



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Develop a
Successor to Existing Net Energy Metering Tariffs
Pursuant to Public Utilities Code Section 2827.1,
and to Address Other Issues Related to Net
Energy Metering.

RULEMAKING 14-07-002
(Filed July 10, 2014)

**Comments of the Center for Sustainable Energy® in response to the
Administrative Law Judge's Ruling Seeking Proposals and Comments on
Implementation of Assembly Bill 693**

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INTRODUCTION

The Center for Sustainable Energy® (CSE) appreciates the opportunity to provide these comments in response to the *Administrative Law Judge's Ruling Seeking Proposals and Comments on Implementation of Assembly Bill 693 (Ruling)*. CSE is pleased to see the California Public Utilities Commission (Commission) begin the implementation process for Assembly Bill (AB) 693 to create the Multifamily Affordable Solar Housing Roofs Program (Program) to provide financial incentives for the installation of solar photovoltaic (PV) systems on multifamily affordable housing properties in California. CSE views the Program as the necessary next step in clean energy options and support for low-income multifamily customers as well as an essential part of ensuring the equity of the solar PV market in the future. At a minimum, CSE envisions the following for the Program:

- The Program should encompass and enable community-type solar for eligible disadvantaged communities and low-income communities, with incentive-based projects located within and benefitting the tenants of these communities;
- The Program should ensure diversity of building types as well as geographic diversity ;
- The Program should adopt a comprehensive definition of “solar energy system”, aligned with the legislative intent of AB 693 to empower tenants to participate in the benefits of the clean energy economy, that includes energy storage and smart inverters, complemented by energy efficiency and demand response, and enables the Program Administrator(s) to explore incorporation of incentives for these additional solar energy system components over time;
- The Program should utilize Program resources to create a new statewide job placement program that places skilled workers from eligible communities trained through existing workforce programs throughout the State and include an option to utilize Program resources to create additional workforce training

and development options to address specific needs for skilled workers in certain locations or for certain types of solar energy system installations; and

- Administration of the Program should be on a statewide basis by a single third-party administrator driven by a mission aligned with the purposes of the Program.

Accordingly, CSE provides responses to the following questions posed in the Ruling.

I. QUESTION 1

In order to be eligible to receive an incentive, the Program should require that a property meet the statutory definition of “qualified multifamily affordable housing property” in a manner similar to the Commission’s Multifamily Affordable Solar Housing (MASH) program. Along with the requirement to submit documentation proving Public Utilities Code Section 2852 eligibility, the Host Customer should additionally be required to submit a signed affidavit, called the Multifamily Affordable Housing Qualification (MAHQ), stating the multifamily residential building of at least five rental housing units is located in a disadvantaged community as defined by the MAHSR, or will adhere to a strict requirement to sell or rent at least 80 percent of the units to tenants with incomes at or below 60 percent of the area median income, as defined in Health and Safety Code Section 50052.5(f). At a minimum, the affidavit should also require the following information to be listed: Site Address; Total Number of Units on Site; and Total Number of Units Rented to Low Income Tenants (Minimum 60% AMI). The Program Administrator(s) should then be required to independently verify the site is a “multifamily residential building” of at least five rental housing units, and in addition, reserves the right to audit any information claimed on the affidavit.

II. QUESTION 2

In defining “qualified multifamily affordable housing property”, AB 693 explicitly states that eligibility based on location in a disadvantaged community is to be determined by the California Environmental Protection Agency (CalEPA) pursuant to Health and Safety Code Section 39711. The CalEnviroScreen tool is the tool developed by CalEPA to identify disadvantaged communities pursuant to SB 535 (Stats. 2012, ch. 830) to carry out Section 39711. Therefore, the Program should use the CalEnviroScreen tool to determine the boundaries of “a disadvantaged community, as defined by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code”. Nevertheless, we recognize that AB 693 is silent as to *how* CalEnviroScreen should be applied to determine whether a qualified multifamily affordable housing property is located in a disadvantaged community.

Generally, disadvantaged communities are defined as the census tracts scoring in the top 25% of CalEPA’s EnviroScreen tool. However, differences in how the CalEnviroScreen tool is applied can result in large variations in the resulting number of qualifying census tracts in the top 25% of the CalEnviroScreen tool, and thus, in turn, the number of “qualified multifamily affordable housing propert[ies]” eligible to participate in the Program. Most significantly, large variations in the resulting number of qualifying census tracts occur when applying the tool on a statewide versus a service territory basis. Moreover, these variations are not consistent across the State’s IOU service territories. For some IOU territories, a larger number of qualifying census tracts results when the tool is applied on a statewide basis, but for others, a larger number results when the tool is applied on a service territory basis.

The Commission recently addressed this issue in Application (A.)14-04-014 and A.14-10-014, San Diego Gas & Electric’s (SDG&E’s) *Application for Approval of its Electric Vehicle-Grid Integration Pilot Program* and Southern California Edison’s (SCE’s) *Application for Approval of its Charge Ready and Market Education Programs*, respectively. For SCE’s Application, the Commission stated in D.16-01-023, “...we find it reasonable to define the eligible

disadvantaged communities as the top quartile of census tracts per the CalEnviroScreen scores on either a state-wide or a utility-wide basis – whichever is broader...In the case of SCE's service territory, more census tracts will qualify using a state-wide basis..."¹ Conversely, as the Commission explains in D.16-01-045 to approve SDG&E's Application:

...the CalEnviroScreen tool was developed in accordance with SB 535 to identify disadvantaged communities. However, the use of a state-wide scope for determining which disadvantaged communities would be eligible for site installations poses a challenge to the extent that certain utility territories – as a result of their relative geographic size, local industrial composition, and residents – have relatively few census tracts that are scored within the top quartile by the CalEnviroScreen tool on a state-wide basis. The inclusion of census tracts located within other utility service territories in the definition of disadvantaged communities would have the consequence of excluding from eligibility the census tracts in such utility territories that are disadvantaged when compared to the rest of the service territory, but relatively less disadvantaged when compared to communities elsewhere in California. For the purposes of this initial pilot program, we find it reasonable to be more inclusive, and select the definition that will enable greater access to charging infrastructure, including those in rural areas. For those reasons, it is reasonable to define eligible disadvantaged communities as the top quartile of census tracts as identified by CalEnviroScreen on either a state-wide or a utility-wide basis, whichever is broader.²

To determine which basis was appropriate in the case of SDG&E's service territory, the Commission then went on to direct SDG&E to calculate the number of census tracts qualifying under each option and to submit this information, along with a request to use the broader of the two options, as part of a Tier 1 advice letter. SDG&E subsequently filed Advice Letter 2876-E and "request[ed] authorization to use the service territory methodology, because it

¹ D.16-01-023, *Decision Regarding Southern California Edison Company's Application for Charge Ready and Market Education Programs*, January 14, 2016, pages 41-42.

² D.16-01-045, *Decision regarding Underlying Vehicle Grid Integration Application and Motion to Adopt Settlement Agreement*, January 28, 2016, pages 137-138.

results in a larger number of qualifying census tracts to target as disadvantaged communities[, noting that u]sing the statewide basis to calculate the top quartile in EnviroScreen, 27 census tracts in the SDG&E service territory are defined as disadvantaged communities[, but u]sing the service territory basis to calculate the top quartile in EnviroScreen, 180 census tracts in the SDG&E service territory are defined as disadvantaged communities. Thus the service territory methodology produces a broader definition for the SDG&E service territory.”³

Section 1 of AB 693 includes the legislature’s finding and declaration that program installations should represent the geographic diversity of the State. Accordingly, CSE urges the Commission to define eligible disadvantaged communities as the top 25% of census tracts as identified by CalEnviroScreen on either a statewide or a utility service territory basis, whichever is broader, and require a determination of which basis is most appropriate in the case of each individual IOU service territory. This will ensure the greatest possible number of qualifying census tracts in the top 25% of the EnviroScreen tool, and thus, enable better geographic representation of the State, as well as the highest possible number of “qualified multifamily affordable housing propert[ies]” eligible to participate in the Program.

III. QUESTION 3

To demonstrate compliance with the Public Utilities Code Section 2852(a)(3)(A)(i) definition of “low-income residential housing”, an applicant should be required to submit either a deed restriction or a regulatory agreement, signed and executed between the property owner/developer and the entity issuing financing via low-income housing tax credits, tax-exempt mortgage revenue bonds, general obligation bonds, or local, state or federal loans or grants. This documentation is identical to documentation required to be submitted for MASH multifamily residential projects proving low-income status per Public Utilities Code Section

³ SDG&E Advice Letter 2876-E, *Submittal of Definition of Disadvantaged Communities for Electric Vehicle-Grid Integration (VGI) Pilot Program Pursuant to Commission Decision 16-01-045*, effective as of March 31, 2016, available at: <http://regarchive.sdge.com/tm2/pdf/2876-E.pdf>.

2852. Moreover, as in the MASH Program, documentation of compliance with Public Utilities Code Section 2852 must be independently enforceable and verifiable and cannot be contingent upon participation in the Program.

In addition, an applicant should be required to submit the aforementioned MAHQ affidavit, stating either that the low-income residential housing is located in a disadvantaged community, as defined as the top 25% of census tracts as identified by CalEnviroScreen on the broader of either a statewide or a utility service territory basis as determined for the respective IOU service territory, *or* stating that the multifamily residential building of at least five rental housing units will rent at least 80 percent of the units to tenants with household incomes at or below 60 percent of Area Medium Income (AMI).

IV. QUESTION 4

CSE believes that if some tenants of an otherwise qualified property are customers of a community choice aggregator (CCA), this should not impact Program eligibility as long as the CCA has the structures in place to enable the financial benefits of the solar energy system to flow to the tenants of the otherwise qualified property. For example, should the Program be designed so that all tenants of a qualified property will receive the financial benefits of the solar energy system through virtual net metering (VNM), then an otherwise qualified property with CCA customer tenants will be eligible so long as the CCA has a VNM program in place.

V. QUESTION 5

Yes, CSE believes the available incentive funding should be allocated as a certain percentage set aside for properties that qualify by virtue of location in a disadvantaged community and for those that qualify by virtue of low-income tenant households. CSE recommends that such a division should be predetermined, with a minimum of 25% of available incentive funds allocated to projects located within disadvantaged communities

(DACs) and a maximum of 75% of available incentive funds allocated to projects located outside of DACs that qualify by virtue of low-income tenant households. CSE finds this to be an appropriate division when coupled with our recommendation to define eligible DACs as the top 25% of census tracts as identified by CalEnviroScreen on either a statewide or a utility service territory basis, whichever is broader, as previously discussed in our response to Question 2.

However, if demand for DAC project participation in the Program is found to outweigh the minimum 25% funding allocation, then CSE recommends that DAC projects be eligible for funding from the non-DAC incentive budget. Conversely, if DAC project participation in the Program does not demand a minimum of 25% of available incentive funds, the Commission should allow for the Program Administrator(s) to submit an Advice Letter to transfer incentive funds allocated to DAC projects to the incentive budget allocated to non-DAC projects.

CSE strongly discourages the Commission from determining a division of incentive funding each program year. Setting a minimum for DAC-funding and allowing flexibility for non-DAC budget allocations, and similarly in incentive rates, will allow the Program to be nimble and responsive to the market based on application flow and uptake. Yearly fixed incentive budget subscriptions have been found to overly restrict market needs. In other statewide incentive programs where yearly allocations of funding are offered, we often see a rush of projects upon the release of funding, followed by developers left waiting for the next year's funding allocation for the remainder of that year, significantly limiting project sales cycles and installations. Moreover, with an annual allocation, important components of the Program -- including, but not limited to, local hiring -- could be impacted if projects are not guaranteed funding until the next annual cycle. Rather the Program should allow for flexibility, similar to the spirit of the California Solar Initiative (CSI) where incentive funding was not limited to program years, allowing for market transparency through continuously available funding, which, in turn, creates momentum for continued project development.

Thus, CSE recommends the Commission set a predetermined division at the start of the Program, with a minimum of 25% of the available incentive funding allocated to DAC projects and a maximum of 75% of the available incentive funding allocated to non-DAC projects, and allowing for flexibility for the Program Administrator(s) to freely shift funds from the non-DAC budget to the DAC budget and, in the case of transferring incentive funds from the DAC budget to the non-DAC incentive budget, allowing the Program Administrator(s) to submit an Advice Letter to request to do so.

VI. QUESTION 6

No, the 300 megawatt (MW) capacity goal should not be allocated as a certain percentage to properties that qualify by virtue of location in a DAC and to those that qualify by virtue of low-income tenant households. Instead, by allocating the available incentive funding as a certain percentage to properties that qualify by virtue of location in a DAC and to those that qualify by virtue of low-income tenant households, as recommended by CSE above in our response to Question 5, associated MW targets will be established by default. No predetermined fixed division of MW needs to be made because the division will be inherent in the available incentive funding allocation, and furthermore, no annual division of MW should be made based on the aforementioned consequences of annual funding cycles, as described in our response to Question 5 above.

Moreover, CSE is gravely concerned that the 300 MW target called out in AB 693 is unachievable, given the great uncertainty surrounding the availability of incentive funding over the life of the Program. Any changes to the available incentive funding allocation will inherently change the MW targets for DAC and non-DAC projects. Furthermore, by following CSE's recommendation and allowing for flexibility for the Program Administrator(s) to freely shift funds from the non-DAC budget to the DAC budget, there is no need to establish MW targets because the number of DAC projects will not be limited. Given uncertainties about

funding, CSE encourages the Commission to recharacterize the 300 MW goal as one that is consistent with achieving direct tenant benefits with the available funding.

VII. QUESTION 7

CSE recommends that the Commission adopt an Estimated Performance-Based Incentive (EPBI) structure for this Program. The EPBI structure provides an expedited “up-front” payment to the incentive recipient, while minimizing administrative costs and burden that accompany Performance Based Incentives (PBI). Similarly, an auction mechanism inhibits transparency and slows the project sales cycle. The EPBI structure provides greater transparency into Program status, allowing easier tracking of incentive dollars paid and MWs incentivized.

Under the EPBI structure, the incentive amount should be calculated based on the optimal design of the system. The EPBI structure should utilize the CSI Expected Performance Based Buy-Down (EPBB) calculator to accurately incentivize projects based on optimal design characteristics or design factor. The EPBB calculator is an established tool, already widely used by the solar market to estimate incentive funding, that provides transparency into project financing. Incentives should be calculated based on the total system size (watts) multiplied by the current incentive rate (TBD), multiplied by the design factor:

$$\text{Watts} \times \text{Program Incentive Rate} \times \text{Design Factor} = \text{Program \$ Total}$$

The incentive amount should be higher for projects that are ineligible for the federal Investment Tax Credit (ITC) and lower for projects that receive the benefit of the ITC. Furthermore, the incentive rate should be reduced based on other financial benefits received by projects, including Low-Income Weatherization Program (LIWP) incentives, low income tax credits that allow for a certain percentage of the system cost to be recouped, as well as other incentives that may exist. All other incentives and credits should be required to be disclosed by the Program applicant in the project application. Entities with tax exempt status should be

offered a higher incentive rate to be calculated using the same equation used to derive the Government / Nonprofit incentive rate utilized in the CSI Program. If the total amount of incentives and tax credits exceed the total project cost, the Program incentive should be reduced so that the total project cost will equal \$0.

VIII. QUESTION 8

Based on both the plain language of AB 693 and the purpose of the statute, the Commission should clearly establish a comprehensive definition of a solar energy system that supports optimal system performance during periods of peak electricity demand, provides financial and health benefits for tenants, and supports the achievement of our climate goals. The definition of a solar energy system should explicitly include energy storage and smart inverters, with demand response capabilities.

AB 693 defines a “solar energy system” as a “solar energy photovoltaic device that meets or exceeds the eligibility criteria established pursuant to Section 25782 of the Public Resources Code.”⁴ Section 25782 of the Public Resources Code requires the Commission to establish eligibility criteria for any solar energy system receiving “ratepayer funded incentives that include... the following... (2) the solar energy system is intended primarily to offset part or all the consumer’s own electricity demands.”⁵ Additionally, “the [C]ommission shall establish conditions on ratepayer funded incentives that require... (2) [o]ptimal solar energy system performance during periods of peak electricity demand.”⁶ Accordingly, the definition of a solar energy system should include balance of system components that support reducing on-site electricity demands or shifting away from periods of peak electricity demand.

Moreover, the primary purpose of AB 693 is to enable low-income multifamily tenants to share in the benefits of the clean energy economy. Section 1 of AB 693 begins with the

⁴ California Public Utilities Code § 2870(a)(4)

⁵ California Public Resources Code § 25782(a)

⁶ California Public Resources Code § 25782(b)

finding that “[i]t is necessary to provide assistance to low-income utility customers to make sure they can afford to pay their energy bills.” Energy storage and smart inverters are key solutions for enabling low-income multifamily tenants to reduce time-of-use (TOU) rate impacts. Energy storage and smart inverters will enable load-shifting away from peak rate periods, resulting in significant bill savings.⁷ In addition, solar energy systems that are optimized to meet peak demand will reduce the need to dispatch high-emission peaker plants, resulting in improved air quality for low-income multifamily tenants in disadvantaged communities and reducing emissions of greenhouse gases.⁸ In a recent study, researchers concluded that by strategically siting technologies such as energy storage in areas of California where peaker plant use occurred frequently on poor air quality days near dense and overburdened communities, high impact emissions could be displaced, resulting in “a more complete suite of environmental public health, air pollution, and environmental equity co-benefits of these emerging technologies [that] can be realized while simultaneously reducing emissions of climate forcing air pollutants.”⁹

CSE acknowledges that it may not necessarily be feasible to provide Program incentives for all balance of system components that support reducing on-site electricity demands or shifting away from periods of peak electricity demand for every project. Thus, we recommend the Commission adopt a comprehensive definition of “solar energy system” that enables the Program Administrator(s) to explore incorporation of incentives for these additional balance of system components over time. Furthermore, we urge the Commission to encourage the

⁷ California Housing Partnership, Center for Sustainable Energy, Clean Energy Group, and Geli, “Closing the California Clean Energy Divide: Reducing Electric Bills in Affordable Multifamily Rental Housing with Solar+Storage.” Available at <http://www.cleanegroup.org/ceg-resources/resource/closing-the-california-clean-energy-divide/>.

⁸ In Section 1 of AB 693, the legislature found that, “Installing qualifying solar energy systems in disadvantaged communities can provide local economic development benefits while advancing the state’s renewable energy policies and policies to reduce emissions of greenhouse gases.”

⁹ Elena M. Krieger, Joan A. Casey & Seth B.C. Shonkoff, *A framework for siting and dispatch of emergency energy resources to realize environmental and health benefits: Case study on peaker power plant displacement*, ENERGY POLICY 305, 303-313 (2016)

Program Administrator(s) to work together with program administrators of demand-side resource programs to connect the delivery of the Program to these related programs. For example, this should include exploration of the potential to streamline participation in the Self-Generation Incentive Program (SGIP) for Program participants, as well as integrate marketing and outreach to low-income tenants for all energy-related assistance programs.

IX. QUESTION 9

As explained in detail above, CSE believes a solar energy system paired with a storage device meets the Section 2870 definition. For these paired systems, the Program goal should be to demonstrate the direct tenant value delivered by a solar energy system paired with a storage device when time of use (TOU) rates become mandatory for all utility solar customers. An incentive structure for these projects should include a Program funding carve-out to be used to provide up to 100% offset of the cost of the storage device, along with the upfront Program EPBI incentive, to entice solar developers to install solar + storage projects. As mentioned above, the Program Administrator(s) should work together with program administrators of demand-side resource programs, in particular SGIP or any successor energy storage incentive program, to streamline participation in the SGIP or any other related programs. In exchange for Program incentives, each project should additionally be required to place all tenants who receive a direct benefit from the solar energy system paired with a storage device on an available TOU tariff and allow the Program Administrator(s), through measurement and evaluation activities, to collect and analyze the direct effects the combination of solar + storage with TOU rates has on tenants of qualified low-income properties.

To best achieve this, CSE recommends the Program Administrator(s) release a solicitation aimed at solar + storage project developers who agree to design and integrate solar and storage systems on Program-eligible buildings and report system configuration

specifications and tenant utility bills to enable the Commission and the Program Administrator(s) to study the benefits the paired technologies can deliver to tenants. This pilot study within the Program can inform the market on the impacts of the combination of solar PV/storage/VNM when TOU rates are applied, while at the same time allowing tenants access to the economic and environmental benefits of these innovative systems typically experienced in other market sectors. In turn, the results of this pilot study can inform the reevaluation of net energy metering (NEM) and mandatory TOU rate participation by solar PV customers by 2019.

X. QUESTION 10

CSE is supportive of continuing many of the features of the CSI and MASH programs under the Program, in particular those features that will easily assist in creating a framework for Program eligibility and participation within the constraints of AB 693. Rather than specifically address each of the features of the CSI and MASH programs to be continued under the Program in this proceeding, CSE instead recommends that prior to opening of the Program, the Program Administrator(s) review the most current version of the MASH Program Handbook to determine which of that program's requirements, if any, should be continued in AB 693 implementation.

Nevertheless, at this time, CSE recommends that one feature of the MASH program no longer be continued in AB 693 implementation. Specifically, the 1 MW CEC-AC generation system equipment cap for Program eligibility should be lifted. The generation system equipment cap for the Commission's solar programs has typically comported with the NEM system size cap of "not to exceed 1 MW"; however, with the recent uncapping of the NEM eligible system size, we recommend the maximum eligible system size for the Program should be determined based on the requirement that the generation system equipment must serve onsite electrical load, with a caveat for increased system sizing based on future load growth.

XI. QUESTION 11

CSE agrees that third-party owned financial agreements for the purchase and sale of a solar generating system should be restricted to ensure that no additional costs for the system are passed on to low-income tenants at properties receiving Program incentives. This language should be an explicit requirement included in the Program handbook and any other relevant documentation. Moreover, to ensure that no additional costs for the system are passed on to low-income tenants at the properties receiving incentives, the Program Administrator(s) should be required to review any executed alternative system ownership agreement submitted as part of the application process.

In addition, CSE believes that a critical part of consumer protection is ensuring third-party systems owners provide ongoing operations and maintenance of the system, monitor energy production, and ensure that projected system production is in fact received by the property owner and tenants. CSE believes this can be sufficiently achieved by requiring the System Owner to submit documentation showing proof of compliance as part of the Program's incentive application process.

XII. QUESTION 12

CSE views job placement as a critical component to ensure a robust local hiring requirement. A statewide job placement program under the Program will be essential for meeting the legislative requirement of local hiring, which was intended to provide economic benefits and meet existing need in our State's DACs and low-income communities. There continues to be a gap in the marketplace between the State's many job training programs and job opportunities across the State. More specifically, the State lacks a statewide job placement program, and no such program presently exists to connect existing trained, skilled workers from existing workforce development programs across the state with good jobs. Thus, CSE recommends that the Program: (a) build off the job training requirements of the most recent

MASH Program, which allowed for trained workers to receive hands-on solar PV system installation experience via actual solar PV system installations in the MASH Program, to develop specific local hiring eligibility requirements; (b) utilize Program resources to create a new statewide job placement program that places skilled workers from existing workforce programs throughout the State; and (c) include an option to utilize Program funds to create additional workforce training and development options to address specific needs for skilled workers in certain locations or for certain types of solar energy system installations.

First, the Program should build off the job training requirements of the most recent MASH Program, which allowed for trained workers to receive hands-on solar PV system installation experience via actual solar PV system installations in the MASH Program, to develop specific local hiring eligibility requirements. Projects seeking Program incentives should be required to hire from the pool of skilled workers referred by the statewide job placement program. Participating projects should be required to hire candidates from the statewide job database to perform a certain percentage of the work on the project, e.g., require job trainees to work a certain number of hours based on project system size as in the most recent MASH program, or be required to hire a minimum number of job trainees to work on the entire installation. While the framework for the job requirement already exists, CSE believes the exact details of this requirement can be finalized during program implementation.

The statewide job placement program should work with existing workforce development programs to develop and maintain a database of skilled workers that: (a) are residents of DACs and/or low-income communities, as defined for the Program; or (b) received training through programs based in DACs and/or low-income communities. To the greatest extent possible, the statewide job placement program should refer candidates who reside in close proximity to the project receiving incentives. In the event there is an insufficient number of skilled candidates who reside near the project site, the statewide job placement program should refer other candidates from the statewide pool.

In addition to solar PV system installation training, the Program may also choose to include solar thermal, energy efficiency, energy storage and/or integrated projects installation training. The training program should be developed as needed throughout the lifetime of the Program, funding permitting, in order to fill gaps in the existing workforce. This is key, especially where, for example, we expect a lack of a robust pool of qualified local storage system installers in the early years of the Program. This will also enable the job training program to develop workers skilled in not only solar PV system installations, but also storage system and energy efficiency measures installations, in turn making for an even more robust job placement program.

XIII. QUESTION 13

CSE wholly supports the requirement that the electricity generated by systems benefiting from the Program “be primarily used to offset electricity usage by low-income tenants”. The legislative intent of AB 693 is to empower tenants to participate in the benefits of the clean energy economy. Thus, we believe that providing direct tenant benefits is the critical factor in meeting the legislative intent of AB 693. Nevertheless, we remain concerned that reaching the goal of 300 MW of installed capacity on qualified low-income multifamily properties may not be attainable due to the Program’s budget uncertainty. Rather, the Commission will need to reconcile how the Program should balance reaching the goal of 300 MW of installed capacity on qualified low-income multifamily properties while ensuring a large enough incentive to nearly guarantee the majority of the system production will benefit tenants directly through reduced electric bills. Until this is reconciled, it is premature to determine with confidence how to ensure direct tenant benefit.

XIV. QUESTION 14

Public Utilities Code Section 2870(g)(2) provides, “[t]he Commission shall ensure that electrical corporation tariff structures affecting the low-income tenants participating in the

program continue to provide a direct economic benefit from the qualifying solar energy system.” Virtual Net Metering (VNM) has been the main driver enabling renters to receive direct utility savings through a shared solar PV system installed on a multifamily property. VNM is an effective tool that has helped thousands of tenants receive direct tenant benefits from hundreds of multifamily projects installed in California. Until new and additional utility tariff structures are adopted that allow low-income tenants participating in the Program to receive direct tenant benefits, VNM should be the main tariff used by the Program to ensure low-income tenants participating in the Program receive direct economic benefit from the qualifying solar energy system.

XV. QUESTION 15

Of course, it would be optimal for a diverse pool of solar contractors to be proficient at selling and installing projects on qualified low-income multifamily properties and participate in the Program. Nevertheless, CSE has found that low-income multifamily solar projects are more nuanced with respect to their financing and incentive structures, and this may require contractors to be more experienced in developing projects on low-income multifamily properties to cost-effectively participate in the Program. Accordingly, the Program should not penalize qualified projects by preventing their participation in the Program, or otherwise prevent qualified projects from receiving quality and cost-effective systems, simply because a particular third-party owner or contractor has met its quota of projects eligible to participate in the Program. Moreover, implementing this requirement would require greater administrative oversight and tracking, and it is unclear that the benefits of placing a limit on the amount of incentive payments to projects developed by any one third-party owner, supplier or installer would outweigh the costs of implementing this requirement. CSE therefore urges the Commission to not include a limit on the amount of incentive payments that can be paid to projects developed by any one third-party owner, supplier, or installer of qualified solar energy systems.

XVI. QUESTION 16

As discussed above, it would be optimal for a diverse pool of solar contractors to be proficient at selling and installing projects on qualified low-income multifamily properties and participate in the Program, but CSE has found that these projects are more nuanced with respect to their financing and incentive structures, requiring contractors to be more experienced in order to cost-effectively participate in the Program. Accordingly, for the same reasons discussed in our response to Question 15, CSE urges the Commission to not include a limit on the number of MW for which projects developed by any one third-party owner, supplier, or installer of qualified solar energy systems may be paid with Program incentives.

XVII. QUESTION 17

For the Program, the Commission should allow for a single statewide third-party program administrator. As explained below, single statewide administration can be the most cost-effective and efficient approach, avoiding the creation of multiple, identical administration structures for a singular program.

Utility administration, while having proven sufficient for past programs, is an outdated administration model for a program that must meet the many requirements of AB 693. Simplicity, efficiency and nimbleness will be the keys to enabling a successful program, especially given the uncertain incentive and administration budgets due to fluctuating annual GHG allowance revenues received by the electrical corporations along with the various utility service territories that may be eligible to participate in the Program. Unlike previous solar incentive programs that were afforded continuous funding and transparent budgets, which allowed for transparent future planning, the GHG allowance revenue budget allocation of \$100,000,000 annually or 10% of available funds, whichever is less, leaves uncertain the amount of incentive and administration dollars that will be available for entirety of the Program. This will require the Program Administrator to ensure annual incentive funding

amounts are clearly indicated to Program participants and administration funds are quickly dedicated to the most essential administrative tasks. A single statewide administrator can be flexible enough to address these issues quickly and uniformly throughout the State, and cost savings can be achieved due to a streamlined administration structure that could potentially allow the Program to utilize less than 10 percent of funds for administration, which will be crucial if the total budget is not robust enough.

To add greater complexity and perhaps cost to the administration of the Program, the Commission will determine whether Liberty Utilities (CalPeco Electric) LLC (Liberty) and PacifiCorp should be required to contribute to GHG allowance proceeds to fund the Program and whether incentives from the Program should be available to eligible projects within those territories. If the Commission agrees, a total of five utility regions will be required to participate in the Program, creating a need for program administration among these five utility regions. Should the Commission elect to utilize a separate administrative structure for each utility service territory, the result could be five different administration staffs for the Program, five separate marketing plans for the Program, five separate local hiring plans for the Program, and the added complexity of determining which program activities are fixed-cost versus which program activities are variable costs to ensure an equitable split of the administration budget among the various Program Administrators.

Delivery of the Program by a single statewide administrator will also greatly reduce the costs of participation by multifamily affordable housing property owners and managers. This market segment includes property owners and managers with assets in multiple utility territories, and reducing the number of participation processes and contacts will greatly reduce participation costs and likelihood of participation.

Moreover, AB 693 will have specific components that will benefit from a single statewide program administrator structure. For example, in designing and implementing the local hiring requirement, it will be critical for the Program Administrator to work closely with

regional job training organizations to create pools of qualified trainees from which solar contractors and developers may choose. Rather than replicating implementation of this requirement multiple times, on varying scales and in different locations throughout the State, one single model should be created that gets at the heart of the Program's local hiring requirements and is flexible enough to expand beyond boundaries of the utility service territories, counties and even cities, and nimble enough to conform to regional dynamics. A single statewide job placement program will have the flexibility to refer candidates from other eligible communities where there are insufficient candidates located in the project's community. Similarly, a statewide non-utility administrator has the potential to connect property owners and managers with energy efficiency opportunities across federal, state and local agencies, advancing the legislature's intent to increase adoption of energy efficiency among program participants.

Accordingly, CSE recommends that the Commission adopt a single statewide third-party program administrator. To select a third-party administrator for the Program, the Commission should evaluate organizations driven by missions aligned with the legislative intent of AB 693 and who have a proven track record of administering successful solar programs. Furthermore, selecting a third-party administrator proficient in collaborating with all stakeholders and who understands the low-income and solar market landscapes can only help to efficiently and effectively launch and manage the Program.

XVIII. QUESTION 18

The Program implemented under AB 693 should have a wide reaching approach that benefits residential customers who are impacted by climate change and pay into the GHG fund, either directly or indirectly via the increased cost of goods and services as businesses pass on the carbon cost embedded in their electricity rates. Because of this, CSE believes that Liberty and PacifiCorp should be required to contribute GHG allowance proceeds to fund the

Program, and incentives from the Program should be available to their ratepayers for eligible projects in their service territories.

CSE notes that there appears to be a lack of DACs in the service territories of Liberty and PacifiCorp. As previously discussed in greater detail in our response to Question 2, CSE urges the Commission to define eligible DACs for these utility service territories as the top 25% of census tracts as identified by CalEnviroScreen on either a statewide or a utility service territory basis, whichever is broader, and require a determination of which basis is most appropriate in the case of each individual IOU service territory. This will ensure the greatest possible number of qualifying census tracts in the top 25% of the EnviroScreen tool, and thus, in turn, the highest possible number of “qualified multifamily affordable housing propert[ies]” eligible to participate in the Program.

XIX. QUESTION 19

Public Utilities Code Section 2870(c) directs the Commission to annually authorize funds for the Program. Experience has shown us that incentive programs designed with annual collection cycles have typically suffered from the dynamics surrounding market start/stop, often resulting in a rush of applications at the beginning of the program year, a lack of funds later in the program year, and a lack of transparency and predictability for Program participants when demand for the incentivized technology is high. We can easily look to the SGIP, prior to recent program modifications, as an example. Thus, to optimize the Program, CSE urges the Commission to provide for a continuous funding cycle, similar to that of CSI and now SGIP, in order to give predictability and transparency to participating project developers and property owners. Because funding is based on annual cycles, which by default creates the start/stop dynamics, the Commission should direct the utilities to set aside ratepayer funds in advance of the Program year for the purposes of program continuity. The amount of funds to be collected from ratepayers should be based on the previous year’s

collection and trued-up annually. Once GHG allowance proceeds are collected, the utilities may then refund their ratepayers. Additionally, this methodology can be adjusted to account for the lag between the fiscal year budget schedule for the Program and the calendar year schedule for collections and distribution of GHG allowance proceeds.

Regarding the up to 10 percent of total funds allocated to the Program to be used for administration, CSE recommends that the administration budget should be allocated the full 10 percent initially, given anticipated higher start-up administration costs for the new program. In subsequent years, the Commission should evaluate the amount allocated to the administrative budget on a yearly basis, taking into account the potential fluctuations in GHG allowance proceeds in future years as well as the number and complexity of administrative tasks necessary for the particular Program year. As needed on a yearly basis, the Commission should then evaluate whether the percentage allocated to administration may be lowered in subsequent years. This will be particularly important should the Commission elect to utilize a statewide third-party program administrator structure and will be key in evaluating whether that structure results in certain cost savings and efficiencies.

Furthermore regarding the funds allocated to administration of the Program, CSE urges the Commission to include program administration and marketing and outreach activities within the same administrative budget and provide the Program Administrator(s) the flexibility to move funds between these budget subcategories as needed to ensure funds are directed to the most essential administrative tasks. The administrative budget should cover expenses related to any activity that fulfills the scope of the program, other than incentives. This could potentially include funds for determination and implementation of any local hiring requirements, funds allocated for any subcontract work that may be needed, and marketing, education and outreach aimed at project developers, property owners and tenants. By providing flexibility between the various subcategories of the administrative budget, the program administrator(s) will be able to use the combined budget in a manner that best directs

funds to the most essential administrative tasks, to ensure certain marketing, education and outreach activities are carried out as appropriate, and to ensure sufficient funding to cover the costs necessary to complete the Program.

XX. QUESTION 20

The IOUs should each be directed to establish a sub-balancing account specifically for GHG allowance proceeds for the Program within their individual GHG Revenue Balancing Accounts. At the same time, and as discussed in greater detail above, the utilities should be directed to set aside ratepayer funds in advance of the Program year for the purposes of program continuity. The amount of funds to be collected from ratepayers should be based on the previous year's collection and trued-up annually. The balancing account can track actual expenditures, which should be consistent with the prior year's collection, and then the uncollected amount reflected in the balancing account can be reduced or eliminated once the utility receives the GHG allowance proceeds. If an amount comparable to the prior year's collections is never received by the utility from the GHG allowance funds, then the under-collection can be added to the revenue requirement in a future year. Additionally, this methodology can be adjusted to account for the lag between the fiscal year budget schedule for the Program and the calendar year schedule for collections and distribution of GHG allowance proceeds.

XXI. QUESTION 21

CSE would suggest that in order to comply with the California Air Resources Board's regulation preventing the utilities from publicly disclosing auction bidding information, including intent to participate in an auction, bidding strategy, and bid quantity information, the IOUs could potentially disclose this information in a confidential report to the Commission, and the Commission could, in turn, process the utilities' confidential information to provide a report of anticipated funding and budgeting for the Program directly to the

Program Administrator(s). This would enable the Program Administrator(s) to plan funding and budgeting for the coming year, and perhaps even communicate that to Program participants, while avoiding any public disclosure of auction bidding information.

XXII. QUESTION 22

“Equal to” means no more and no less than what is required in Public Utilities Code Section 2870(f)(7), which are the energy efficiency requirements established for the Program described in Section 2852 and include participation in a federal, state, or utility-funded energy efficiency program or documentation of a recent energy efficiency retrofit. Nevertheless, CSE believes that through the Program, there is an opportunity to create an innovative approach to increase the adoption of energy efficiency among multifamily solar program participants, such as through coordination of delivery of energy efficiency opportunities across various existing energy efficiency programs. This approach can be balanced by providing a hub for energy efficiency services for property owners through the Program, while not over-burdening program participants with requirements that go beyond Section 2870(f)(7).

XXIII. QUESTION 23

CSE has found that due to somewhat lengthy project development timelines for low-income multifamily projects, it can be difficult to determine interim capacity targets for the Program. In past programs that have included MW capacity goals, we have seen that it may take several years for program participation to flourish, thus creating uncertainty around meeting any interim capacity target. With continuous funding, and total MW capacity targets set as described above, interim targets are not necessary. The Program will disclose in near real time its progress towards goals.

XXIV. QUESTION 24

Through weekly data collection and reporting requirements, similar to the Trigger Tracker for CSI and the MASH Budget Report, the Program will be able to track application volume, capacity received, and incentive budgets, as are currently reported on the California Solar Statistics website and should continue to be, moving forward on the Cal DG Stats website currently under development and intended to replace the California Solar Statistics website. Additionally, Program metrics, including, but not limited to, VNM participation, number of tenant benefiting accounts, and participation in DACs, should be reported on the Cal DG Stats page, along with MASH and non-MASH VNM projects.

Moreover, CSE recommends that the Program continue to report relevant program activities and accomplishments semiannually to the Commission. This report, similar to what is currently required of the MASH program, can include additional relevant Program information regarding marketing and outreach activities, local hiring activities and progress, as well as other program elements.

XXV. QUESTION 25

In the MASH program, no explicit safety considerations were made with the understanding that local Authorities Having Jurisdiction (AHJs) were responsible for ensuring that all rules and regulations governing the installation of solar energy systems were followed by solar developers. Furthermore, it is the responsibility of the electric utility through Rule 21 to ensure all solar energy systems are interconnected to the utility distribution grid safely. The Program will be based off of many of the same tenets as the MASH program, and with these same safeguards and understandings in place, accordingly, no explicit safety considerations should be required to be made.

XXVI. QUESTION 26

CSE reserves the right to identify and comment on any additional topics related to implementation of the Program not addressed in the questions above in our forthcoming reply comments.

CONCLUSION

CSE appreciates the opportunity to provide these comments in response to the Ruling. In summary, at a minimum the Program should:

- Encompass and enable community-type solar for eligible disadvantaged communities and low-income communities, with incentive-based projects located within and benefitting the tenants of these communities;
- Ensure diversity of building types as well as geographic diversity;
- Adopt a comprehensive definition of “solar energy system”, aligned with the legislative intent of AB 693 to empower tenants to participate in the benefits of the clean energy economy, that includes energy storage and smart inverters, complemented by energy efficiency and demand response, and enables the Program Administrator(s) to explore incorporation of incentives for these additional solar energy system components over time;
- Utilize Program resources to create a new statewide job placement program that places skilled workers from eligible communities trained through existing workforce programs throughout the State and include an option to utilize Program resources to create additional workforce training and development options to address specific needs for skilled workers in certain locations or for certain types of solar energy system installations; and
- Be administered on a statewide basis by a single third-party administrator driven by a mission aligned with the purposes of the Program.

August 3, 2016

A handwritten signature in dark ink, appearing to read 'Sachu' followed by a stylized, cursive surname.

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