Decision **PROPOSED DECISION OF COMMISSIONER PEEVEY**
(Mailed 6/14/2011)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.	Rulemaking 10-05-004 (Filed May 6, 2010)

CALIFORNIA SOLAR INITIATIVE PHASE ONE MODIFICATIONS

Table of Contents

Table of Contents

CALIFORNIA SOLAR INITIATIVE PHASE ONE MODIFICATIONS

1. Summary

This decision modifies several prior decisions that established and implemented the California Solar Initiative (CSI).

This decision expands the types of customers eligible for Virtual Net Metering (VNM), which was first established as part of the Multifamily Affordable Solar Housing (MASH) Program in Decision (D.) 08-10-036. When first established, VNM allowed customers to allocate electricity generated from a single solar energy system as kilowatt hour credits to other accounts on the affordable housing property. This decision directs Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company to file tariffs to allow any multi-tenant or multi-meter property to utilize VNM, not just affordable housing properties. A second VNM change in this decision applies to VNM offered through the MASH Program and allows VNM credits to be shared throughout an entire affordable housing property, as long as the property is on contiguous parcels and under common ownership.

Next, the decision makes a number of minor modifications to the CSI program including guidelines for application processing, project completion reports, inspection requirements, suspension procedures, performance monitoring and reporting service rules, and CSI budget components. As a result, the following CSI decisions are modified: D.06-08-028, D.06-12-033, and D.10-09-046.

With regard to the Single Family Affordable Solar Housing Program, the decision modifies the minimum design factor set in D.07-11-045 and inspection requirements set in D.08-11-005. For the MASH Program, the decision modifies

incentive rates, the program budget, and occupancy requirements previously adopted in D.08-10-036.

2. Background

The Commission established the California Solar Initiative (CSI) in early 2006 in Decision (D.) 06-01-024 and implemented it later in 2006 with the issuance of D.06-08-028 and D.06-12-033. The CSI was conceived as a 10-year market transformation program that provides solar incentives to eligible systems, from 2007 through 2016. Also in 2006, the Legislature passed Senate Bill (SB) 1 (Stats. 2006, ch. 132), which directed the Commission and the California Energy Commission (CEC) to implement the CSI given specific requirements and budget limits. Specifically, SB 1 mandates that the total cost of the CSI program overseen by the Commission shall not exceed $2,166,800,000. The Commission established a goal for the general market CSI program to install 1,750 megawatts (MW) of solar energy systems. (D.06-12-033, Appendix B, Table 10.)

Since 2006, the Commission has opened three successive rulemakings to address various sub-programs and implementation issues within CSI. The initial proceeding was Rulemaking (R.) 06-03-004, which was followed by R.08-03-008 and finally the present rulemaking, R.10-05-004. Most recently, the Commission made modifications to the CSI budget in D.10-09-046.

The Commission addressed low-income solar programs in two significant decisions. First, the Single Family Affordable Solar Housing (SASH) Program was established in D.07-11-045 and later modified in D.08-11-005. In 2008, the Commission established the Multifamily Affordable Solar Housing (MASH) program and Virtual Net Metering (VNM) in D.08-10-036.

3. Procedural Issues

On July 26, 2010, the assigned Administrative Law Judge (ALJ) issued a ruling with a proposal by the Commission's Energy Division staff (Staff Proposal) containing suggested program modifications to the CSI program. The lengthy Staff Proposal made program modification recommendations on over 40 topics. The ALJ requested parties prioritize the suggested program modifications prior to a prehearing conference of August 12, 2010. A Scoping Memo for this rulemaking was issued on November 9, 2010, setting forth those recommendations from the Staff Proposal which were deemed a high priority and would be taken up in Phase I of the rulemaking.

Comments on the 23 items deemed Phase I issues were filed on December 6, 2010, by the California Center for Sustainable Energy (CCSE), the California Solar Energy Industries Association (CALSEIA), EcoPlexus Inc., Everyday Energy Inc. (Everyday Energy), Grid Alternatives, Interstate Renewable Energy Council (IREC), Pacific Gas and Electric Company (PG&E), Recolte Energy (Recolte), San Diego Gas and Electric Company (SDG&E), jointly by the Solar Alliance and the Vote Solar Initiative (collectively, the Joint Solar Parties), SolarCity Corporation (SolarCity), and Southern California Edison Company (SCE).

Reply comments were filed on December 20, 2010, by the City and County of San Francisco (CCSF), CALSEIA, CCSE, Everyday Energy, Grid Alternatives, IREC, the Joint Solar Parties, PG&E, Recolte, SolarCity, SCE, and SDG&E.

In addition, letters were received from the CEC, EAH,[1] Eden Housing, Helio Micro Utility Inc., and the San Diego Interfaith Housing Foundation and placed in the correspondence file of this proceeding.

This decision addresses Phase I issues in the sections below. Each section heading provides a reference to the original Staff Proposal section number pertaining to the topic, for ease of reference.

4. Issues surrounding Net Energy Metering, VNM, and Bill Credit Transfer Tariffs

In D.08-10-036, the Commission established the MASH Program as a subset of the CSI program. The MASH program provides solar incentives to qualifying affordable housing developments. One component of the MASH program is VNM, which allows electricity generated from a single solar energy system on a multifamily affordable housing property to be allocated as kilowatt hour (kWh) credits to either common areas of the property or to individually metered tenant accounts, without requiring the system to be physically interconnected to each tenant's meter. (See D.08-10-036 at 31.)

The Staff Proposal made several recommendations surrounding VNM, either to modify aspects of it under MASH or to expand the benefits offered by a VNM tariff beyond the MASH Program to other utility customers. We discuss these proposals below. Section 4.1 discusses expanding VNM beyond the service delivery point for MASH program participants. Section 4.2 involves expanding VNM beyond the MASH program, although with the service delivery point limitation. Section 4.3 pertains to whether VNM should be expanded to all

[1] EAH is a non-profit housing corporation.

affordable housing customers and Section 4.4 considers expansion of a specialized tariff currently available only to local governments.

4.1. Service Delivery Point as VNM Boundary in the MASH Program[2]

As part of the VNM tariff established pursuant to D.08-10-036, the Commission required that each utility's VNM must:

> Allow for the allocation of net energy metering benefits from a single solar energy system to all meters on an individually metered multifamily affordable housing property, without adversely impacting building tenants. (D.08-10-036 at 38.)

The Commission did not define what "affordable housing property" meant in terms of multifamily housing. Many multifamily affordable housing projects are actually comprised of multiple buildings on a single property, or on multiple parcels extending across the equivalent of several city blocks but under the same ownership. These housing complexes are often served by multiple utility "service delivery points" (SDPs). The SDP is defined in utility practice as the demarcation between the customer-owned electrical system and the utility distribution system. Typically, each multi-tenant building has one SDP that then serves multiple tenants or utility accounts. Generally, each tenant's apartment or unit is served by its own meter.

The Commission's Energy Division approved the VNM tariffs that were filed in compliance with D.08-10-036. As filed, the VNM tariffs limit the transfer of kWh credits to those utility accounts served by a single SDP. Some developers of MASH/VNM projects argue that this tariff provision has limited the viability of VNM for many potential affordable housing sites that have multiple SDPs.

---

2 See Staff Proposal Section 2.2.

They have questioned whether "affordable housing property" should more properly be defined as "all units in a single affordable housing development" so that tenants served by different SDPs within a single development can benefit from VNM bill credits. Developers further claim their projects are stymied by the current implementation of the VNM tariffs and the utility should allow all units in a development to share credits from one or more MASH solar systems even if there are multiple SDPs.

In response to this criticism, the Staff Proposal recommended that the Commission should determine that the SDP is not the proper boundary for VNM tariffs for affordable housing projects. Instead, the Staff Proposal recommends the Commission clarify that VNM should be available to the entire affordable housing development, not just the units behind a single SDP, and direct the utilities to modify their tariffs accordingly. The Staff Proposal makes this recommendation for a change in the SDP limitation only for VNM applicable to affordable housing projects, and not for VNM if it were expanded to all customers.

In August 2010, PG&E filed Advice Letter 3718-E to temporarily address this SDP issue and the challenges it created for several affordable housing project developers, especially those facing financing deadlines in order to take advantage of American Recovery and Reinvestment Act of 2009 (ARRA) funding. As an interim measure and to address these ARRA funding concerns, PG&E proposed netting customer-generated power beyond the SDP but within the low income development. PG&E proposed defining "eligible low income development" as "all of the real property and apparatus employed in a single low income housing enterprise on contiguous parcels of land." (See PG&E Electric Schedule NEMVNMA, Tariff Sheet 1, Section (d).) The proposed tariff further specified that these parcels may be divided by a dedicated street, highway, or public thoroughfare or railway, so long as they are otherwise contiguous and part of the same single low income housing enterprise, and all under the same ownership. In the same advice letter, PG&E also proposed expanding VNM tariff eligibility to customers that meet MASH eligibility requirements but do not receive funding if MASH funds are fully subscribed. The Commission approved PG&E's advice letter and it went into effect on September 15, 2010, with a sunset date of December 31, 2011.

The Commission now faces the question of whether to adopt the Staff Proposal and expand VNM eligibility for affordable housing across multiple service delivery points for the other utilities, similar to the approval granted to PG&E's advice letter. A related question is whether the Commission should lift the sunset date in PG&E's advice letter, thus making the tariff changes permanent.

Several parties support the Staff Proposal's recommendation, namely CCSE, IREC, Joint Solar Parties, EcoPlexus, Everyday Energy, and Recolte. EcoPlexus maintains that the intent of the MASH decision was for VNM to encompass the entire affordable housing development and that if the SDP limit is not modified, or if PG&E's tariff is allowed to sunset, it will severely undermine and perhaps cripple the expansion of solar on multi-tenant properties. IREC echoes these concerns and contends the SDP is an unnecessarily restrictive boundary that excludes certain multi-tenant properties from VNM without sufficient justification. Instead, IREC suggests that a more logical boundary for multi-tenant properties to participate in VNM be based on the definition of an "eligible low income development" in PG&E's recent tariff modification, which allows the sharing of credits over multiple SDPs as long as the sharing occurs over contiguous parcels under common ownership.

CCSE claims that expanding the definition of an eligible property beyond the SDP will allow for greater economies of scale from multifamily solar projects. Everyday Energy asserts that the SDP limit currently contained in the VNM tariffs has added substantially to the costs of installations, reduced the efficiency of installations, and precluded some low-income customers from receiving the benefits of MASH funded projects. According to Everyday Energy, in most cases an entire MASH development could be served through the installation of solar facilities on only a portion of the buildings in the development.

Recolte endorses the concept of maximum flexibility for customers in transferring kWh credits, and it suggests that the Commission allow credits to be transferred throughout the utility's entire territory, removing the SDP boundary for VNM. According to Recolte, one of its clients incurred an additional $650,000 in expenses due to the SDP limitation, which affected the project's cost-effectiveness.

In addition, letters supporting the Staff Proposal were received from EAH, Eden Housing, Helio Micro Utility, and San Diego Interfaith Housing Foundation, who are all developers of multifamily affordable housing. These entities generally claim that the SDP limitation has negatively impacted their projects.

SDG&E supports the Staff Proposal to remove the SDP limit, but only for qualified low-income customers. It contends that if the Commission expands sharing of VNM credits beyond the SDP, then the Commission should adopt language limiting the arrangement to a single corporate entity owning a contiguous property, not divided by any public right of way. Similarly, SCE does not oppose removing the SDP limitation as long as the new limiting point for the transfer is the "customer's premises,"[3] as defined in existing tariffs. SCE's proposed definition of premises appears similar to SDG&E's proposal, in that properties of a single owner may not be divided by a road or other public thoroughfare. In addition, SCE proposes to charge customers who share Net Energy Metering (NEM) credits across multiple SDPs for their use of the IOU's local distribution system. This proposed charge would apply the existing distribution rate to any energy produced by a generating account at one SDP that provides a credit to a benefiting account at another SDP.

In contrast, PG&E opposes the staff recommendation and argues that the transfer of kWhs across SDPs is "retail wheeling," which raises both policy and technical concerns. PG&E acknowledges that its Advice Letter 3718-E allows netting of generation beyond the SDP, but it contends this action was a stopgap measure to allow development of certain low-income projects that may have been designed and financed under a misunderstanding of how the VNM tariff works. Those projects should generally be completed by December 31, 2011. PG&E urges the Commission to maintain the sunset date of its VNM tariff allowing NEM credits beyond the SDP. Once the tariff sunsets, PG&E

---

[3] Rule 1 of SCE's tariffs define "premises" as follows:

> All of the real property and apparatus employed in a single enterprise on an integral parcel of land undivided, excepting in the case of industrial, agricultural, oil field, resort enterprises, and public or quasi-public institutions, by a dedicated street, highway, or other public thoroughfare, or a railway. Automobile parking lots constituting a part of and adjacent to a single enterprise may be separated by an alley from the remainder of the premises served. (*See* SCE comments, 12/20/10 at 3, n. 7.)

recommends the Commission once again apply the SDP limit for netting generation.

PG&E contends that the purpose of the SDP limitation is to limit the extent to which the utility grid is used to move power without compensation for that service. PG&E maintains that all NEM arrangements, including VNM, use PG&E's transmission and distribution (T&D) system to provide power to the customer's load when the solar system is not generating and to move power away when the system is producing more than the load behind the SDP requires. Thus, solar NEM customers are not fully covering the cost of T&D services and these costs are being borne by all other customers. PG&E alleges that this misalignment is accentuated if VNM is expanded beyond the SDP.

PG&E claims that the concept of transferring kWh credits beyond the service delivery point would be a significant departure from Commission precedent. For example, PG&E asserts that in D.03-02-068, the Commission considered and rejected "distribution only wheeling." (*See* PG&E, 12/6/10 at 5.) In addition, PG&E cites several instances where the legislature has provided customers the opportunity to generate power at a given location on the utility grid and to have it consumed at another location on the grid. In all those instances, PG&E asserts that customers have been required to cover the costs of transmitting and distributing the power and they receive only a generation credit at the point of consumption.[4] According to PG&E, the Staff Proposal to allow

[4] Specifically, PG&E cites to a generation credit for the City of Davis, Assembly Bill (AB) 2573 regarding CCSF solar wheeling, AB 2488 regarding dairy biodigesters, and AB 2466 regarding local government renewable power. (*See* PG&E comments, 12/6/10 at 4.)

NEM credits across SDPs would encourage other utility customer groups, such as agricultural and local government customers, to push for other retail wheeling schemes, and this could substantially increase the costs borne by other customers.

PG&E urges the Commission to explore reasonable alternatives to expanding VNM beyond the SDP such as procuring power through a power purchase agreement (PPA) or using a feed-in tariff. In addition, PG&E suggests the Commission further explore SCE's proposal to charge the existing distribution rate for delivery of power beyond the SDP. At the same time, PG&E questions the need for any VNM modifications since the MASH program is fully subscribed in its territory.

Ecoplexus dismisses PG&E's wheeling arguments, maintaining that any use of distribution infrastructure for VNM beyond an SDP will likely be minimal and amount to a few yards as opposed to miles. Ecoplexus contends that the utilities have hundreds of substations which connect the distribution system to customer sites. Given the number of distribution substations maintained by the utilities, Ecoplexus maintains that the distribution system would be minimally impacted, and any distribution charge, such as the one SCE proposes, should be less than $.005 per kWh. It suggests a simple fee per month per meter, in the range of 25 to 50 cents, for a solar energy system owner to use VNM kWh credits at a different SDP which is more than 500 yards away.

Discussion. PG&E raises valid concerns over wheeling and the use of the transmission and distribution grid. However, its own VNM tariff contains limiting language to reduce the extent to which such wheeling would occur. Namely, any sharing of credits would be limited to a single enterprise on contiguous parcels. The parcels may be divided by a street, highway or public thoroughfare, as long as they are otherwise contiguous and part of the same low income housing enterprise, and all under the same ownership.

Moreover, the MASH program is very limited in scope and budget, and the extent to which credits will be shared over multiple SDPs is minimal. One of our MASH program goals is to allocate the benefits of solar energy systems to all tenants on the affordable housing property. The current limitation that VNM credits may only be shared if served by a single SDP hampers our ability to meet this goal and has jeopardized otherwise viable projects. We will lift this SDP limitation and allow VNM credits to all tenants of the affordable housing development as long as the development matches the description in PG&E's current NEMVNMA tariff that it is a single enterprise on contiguous parcels under the same ownership.[5] Therefore, we will direct SCE and SDG&E to revise their VNM tariffs to match the revision to PG&E's NEMVNMA tariff. In addition, we will direct PG&E to remove the sunset date from its VNM tariff language.

4.2. Expansion of VNM to All Customers[6]

Staff recommends that the Commission expand VNM to all multi-tenant or multi-meter customers – namely residential, commercial, and industrial customers – not merely those that qualify for the MASH program, as long as the customers who receive the credits are all behind the same utility SDP. Unlike the

---

[5] As stated in PG&E's tariff that the Commission approved in PG&E's Advice Letter 3718-E, parcels may be divided by a street, highway or public thoroughfare as long as they are otherwise contiguous, part of the same enterprise, and under the same ownership.

[6] *See* Staff Proposal Section 2.3.

previous section where staff proposed, and we approved, sharing across multiple SDPs for those served by the MASH program, staff recommends that transfer of credits for all other multi-tenant or multi-meter customers be limited to accounts served behind a single SDP. Staff suggests that as long as VNM credits are transferred between the accounts served by a single SDP, there should be no significant cost-shifting between customer classes.

Many parties support the Staff Proposal to allow any multi-tenant property to take VNM service. Parties in support include Ecoplexus, the Joint Solar Parties, CCSE, Recolte, Everyday Energy, IREC, and CCSF. Ecoplexus and IREC note that many residential renters and small businesses that rent retail or office space fund CSI through their rates but are unable to apply for incentives. They claim that VNM expansion is needed to allow these customers to benefit from CSI. IREC believes the SDP barrier should be removed and the Commission should allow contiguous parcels managed as part of the same development, even if divided by a street, highway, public thoroughfare or railway, to participate in VNM. IREC contends that use of the grid would be so minimal as to hardly warrant a charge on the bill. Recolte supports expansion of VNM where customers could share kWh credits to any customer in the entire investor-owned utility (IOU) territory, not just behind an SDP. It suggests allowing the utilities to charge customers a fee per linear foot from the point of generation to the SDP of the account being offset. It also suggests the Commission allow a VNM tariff for all renewable technologies, not just solar. The Joint Solar Parties and CCSE both maintain that if VNM is expanded to multi-tenant properties, it should not be limited to those who receive CSI incentives, particularly since CSI funds will not be available indefinitely.

In contrast, the utilities oppose expansion of VNM. PG&E contends that expansion of VNM to multiple SDPs raises the same wheeling and cross-subsidy issues it expressed in opposition to the expansion of VNM in the MASH, as discussed above in Section 4.1. Further, PG&E cautions that before expanding VNM to all multi-tenant customers, the Commission should consider the cost-shift associated with CSI and the increased billing costs of VNM. PG&E states that current billing costs for VNM customers are $36 to set up an account and $15 per month to bill that account. PG&E contends billing costs would increase significantly if the Commission expands VNM eligibility, requiring PG&E to make a significant information technology investment. If the Commission does expand VNM to all multi-tenant properties, PG&E agrees with the staff recommendation that this expanded VNM should be limited to accounts served by a single SDP.

Similarly, SDG&E contends that if VNM is expanded beyond MASH participants to all multi-tenant customers, these customers must all be behind the same SDP. According to SDG&E, extending VNM to multi-tenant properties served by different SDPs would increase the hidden subsidies to VNM customers and leave remaining customers with these costs. As SDG&E explains, this cross-subsidy occurs because renewable distributed generation (DG) does not perfectly match on-site usage and a DG customer uses the utility grid like a battery. However, under NEM tariffs, NEM customers avoid paying all T&D charges.

SCE states that it would consider expanding VNM to all multi-tenant customers assuming the "premises" restriction it proposed in Section 4.1, along with application of a distribution charge when customers seek to allocate kWh credits to accounts served by a different SDP. SCE opposes sharing VNM credits at retail rates between separate premises. SCE also raises a retail wheeling concern if VNM allowed the transfer of kWhs across SDPs. SCE recommends the Commission work with the utilities and parties to resolve the complexities and issues associated with expanding VNM before adopting any expansion proposal.

In response to wheeling concerns raised by the utilities, the Joint Solar Parties contend there are ways to mitigate wheeling concerns by limiting sharing of VNM credits to a geographically confined area, rather than imposing an overly restrictive SDP boundary. They maintain that any use of the T&D system for VNM credit purposes would be minimal if sharing beyond the SDP is somehow limited. Therefore, VNM customers should not be assessed a fully loaded T&D charge.

Discussion. We find that there are ample reasons to offer VNM to all multi-tenant and multi-meter properties, not just affordable housing properties. If we expand VNM, this will allow residential, commercial, and industrial customers who now fund CSI through their rates to receive the benefits of the installation of a solar energy system and net energy metering.

We will limit the expansion to those customers served by a single SDP. The utilities raise valid concerns about cross-subsidies and use of the T&D system if credits extend beyond the SDP. While SCE's proposal for a distribution charge for sharing across multiple SDPs may be worthy of consideration in the future, we do not want to delay implementation of VNM expansion while we examine this idea. Instead, we will limit VNM to customers served by a single SDP.

We will direct PG&E, SCE and SDG&E to file modifications to their NEM tariffs to allow VNM to apply to all residential, commercial and industrial multi-tenant and multi-meter properties, with the limitation that sharing of bill credits can only occur for accounts served by a single SDP. The tariff should mirror the one created in compliance with D.08-10-036, with the following clarifications based on the comments of Recolte. First, VNM should not be limited to those who receive CSI incentives. Customers may opt for VNM even if they did not apply for CSI incentives. We do, however, clarify that per the NEM statutes, systems are "intended primarily to offset part of all of the customer's own electrical requirements" (Pub. Util. Code Section 2827(b)(4)),[7] and should be sized accordingly. Second, VNM should not be limited to photovoltaic (PV) systems. The expanded VNM concept can apply to any DG technology that receives a full retail rate credit under net energy metering. As PG&E and SDG&E point out, biogas and fuel cell NEM customers do not receive a full retail credit. Thus, biogas and fuel cell NEM customers would not be eligible for the VNM program. PG&E, SCE and SDG&E should each file an advice letter containing their proposed expanded VNM tariff within 60 days of this decision.

The parties raised many issues surrounding implementation details of an expanded VNM tariff such as allocation of credits for commercial and industrial customers, metering costs, billing charges and start up costs. We prefer to allow these details to be worked out through the compliance advice letter process rather than to address them here. We agree with parties who commented that a workshop may be useful to help resolves these issues. Energy Division may hold a workshop or direct the utilities to host a workshop to resolve implementation issues that may arise relating to the VNM tariffs. Moreover, we will direct that the expanded VNM tariffs should mirror those filed for VNM in the MASH program. If the utilities choose to deviate from the details of the MASH VNM

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

program, their advice letter filing should contain justification to support any proposed deviations.

With regard to billing concerns raised by PG&E, the utilities may propose in their advice letter filings a one-time account set up fee and a monthly administrative fee for VNM service. In addition, the utilities may seek recovery of implementation and setup costs for VNM in their future general rate cases.

4.3. Expansion of VNM to All Affordable Housing Customers[8]

If no Commission action is taken in the short-term on expansion of VNM to all customers, the Staff Proposal recommends the Commission could allow all qualified multifamily affordable housing customers to apply for VNM tariffs regardless of whether they participate in the MASH program or the CEC's New Solar Homes Partnership (NSHP) affordable housing program. Specifically, multifamily affordable housing properties that install solar energy systems, either with incentives from the CSI general market program or without any CSI rebate, could apply for VNM. At present, D.08-10-036 limits VNM to participants in the MASH program (and NSHP's affordable housing program).

Discussion. In Section 4.2 above, we accepted the staff recommendation to offer VNM to all multi-tenant and multi-meter properties, which opens VNM to residential, commercial, and industrial customers. Affordable housing properties that are not able to receive a MASH incentive may still take part in VNM as set forth in Section 4.2 above, which means these properties must comply with the limitation that sharing of bill credits can only occur for accounts served by a single SDP. Therefore, the staff recommendation is moot.

---

8 *See* Staff Proposal Section 2.4

4.4. Bill Credit Transfer Option[9]

Another option that could, if adopted, allow solar energy system owners to transfer bill credits across multiple service delivery points is the "Renewable Energy Self-Generation Bill Credit Transfer" (RES-BCT) option. The concept of a bill credit transfer was created by Section 2830 and is currently available only to local governments.

Under the RES-BCT tariffs recently approved by the Commission in Resolution E-4283 in April 2010, local government entities can generate electricity at one account and transfer any available or excess bill credits to another account of the same local government. The bill credits are calculated by multiplying the generation component of the time of use rate applicable to the account by the amount of energy exported to the grid. Credits under RES-BCT can be transferred to multiple accounts within the geographical boundaries of the local government customer. A credit under the RES-BCT tariff is lower than a VNM credit, because the VNM tariffs allow the transfer of kWhs for credit at the full retail rate, which includes generation, transmission, and distribution components.

Staff proposes the Commission require the utilities create a bill credit transfer tariff for all multi-tenant buildings, similar to the RES-BCT tariffs that currently exist for local governments. An expanded RES-BCT tariff would provide an option for a project that was unable to comply with the SDP restrictions under the expanded VNM program in Section 4.3 above. Staff further proposes that if customers receive this new tariff, they should only

---

[9] *See* Staff Proposal section 2.5.

receive CSI program solar incentives for capacity not to exceed the total load at the host site, although the total solar energy system size could exceed the rebated capacity size. This latter recommendation is to maintain compliance with the CSI statute on system sizing.

PG&E opposes expanding the RES-BCT tariff to multi-tenant properties, contending the arrangement is a form of retail wheeling and should be considered as part of a reopening of direct access. PG&E contends the RES-BCT tariff is an extremely complicated rate to bill and expanding the tariff would require significant information technology start-up costs, as well as account set-up and ongoing billing costs. As an alternative, PG&E suggests that multi-tenant properties interested in developing renewable energy resources should enter into standardized PPAs with the utility.

SDG&E urges the Commission not to expand the RES-BCT tariff until the proceeding regarding a rate for Net Surplus Compensation[10] pursuant to AB 920 (stats. 2009, ch. 376) is finalized so that any expanded RES-BCT tariff can be reconciled with that proceeding. Likewise, SCE urges the Commission to resolve complexities and issues associated with expanding VNM and RES-BCT tariffs before adopting the Staff Proposal. SCE would consider expanding RES-BCT to other entities at different premises at the generation rate where all accounts are registered to the same customer. SCE opposes expanding RES-BCT at the retail rate, contending that is equivalent to retail wheeling with no compensation for use of the T&D system and would adversely affect other ratepayers.

---

[10] The Commission issued D.11-06-016 on June 9, 2011 to establish a Net Surplus Compensation Rate in Application (A.) 10-03-001 and consolidated cases.

The Joint Solar Parties and CCSE support expanding the RES-BCT tariff to include multi-tenant customers, but they note that onsite load restrictions make the program unattractive. Similarly, IREC and Recolte Energy contend that the RES-BCT tariff does not offer significant value to customers. These parties claim that in order for a RES-BCT tariff to be attractive and effective, a customer would need to be able to size a solar system up to the total load of all benefiting accounts. Joint Solar Parties urge the Commission to eliminate NEM sizing restrictions by reinterpreting "premises" in Public Resources Code 25782 to include multiple sites owned by a single entity. They suggest the Commission allow entities to aggregate load from multiple sites and receive a solar incentive based on aggregated load.

The utilities generally oppose lifting NEM sizing restrictions. SCE contends that if the RES-BCT tariff is expanded to all multi-tenant properties, system size should be allowed to match all accounts, but the CSI incentive should be limited to site load. PG&E echoes this comment.

Discussion. The concept of expanding the RES-BCT tariff to all customers is intriguing and would provide additional flexibility to solar energy system owners to share the production at one site with other accounts registered to the same customer. Nevertheless, we agree with the utilities that there are several issues surrounding an expanded RES-BCT tariff that would need to be addressed before implementation could occur.

For example, should the bill credit rate match the rate offered under the Net Surplus Compensation[11] program? How should billing and implementation

---

[11] See D.11-06-0106 issued by the Commission on June 9, 2011.

costs be handled and what are reasonable amounts for these costs? The RES-BCT tariff is limited within the geographic boundaries of the local government, under Pub. Util. Code Section 2830. If RES-BCT were expanded, would those on the tariff be able to transfer credits over the entire utility service territory?

Given these questions, and others raised by the utilities, we will not decide this issue at this time. Instead, we will ask our Energy Division to consider the questions above, and the other issues raised by parties in their comments on this subject, and provide a revised recommendation to the Assigned Commissioner and ALJ. This will allow the Commission to reconsider the recommendation to expand the RES-BCT tariff in a later phase of this rulemaking.

5. General Market Program Modifications

5.1. Application Processing Timelines[12]

Since the CSI program's inception, solar contractors have raised issues around CSI application processing times. The CSI Program Administrators[13] (PAs) have made significant efforts to reduce processing times, including reducing application paperwork and making the CSI application available online. In the Staff Proposal, Energy Division reviewed and analyzed average application processing timelines for the general market CSI program. (*See* Staff Proposal at Section 3.1.) The Staff Proposal finds that despite these efforts, the CSI Program Administrators continue to have problems processing CSI reservations and incentive claim payments in a timely manner. Energy Division concludes that, collectively, all of the application processing times of the PAs are

12 *See* Staff Proposal Section 3.1.

13 The CSI PAs are PG&E, SCE, and CCSE.

too long. Moreover, these delays cost solar customers time and money and lead to increased system costs.

For example, the Staff Proposal indicates that in the first quarter of 2010, 47% of SCE's residential project applications did not receive an incentive reservation in 30 days, and 13% did not receive a reservation within 60 days. For non-residential projects in the CCSE and SCE territories, one-third or more did not receive an incentive reservation within 60 days of submittal.

After CSI applicants complete their installation, they file an Incentive Claim Form (ICF). For both residential and non-residential applicants, it often takes more than 60 days to process these ICF forms. For the one in seven projects that are inspected, the wait time is even longer. In SCE's territory, 32% of inspected residential projects take more than 90 days to process, and 21% of projects take more than 90 days even when there is no inspection.

The Staff Proposal recommends the Commission order the PAs to meet minimum standards for processing CSI applications. The Staff Proposal suggests the Commission adopt standards for issuance of reservations, processing of ICF claim forms, and payment of incentives. The proposed standards would require PAs to process 95% of all applications within a specified number of days, depending on whether the application was for a residential or non-residential system, and whether an inspection was required. Further, Energy Division recommends the Commission either adopt fines or penalties if the PAs cannot meet these targets, or change PAs if the processing times cannot improve.

In response to the Staff Proposal, the PAs comment that although speed is important, specific requirements, fines and penalties will not improve performance. The PAs claim the problem stems from resource constraints, limited budgets, and spikes in program applications. They also cite incomplete applications and ICFs submitted by applicants. The Joint Solar parties support minimum requirements, fines and penalties, although they suggest one modification to the Staff Proposal. They propose the Commission adopt a shorter 21 day deadline for Expected Performance Based Buydown (EPBB)[14] incentive applications claim processing.

Discussion. We will adopt the Staff Proposal and set guidelines for CSI application processing. We will require that 95% of applications be acted on within the number of calendar days shown in the table below:

Table 1: Application Processing Guidelines

PA Action	Residential Systems	Non-Residential Systems
Reservation Issued	30 days	60 days
ICF Claim Processed (no inspection)	30 days	60 days
ICF Claim Processed (with inspection)	60 days	90 days
Incentive Paid after ICF claim approval	30 days	30 days

We will not adopt fines or penalties at this time, but direct our Energy Division to monitor PA performance with regard to these guidelines. We may adopt fines and penalties in the future if we find the PAs cannot comply with the timelines in the table above. We decline to adopt the Joint Solar Parties suggestion for a shorter processing deadline for EPBB systems because we find it unnecessarily short. A 30-day deadline is reasonable and preserves flexibility for the PAs.

[14] EPBB applications pay incentives up front based on an estimate of system performance.

5.2. Project Completion Time Requirements[15]

The CSI Program Handbook contains time limits for applicants to install a solar energy system and obtain a CSI rebate. The Handbook also contains provisions for extensions under certain circumstances. The Staff Proposal describes growing tension between customers seeking to keep an incentive application alive through multiple extensions and the PAs who are concerned that projects sit in the application queue indefinitely, tying up incentive funds that could go to more viable projects. When projects drop out, those incentives can be made available to other projects, albeit often at a lower incentive rate. The Staff Proposal notes the failure of the PAs to enforce the existing time limits for customer application processing.

The Staff Proposal recommends the Commission take action to ensure the PAs apply the current policy on extensions consistently. Specifically, the Staff Proposal recommends the Commission establish a process to ensure the PAs do not allow projects to receive incentives if they have missed the application time limits. For example, staff suggests the Commission could force the utilities to pay for late projects through shareholder funds. The Staff Proposal also suggests the PAs allow 18 month extensions for all public entities, not just educational institutions.

In response to the Staff Proposal, the Joint Solar Parties urge clear, fair and equitable treatment by the PAs when enforcing extension policies. PG&E and CCSE contend it is important to allow the PAs some leeway when enforcing

---

[15] *See* Staff Proposal Section 3.2.

project deadlines due to unforeseen issues that can cause delay. They recommend continued monitoring of extensions along with flexibility.

The PAs oppose 18-month extensions for all public entities, preferring a case-by-case approach. The Joint Solar Parties agree with the Staff Proposal on extensions of 18 months for all public entities.

Discussion. We agree with staff that further scrutiny of project completions and extensions by the PAs is warranted. We will require the PAs to submit a quarterly report to the Energy Division containing a detailed account of extensions granted in that quarter and the reason for the extension, as well as the status of projects granted extensions in prior quarters. Energy Division should specify the format of this report, and the PAs should comply with Energy Division reporting requirements. If these reports indicate to Energy Division that project extensions appear to unnecessarily constrain a significant portion of program funds for an extended period, Energy Division may draft a resolution for Commission consideration of an audit of program administrator performance, particularly with regard to project extensions and equitable treatment of all projects.

We decline to adopt the staff proposal for 18-month extensions for all public entities. We agree with the PAs that extensions may be handled on a case-by-case basis.

5.3. Project Inspections

The Staff Proposal contained several recommendations regarding inspection of CSI projects. The recommendations focused on the rate of inspection, the cost of inspections, and suspension of installers for inspection failures.

5.3.1. Rate of Inspection[16]

The CSI Program Handbook and the CEC's SB 1 Guidelines[17] require inspection of one in seven CSI projects. According to the SB 1 Guidelines, EPBB and performance-based incentive (PBI)[18] applicants with systems smaller than 50 kW are required to pass third-party field verification tests on a sampling basis, which includes visual inspection of components, installations characteristics, and shading conditions. Field verification is encouraged for systems above 50 kW, but not required. The SB 1 Guidelines require that the field verification tests be verified using a protocol described in Appendix 2 of the Guidelines.

CSI Program stakeholders and the PAs have expressed concern about the cost of the 1:7 inspection requirement. They are also concerned with the stringency of the field verification and testing protocols. For example, the protocol limits the inspection times to between the hours of 10 a.m. and 2 p.m., based on solar irradiance levels, which significantly increases the cost of the inspection process.

In D.06-08-028, the Commission required the PAs to inspect every project between 30-100 kW because these systems would receive up-front EPBB incentives. (D.06-08-028 at 51.) No inspection was required for systems over 100 kW because they would receive PBI payments based on actual performance.

---

16 *See* Staff Proposal Section 3.3.2.

17 The Third Edition of the CEC's *Guidelines for California's Solar Electric Incentive Programs (Senate Bill 1)* was published June 29, 2010, and can be found at: http://www.energy.ca.gov/2010publications/CEC-300-2010-004/CEC-300-2010-004-CMF.pdf.

18 PBI refers to payment of incentives over a five-year period based on the actual, measured output of the solar energy system.

Later in D.06-12-033, the size threshold beyond which PBI is mandatory was dropped to systems 30 kW, beginning January 1, 2010. (D.06-12-033 at 12.) Despite this change, the inspection requirement in D.06-08-028 was not adjusted. The PAs are sampling between 12.4% and 62.7% of applications, depending on the type of incentive and system size. (*See* Staff Proposal, Section 3.3.2, Table 11.)

We need to clarify the inspection requirements for CSI systems since the requirements we adopted in D.06-08-028 differ from the SB 1 Guidelines and more systems now qualify for PBI payments. The Staff Proposal recommends the Commission direct the PAs to review the cost-effectiveness of inspection requirements and based on that review, the PAs should file an annual inspection plan. Staff also recommends inspection of all PBI systems and all EPBB projects over 30 kW.

The PAs generally oppose a requirement to file an annual inspection plan by advice letter. Instead, they propose the Commission work with the CEC to reduce the 1:7 inspection rate in the SB 1 Guidelines. For example, they suggest the Guidelines be adjusted to decrease inspections for proven installers and to change onsite inspection criteria. The PAs oppose a 100% inspection rate for PBI systems. They claim this will be very expensive given the increase in the number of PBI projects. Rather, they propose they be allowed to create "smart" inspection plans that would inspect only if actual production falls outside the range of forecasted production.

The Joint Solar Parties agree with the PAs that the Commission should evaluate the cost-effectiveness of the inspection program, and that inspecting 100% of PBI systems is not cost-effective.

Discussion. First, we will modify D.06-08-028 and remove the requirement that PAs inspect every project between 30 and 100 kW. All projects

30 kW and larger receive PBI payments and inspection of every project is not necessary because these projects only receive incentives based on the power they actually produce.

Second, although we are sympathetic to concerns about the one in seven inspection requirement in the SB 1 Guidelines, these Guidelines were adopted by the CEC and the PAs will need to work with the CEC on changes to the inspection requirement. We can, however, direct the PAs to undertake a review of their inspection procedures, sampling methodology, and costs. Such a review could assess the inspection sampling methodology and whether, rather than random inspections, certain contractors should be targeted for inspection if they are new to the program or had a history of problem installations. The inspection review should consider the cost of inspections versus the benefit inspections can provide in preventing fraud and maintaining program integrity. For example, experienced installers with a good program history may require fewer inspections, and it may also be beneficial to inspect larger installations. Once completed, this PA inspection review could be used to request the CEC's reconsideration or refinement of its one in seven inspection requirements.

The review of inspection procedures described above should be completed so that the PAs can jointly submit an inspection plan by advice letter to the Commission within 90 days of this decision.

5.3.2. Inspection Costs[19]

The Staff Proposal notes that the PAs would like to charge inspection costs, estimated at $426 to $1,042 per inspection, to the measurement and evaluation

---

19 *See* Staff Proposal Section 3.3.3.

budget. The Staff Proposal does not support this idea, preferring that the PAs continue to charge inspections to the general administrative budget so that funds reserved for measurement and evaluation can be maximized for that purpose. The Staff Proposal suggests that the PAs find efficiencies in the inspection process, such as lower cost labor to conduct inspections.

Discussion. We agree with the Staff Proposal. Inspection costs should continue to be charged to the general administrative budget and not the measurement and evaluation budget. We encourage the PAs to find methods to decrease inspections costs through the inspection review discussed in the preceding section.

5.3.3. Suspension from CSI[20]

In D.06-08-028, the Commission directed that "project installers who fail three random inspections must be excluded from program participation." (D.06-08-028 at 51.) The decision directed the PAs to develop appropriate procedures to fulfill this mandate. Specifically, the PAs were directed to define an inspection failure, taking into consideration the severity of the transgression, and to address correction opportunities, notification, and appeal mechanisms in the CSI Handbook. The PAs accomplished this task and the current CSI Handbook (Section 4.9.2) allows certain minor inspection errors to count as "infractions," and three infractions equal a failure. Large-volume solar contractors with more than 200 installations per year are allowed up to five failures per year. (*See* CSI Handbook, Section 4.10.)

---

[20] *See* Staff Proposal Section 3.3.4.

The Staff Proposal recommends further refinement of the suspension rules currently in effect in the CSI Program Handbook to: 1) accommodate large volume solar contractors, and 2) establish a dispute resolution process for suspended contractors.

The Joint Solar Parties and SolarCity agree with the Staff Proposal that suspension rules should be revisited. They suggest that for high volume installers (i.e., those with 200 or more project sites per 12 month period), suspension be based on the rate of failure rather than an absolute number of five failures per year. Specifically, they propose probation if a high-volume installer has a failure rate of more than 1.5% (but less than 2.5%), and suspension if the failure rate is greater than 2.5%.

In contrast, the PAs comment that there is no need to revise the current process, which applies suspension rules based on whether installers handle more or less than 200 installations per year.

Discussion. First, we will retain the scheme in the CSI Handbook Section 4.9.2 for infractions and failures. Infractions are issued for minor application problems and failures are issued for more severe problems. Three infractions are equivalent to one failure.

Second, we agree with Joint Solar Parties and SolarCity that our current rules should be modified to be based on a failure rate rather than a predetermined number of failures so as not to impose more stringent standards on high volume installers. Thus, the CSI Handbook Section 4.10 should be revised to clarify that high volume installers, defined as those with 200 or more project sites per rolling 12 month period, shall be placed on probation if their failure rate reaches 1.5%, and shall be suspended if their failure rate reaches 2.5%.

Finally, Section 4.10.4 of the CSI Handbook contains information on dispute resolution for applicants, solar contractors, system owners, sellers, or host customers to appeal PA determinations. We see no need to revise this process at this time.

5.4. Performance Monitoring and Reporting Services Cost Cap Exemption and Measurement and Evaluation Metering Expenses[21]

In implementing the CSI, the Commission stated its intent for performance data from solar energy systems installed through the program to be accessible and available to customers and PAs, and possibly the general public. (*See* D.06-08-028 at 80.) At the same time, the Commission was concerned that the cost of this performance metering and monitoring could be become a barrier to program participation. The Commission chose to require performance monitoring and reporting services (PMRS) for all PBI and EPBB systems, but allowed EPBB systems to apply for a "cost-cap exemption" if the cost of PMRS exceeds 1% of total system cost. (D.06-08-028 at 77.)

The Staff Proposal describes that the vast majority of EPBB systems under 15 kW take this cost-cap exemption. To qualify for the exemption, applicants need only show that they have one bid higher than the cost-cap. The Staff Proposal reports that this has resulted in large volumes of requests for bids from PMRS providers, but few PMRS purchases. According to the Staff Proposal, the small number of EPBB systems providing PMRS data has made program evaluation difficult and costly. Staff expresses further concern that PMRS providers, who are not directly under contract with the CSI Program, are not

[21] *See* Staff Proposal Sections 3.4 and 4.6.

required to turn over PMRS data to the PAs. At the same time, the Staff Proposal notes that Energy Division and CEC staff have made sure that only PMRS providers who are willing to provide the CSI program with data can be considered "Eligible PMRS providers" on the Go Solar California equipment vendor website listing.[22]

To address these concerns, the Staff Proposal recommended the Commission eliminate the EPBB metering cost-cap exemption and require that all EPBB customers over 15 kW take PMRS service and that all CSI systems with PMRS service report 15-minute interval kWh production data to the PAs on a quarterly basis for five years. In addition, the Staff Proposal recommended that the Commission offer a selected sample of EPBB customers under 15 kW a $100 annual incentive to install PMRS and provide the data on a quarterly basis to the Commission for up to five years. Staff estimates this recommendation could cost from $5 to $10 million, and needs to be evaluated in light of the overall measurement and evaluation (M&E) budget and evaluation plan objectives.

The Joint Solar Parties agree with the proposal to eliminate PMRS cost cap exemption but are concerned with the $5 to $10 million cost of paying EPBB customers to install PMRS. The PAs support the idea of obtaining more data from PMRS, but like the Joint Solar Parties, they question whether the $5 to $10 million cost of additional metering is too expensive given current CSI budget constraints. The PAs suggest that the PAs and Energy Division work together to decide whether additional metering is required and feasible, beyond the metering provided by the current M&E contractor, Itron. If additional metering

---

[22] *See* http://www.gosolarcalifornia.org/equipment/perf_monitor.php.

is deemed necessary, the PAs propose the Commission: (1) require PMRS on all systems over 15 kW and, (2) require the PAs to issue a Request for Proposals (RFP) for a PMRS provider to monitor these additional systems. Cost for this additional monitoring would be borne by the M&E budget.

Grid Alternatives opposes removal of the EPBB PMRS cost cap exemption, because it would be costly to implement for low income customers who do not have the high speed internet connections needed for PMRS. The Joint Solar Parties suggest that low-income CSI applicants be exempted from this requirement.

Discussion. We agree with the Staff Proposal that the cost-cap exemption should be removed because it is hindering the collection of CSI program evaluation data. We will require all EPBB systems over 10 kW to take PMRS service and to report 15-minute interval kWh production data to the PAs on a quarterly basis for five years. We choose 10 kW as the limit, rather than the 15 kW proposed by staff, because our experience with CSI indicates this is the typical dividing line between large and small commercial solar energy systems. We agree with the PAs that due to recent cuts in CSI administrative budgets, the program cannot provide a PMRS subsidy as staff originally proposed. Therefore, CSI participants will have to bear the cost of the required PMRS. In addition, we agree with the PA proposal that any need for additional PMRS data for program evaluation from systems under 10 kW should be determined through the CSI M&E process, in coordination with Energy Division.

Moreover, the PAs should evaluate the feasibility of and projected timeline for using advanced metering infrastructure (AMI) data to make solar production data available to CSI participants and submit a report to Energy Division on this subject within one year of this decision. The report should be electronically mailed to the service list of this proceeding. In response to Grid's concerns, the requirement to take PMRS service shall not apply to low-income CSI applicants funded through the MASH or SASH programs.

5.5. EPBB Calculator Integration with Powerclerk[23]

The EPBB Calculator is used to calculate the design factor of CSI applicants' systems and is a key component needed to determine an applicant's ultimate CSI incentive. The EPBB Calculator was created by the PAs in compliance with D.06-08-028. The Staff Proposal describes several aspects of the EPBB Calculator that could be streamlined and made more useful.

First, the EPBB Calculator is separate from the CSI online application processing database, PowerClerk. As a result, all applicants to the CSI program have to go to the online calculator and type in their system characteristics to get a design factor. The applicants then have to retype the same information into their CSI application in PowerClerk, as well as attach (or upload) a PDF file of their "EPBB Printout" to document their project's design factor.

Second, the PowerClerk database does not capture all of the system characteristic fields that are used to generate the Design Factor in the EPBB Calculator. For example, PowerClerk is missing the shading information about projects. Without this shading information, the accuracy of the system characteristic dataset is significantly reduced. While the shading information is contained on the EPBB Printout that is attached to the CSI application, the data is not in a format that can be easily retrieved and used by evaluation consultants.

---

[23] *See* Staff Proposal Section 3.8.

The Staff Proposal recommends the PAs be required to integrate the EPBB Calculator into the CSI online database, PowerClerk. The PAs have been considering various ways to make this change for several years, but have yet to take action. In addition, the Staff Proposal suggests the CSI Program online application database should capture all of the EPBB Calculator data fields, including shading.

The PAs generally support the Staff Proposal recommendation regarding the EPBB Calculator. They express concern, however, that the cost of integration should have minimal impact on the PAs' administrative budgets. The Joint Solar Parties support the Staff Proposal.

Discussion. We adopt the Staff Proposal and will require the PAs to integrate the EPBB Calculator into PowerClerk as soon as possible. This integration should occur within 90 days of this decision and any cost borne by the CSI administrative budget. We will require the PAs to report to Energy Division on whether integration is complete. Integration of the EPBB Calculator into PowerClerk is necessary for ongoing program assessment purposes. The EPBB Calculator has been funded with CSI administrative funds and should be used not only to calculate the amount of money paid to a solar customer, but also to promote solar customer understanding of how modifications to system design characteristics can improve both the customer's rebate and the customer's solar system production over the long-term.

5.6. Payment Intervals for PBI[24]

In D.06-08-028, the Commission established that larger systems must be paid based on the actual output, or production of the system. These incentives are known as PBI. Currently, systems above 30 kW are required to receive PBI in monthly payments over a five year period. The Commission also allowed smaller solar energy systems to "opt in" to PBI, and many have taken advantage of this and receive these monthly PBI payments. The Staff Proposal notes the concern that these smaller PBI systems with little generation output can present a payment processing burden to the PAs. However, the Staff Proposal does not identify the exact cost of monthly PBI payment processing.

The Staff Proposal recommends that to minimize the administration costs of five years of monthly PBI payments, the Commission give the PAs the discretion to make PBI payments on a quarterly or semi-annual basis if the project earns PBI payments of less than a certain amount per month (e.g., $50).

The PAs comment that less frequent PBI payments would save little money and make it harder to track PBI spending. Instead, they suggest the Commission no longer allow systems under 30 kW to opt-in to receiving PBI payments. Instead, these systems would have to receive an up-front EPBB incentive. The PAs contend this will improve budget tracking and maximize program dollars.

Discussion. We will make no change regarding PBI payment intervals. Although staff suggests a change that could lead to administrative cost reductions, we have no cost data to support a change and the PAs support

[24] *See* Staff Proposal Section 3.9.

monthly payments for cost tracking purposes. Nevertheless, we agree with the PAs that we should narrow the ability of smaller systems to opt for PBI payments. We prohibit fixed tilt systems 10 kW or smaller from receiving PBI payments, and will instead require them to receive an up-front EPBB incentive. Systems that incorporate tracking technology are exempted from this prohibition.

6. Budget Issues

6.1. General Market Administrative Budget[25]

In D.06-08-028, the Commission allocated 10% of the total CSI budget for administrative expenses, which includes general market program administrative activities, application processing, marketing and outreach (M&O) and M&E.[26] The PAs were directed to spend only half of the 10% allocated (or 5% of total program budget) until the Commission provided further direction on spending for M&O and M&E.[27]

The Staff Proposal reviewed CSI administrative expenses incurred by each PA since the start of CSI in 2007. The analysis indicates that for the three years 2007 through 2009, all three PAs spent more than the amount they had budgeted for general market program administration. The Staff Proposal raises the concern that as the volume of CSI applications increases in later years of the

---

25 *See* Staff Proposal Section 3.6.

26 Other portions of CSI such as RD&D, SASH and MASH have separate administrative budgets, and are not included in the 10% reserved for the general market administrative budget.

27 Interim guidance on M&O was provided in D.07-05-047. An Assigned Commissioner's Ruling, dated July 29, 2008 in R.08-03-008 set an M&E budget of $46.7 million.

program, administrative expenses may also rise. Staff is concerned that if administrative spending is already over budget, a budget shortfall could occur in later program years. Staff also notes that on occasion, there are administrative expenses that span all of the programs such as processing contracts and other paperwork for research, development and demonstration and the low-income incentive programs.

In D.10-09-046, the Commission shifted $40 million from the program administration budget into the incentive budget. (*See* D.10-09-046 at 32, and Appendix Table 1.) As a consequence, the CSI general market administrative budget is now as follows:

Table 2: Adopted CSI General Market Administrative Budget

Administrative Budget Component	Budget
Application Processing	$94,860,000
M&E	26,700,000
M&O	21,250,000
Unallocated	6,900,000
Total Program Administration	**$149,710,000**

The Staff Proposal makes several recommendations regarding the CSI program administration budget. These recommendations include setting parameters for the exclusion of certain costs from administration, establishing guidelines for acceptable spending levels, streamlining of application processing, and allowing the PAs to charge administrative expenses related to miscellaneous (or cross-cutting) functions to the CSI general market program administrative budget. In addition, staff also proposes the Commission direct the PAs to reserve funds for post-2016 program administration tasks[28] from the total CSI administrative budget. Finally, staff suggests that if the PAs exceed their allocated administrative budgets, cost overruns will come from shareholder dollars.

The Joint Solar Parties comment that the administrative budget for CSI is too small and should be increased by taking funds from M&O and M&E budgets.

The PAs agree with the Staff Proposal that administration costs will most likely go up in the second half of the program, as more applications are handled in each step. They ask the Commission to grant them flexibility to move funding around within the entire 10% allocated to Administration, including moving funds allocated for M&E and M&O purposes. To avoid exceeding budgets, the PAs ask the Commission to work closely with them to avoid this outcome rather than assess penalties.

Discussion. Many of the recommendations in the Staff Proposal are moot because they were made prior to D.10-09-046 which moved $40 million from the administrative budget to the incentive budget. In light of the newly revised administrative budget numbers, we now clarify several items.

---

[28] Post-2016 costs may occur if an incentive application is received on December 31, 2016. Under normal circumstances, the project may take up to 12 months after the application submittal to receive its incentive. If extensions are granted, the incentive may not be paid for three years from the application date, or December 2019. If the project occurs and is eligible for an incentive, the PAs will incur administrative costs to pay the incentive. If the project is eligible for PBI payments, there may be administrative costs for up to five years after project completion.

First, the PAs are authorized to spend administrative funds up to the full budget amounts adopted in D.10-09-046. (*See* D.10-09-046, Table 6, and Appendix Table 1.) The previous cap on spending in D.06-08-028 which restricted the PAs to spending only half of the administrative budget is now lifted.

Second, the PAs need to reserve funds to cover post-2016 expenses. The table above shows $6.9 million in unallocated funds. The PAs should reserve these unallocated funds to cover administrative costs they could incur processing applications and making PBI payments after 2016. CSI will cease to accept applications on December 31, 2016, and rate collections to fund CSI will also stop at that point, but the PAs need to have funds reserved to cover post-2016 administrative activities. If any PA forecasts that it will need more than its share of the unallocated $6.9 million, as shown in Table 6 of D.10-09-046, the PA should submit its forecast of the amount it will reserve for post-2016 expenses to Energy Division in its next semi-annual CSI expense report.

Third, we agree with the Staff Proposal recommendation that we should allow the PAs to charge administrative expenses related to miscellaneous functions that pertain to multiple sub-programs of CSI (i.e. SASH, MASH, RD&D, and CSI Thermal) to the general market administrative budget, if funds allow. We urge administrative simplicity and will not require the PAs to allocate every marketing or program evaluation dollar to the many CSI sub-programs. Of course, each of these sub-programs has its own administrative budget, so whenever possible, administrative expenses should be charged to the relevant program. But if allocation of activities that benefit all of the programs is not feasible, or expenditures are *de minimis*, we will allow the general market administrative budget to absorb these costs.

Finally, we caution the PAs that they may not exceed the budget set forth in D.10-09-046 for administrative expenses. We will disallow administrative cost overruns should they occur.

The Joint Solar Parties propose shifting funds from M&E and M&O to general administration. The PAs ask for flexibility to move funds between the various administrative functions. This mirrors requests made recently in this same rulemaking and addressed in D.10-09-046. We will not repeat the discussion in that decision. As we stated in D.10-09-046, the PAs may not shift administrative funds between administrative budget subcategories on their own. Rather, the assigned Commissioner may shift administrative budget dollars between administration subcategories after appropriate notice to the parties and an opportunity for them to comment. (*See* D.10-09-046 at 25 and Ordering Paragraph 9.) Alternatively, if the PAs want to shift funds between administrative subcategories, they may file a petition for modification of D.10-09-046.

6.2. M&O Budget[29]

As stated above, the Commission reduced the administrative budget for the CSI Program in D.10-09-046. The decision specifies that the total M&O budget is $21.25 million, with $15 million allocated for general market CSI M&O and $6.25 million allocated for M&O related to the electric-displacing portion of the CSI-Thermal program. In D.10-09-046, the Commission specified that the $15 million general market CSI M&O budget would be split equally among the three PAs until further order of the Commission, and would not follow the

[29] *See* Staff Proposal Section 5.4.

spending allocation percentages used for other aspects of the CSI program. (*See* D.10-09-046, Table 6, n. 16.) The decision warned that the M&O budget could be adjusted further. This decision clarifies that the budget shall remain as adopted in D.10-09-046. We reaffirm that the $15 million budgeted for M&O shall be split equally among the three PAs, which provides each PA with $5 million for M&O activities. The table below summarizes the M&O adopted budget.

Table 3: Adopted CSI M&O Budget

PA	M&O Budget for General Market CSI	M&O Budget for Electric-displacing CSI-Thermal	Total PA M&O Budget
CCSE	$1,545,000.00	$643,750.00	$2,188,750.00
PG&E	$6,555,000.00	$2,731,250.00	$9,286,250.007,731,250
SCE	$6,900,000.00	$2,875,000.00	$9,775,000.007,875,000
Total	**$15,000,000.00**	**$6,250,000.00**	**$22,856,250.014**

6.3. M&E Budget[30]

In July 2008, an Assigned Commissioner's Ruling in R.08-03-008 (the predecessor docket to the current CSI/DG Rulemaking) established a CSI program evaluation plan and total budget of $46.7 million for general market CSI M&E. Later decisions for SASH, MASH, and CSI Thermal have set aside funds for M&E applicable to those smaller programs. Commission staff has jointly coordinated all of these M&E efforts, and an M&E project coordinator is funded from general market M&E funds. In D.10-09-046, the Commission reduced the general market M&E budget to $26.7 million.

---

30 *See* Staff Proposal Section 4.2.

The Staff Proposal recommends the Commission affirm that M&E studies that pertain to multiple programs should be funded by the general market M&E budget.

The PAs express concern with the recommendation that the general market M&E budget should fund studies that benefit other smaller programs like SASH, MASH and CSI Thermal, particularly given the recent M&E budget reduction to $26.7 million. The Joint Solar Parties suggest that since M&E funds are short, M&E work should focus on program achievements and market transformation.

Discussion. We affirm that the PAs should coordinate and jointly manage all M&E activities across the CSI program areas, even though certain studies only pertain to one program component. If an M&E study pertains to multiple CSI programs (such as general market, MASH and SASH), it can be charged in whole or part to the general market program M&E budget. We clarify that the PAs should follow Energy Division directives on how to allocate M&E studies when the study pertains to multiple CSI program areas.

In summary, the various M&E budgets for all portions of the CSI program are shown in the table below:

Table 4: Authorized M&E budgets for CSI Program Components

Program Area	Authorized Budget ($ in millions)	Authorizing Decision
CSI General Market	$25.45	D.10-09-046
SASH	$1.08	D.07-11-045
MASH	$1.08	D.08-10-036

RD&D	$1.5	D.07-09-042
CSI Thermal	$6.25[31]	D.10-01-022
Total	**$35.36**	

6.4. CSI Revenue Requirement[32]

The Commission established the initial CSI revenue requirement in D.06-01-024, and it has been adjusted several times since.[33] The Commission's most recent adjustment to the revenue requirement was set forth in D.10-04-017. The Staff Proposal reviewed and analyzed the status of the revenue collections by PG&E, SCE and SDG&E to support the CSI program.

The Staff Proposal concludes that all three utilities have positive balances in their CSI balancing accounts, meaning they have collected more from ratepayers than they have actually spent to date. On the other hand, if pending incentive reservations are considered, the balancing accounts of all three utilities can be considered undercollected, meaning obligations are greater than rate collections to date. (See Staff Proposal, Section 7.1, Table 24.) The Staff Proposal calculates that potential undercollections for PG&E, SCE, and SDG&E are approximately $44 million, $72 million, and $25 million, respectively. (*Id.*) At the same time, the Staff Proposal concludes that these potential undercollections

[31] Per D.10-01-022 (at 66), the CSI Thermal M&E budget is composed of $5 million from the gas-displacing budget, and $1.25 million from the general market CSI administration budget.

[32] *See* Staff Proposal Section 7.1.

[33] *See* D.06-12-033 and D.08-12-004.

are not a significant concern because many applications with pending reservations may never actually be installed and paid.

In response to the Staff Proposal, the Joint Solar Parties suggest that given CSI budget constraints, the Commission should seek statutory amendments to increase the overall CSI budget. CCSE requests that the Commission increase rate collection amounts in the next two years because it expects a budget shortfall based on estimates of PBI system overproduction. PG&E requests that the Commission allow an advice letter process to adjust the CSI revenue requirement as needed, because this process may be faster than a petition for modification of the applicable decision. SCE requests clarification that interest collected on funds in the CSI balancing account, as well as forfeited application fees, can be used to reduce rate collections.

Discussion. Following release of the Staff Proposal, the Commission adopted a revised CSI Budget in D.10-09-046. The revised budget in Table 6 of that decision notes that the revised budget differs slightly from the CSI revenue requirement by utility set forth in D.10-04-017. (*See* D.10-09-046, n. 18 at 23; and D.10-04-017, Table 3 at 8.) Given this minor discrepancy, we need to make a minor adjustment to the CSI revenue requirement at this time so that the total CSI budget numbers match the collections by PG&E, SCE and SDG&E.

Upon review of the information in the Staff Proposal and the parties' comments on this topic, we are not persuaded that any adjustments to the current revenue requirement for CSI are necessary, other than a minor adjustment so that the revenue requirement matches the budget adopted in D.10-09-046. The current revenue requirement collection schedule ensures that all funds for CSI will be collected by 2016, even if program expenditures occur after that date. We will adjust it slightly by modifying collections in 2016 for all three utilities so that total collections match the CSI budget adopted in D.10-09-016. The revised CSI Revenue Requirement is as follows:

Table 5: Revised Annual CSI Revenue Requirements (In Millions of Dollars)

Year	PG&E	SCE	SDG&E	Total
Transfer from SGIP on 12/31/2006	$0	$104.6	$37.2	$141.8
2007	$140	$147	$33	$320
2008	$140	$147	$33	$320
2009	$140	$0	$0	$140
2010	$43.75	$110	$25	$178.75
2011	$105	$110	$25	$240
2012	$120	$110	$25	$255
2013	$85	$74	$16	$175
2014	$85	$74	$16	$175
2015	$85	$74	$12.8	$171.8
2016	$.4504	$43.032	$5.9676	$49.45
Total	**$944.2004**	**$993.632**	**$228.9676**	**$2,166.8**

Moreover, the Staff Proposal notes that the three utilities have significant combined forfeited application fees and interest. Staff now estimates this combined amount for all three PAs at $31.4 million through the first quarter of 2011. As recommended in the Staff Proposal, we clarify that these forfeited fees and interest reduce the amount of ratepayer collections as previously set by the Commission. Energy Division should continue to monitor the status of CSI collections and total spending and may recommend that the assigned Commissioner and Administrative Law Judge consider revenue requirement adjustments, if warranted, at any time.

PG&E requests the Commission allow the utilities to seek revenue requirement adjustments by advice letter so that any revenue modifications can occur quickly. SCE and SDG&E made a similar proposal in 2008, which the Commission declined to adopt. The Commission stated it preferred to consider revenue requirement changes through the petition for modification and decision process. (D.08-12-004 at 10.) For the same reasons discussed in that decision, we decline PG&E's proposal.

7. Low Income Program Modifications

7.1. SASH Design Factor[34]

In D.07-11-045, the Commission required that in order to qualify for SASH program incentives, an installation must meet a minimum performance requirement. The adopted minimum requirement was set equal to 0.95 of the design factor[35] used to calculate EPBB incentives for the general market CSI program. (D.07-11-045 at 21.) The intent of this minimum performance standard was to provide better assurance of high performing installations for low-income homeowners.

As a result of this minimum performance requirement, the SASH Program Administrator (Grid Alternatives) has reported to Energy Division that many eligible customers have been unable to qualify for SASH incentives. According to Grid Alternatives, 18% of SASH applications from April 2009 to January 2010 failed to meet the minimum performance requirement. Staff suggests this data indicate the SASH minimum performance requirement may be too stringent and

---

[34] *See* Staff Proposal Section 6.3.

[35] The design factor is a reflection of a proposed system's tilt, orientation, shading, equipment efficiency, and other factors compared to an optimally-installed system.

that if it were relaxed, a larger number of projects would be eligible for SASH incentives. Thus, the Staff Proposal recommends the Commission change the minimum design factor requirement for SASH systems from 0.95 to 0.85.

Grid Alternatives supports the recommendation in the Staff Proposal. SCE opposes it, but suggests that if the minimum performance standard is lowered, the incentive mechanism should reflect a performance efficiency factor consistent with the general market CSI and MASH program

Discussion. We will make the change proposed by staff, and lower the design factor requirement for the SASH Program to 0.85 to enable more systems to qualify. We find this change reasonable because a design factor of 0.85, although lower than the initial 0.95 design factor, still ensures a high level of performance from the installed facilities.

7.2. SASH Inspections[36]

In D.08-11-005, the Commission required that 100% of the systems installed under the SASH Program be inspected by a third-party inspector. The Commission adopted this proposal out of concern for a "conflict of interest" that may occur if the incentives are assigned to the PA since the administrator also serves as a solar system installer for the projects. In the CSI general market program, only one in seven systems are currently inspected, although staff has proposed reconsideration of this inspection level.

Staff recommends that only one in seven SASH systems be inspected, consistent with the current general market CSI program. A sampling protocol would be developed by the inspector and approved by the Commission's Energy

---

[36] *See* Staff Proposal Section 6.4.

Division. An inspector, independent from the SASH Program Administrator, would randomly select the projects for inspection using the sampling protocol. Grid Alternatives and SCE support the recommendations in the Staff Proposal.

Discussion. We will modify our previous mandate in D.08-11-005 that 100% of SASH projects be inspected. Since the start of the SASH program, installed projects routinely pass inspection. Plus, the SASH program has financial safeguards through program reporting and auditing to ensure the integrity of the program is maintained. This mitigates our concerns over any conflict of interest derived from Grid Alternatives dual role as PA and system installer. We agree with staff that random inspection of a sample of projects by a third party, not chosen by the PA, is now sufficient. To further minimize any conflict of interest, the third party inspector should report inspection results directly to the relevant utility and the Energy Division, as well as Grid Alternatives. A lower inspection requirement should reduce SASH administrative costs and potentially allow installation of more SASH projects.

Therefore, we will require SCE, as administrator of the SASH program administration contract with Grid Alternatives, to work with Grid Alternatives to develop an inspection sampling protocol for SASH and submit it by advice letter within 60 days of this decision. The protocol should involve random inspection of one in seven systems by a third party inspector not affiliated with Grid Alternatives, the SASH PA. Furthermore, we clarify that if inspection guidelines for the general market program are modified, SASH inspection levels should conform to those inspection modifications.

7.3. Increasing the Budget for MASH Track 1 Incentives[37]

As established in D.08-10-036, the MASH program provides two types of incentives. Track 1 incentives provide fixed, upfront capacity-based incentives for solar PV systems that offset common area and tenant loads. Incentives are either $3.30 per watt for systems that offset common area load (known as Track 1A), or $4.00 per watt for systems that offset tenant load (Track 1B). Track 2 incentives are determined through an application and competitive grant process for systems that provide quantifiable "direct tenant benefits" (i.e. any operating costs savings from solar that are shared with their tenants).

Track 1 incentives are sold out in all three utility territories and each PA has a waiting list. With regard to Track 2, the PAs have received many applications, but few projects have been found to provide compelling benefits. Therefore, less than half of the Track 2 incentives have been awarded and $11.9 million remains in the Track 2 budget as of December 31, 2010.

The Staff Proposal suggests eliminating Track 2 incentives so that remaining Track 2 funds, or $11.9 million, can be reallocated to Track 1 and used to fund further installations from the waiting list. This would install additional capacity of solar PV at a lower cost per watt than Track 2. At the same time, staff proposes reducing Track 1 incentives from their current levels to $2.30 per watt for Track 1A and $2.80 per watt for Track 1B. These new incentive levels would apply to any reservations confirmed after the adoption of these new lower rates.

---

37 *See* Staff Proposal Section 6.6.

In addition, the staff suggests the Commission reallocate some SASH program funding to the MASH program, but staff does not suggest a specific dollar amount**.**

PG&E, Everyday Energy, Grid Alternatives, and CCSE support eliminating MASH Track 2 incentives as suggested in the Staff Proposal. PG&E states that Track 2 has had little success in its service area and few applications have demonstrated significant benefit to low income tenants. Everyday Energy notes that the popularity of Track 1 suggests the higher incentives under Track 2 are unnecessary. CCSE suggests that the 20/80 percentage split between Track 1A and Track 1B be eliminated. Helio opposes the proposal to eliminate Track 2.

PG&E and CCSE support the proposal to reduce Track 1 incentive rates, with PG&E suggesting a lower Track 1A rate than proposed by staff in order to fund more projects. PG&E notes that a recent study by Navigant suggests that incentives of $1.90 per watt are reasonable given that MASH systems are often owned by third parties who are able to take advantage of federal tax incentives in addition to MASH incentives. (PG&E, 7/5/11 at 14.) Everyday Energy opposes incentive reductions, claiming that market speculation caused the program to sell-out quickly. Instead, it recommends an application fee for projects greater than 10 kW, shorter completion deadlines, and the requirement to submit a signed contract to counteract speculation and ensure commitment from applicants.

With regard to the proposal to reallocate SASH funds to MASH, CCSE, Everyday Energy and Helio support the idea, while CALSEIA and Grid Alternatives oppose it.

Discussion. We will adopt the recommendation in the Staff Proposal to shift all remaining funds from Track 2 to Track 1. The strong demand for Track 1 incentives indicates that the higher Track 2 incentives are not necessary. We will also accept the staff recommendation to lower MASH Track 1 incentives. We agree with PG&E that Track 1A can survive with an incentive lower than proposed by staff, given the continuing cost declines for solar installations that our CSI database shows. The new Track 1 MASH incentives shall be $1.90 per watt for Track 1A and $2.80 per watt for Track 1B. The new incentive levels apply to any reservations confirmed after the date of this decision. In addition, we will also remove the 20/80 percentage split between Track 1A and Track 1B that we specified in D.08-10-036. The PAs may now spend their Track 1 funds on either Track 1A or 1B without limitation.

We accept the suggestion of Everyday Energy that an application fee will help ensure commitment by applicants to the MASH program. We direct the PAs to add a MASH application fee that mirrors the current CSI general market program application fee structure which is as follows:

Table 6: Application Fee Structure

System Size Range	Application Fee
10 kW to < 50 kW	$1,250
50 to < 100 kW	$2,500
100 to < 250 kW	$5,000
250 to < 500 kW	$10,000
500 to 1000 kW	$20,000

The application fee should be refundable upon the successful installation of the solar energy system, or forfeited if applications drop out after they have been confirmed.

We decline to shift any SASH funds to MASH at this time, but will continue to monitor this closely. We agree with Grid Alternatives that a fund transfer may be premature and we will await the outcome of pending evaluations of the MASH and SASH programs before shifting funds. Moreover, we direct our Energy Division to obtain information on the number of households that may qualify for MASH and SASH. Once the MASH and SASH evaluations are complete and information on eligible households is available, Energy Division may propose to the ALJ and assigned Commissioner that funds be transferred from SASH to MASH. The ALJ and assigned Commissioner may issue a ruling seeking comment on that proposal and may transfer funds between SASH and MASH, after appropriate notice and opportunity for comment by the parties to this proceeding.

7.4. Two Year Occupancy for MASH Program[38]

The CSI MASH program requires that projects be occupied for two years prior to applying for incentives from the MASH program. The Commission adopted this requirement in D.08-10-036 because at that time, MASH incentives were intended for retrofitting existing affordable housing and were higher than the CEC's NSHP incentives for new construction.[39] The Commission wanted to avoid a situation where new construction projects purposefully avoided the lower incentives in the NSHP program in order to receive higher incentives through the MASH program.

The Staff Proposal recommends the Commission now eliminate the two-year occupancy requirement, contending the requirement has caused confusion since the launch of the MASH program. The Staff Proposal further recommends

---

[38] *See* Staff Proposal Section 6.7.

[39] Current NSHP Affordable Housing incentives are $3.50 per watt for residential unit systems and $3.30 per watt for common area systems.

the Commission maintain the otherwise applicable rule that a project cannot receive both NSHP and CSI incentives. According to the Staff Proposal, the CEC's NSHP Guidebook was modified recently to allow projects that have been occupied for less than two years to qualify for the NSHP program to "close the gap" between the NSHP affordable housing program and the CSI MASH program**.**

SCE and PG&E support the Staff Proposal, but they both question whether this modification allows new construction projects to apply for MASH incentives**.** Helio and CCSE also support the Staff Proposal on this topic.

Discussion. Given recent changes to both the MASH Program and NSHP, the two year occupancy requirement that we adopted in D.08-10-036 is no longer needed. This decision lowers MASH incentives below NSHP levels, and NSHP allows projects occupied less than two years to apply for incentives through that program. We will remove the two-year occupancy requirement for the MASH program, but we maintain the requirement that projects cannot receive incentives from both NSHP and MASH.

8. Marketing and Outreach Modifications[40]

In D.07-05-047, the Commission established interim guidance for CSI M&O activities. The CSI PAs have been conducting M&O activities on an interim basis in accordance with that decision while the Commission considered an appropriate long-term budget and approach for this element of the program.

To provide a strategic focus to M&O efforts, the CSI Staff Proposal recommended that the CSI general market administrative budget be spent on

[40] *See* Staff Proposal Sections 5.2, 5.3, 5.5 and 5.6.

M&O activities that are designed to: (1) market the solar program and solar technology to consumers and end-users; (2) facilitate the development of a sustainable solar industry through the creation of tools, information, trainings, events that expand or support the solar industry; and (3) facilitate efforts to reduce installed cost of systems (e.g. reducing permitting fees, promoting group discounts, facilitating price competition, streamlining administrative costs, reducing administrative costs to contractors).

The Staff Proposal recommended that the PAs hire a marketing firm to handle statewide activities such as media buys, events and the overall brand. Staff also listed activities that the PAs should conduct as part of their M&O obligations, which would be approved annually via advice letter.

Comments were filed by Joint Solar Parties, CalSEIA and the CSI PAs. All groups expressed support for the goals of providing consumer information, facilitation of a sustainable solar industry, and strategies to reduce solar costs to end-users. The *Go Solar California!* brand continues to receive the support of all parties, and the parties' comments supported a targeted approach to ensure that the right information is provided to different groups of solar customers and professionals.

The CSI PAs did not support the staff recommendation to hire a marketing firm for a statewide M&O campaign. The PAs contend that each territory has unique needs, and the PAs are in the best position to tailor M&O to these needs. CalSEIA remarked that CSI-Thermal should be marketed alongside the general market program. In contrast, the CSI PAs rejected the staff proposal to file plans for the two programs simultaneously, arguing this would be problematic given the different needs of the programs. CCSE affirmed overall support for integrated marketing, when appropriate, with energy efficiency and demand response programs such as Energy Upgrade and Engage 360. The Joint Solar Parties suggested that activities should focus on developing various consumer and industry best practice guides and solar comparison tools.

The PAs commented on the Energy Division's M&O approval process, suggesting that it should not interfere with timely M&O implementation. They suggest a cost threshold that allows the PAs to spend below the threshold without Commission approval. PG&E disagreed with the advice letter process as the best way to approve plans, stating that potential protests would cause delays in the M&O planning process. The PAs all indicated that the proposed annual filing date of September 30th was inconvenient and that December or January would be a more appropriate time for them to file such plans.

Discussion. We will direct the PAs to continue to conduct the key M&O activities adopted in D.07-05-047, including but not limited the CSI electronic newsletter, monthly free classes for installers, use of the *Go Solar California!* brand and logo, and maintenance of CSI web site that link to the *Go Solar California* web site. We will leave to the discretion of the PAs and the Energy Division the many other recommended activities listed in the Staff Proposal, and encourage them to consider the merits of those activities when submitting plans to the Energy Division.

We direct the PAs to file annual M&O plans and budgets via advice letter by December 1st of each year, following the same general approval guidelines currently established by the Energy Division.[41]

---

[41] On April 5, 2011, the Energy Division approved the PAs' 2011 M&O plans, and issued "CSI Approval Procedure, and Energy Division Staff Guidelines, for CSI

Footnote continued on next page

9. Comments on Proposed Decision

The proposed decision of the Commissioner in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments on the proposed decision were filed by CCSE, Everyday Energy, IREC, Grid Alternatives, PG&E, SCE, SDG&E, the Solar Alliance, SolarCity, Recolte, and the Vote Solar Initiative. Reply comments were filed by CCSE, Grid Alternatives, PG&E, Recolte, SCE, SDG&E, and the Solar Alliance. In addition, the ALJ received letters from Del Mesa Carmel, Eden Housing, Skyline Solar, Inc. (Skyline Solar), and Sustainable Napa County. These letters were placed in the correspondence file of this proceeding. Minor corrections and clarifications in response to comments are incorporated throughout the decision. Where comments reargued earlier positions, they were ignored. A few comments merit discussion.

The utilities oppose expansion of the RES-BCT tariff beyond local governments, arguing that an expansion shifts costs to other bundled customers. We agree that further study of the underlying costs of any RES-BCT expansion deserve further scrutiny and we direct Energy Division to review this issue further.

PG&E and SDG&E requests that biogas and fuel cell projects not be eligible for VNM as these projects only qualify for a generation credit under net energy metering. We agree and have made this change.

Marketing and Outreach Activities, Materials and Third-party Sponsorships—Version 1.0."

PG&E requests additional time to perform the AMI feasibility study discussed in Section 5.4 and Ordering Paragraph 8. This request is reasonable and this change has been made. In addition, PG&E requests that Track 1A MASH incentives be reduced to $1.90 per watt to enable the PAs to fund more MASH applications. PG&E contends this lower incentive is supported by Navigant's recent study of the CSI low-income incentive programs.[42] We find this change reasonable and will adopt it.

Skyline Solar requests that systems under 10 kW that employ tracking technology be allowed to receive PBI payments. We agree with this exemption and incorporate it into the decision.

10. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Dorothy J. Duda is the assigned ALJ in this portion of the proceeding.

Findings of Fact

1. In D.08-10-036, the Commission established the MASH program with the goal of allocating the benefits of solar energy systems to all tenants on the eligible affordable housing property.

2. Many multifamily affordable housing properties are comprised of multiple parcels extending across several city blocks and served by multiple service delivery points.

---

[42] See Navigant's "California Solar Initiative Low-Income Solar Program Evaluation Market Assessment Report," at 10. The report can be viewed at: http://www.cpuc.ca.gov/NR/rdonlyres/EB601615-61B3-43B2-B034-EEC95AF46708/0/CSISASHandMASHMarketAssessmentReport.pdf

3. The current VNM tariffs limit the transfer of VNM credits to those accounts served by a single service delivery point.

4. Residential and small business renters that fund CSI through their electric rates are unable to apply for CSI incentives under the current CSI program.

5. The concept of a bill credit transfer for local governments was created by Section 2830.

6. Energy Division has found that CSI application processing times are too long and delays cost solar customers both time and money.

7. When CSI applications drop out, those incentive dollars can be made available to other projects.

8. The CEC's SB 1 Guidelines require inspection of one in seven CSI projects whereas in D.06-08-028, the Commission required the PAs to inspect every CSI project between 30 and 100 kW.

9. In D.06-08-028 the Commission directed that project installers who fail three random inspections must be excluded from program participation.

10. In D.06-08-028, the Commission allowed EPBB systems to apply for a PMRS cost-cap exemption under certain circumstances.

11. The EPBB calculator, created in compliance with D.06-08-028, is separate from the CSI online application processing database, PowerClerk.

12. In D.06-08-028, the Commission allowed smaller solar energy systems to opt-in to PBI payments, rather than up-front EPBB incentives.

13. In D.06-08-028, the Commission allocated 10% of the total CSI budget for administrative expenses, but directed the PAs to spend only half this amount until further Commission order.

14. In D.10-09-046, the Commission shifted $40 million from the CSI administration budget into the CSI incentive budget.

15. The PAs will need administrative funds to cover post-2016 expenses.

16. The Commission established a CSI program evaluation budget of $46.7 million in July 2008, which was reduced to $26.7 million in D.10-09-046.

17. The current CSI revenue requirement was adopted in D.10-04-017.

18. Forfeited application fees and interest reduce the amount of ratepayer collections for CSI.

19. In D.07-11-045, the Commission adopted a minimum design factor requirement for SASH projects.

20. In D.08-11-005, the Commission required that 100% of SASH installations be inspected by a third-party inspector.

21. The SASH program has financial safeguards through program reporting and auditing.

22. MASH Track 1 incentives are sold out in all three utility territories, and there are unused funds available in the MASH Track 2 budget.

23. In D.08-10-036, the Commission required that MASH projects be occupied for two years prior to applying for MASH incentives.

Conclusions of Law

1. To fulfill the mandate of D.08-10-36, the VNM tariffs applicable to MASH Program participants should be modified to allow the sharing of VNM credits over the entire affordable housing property participating in MASH, which may be on contiguous parcels divided by a street, highway or public thoroughfare, as long as they are under the same ownership.

2. VNM tariffs should be expanded to allow any residential, commercial or industrial multi-tenant or multi-meter property to take VNM service and thereby receive the benefits of a solar energy system and net energy metering.

3. For properties other than MASH-participating affordable housing developments, an expanded VNM tariff should be limited to accounts served by a single SDP.

4. It is not necessary for a customer to have received a CSI incentive to receive VNM service.

5. The expanded VNM tariff can apply to any DG technology that is eligible for a full retail rate credit under net energy metering.

6. Energy Division should further review the costs and implementation issues surrounding expansion of the RES-BCT tariff, which could allow solar energy system owners to share production at one site with other accounts registered to the same customer.

7. The Commission should adopt minimum standards for CSI order processing.

8. The CSI PAs should submit a quarterly report to the Energy Division containing detailed information on application extensions.

9. It is reasonable to remove the requirement that PAs inspect every project between 30 and 100 kW so that Commission requirements and CEC SB 1 Guidelines for inspection are consistent.

10. The PAs should review their inspection procedures, sampling methodology and costs in an effort to decrease inspection costs. The PAs should submit an inspection plan by advice letter.

11. The CSI rules for suspension should be modified to be based on a failure rate rather than a predetermined number of failures.

12. Section 4.10 of the CSI Handbook should be modified to clarify that high volume installers, defined as those with 200 or more project sites per rolling

12-month period, shall be placed on probation if their failure rate reaches 1.5%, and shall be suspended if their failure rate reaches 2.5%.

13. The cost-cap exemption adopted in D.06-08-028 should be removed to improve collection of CSI production data. All EPBB systems over 10 kW, except those funded through MASH or SASH, should take PMRS service at the applicants own cost, and report 15-minute interval kWh production data to the PAs on a quarterly basis for five years.

14. Integration of the EPBB calculator into PowerClerk will expedite sharing of critical CSI project information from applicants directly into the database to be used for program evaluation purposes.

15. Fixed tilt systems 10 kW or smaller should no longer be able to opt-in to PBI payments.

16. The CSI PAs should be allowed to spend the entire authorized administrative budget amount, but not exceed it.

17. The PAs should reserve unallocated administrative funds for post-2016 expenses.

18. The PAs may charge administrative expenses related to miscellaneous functions that pertain to several CSI sub-programs to the general market CSI administrative budget.

19. The CSI M&O budget should remain as adopted in D.10-09-046.

20. The PAs should coordinate and jointly manage M&E activities across all CSI sub-programs.

21. The CSI revenue requirement needs a minor adjustment to collections in 2016 so that revenue collections match the CSI budget adopted in D.10-09-016.

22. The SASH minimum design factor should be lowered to 0.85 based on experience with the program.

23. Random inspection of a sample of SASH installations should replace the former 100% inspection requirement.

24. The SASH PA should develop a sampling protocol for SASH involving random inspection of one in seven systems by a third-party inspector not affiliated with the PA.

25. If inspection guidelines for the general market program are modified, the SASH inspection guidelines should conform to these new inspection guidelines.

26. All funds remaining in MASH Track 2 should be shifted to MASH Track 1.

27. MASH Track 1 incentives should be reduced given declines in solar installation costs.

28. It is reasonable to remove the 20/80 percentage split of Track 1A and 1B funds adopted in D.08-10-036, and allow the PAs to spend MASH Track 1 funds on either Track 1A or 1B without limitation.

29. A MASH application fee should be adopted, mirroring the application fees in the general market CSI program.

30. The two-year occupancy requirement for MASH applicants is no longer needed, but projects may not receive incentives from both NSHP and MASH.

31. The PAs should continue to conduct the key M&O activities adopted in D.07-05-047.

O R D E R

IT IS ORDERED that:

1. Within 30 days of the effective date of this decision, Southern California Edison Company and San Diego Gas and Electric Company shall each file a Tier 2 advice letter to revise their respective Virtual Net Metering tariffs, applicable to Multifamily Solar Housing (MASH) Program participants, to match the Pacific Gas and Electric Company (PG&E) NEMVNMA tariff. Within 30 days of this decision, PG&E should file a Tier 2 advice letter to remove the sunset date from its NEMVNMA tariff for MASH participants.

2. Within 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas and Electric Company (collectively, the utilities) shall each file Tier 2 advice letters containing modifications to their Net Energy Metering tariffs to allow Virtual Net Metering (VNM) to apply to all multi-tenant and multi-meter properties, with the limitation that sharing of bill credits can only occur for accounts served by a single service delivery point that receive a full retail rate credit unless the customer is a Multifamily Solar Housing Program participant. The revised tariffs in these advice letters should mirror the tariff created in compliance with Decision 08-10-036 for Multifamily Affordable Solar Housing (MASH) program participants. Any deviations from the MASH VNM tariffs should be explained and supported in the advice letter. The utilities may propose a one time account set up fee and monthly administrative fee for VNM service. The utilities may seek recovery of VNM implementation and set up costs in their future general rate cases.

3. The California Solar Initiative (CSI) Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the

California Center for Sustainable Energy) should act on CSI applications within the timeframes in Table 1 of this decision.

4. The Commission's Energy Division may draft a resolution for consideration of an audit of California Solar Initiative Program Administrators' performance with regard to project extensions.

5. The California Solar Initiative Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall jointly undertake a review of their inspection procedures, sampling methodology, and inspection costs. Such a review shall assess the inspection sampling methodology and whether certain solar installation contractors should be targeted for inspection if they are new to the program or had a history of problem installations. The inspection review shall consider the cost of inspections versus the benefit inspections can provide in preventing fraud and maintaining program integrity.

6. Within 90 days of the effective date of this decision, the California Solar Initiative (CSI) Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall jointly submit a Tier 2 advice letter with a CSI inspection plan.

7. The California Solar Initiative Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall report within one year of this decision to Energy Division on the feasibility of using advanced metering infrastructure data to make solar production data available to CSI participants, and ensure a copy of this report is sent to the service list of this rulemaking.

8. Within 90 days of the effective date of this decision, the California Solar Initiative (CSI) Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall complete integration of the Expected Performance Based Buydown Calculator into the CSI application database, PowerClerk.

9. The California Solar Initiative Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) may spend up to, but no more than, the total administrative budget amounts adopted in Decision 10-09-046, Table 6.

10. The California Solar Initiative (CSI) Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall reserve the unallocated funds shown in Table 6 of Decision 10-09-046 for post-2016 CSI expenses. If additional funds are needed for post-2016 CSI application processing, the CSI Program Administrators shall alert Energy Division in the semi-annual CSI expense report.

11. The California Solar Initiative revenue requirement shown in Table 5 of this decision is adopted.

12. Southern California Edison Company shall work with the Single Family Affordable Solar Housing (SASH) Program Administrator to develop a sampling protocol for the SASH Program and shall, within 60 days of this decision, submit that protocol for Commission approval through a Tier 2 advice letter.

13. Multifamily Affordable Solar Housing (MASH) Program Track 1 incentives shall be reduced to $1.90 per watt for Track 1A and $2.80 per watt for Track 1B. These new incentive levels shall apply to any MASH reservations confirmed after the date of this decision.

14. Energy Division shall obtain information on the number of households eligible for the Single Family Affordable Solar Housing Program and the Multifamily Affordable Solar Housing Program and report this information to the Administrative Law Judge and assigned Commissioner.

15. The Administrative Law Judge and assigned Commissioner may issue a ruling to shift funds from the Single Family Affordable Solar Housing Program to the Multifamily Affordable Solar Housing Program, after appropriate notice and opportunity to comment by the parties to this proceeding.

16. Applicants for Multifamily Affordable Solar Housing incentives may not receive incentives from the California Energy Commission's New Solar Homes Partnership.

17. The California Solar Initiative Program Administrators (namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall file annual Marketing and Outreach plans and budgets through a Tier 2 advice letter no later than December 1st of each year, following the general approval guidelines currently established by the Energy Division.

18. The Administrative Law Judge may modify the compliance dates set forth in this order for good cause and as needed to ensure effective program implementation.

19. This proceeding remains open for consideration of additional issues as set forth in the Scoping Memo Ruling dated November 9, 2010.

This order is effective today.

Dated _________________, at San Francisco, California