staff, and individualized goals depending on prior experience and personal objectives. A minimum of one (1) Design & Construction Intern must participate on the installation to meet the requirement for this category. A minimum of one (1) Design & Construction intern must participate on the installation to meet the job training workday requirement.

**Documenting compliance:** As in the SASH program, GRID will utilize its database to track compliance with the in-house installation model's job training requirements for DAC-SASH. Participants on installations who are identified as members of the above categories will count toward compliance for the requirement. GRID will include aggregated data about the total number of participants from these categories on DAC-SASH installations in the semi-annual program reports, as further described in Section VII, Reporting, Accounting, and Evaluation. No exceptions will be made to the job training requirement.

## **2. Job Training Requirements for the Subcontractor Partnership Program (SPP) installation model**

In the 2015 AB 217 Implementation Decision, the Commission formally adopted the SASH job training requirement for projects installed by subcontractors through SPP. Each subcontracted installation must include at least one paid workday opportunity for a job trainee from an eligible job training program.<sup>20</sup> GRID has utilized this requirement since it launched the SPP program in 2010, and this standard has since been utilized as the foundation for the MASH job training requirement under AB 217, as well as the forthcoming SOMAH program. GRID will use this program model for DAC-SASH SPP projects.

**Documenting Compliance:** As in the SASH program, an affidavit process will be implemented in DAC-SASH that requires the subcontractor and job trainee to verify that the workday opportunity occurred. The affidavit provides additional information about the type of work, and hours worked, that GRID will include in the aggregate, in the semi-annual program reports, as further described in Section VII, Reporting, Accounting, and Evaluation. No exceptions will be made to the job training requirement.

### **B. Tracking and Reporting of Job Training Outcomes**

GRID plans to include robust data collection and reporting on the workforce development impacts of the DAC-SASH program. As further described in Section VII, Reporting, Accounting, and Evaluation, GRID will include aggregated (non-personally identifiable information) data on the job training initiatives in the semi-annual program progress reports and also aims to include job training information on the CalDGStats webpage.

Specific details are included below:

**In-house installation model:** All participants on GRID's in-house installations submit an intake form providing additional information about the individual's goals and objectives in working in the solar industry. This intake form can be utilized by GRID staff to offer information about specific training opportunities and resources to trainees, and help ensure individuals are successful in reaching their goals. GRID will reach out to participating Job Training Programs to receive feedback on their experience having students participate in DAC-SASH installations, and in accessing other job training resources in the DAC-SASH program.

**Sub-contractor installation model:** GRID will build upon the job training affidavit used in the SASH and MASH programs to include additional information on wages paid, and using trainee addresses to determine local hiring success and impacts in DACs. Trainees submitting affidavits will be entered into a customer relationship management (CRM) tool for easy data management, and GRID may contact them to survey them on their training experience, share professional development resources, and collect data on long term job placement. GRID will

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<sup>20</sup> Decision 15-01-027, p. 21

also survey SPP Program installers on their long term hiring of program trainees, trainee recruitment experience, and trainee quality on a semi-annual basis.

Feedback from trainees, employers, and Job Training Programs will inform revisions to improve the effectiveness of the training and job training requirements.

### **C. Job Training Resources and Initiatives**

In order to facilitate the DAC-SASH job training requirements, and to support individuals participating as job trainees, GRID will develop the following additional resources and initiatives for the DAC-SASH program:

- *Resume Bank/Job Board*: GRID maintains an online Resume Bank/Job Board to promote economic development in disadvantaged communities through job training and local hiring initiatives. This platform will be expanded and adapted for DAC-SASH to match qualified trainees/job candidates with job opportunities. The Resume Bank/Job Board provides the additional benefit of gathering critical data around hiring. For example, GRID has found that frequent updates with individuals, Job training Programs, and contractors who use the resume bank lead to insights about the success rate of individuals seeking full-time employment.
- *Focus on impacts in DACs*: GRID will target subcontractors and Job Training Programs both located in DACs, and focused on serving residents of DACs, to participate in the DAC-SASH program.
- *Broad participation from Job Training Programs across the IOU territories*: GRID will work with its existing network of CA job training organizations to inform them about the DAC-SASH program opportunities, and also expand outreach to new job training programs as needed to ensure broad representation across the IOU territories in the DAC-SASH program.
- *Inclusion of individuals from marginalized backgrounds*: GRID strives to create opportunities for a broad and diverse set of individuals in its programming, and ensure a safe and inclusive environment on its job sites. In DAC-SASH, as in the current SASH program, GRID will partner with Job Training Programs serving individuals from marginalized backgrounds, including re-entry populations and at-risk young adults, to further the deep community impact and benefit the DAC-SASH program can make.

## **VI. Energy Efficiency Initiatives and Requirements**

### **A. Participant Energy Education**

GRID will provide energy efficiency education and training to all DAC-SASH participants, along with referrals to applicable state, local and utility energy efficiency programs to help them reduce overall energy usage and get the most out of their solar electric system. GRID will provide energy efficiency education during multiple stages of a DAC-SASH client's journey, including the initial contact with program or call center staff, during the in-home assessment, and after installation. Multiple educational opportunities reinforce the benefits of improving energy efficiency.

Areas of education are:

- Changing perceptions about energy production and use;
- Teaching the importance of conserving energy to reduce energy costs, prevent the emission of greenhouse gases into the atmosphere, and other important benefits,
- Increasing awareness of behavioral changes that promote energy efficiency;
- Education about existing no-cost energy efficiency programs they may qualify for, including the Energy Savings Assistance Program (ESAP) ; and
- TOU rates - work with customers to determine which available rate option provides the highest solar value, since there are multiple TOU options in each IOU.

### **B. System Sizing Parameters**

All DAC-SASH systems will be sized to maximize customer bill impact, and also incorporate assumed electric savings from energy efficiency measures within the maximum allowable system size eligible for incentives of 5 kW (CEC-AC). Every DAC-SASH applicant will be required to provide at least 12 months of prior electric usage data, if available. GRID will consider historical usage, assumed energy efficiency savings, and any documented future electric load growth in determining the maximum system size for DAC-SASH projects. For DAC-SASH program applicants without historical electrical usage, an estimate of usage and energy efficiency will be utilized to determine the maximum system size. This sizing process, established in the SASH program, incentivizes participants to adopt energy efficiency measures through ESAP, and/or behavioral changes, in order to maximize the economic benefits from the program, and ensures incentives are applied to efficiently-designed systems.

### **C. Referrals and Coordination with the Energy Savings Assistance Program**

GRID will work with the IOU's Energy Savings Assistance Program (ESAP) administrators to streamline ESAP enrollment for eligible clients. Outreach coordinators will introduce clients to the program and encourage ESAP enrollment for further utility savings. All eligible DAC-SASH participants are required to be referred to ESAP. GRID will receive enrollment data back from the IOUs in order to track efficiency uptake, which allows GRID to analyze this data and create strategies to improve enrollment. To further improve on our energy efficiency programming in DAC-SASH, GRID will explore strategic partnerships with the IOUs and other state programs that provide additional efficiency services to qualified homeowners.

GRID also hopes to coordinate with the administrators of the CARE and FERA programs at the IOUs, to increase enrollment in these energy assistance programs and further increase benefits for DAC-SASH participants.

## **VII. Marketing, Education, and Outreach (ME&O)**

GRID has long standing experience with marketing, education, and outreach for low-income solar programs and will apply proven strategies to the DAC-SASH program. All marketing, education, and outreach for the DAC-SASH program, as in other low-income solar programs, must be conducted through a lens of consumer protection, to ensure target audiences receive



clear, comprehensive, and standardized information about the program offering. As in the SASH program, GRID will be responsible for all ME&O efforts statewide in DAC-SASH.

Decision D.18-06-027 requires GRID to submit an annual ME&O plan for DAC-SASH. The first ME&O plan will be submitted 60 days after program approval, and on an annual basis thereafter. The ME&O plan will contain detailed budget information for ME&O activities, as well as all program marketing collateral.

For purposes of the PIP, GRID provides a high-level summary of planned ME&O activities, strategies, and considerations for DAC-SASH in the following subsections.

#### **A. Client Identification**

Efficient, effective and culturally-appropriate marketing begins with data-driven targeting of DACs. This includes identification of the linguistic, cultural and socio-economic needs specific to the region, as well as general characteristics present among California's low-income population.

*Analyzing SB535 Data and Online Mapping* - GRID will analyze and utilize data provided in the "SB 535 List of Disadvantaged Communities" and online mapping tool to identify target communities and their attributes. GRID will use this data to identify zip codes with the highest concentration of DACs and identify the most significant linguistic, cultural and socio-economic characteristics of each DAC to be targeted.

*Leveraging Data-driven Household Predictive Model* - GRID maintains an account with Faraday, a cloud software company specializing in customer acquisition, to deploy data-driven marketing campaigns. Faraday's prospecting platform is used by much of the solar industry to analyze household-level data in order to forecast the likelihood of meeting the criteria for solar PV installation. This predictive modeling has allowed GRID to target mailers and other marketing collateral to specific households and communities that have the best possible prospects.

#### **B. Direct Outreach**

The following proven strategies will be used to engage in targeted, culturally and linguistically appropriate marketing and outreach for DAC-SASH:

*Direct Mail* - GRID has had considerable success finding qualified households for SASH using direct mail, and will utilize a prospecting database, Faraday, that allows us to target specific households within DACs that are likely to qualify. We will use direct mail in coordination with other on-the-ground outreach strategies to provide additional touches and follow-up to prospective clients.

*Canvassing* - After identifying selected DACs for targeted, culturally sensitive outreach, GRID staff will coordinate canvassing events, going door-to-door throughout the community to engage potential clients and provide information on the benefits of solar, the particulars of DAC-SASH, and other energy efficiency programs they might be eligible for.



*Community Engagement* - Over the past decade, GRID has solidified its roots in communities across the state. GRID staff regularly attend events held by community associations, municipalities, churches, schools, and other trusted entities to engage with members of the communities we hope to reach. Creating a presence at such events gives GRID a key opportunity to speak directly with potential DAC-SASH clients, connect with other community-based or service-oriented organizations as well as engage and educate with a larger audience. Past examples of events attended by GRID staff to reach potential clients and the community at large include community resource fairs, city council meetings, and church events.

*Co-marketing with Trusted Partners* - GRID's regional offices will partner with local government agencies, community institutions, and other NGOs to send co-branded mailers and other communications to homeowners in DACs, either separately or in tandem with complementary program offerings. GRID will coordinate with the IOUs with the goal of sending co-branding materials to communities about CARE, FERA, and DAC-SASH, as DAC-SASH income eligibility requirements match those of CARE and FERA.

As stated in D. 18-06-027, GRID's marketing and outreach plans will align with the language needs of low-income communities, and will meet the Dymally-Alatorre Bilingual Services Act of California (1973).<sup>21</sup> Introductory marketing materials will be available in seven languages (English, Spanish, Mandarin, Cantonese, Vietnamese, Korean, and Tagalog), and translation services will be utilized as needed. Additionally, in accordance with applicable state and federal law, GRID Alternatives will reasonably accommodate clients with disabilities, where such accommodations will enable the client to receive GRID Alternatives' services, unless undue hardship would result.

### **C. Partnerships with Community-based Organizations (CBOs)**

GRID will partner with community-based organizations that have strong ties in targeted DACs to both inform and supplement GRID's in-house outreach activities. These partnerships will help GRID reach into new geographic and cultural/linguistic communities to ensure broad program participation. Partners will assist GRID in developing targeted marketing materials and identifying channels for reaching the communities they serve, as well as building trust and educating their networks about the DAC-SASH opportunity.

### **D. Homeowner Education**

GRID's outreach staff serve as liaisons and advocates for each participating homeowner. Staff activities include initial community and household outreach; solar and energy efficiency education; referrals to complementary programs; application support; reviewing solar designs and site plans; extensive assistance and education with contract review; enabling optional participation in the solar installation or other aspects of GRID's mission; support throughout the multiple steps of solar process, including interconnection; education on system monitoring and maintenance, and ongoing post-installation support as needed.

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<sup>21</sup> D. 18-06-027, Appendix A-11

Education about solar technology and its benefits is a critical first step to winning participation in any solar program. GRID Alternatives' experienced local outreach staff will lead community-based consumer education initiatives around solar and energy efficiency, and provide culturally and linguistically appropriate educational resources about solar to its CBO partners and other community groups providing complementary education and services. In addition, GRID provides participating homeowners with a comprehensive education curriculum to ensure maximum benefit from their PV system, including energy efficiency tips and referrals, the basics of solar, and solar system care and maintenance after installation.

Homeowners will receive a solar installation orientation prior to the installation on their home. This orientation requirement can be met if the homeowner attends one of GRID's volunteer trainings, or, if the homeowner is unable to attend the volunteer training, our outreach staff will teach the orientation for the homeowner in their home.

## **VIII. Reporting, Accounting, and Evaluation**

### **A. Data Collection and Reporting Requirements**

GRID will use our Salesforce CRM database to track all required DAC-SASH program information including, but not limited to, the following:

- Number of applications received
- Number of applications accepted
- Size of installations and expected annual output
- Total system cost in \$/kW before subsidy
- Progress of installations
- Geographic areas served
- Incentive dollars paid by each utility
- Installer used (if applicable)
- Applicant enrollment with ESAP, and CARE/FERA (if data is available)
- Administrative and marketing expenditures

GRID will submit semi-annual progress reports to the Energy Division on progress of the DAC-SASH program. The semi-annual report will include at least the data points listed above. GRID will publish semi-annual progress reports for DAC-SASH on its website and the CPUC's website, as is currently done for SASH. In addition to MW targets and budget expenditures, GRID will report on DAC-SASH specific goals and metrics, such as job training and energy efficiency program components. GRID will leverage the report structure and approval process already developed for the SASH program for DAC-SASH, including posting weekly updates to CalDGStats, and add additional metrics based on stakeholder or Commission input.

The DAC-SASH semi-annual progress reports will follow the same format established for SASH; for this reason, GRID received confirmation from the Energy Division that report formats would not need to be included in this PIP.

## **B. Public Reporting**

GRID will work with Energy Solutions to lead coordination of public reporting through CalDGStats (<https://www.californiadgstats.ca.gov/>). CalDGStats is the official public reporting site of the California Solar Initiative (CSI), presented jointly by the CSI Program Administrators, GRID Alternatives, the California Investor Owned Utilities, and the California Public Utilities Commission. Semi-annual reports of administrative expenditures incurred for the program will also be posted to CalDGStats, with weekly updates on the incentive budget allocations encumbered and remaining in each utility territory.

## **C. Annual Audits**

GRID will submit annual financial audits of program expenditures to the Energy Division, and participate in any other program audits as mandated by the Energy Division.

## **D. Independent Program Evaluations**

Per D. 18-06-027, Energy Division will select an independent evaluator to evaluate DAC-SASH program every three years beginning in 2021. As in the prior program evaluations conducted for SASH, GRID will participate and coordinate with the independent evaluator to provide relevant DAC-SASH program information for the evaluation.

## **IX. Complete Program Timeline and Deliverables**

GRID developed the following timeline of deliverables for the lifetime of the DAC-SASH program. GRID Alternatives cannot be held responsible for delays in this timeline due to external regulatory, contracting or legislative action from Energy Division staff, Southern California Edison Company, or the California legislature.

<b>Timeframe</b>	<b>Task Description</b>
2019 Q2	<ul style="list-style-type: none"><li>- Begin contract work, including but not limited to: development of marketing materials, standard quarterly and annual report formats, incentive payment procedures</li><li>- Sign contract with Energy Solutions for reporting to CalDGStats</li><li>- Execute agreements with third-party project inspectors</li><li>- Execute incentive payment agreements with the IOUs</li></ul>
2019 Q3	<ul style="list-style-type: none"><li>- DAC-SASH Program launch</li><li>- Call for applications for subcontractors (SPP)</li><li>- Explore partnerships with CBOs for marketing and outreach</li><li>- Submit quarterly financials to ED and SCE</li></ul>
2019 Q4	<ul style="list-style-type: none"><li>- Submit quarterly financials to ED and SCE</li><li>- Submit annual ME&amp;O plan and Budget to ED for approval</li></ul>

2020 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2020 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2020 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2020 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2021 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> <li>- ED will select an independent evaluator to assess effectiveness and efficiency of both the PA and the DAC-SASH Program.</li> </ul>
2021 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2021 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2021 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2022 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2022 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
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2023 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2023 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
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2024 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> <li>- ED will select an independent evaluator to assess effectiveness and efficiency of both the PA and the DAC-SASH Program.</li> </ul>
2024 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2024 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2024 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2025 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2025 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2025 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2025 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> </ul>

	<ul style="list-style-type: none"> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2026 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2026 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2026 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2026 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
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2027 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2027 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2027 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2028 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2028 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2028 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>

2028 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2029 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> </ul>
2029 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2029 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2029 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>
2030 Q1	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit Annual Expenditure Report to ED (documenting current calendar year)</li> <li>- ED will select an independent evaluator to assess effectiveness and efficiency of both the PA and the DAC-SASH Program.</li> </ul>
2030 Q2	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2030 Q3	<ul style="list-style-type: none"> <li>- Submit Semiannual program report to ED</li> <li>- Submit quarterly financials to ED and SCE</li> </ul>
2030 Q4	<ul style="list-style-type: none"> <li>- Submit quarterly financials to ED and SCE</li> <li>- Submit annual ME&amp;O plan and Budget to ED for approval</li> <li>- Submit financial audit of prior year's expenditures to ED</li> </ul>



## X. Program Budget Overview

The following table describes the different categories that comprise the DAC-SASH Program Budget and general program activities related to each category:

DAC-SASH Budget Category	Activity Details
Administration	<p>All activities supporting general administration of the program across the IOU territories, including, but not limited to:</p> <ul style="list-style-type: none"><li>• Program planning, design and implementation including development of Program Handbook and Program Implementation Plan;</li><li>• Subcontracting with program support partners, as needed;</li><li>• All ongoing program reporting, data collection, financial tracking, annual audits</li><li>• All program job training and workforce development initiatives;</li><li>• Implementing systems for quality control, project inspections;</li><li>• Orchestrating third-party ownership model,</li><li>• Identifying additional funding resources for projects;</li><li>• Coordination with the PUC Energy Division, IOU, and Stakeholders;</li><li>• Developing energy efficiency training curriculum and referral processes</li></ul>
Marketing and Outreach	<p>All statewide program marketing, education and outreach (ME&amp;O) activities including, but not limited to:</p> <ul style="list-style-type: none"><li>• Client acquisition, education, contracting, and post-installation support;</li><li>• Development of program website and brand development;</li><li>• Creation of marketing collateral;</li><li>• Development of database and implementation of data security measures</li><li>• Assessment of client satisfaction with program participation;</li><li>• Developing partnerships with community-based organizations (CBOs) to support ME&amp;O efforts</li></ul>
Evaluation	<p>Biennial third-party independent program evaluation, as orchestrated by the PUC Energy Division</p>
Incentives	<p>Per project incentive (rebate) offsetting the cost of the solar electric system and allowing low-income family</p>

	<p>to access solar;</p> <ul style="list-style-type: none"> <li>• The Decision allocates a set incentive amount available in each IOU, on an annual basis</li> <li>• GRID will pair available incentive with other identified organizational funding (including philanthropic fundraising, equipment donations, proceeds from a TPO model, grants, public-private-nonprofit partnerships, etc.) to allow for clients to participate in DAC-SASH at no out-of-pocket cost</li> </ul>
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The Decision delineated that the program budget would be divided based on the budget categories and allocations below:<sup>22</sup>

Administration	10%
Marketing and Outreach	4%
Evaluation	1%
Incentives	85%

Below are GRID's total program budget by category for program years 2019-2030:

Administration	\$10,487,578
Marketing and Outreach	\$4,506,358
Evaluation	\$1,200,000
Incentives	\$103,806,064
TOTAL	\$120,000,000

GRID notes that its total budget for all program administration and marketing and outreach activities from 2019-2030 is \$14,993,936. This leaves a budget surplus of \$1,806,064 from the \$16,800,000 the Commission allocated to the administrative and marketing and outreach functions. GRID is able to create this savings by utilizing many established processes, procedures, and efficiencies of scale from its experience administering SASH over the last decade and apply them to DAC-SASH. Details on annual incentive, administration, and marketing and outreach budgets are included in Appendix A.

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<sup>22</sup> D. 18-06-027, p. A-6

GRID plans to file an Advice Letter in late 2019 requesting any additional budget available from savings realized from the administration and marketing and outreach budget, be allocated to the incentive budget. Allocating additional dollars to incentives from other program budget categories that are non-expended is aligned with prior actions taken in by the Commission in the CA Solar Initiative (CSI) and Multi-family Affordable Solar Housing (MASH) programs and will allow more low-income families to participate in the DAC-SASH program.

GRID's annual DAC-SASH Administration and Marketing & Outreach budgets, and the annual incentive budget per utility are provided in Appendix A, attached.

## Appendix A. Program Budget by Function and Year

### I. Annual Administrative and ME&O Costs

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Admin	\$509,683	\$843,207	\$930,231	\$943,685	\$945,852	\$937,931	\$939,666	\$935,606	\$927,931	\$887,842	\$854,361	\$931,583	\$10,487,578
ME&O	\$297,311	\$418,631	\$406,282	\$450,474	\$388,728	\$397,685	\$402,714	\$400,974	\$380,504	\$353,298	\$321,953	\$287,804	\$4,506,358
Total	\$806,994	\$1,261,838	\$1,336,512	\$1,394,160	\$1,334,580	\$1,335,616	\$1,342,381	\$1,336,580	\$1,308,435	\$1,241,139	\$1,176,314	\$1,119,387	\$14,993,936

### II. Annual Incentive Budget by Utility

	2019*	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
PG&E	\$3,449,450	\$3,833,055	\$3,842,149	\$3,742,926	\$3,743,743	\$3,781,995	\$3,774,668	\$3,777,203	\$3,807,022	\$3,846,652	\$3,857,321	\$3,907,066	\$45,363,250
SCE	\$2,754,303	\$3,910,000	\$4,550,000	\$4,289,922	\$4,040,782	\$3,948,217	\$3,981,505	\$3,984,173	\$4,015,561	\$4,057,277	\$4,105,338	\$4,113,712	\$47,750,790
SDG&E	\$746,947	\$1,034,328	\$882,017	\$882,200	\$882,392	\$883,162	\$881,435	\$882,032	\$889,060	\$898,401	\$909,163	\$920,887	\$10,692,025
Total**	\$6,950,700	\$8,777,383	\$9,274,166	\$8,915,048	\$8,666,917	\$8,613,373	\$8,637,608	\$8,643,409	\$8,711,643	\$8,802,330	\$8,871,822	\$8,941,665	\$103,806,064

\* GRID estimates a program launch date of August 1, 2019. Thus we expect to not spend the full incentive budget for 2019.

Remaining incentives will be carried over and spent in subsequent years.

\*\* GRID's proposal maximizes the budget available for incentives by not utilizing the full amount allocated for program administration, leaving 87.5% of the budget available for incentives as opposed to 85%. Thus, the total incentive budget has increased from the original allocation of \$102,000,000.