

**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 IMPLEMENTATION OF SENATE BILL 861**

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Pursuant to “Assigned Commissioner’s Ruling on the Implementation of Public Utilities Code Section 379.6 of Senate Bill 861 to Extend the Self-Generation Incentive Program” (ACR) issued by the California Public Utilities Commission (Commission) on September 23, the California Solar Energy Industries Association (CALSEIA) respectfully submits these comments.

1. INTRODUCTION

The ACR addresses only the most immediate questions within reauthorization of the Self-Generation Incentive Program (SGIP) related to authorizing collections. CALSEIA supports this approach in order to resolve the most urgent questions quickly. We also urge the Commission to begin to address other issues in implementing SGIP reauthorization so that the program can be operational with minimal disruption, while also making clear that the program can continue to operate under current rules using existing funds and future collections until new rules are adopted.

CALSEIA is primarily focused on the role of SGIP in supporting the increased deployment of distributed energy storage resources, recognizing the important role that these systems can play in integrating and maximizing the value of solar resources.

2. RESPONSES TO QUESTIONS POSED IN RULING

1. Should further collections be authorized for the SGIP, and why or why not? If yes, should further collections be authorized for all years 2015, 2016, 2017, 2018, and 2019?

CALSEIA supports authorization of further collections for the SGIP program to ensure the program continues to encourage the deployment of critical enabling technologies like distributed storage. Ongoing collection of funds to support this program is entirely consistent with state policy objectives as well as with existing Commission policy. As a matter of state policy, the statutory language, while giving the Commission discretion to determine the level of collections to be authorized, up to the statutorily imposed cap, is unambiguous in terms of its objectives, stating, “It is the intent of the Legislature that the self-generation incentive program increase deployment of distributed generation and energy storage systems to facilitate the integration of those resources into the electrical grid, improve efficiency and reliability of the distribution and transmission system, and reduce emissions of greenhouse gases, peak demand, and ratepayer costs.”¹ It is difficult to see how this intent can be fulfilled if additional funding is not collected for the full term of the reauthorized program.

In addition to being entirely consistent with and supportive of state policy as articulated by the Legislature in statute, ongoing funding of SGIP is also consistent with existing Commission policy. As observed in the Assigned Commissioner Ruling that initiated the Commission’s efforts to implement AB 2514, “Energy storage has the

¹ Public Utilities Code section 379.6 (a)(1).

potential to transform how the California electric system is conceived, designed, and operated. In so doing, energy storage has the potential to offer services needed as California seeks to maximize the value of its generation and transmission investments: optimizing the grid to avoid or defer investments in new fossil-power plants, integrating renewable power, and minimizing greenhouse emissions.”

Similar views are expressed in the Draft Energy Storage Roadmap for California, which is being developed jointly by the Commission, the California Independent System Operator, and the California Energy Commission. The draft roadmap recognizes energy storage as a “category of emerging technologies that could help significantly to optimize the use of wind and solar generation, assist in integrating increased amounts of renewable energy resources into the grid, and reduce emissions of greenhouse gases.”²

CALSEIA agrees and submits that all of the transformative potential of storage for the energy system extends to customer-side of the meter storage systems, which by virtue of where they are located on the grid can address the broadest range of potential use cases. For customer side of the meter storage investments, SGIP represents a fundamental policy, the absence of which would undermine the significant progress that has been made to date to scale what is still very much a nascent industry. Importantly, SGIP provides a means of ensuring viable project economics in the near term while the state continues to develop complementary policies that will enable storage to capture additional value and ultimately wean itself off of explicit state incentives. Given the early stage of the energy storage market and the need for regulatory certainty, these incentives will be needed for the next five years, if not longer. Collections should thus be authorized through 2019.

² “Draft Energy Storage Roadmap for California,” CAISO, CEC, CPUC, October 8, 2014 at 3.

SGIP has been recognized by the Commission as a critical enabler of deployment of customer side storage systems as well as the achievement of the Commission's storage procurement targets pursuant to D.13-10-040, which calls for a minimum of 200 MW of customer side storage capacity to be deployed by 2020 as part of an overall 1.3 GW target. Unlike storage systems connected on the utility side of the meter, D.13-10-040 did not create any procurement mechanisms through which the utilities would procure customer side resources, instead relying almost exclusively on SGIP as the means by which the customer-side storage procurement targets will be met.³ Consistency with the Commission's own established storage procurement and deployment objectives, specifically for systems deployed on the customer side of the meter, therefore also strongly argues in favor of authorizing ongoing funding. At this juncture in the storage market's development, SGIP is an absolutely essential element to supporting customer side storage in the near term, pending the development of complementary policies and tariffs that appropriately recognize and take full advantage of the full range of energy storage capabilities.

2. If further collections are authorized, should the full \$83 million per year be authorized for each year, why or why not?

CALSEIA supports authorization of the full \$83 million per year for each year. This will provide certainty to market participants that the program will be fully funded over an extended time frame. The ability of companies and investors to commit capital and resources to a given market, particularly in the context of emerging technologies like customer side energy storage, depends fundamentally on the degree of certainty or confidence they can place on regulatory and incentive framework that is so crucial to early stage market development. The SGIP reauthorization language in SB 861 is

³ D.13-10-040; pgs 58-59.

particularly notable because it gives the Commission the ability to effectively eliminate much of the year-to-year uncertainty that might otherwise exist, and thereby create a more stable investment environment. One of the hallmarks of the California Solar Initiative was the predictable and stable incentive regime it created. This highly stable environment facilitated the substantial investment into rooftop solar space that the state witnessed, thereby promoting industry scale, competition and innovation in the sector. The state's experience with the CSI program, which has been an unalloyed success, should serve as a model for effective program design and militates toward authorizing collection of the full amount over the full time frame over which such collections are authorized.

CALSEIA does note that each of the PAs currently appear to have significant balances of available funding, based on the budget summaries currently available at <https://www.selfgenca.com>. However, we would caution against using this to justify reducing annual collections below \$83 million, recognizing that for a number of the technologies supported through this program, and in particular energy storage, we are only at the very beginning of the customer adoption curve and in a formative state of technology development. Additionally, it is also important to put some perspective on the numbers themselves in terms of the number of MW that the remaining budget might support. For example, using the data from the source cited above, across the investor-owned utility service territories, there appears to be approximately \$49 million in incentives to support renewable/emerging technologies (“current balance” less “pending reservations”). Given the range of incentive levels supporting renewable and emerging

technologies of between \$1.13 and \$1.83 per watt,⁴ this would result in 27 to 43 MW of capacity being deployed if the program were fully subscribed. This is hardly a significant amount in a system that has peak demand on the order of 45,000 MW.⁵

Consistent with the idea of promoting as much market certainty as possible, CALSEIA also asks that the Commission clarify the term “authorize” as it is used throughout the ACR. Should the Commission act to “authorize” the utilities to continue to collect SGIP funds, it should be made clear that this directs the utilities to collect the amounts authorized, not merely gives them the discretion to do so if they so choose.

- 3. If further collections are authorized, should the current annual budget allocation be continued, and why or why not? If not, propose an alternative methodology for calculating the allocation with details regarding proposed calculations, a justification for the change, and expected outcomes from the alternative methodology.**

CALSEIA understands this question to refer to the high level allocation of the \$83 million budget across the utilities. With that understanding in mind, CALSEIA supports continuation of the current methodology and associated allocation.

3. OTHER ISSUES FOR CONSIDERATION

As the ruling spelled out, there are a number of additional elements that the enabling statutory language requires the Commission to address. Among these are updates to the GHG factor used to assess project eligibility, the capacity factors for eligible technologies, and a number of other eligibility and program evaluation requirements. Additionally, AB 1478 was recently signed into law, making some relatively modest but substantive changes that will also need to be considered as the

⁴ See incentive levels as posted on CSE website at <https://energycenter.org/self-generation-incentive-program/business/incentives>.

⁵ California Energy Commission, Demand Analysis Office, 2013, as referenced in <http://www.utilitydive.com/news/is-california-the-roadmap-to-americas-energy-future/204994>.

Commission moves forward with implementation. In addition to these statutory requirements, market participants now have substantial experience with the program. CALSEIA suggests that as the Commission makes modifications to the program design and implementation details pursuant to statute, additional refinements should also be considered to ensure the program is better able to fulfill its goals, particularly as it relates to facilitating the deployment of energy storage solutions. Attached to these comments, CALSEIA provides a list of potential modifications to the program. We ask that the Commission include consideration of these issues within the scope of the next phase of the proceeding.

CALSEIA also wishes to express concern regarding the current timetable envisioned by the ruling, which, as noted above, calls for issuance of a subsequent ruling to address other implementation details in early 2015. This suggests that the availability of new funding may be significantly delayed, which would lead to market disruption pending resolution of these details should currently available funding run out prior to closure on those issues. CALSEIA recommends clarifying that the program will continue to operate under existing rules until new rules are adopted. This should include the use of funds authorized by SB 861, should existing funds become depleted prior to the resolution of new requirements and determinations. Further, the Commission can identify issues that lend themselves to a quick turnaround address those issues in the near term. Other issues or reforms that require longer consideration can be considered subsequent to this with the goal of further changes to the program being instituted in 2016. In the attached document, referenced above, we identify those issues that CALSEIA believes lend themselves to near term resolution and those issues that will likely require additional time.

CALSEIA also recommends that given the uncertain timeline for resolution of required statutory changes that would allow the additional funds to be deployed, that in the interim the Commission consider, within the scope of this ruling, making funds that are currently allocated to non-renewable/non-emerging technologies available to renewable and emerging technologies. Given the relatively low levels of available funding that remain to support renewable and emerging technologies, and the risk of market disruption pending Commission resolution of various statutory requirements and other issues, CALSEIA believes allowing these technologies to access funds that are currently cordoned off to support non-renewable technologies is appropriate. The other technologies would still be able to avail themselves of these funds, but would not have exclusive access to them. The program already has a process by which funds from the non-renewable side of the program can be shifted to support renewable and emerging technology projects. CALSEIA's proposal is consistent with this basic notion, but rather than outright shifting of funds, which would make those funds unavailable to non-renewable projects, we simply ask that these funds be available for renewable technologies and emerging technologies to mitigate potential market disruption should funding run out.

4. CONCLUSION

CALSEIA appreciates the opportunity to provide these comments and requests that the Commission accept these recommendations.

DATED at Santa Rosa, California, this 15th day of October, 2014.

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Attachment A

CALSEIA SGIP REFORM PRIORITIES

1. Near Term Reforms

A. Revisit the EE Audit and Measures Requirement

Our experience suggests that the energy efficiency (EE) measures requirement only serves to disqualify projects from participating rather than encouraging uptake of EE. Given the limited upside of this policy in driving additional EE deployment, it is unclear if this requirement is serving any meaningful purpose. CALSEIA recommends the Commission consider eliminating this requirement from the program.

B. Application process should be completely 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.

C. Shift to a sampling methodology for small systems rather than 100% inspection rate

The current 100% inspection rate seems excessive and should be revisited. Coordinating additional site visits adds to program administrative costs for both PAs and for program participants, and reduces customer satisfaction by increasing the time and steps required to pursue an SGIP-funded project. Transitioning to a sampling methodology should be considered and would be consistent with the approach used in other programs.

2. Longer Term Reforms

A. Change structure of SGIP to emulate the CSI program

The current program has an incentive that steps down each calendar year, irrespective of how many projects or the amount of capacity that has been installed. This approach is inherently disconnected from market conditions. In lieu of this approach, we recommend that the Commission transition SGIP to a capacity based step-down incentive program where the incentive available to technologies steps down as a function of the amount of capacity of a particular technology that has been deployed. This would better align and calibrate the incentives with the realities of market development. Careful consideration would need to be given to issues related to reasonable expectations of what

kind of cost reductions can be anticipated as a function of capacity, as well as other issues given the diversity of technologies represented in the program. However, as demonstrated by the California Solar Initiative (CSI), this approach can be highly effective in promoting deployment and cost reductions.

B. Re-design the PBI

The current Performance-Based Incentive (PBI) is based purely on system energy output, which is not an appropriate basis to ensure that storage systems are being used effectively. For example, in the case of customer maximum demand reduction, one of the primary use cases that storage is used 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 who 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, the PBI 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 energy storage.

CALSEIA suggests that as the CPUC considers modifications and refinements to the program, the Commission should also consider PBI design reforms to better align the basis on which PBI incentives are paid with the practical realities of how energy storage systems are used. Although CALSEIA is not prepared at this point to endorse a particular approach, we believe there are at least two alternative approaches that should be considered among other potential approaches. First, the capacity factor used to set the per kWh incentive for storage systems could be lowered to something that more closely corresponds to actual capacity factors associated with storage systems in the field. To prevent gaming, the total incentives that could be paid to a project would be capped based on this same capacity factor. A second option would be to change the PBI performance metric so that the annual payments are based on the actual monthly reductions in peak power demand in relation to the system rating. In our experience a system that performs well will reduce the average monthly peak power demand by roughly 50% of the 2Hr Rated Capacity of the system. The PBI could be structured around this basic assumption

with the amount provided being pro-rata adjusted based on actual performance. Again, CALSEIA is not endorsing either of these options at this point, but offers them to demonstrate that there are alternatives that would work better than the current PBI rules that are dysfunctional for energy storage.

C. Consolidate Program Administration

SGIP has a limited budget and large goals. It is essential that the program operate as efficiently as possible to maximize the impacts of resources. Economies of scale would be possible by consolidating program administration statewide. CALSEIA sees no benefit to dividing the administration of this limited program among four separate administrators.

We note that Energy Division staff has recently recommended consideration of the consolidation of program administration into a single statewide program administrator for the Multifamily Affordable Solar Housing (MASH) program. Similar consideration should be made for SGIP.