

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

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

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

**COMMENTS OF THE  
CALIFORNIA SOLAR ENERGY INDUSTRIES ASSOCIATION  
ON THE ASSIGNED COMMISSIONER'S RULING  
ON THE SELF-GENERATION INCENTIVE PROGRAM**

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Pursuant to “Assigned Commissioner’s Ruling Requesting Comments on Senate Bill 861 Compliance and Review of Self-Generation Incentive Program” (Ruling), issued April 29, 2015, the California Solar Energy Industries Association (CALSEIA) submits the following comments on a subset of the questions in the Ruling.

**Question 4. Should the Commission now restrict SGIP to those technologies that require an incentive in order for them to be profitable for the system owner?**

To the extent systems are economically viable without direct incentives, CALSEIA does not believe it is a good use of ratepayer money to provide incentives. However, such a determination should be made at the level of the technology, not on a project-by-project or vendor-by-vendor basis. An overly granular approach could have the unintended effect of preventing competitive forces within a given technology segment from driving market outcomes and actually punish those companies or technology providers that are successful in reducing costs or finding new market opportunities. More generally, CALSEIA believes that direct incentives, like the rebates provided in SGIP, are intended to encourage an economically efficient level of investment in a resource or technology to account for benefits the technology provides to society for which they are not currently compensated by the market, and/or in

circumstances where the technology is viewed as emerging and offers significant promise in terms of the role it can be reasonably anticipated to play in facilitating the state's renewable energy and greenhouse gas mitigation goals. The term "emerging" is a subjective term, but as we are using it here refers to those technologies that are commercially available but relatively nascent, and are reasonably expected to see significant cost declines as the technology scales and the market gains additional experience.

**Question 8. Should any of the currently eligible technologies be eliminated from SGIP eligibility? If so, which ones? Why or why not, and based on what criteria? Are there any additional technologies that should be added to the program, and if so, what are they and why should they be included?**

SGIP should only provide incentives to technologies that are aligned with California's renewable energy goals. As the state moves to increase its reliance on zero emission technologies, it is critical that programs like SGIP reflect the state's long term objectives and promote technologies that will further California's efforts to decarbonize the energy system. Any technology that does not reduce greenhouse gas (GHG) emissions compared to a Renewable Portfolio Standard (RPS) as high as 50%, or at a minimum 33%, should no longer be allowed to participate in the program. CALSEIA strongly believes that ratepayer money is better spent supporting those technologies that are relevant in the context of California's movement toward a distributed renewable grid rather than the legacy SGIP program as it stands today.

**Question 9. Should the current categories of "Renewable and Waste Heat Recovery," "Non-Renewable Conventional CHP," and "Emerging Technologies" be maintained? Why or why not? Should any technology be moved from its current category to another? Why or why not.**

CALSEIA believes the program budget allocation and availability should be revised such that the total incentive budget is available to renewable and emerging technologies while access to non-renewable incentives should be capped at 20% of the total funding (as opposed to the

25% threshold and the non-renewable budget not available to renewable technologies). The Commission should dedicate the vast majority of SGIP funding to renewable and emerging technologies, recognizing the state's goals to dramatically reduce GHG emissions.

**Question 10. Should the Commission retain the existing SGIP program design, with incentives declining over time, or does another design better support program participation and market transformation?**

The incentives in SGIP should be designed in a way that imposes some discipline on technologies in terms of pushing them to reduce costs and become self-sustaining without incentives. The current SGIP structure does not promote project cost reduction; if anything it incentivizes project cost inflation. To achieve the promotion of market transformation per the SGIP goals, CALSEIA believes SGIP should take the lessons learned from the California Solar Initiative (CSI) and implement the following programmatic elements:

**1. A fixed \$/watt incentive with a MW capacity step down**

Reducing the incentive level according to the level of program achievement rather than by calendar year offers clear advantages of program simplicity and implementation while also fostering competitive pricing. Experience gained by one SGIP-supported technology does not necessarily translate into cost reductions for other technologies, suggesting that each eligible technology should have its own incentive step-down schedule.

**2. Lower initial base incentive**

The initial \$/watt incentive should take into account length of time in the program, the capacity of the technology deployed to date, and the amount of incentives received to date.

**3. 1 MW size cap**

In order to assure that incentive funds are available for a wide variety of projects, it would be reasonable to cap incentives to cover only the first megawatt of any project sized larger than 1 MW.

**Question 24. How should the Commission comply with the mandate to determine capacity factor? What should the capacity factors for each eligible technology be? Should the Commission use the most recent available impact evaluation to determine what an average or reasonable capacity factor for each technology is? If not, what other information should be used to determine the capacity factors? Should those same capacity factors be used in administering the PBI payments?**

The notion of a capacity factor is designed for typical generating systems and not the unique and diverse set of capabilities of Advanced Energy Storage (AES). The current Performance-Based Incentive (PBI) is based purely on system energy output, which is not an appropriate basis to ensure that AES systems are being used effectively. For example, in the case of customer maximum demand reduction, one of the primary use cases that AES is encouraged to address, a system may not run very often and, to the extent that its capacity factor is less than the 10% codified in the Handbook these systems will effectively receive a reduced incentive. Because of this inappropriate metric, some customers that would otherwise size storage projects larger than 30 kW elect not to do so to avoid an unworkable PBI requirement.

In addition to creating challenges for program participants, PBI for AES also creates significant administrative challenges by requiring the program administrators to project forward the amount of funding to reserve for participating projects. This may be relatively straightforward for baseload generation technologies like fuel cells, but it is far more challenging for technologies like AES.

For these reasons, AES systems should not be included in the Performance Based Incentive payment structure. This would eliminate the importance of this measurement that is not relevant for AES.

Because statute requires the Commission to determine a capacity factor, the Commission must do so even if it is not applied to the payment structure. In so doing, the underlying hours used for the calculation need to be updated. The SGIP Handbook currently requires that AES systems meet a 10% capacity factor using 5,200 hours per year. It is not appropriate to apply a general 5,200 hours standard to a resource that is valued for its flexibility and responsiveness. At most, the underlying assumption for the capacity factor should be based on peak time periods in each utility territory. The 10% capacity factor can remain based on the goals of the program, but the underlying assumption should be updated to reflect peak period usage only. State goals emphasize peak period load reductions and therefore the underlying assumptions used to calculate the capacity factor should be based on peak periods. For example, the current peak period in PG&E territory is from 12:00-6:00 pm (30 hours per week) each non-holiday weekday. This corresponds to 1,512 hours per year. This should be used as the underlying assumption to calculate the capacity factor.

**Question 19.1. Should dual enrollment in DR and SGIP continue to be allowed? If yes, how should the Commission address dual enrollment in DR and SGIP but adhere to its current policy to not allow multiple incentive payments for taking a single action (e.g., through metering?)**

CALSEIA strongly believes that dual enrollment in Demand Response (DR) programs and SGIP should be allowed to continue. SGIP is incentivizing a fleet of resources that could be perfectly positioned to participate in DR programs. SGIP projects should not be forced to choose between an upfront technology incentive and providing additional benefits to the grid. One program compensates energy market participation while the other incentivizes a technology's deployment. SGIP is necessary to get a project "in the ground" and enable market transformation, while DR provides compensation for these resources to behave according to market signals. Needlessly limiting DR participation is counterintuitive to the goals the program,

particularly to the extent SGIP seeks to wean supported technologies off of direct incentives and to instead rely on market opportunities like those provided by DR. SGIP provides incentives for technologies that are perfectly aligned with future DR participation and should be allowed to provide these additional services.

**Question 22. Is the 40 percent individual manufacturer cap working acceptably well to allow robust participation by an individual manufacturer without squeezing out other participants? Why or why not? Should the cap be maintained or modified? If modified, how should the cap be modified?**

The 40 percent cap should be placed on the entity receiving the incentive as opposed to the manufacturer in all cases where manufacturers make their products available to unaffiliated vendors. Placing the concentration cap on the manufacturer creates perverse market signals. The industry will naturally trend toward procuring the least cost and most advanced product. SGIP should foster a competitive marketplace, and natural competition will foster a race to the top for product development. Putting a cap on the manufacturer will only create an environment where upon reaching a 40% cap, a developer will be forced to use a non-optimal technology or forgo SGIP entirely. This is not appropriate and runs counter to the program goals of enabling distributed resources and market transformation. This is another lesson learned from CSI, a successful program that did not have manufacturer caps and resulted in incredible industry competition and price reduction.

**Question 25. Are there other important topics that have not been covered in the previously listed questions? If so, what are they? Are there other ways in which the SGIP can be improved to help meet its goals?**

**A. Do not subtract ITC value from project cost**

CALSEIA strongly encourages the Commission to remove the Federal Investment Tax Credit (ITC) calculation on page 96 of 2015 SGIP Handbook. It is appropriate to penalize SGIP participants that decide to participate in both the Federal ITC and the SGIP. The Federal ITC

requires the storage device be charged at least 75% from the renewable generator, meaning that SGIP participants that apply for the Federal ITC have an automatic requirement to be charged from a renewable generator. The current SGIP requirement to subtract the ITC value from the overall project cost discourages participation in the Federal ITC program and ultimately discourages renewables integration. Also, requiring a unique calculation for dual participation in a federal program and a state program to our knowledge is without precedent. For example, CSI, often regarded as one of the most successful incentive programs in the country, allowed solar technology to apply for federal and state programs, a key factor in achieving the goals of the program, cost reduction of the technology, and innovation in the sector. SGIP should be encouraged rather than discouraged to participation in both programs.

**B. Application process should be paperless**

The Commission should direct the utilities to migrate the SGIP application process online in its entirety. This would greatly reduce transaction costs for both program participants and the program administrators. This change has happened or is happening for each IOU in the net metering application process. Since the experience and technical capabilities for electronic signatures exists for that process, it should also be used for SGIP rebate applications.

DATED at Santa Rosa, California, this 22nd day of May, 2015,

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