Comments of Southern California Edison Company on Senate Bill 1 Eligibility Requirements Staff Report

In the Matter of: Senate Bill 1 Eligibility Criteria and Conditions for Incentives	)))	Energy Commission Docket No. 07-SB-1

I. Introduction

SCE appreciates the opportunity to provide the following comments on the California Energy Commission's (CEC) workshop held on October 4, 2007 to discuss the CEC Draft Staff Report, "Guidelines for California's Solar Electric Incentive Programs Pursuant to Senate Bill 1" (Draft Guidelines). SCE respectfully submits the following comments on the Draft Guidelines and the workshop.

As the CEC notes, Senate Bill 1 (SB 1) adds sections to the Public Resource Code that require building projects applying for ratepayer-funded incentives for photovoltaic (PV) systems to meet minimum energy efficiency levels, and PV system components and installations to meet rating standards and specific performance requirements. SCE supports these legislative goals, as well as the CEC's efforts to ensure that, consistent with SB 1, the State's solar incentive programs will facilitate:

- High-quality, solar energy systems with maximum system performance to promote the highest energy production per ratepayer dollar.
- Optimal system performance during periods of peak demand.
- Appropriate energy efficiency improvements in new and existing homes, and in commercial structures where solar energy systems are installed.

To that end, SCE offers the following brief comments on the Draft Guidelines.

II. The Energy Efficiency Requirements in the Draft Guidelines Should be Adopted by the CEC.

SCE supports the energy efficiency requirements in the Draft Guidelines and believes that these requirements are consistent with the benefits of integrating all customer energy management solutions – energy efficiency, demand response, and renewable energy – referenced in the loading order in California's Energy Action Plan. The CEC has attempted to strike a balance between establishing appropriate rules concerning energy efficiency improvements in structures where solar energy systems are installed, and reducing barriers to solar installation. SCE supports the CEC's recommendations as achieving the appropriate balance between these competing concerns. Although some workshop participants expressed concerns that energy efficiency requirements should not be prescriptive, and that customers may prefer to forgo cost-effective energy efficiency improvements, this was not the intent of SB 1. Rather, the legislature recognized that energy efficiency is key to management of the State's energy needs, and that the economics of a solar energy system are improved with the addition of cost-effective energy efficiency.

SCE stands ready to assist the solar industry in complying with meaningful SB 1 energy efficiency requirements by providing audit, benchmarking and commissioning program services through our current and future energy efficiency program portfolios. SCE believes that there is a significant opportunity for the solar industry to partner with the energy efficiency industry, especially energy service companies, to implement comprehensive solutions for customers. SCE's energy efficiency programs can be an effective catalyst to bring these markets together.

As SCE previously mentioned, the proposed energy efficiency requirements will result in additional administrative and implementation costs to both the CSI program and energy efficiency programs. SCE anticipates that these additional costs will be authorized by the California Public Utilities Commission (CPUC) in current and future program budgets, and that all energy efficiency savings associated with implementation of CSI energy efficiency requirements are attributed to SCE's energy efficiency program goals.

III. The CEC Should Not Adopt a Performance-Based Incentive (PBI) Payment Term that Exceeds Five Years.

The Draft Guidelines (Chapter 4) suggest that the CSI program administrators may establish longer terms (more than five years) for PBI payments. Presumably, the CEC's rationale is that a longer PBI period will result in customers maintaining their systems at optimal levels of performance for a longer period of time. Although SCE agrees with the concept of optimizing PBI systems, SCE is concerned that increasing the PBI payment stream may have unintended consequences on CSI program participation. In adopting a five-year payment period, the CPUC noted a number of benefits associated with this payment period. There, the CPUC stated:

> "We see a tradeoff between the preferred payment period for ratepayers and solar investors. A shorter payment period is more attractive to solar buyers and has lower administrative costs. A longer period guarantees pay-for-performance for ratepayers, but incurs higher administrative costs and risks stalling the solar market since most homeowners and businesses are less likely to invest in solar if they have to wait 20 to 30 years to recoup their investment. We see no reason to depart from the Staff recommendation of a five year performance payment period for PBI because it will have lower administrative costs and less market risk than a longer payment period. This is a reasonable balance between the current up-front payment structure and longer-term payments over the life of the system."[1]

SCE agrees with the CPUC's rationale. As noted, a longer PBI payment term will increase administrative costs. Further, multiple PBI payment terms in different service territories as suggested may create unnecessary customer confusion. A PBI payment stream of five years strikes a fair balance between optimizing system performance and allowing a reasonable payment stream for customer investments in solar. SCE believes that the five year PBI payment stream should not be changed without studying the potential consequences of extending the PBI payment period. SCE recommends that the PBI payment period remain unmodified from its existing five year payment term at this time.

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[1] D.06-08-028, p. 15.

IV. The CEC Should Select One Expected Performance Calculator for All State Solar Incentive Programs.

The Draft Guidebook (Chapter 4) suggests that either the Expected Performance-Based Buydown (EPBB) calculator or the CEC's NSHP PV calculator could be used to demonstrate compliance with the CEC's hourly photovoltaic production calculation as long as fifteen minimum requirements are met.[2] SCE suggests that the State solar programs (*i.e.*, the CSI and NSHP) should only use one calculator in determining expected performance upfront incentive payments. Employing one calculator will ensure consistency in incentive payment and calculation criteria, reduce administrative burden, and eliminate any customer confusion that would result from allowing multiple calculators.

SCE recommends that the CEC establish a side-by-side comparison of both calculators showing their functionality and accuracy for stakeholder review. In SCE's previous comments, SCE sought additional information concerning how certain aspects of the NSHP Calculator work. SCE would appreciate the opportunity to review both calculators, learn more about the NSHP Calculator, and provide recommendations to the CEC through comments. Once both tools are reviewed and stakeholder input is provided, SCE recommends that the CEC choose the single most appropriate calculator tool to be used for calculating future expected performance of systems in both the CSI and the NSHP programs.

V. The CEC Should Consider Emerging Metering Issues and Adopt SCE's Recommended Metering Structure.

The Draft Guidebook (Chapter 3) recommends adopting the same metering accuracy requirements that are in the current CSI program. Under these guidelines, meters with +/- 2 percent accuracy will be installed for all PBI applicants, and meters with +/- 5 percent accuracy will be allowed for expected performance incentive applicants. Moreover, all meters shall have a communication port capable of enabling connection to remote performance monitoring and reporting service (PMRS). SCE recommends that the CEC give further attention to metering

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[2] The Draft Guidelines list fifteen minimum requirements that shall be used in calculating PV production. *See* Draft Guidelines, pp 12-13.

issues described in the Draft Guidebook. Establishing meter reading and data services for the payment of PBI and providing feedback to customers concerning the overall performance of their systems is necessary to meet the objectives of SB 1.

SCE recommends that the CEC consider how to ensure that CSI meters will be fully compatible and integrated with the utility advanced metering infrastructure (AMI) systems. Moreover, the CEC may want to consider how the recent relaxation of the metering accuracy from +/- 2% to +/- 5% for expected performance systems may disadvantage customers from receiving renewable energy credits (RECs) as a result of the Western Renewable Energy Generation Information System (WREGIS) accuracy requirements for REC certification. SCE respectfully requests that the CEC consider in the Draft Guidebook alternative metering requirements consistent with SCE's September 24, 2007 comments filed with the Public Utilities Commission in Rulemaking 06-03-004, or as otherwise necessary to maximize solar energy system performance.[3]

[3] In R.06-03-004, SCE committed to working with all stakeholders to establish both near-term and long term metering solutions and recommended that the Public Utilities Commission implement the following measures:

- Require all solar energy systems receiving a CSI incentive to install a meter socket for PBI revenue grade metering and/or accurate revenue grade metering for REC certification or CSI program information needs;
- Task the program administrators with meter installation and meter reading required for PBI payments. If the program administrator does not want to fulfill this function individually, the program administrator may contract with a qualified third party who meets the program administrator's standards for accuracy, reliability, and safety; and
- Require every solar energy system receiving a CSI incentive to have an accessible, easy-to-read display that will allow the customer to see how the system is performing at any given time. This will immediately allow the customer to make the necessary cleaning, shading, or other performance improvements to optimize the system.

VI. Conclusion

SCE appreciates the CEC's consideration of these comments, and looks forward to participating in the CEC stakeholder process and working with the CEC and CPUC to implement the eligibility criteria adopted by the CEC.

Respectfully submitted,

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