



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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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  
(Filed November 8, 2012)

**Comments of the California Center for Sustainable Energy regarding the  
Assigned Commissioner's Ruling regarding the Transfer of Responsibility for  
Collecting Solar Statistics from the California Solar Initiative to the Net  
Energy Metering Interconnection Process**

**California Center for Sustainable Energy**

**September 9, 2013**

Sachu Constantine  
Director of Policy  
California Center for Sustainable Energy  
9325 Sky Park Court, Suite 100  
San Diego, CA 92123  
Tel: (858) 244-1177  
[sachu.constantine@energycenter.org](mailto:sachu.constantine@energycenter.org)

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**I. INTRODUCTION**

The California Center for Sustainable Energy (CCSE) is pleased to provide comments regarding the *Assigned Commissioner's Ruling regarding the Transfer of Responsibility for Collecting Solar Statistics from the California Solar Initiative to the Net Energy Metering Interconnection Process* (Ruling). Opening comments were originally due August 30, 2013, as per the Ruling; however, on August 28, 2013, Administrative Law Judge Katherine Kwan MacDonald graciously granted an extension of time to file comments to September 9, 2013. As such, these comments are timely filed.

CCSE is pleased to see the California Public Utilities Commission (CPUC or Commission) address continued collection of solar data once the California Solar Initiative (CSI) Program Administrators (PAs) cease accepting CSI applications. CCSE recently discussed the need for continued collection of solar system installation and performance data once the CSI Program ends in a whitepaper titled, *Distributed Generation Solar in California*:

*Framework for Policy and Regulatory Oversight in the Post-California Solar Initiative Era.*<sup>1</sup> As presented in our whitepaper, the data transparency and availability afforded by the CSI Program have been central to the creation of a successful solar market in California, and “[t]he transparency and availability of installation data, as well as the oversight of this data presently provided by the CSI Program, must therefore be continued.”<sup>2</sup> We have further echoed these points in various proceedings and workshops at the CPUC and California Energy Commission (CEC), including forums related to Phase III of the CPUC’s Rulemaking (R.)08-12-009 to address creation of an Energy Data Center and in various forums at the CEC related to implementation of Assembly Bill (AB) 758 (Stats. 2009, Ch. 470).

Accordingly, CCSE strongly supports the continued collection of solar data and its availability to the public. The use of the utilities’ interconnection application process seems to be a logical solution; nevertheless, more is needed beyond simple modification of the Net Energy Metering (NEM) interconnection applications to ensure robust solar system performance and installation data remain transparent and easily available to a wide variety of users. In response to the proposals outlined in the Ruling, CCSE provides the following recommendations:

- The utilities’ interconnection processes must be streamlined and made consistent across the utility service territories.
- A minimum set of data fields, to include data presently collected through the CSI Program’s Expected Performance Based Buydown (EPBB) calculator, must be collected to provide robust installation and performance data useful to a variety of users.

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<sup>1</sup> *Distributed Generation Solar in California: Framework for Policy and Regulatory Oversight in the Post-California Solar Initiative Era*, California Center for Sustainable Energy, San Diego, CA. © July 25, 2013, California Center for Sustainable Energy

<sup>2</sup> *Id.* at 5.

- Collected solar data should be centrally located and managed to ensure it remains readily available to a variety of users to help set a framework for consumer protection, education, and market transformation.

## **II. THE UTILITIES' INTERCONNECTION PROCESSES MUST BE STREAMLINED AND MADE CONSISTENT ACROSS THE UTILITY SERVICE TERRITORIES.**

Standardization of the interconnection process across the utility service territories will facilitate more cost-effective integration of distributed solar generation systems with the grid. Moreover, a web-based, uniform interconnection platform will reduce time and costs for installers and developers who operate across utility jurisdictions, which, in turn, will further reduce costs for customers. CCSE therefore encourages the Commission to require the utilities to establish, implement, and co-finance a statewide, uniform, web-based interconnection portal that will streamline and integrate customer-sited interconnection applications into each utility's interconnection process. For applicants and stakeholders (including NEM customers, solar contractors, and third-party financiers), a uniform interconnection platform will provide some or all of the following benefits: a single system for submitting applications for different service territories; unified status, assignment, and progress tracking; digital document submittal, revision tracking, and re-submittal; web-based communication options; and automated data transfer with utility and large contractor data systems. Such a system will also support standardized data collection, storage and retrieval required to facilitate the public reporting called for in the Ruling.

The CSI Program is a model for how a single application database can be integrated into a statewide program having multiple program administrators. The use of the CSI's online application platform required the three CSI Program Administrators (PAs)<sup>3</sup> to work closely in

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<sup>3</sup> The three CSI PAs are Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and the California Center for Sustainable Energy (CCSE).

developing and modifying the tool. It has been the responsibility of the PAs to ensure that the tool met the guidelines of the CSI Handbook to make certain that the PAs and program applicants were in compliance with its rules and regulations. The use of this centralized tool has also allowed the PAs to more easily meet a set of regulatory reporting requirements mandated by the Commission. Since the data has been entered into and calculated directly from the tool, the PAs have been able to easily build a reporting function within California Solar Statistics (CSS)<sup>4</sup> that utilizes the central collection of the data afforded the program. Bearing in mind the three investor-owned utilities (IOUs) currently utilize three different methods of applying the interconnection application process, a single database and a uniform interface managed jointly by the IOUs would help immensely in the processing of PV system interconnections and continued collection of this valuable data.

**III. A MINIMUM SET OF DATA FIELDS, TO INCLUDE DATA PRESENTLY COLLECTED THROUGH THE CSI PROGRAM'S EPBB CALCULATOR, MUST BE COLLECTED TO PROVIDE ROBUST INSTALLATION AND PERFORMANCE DATA USEFUL TO A VARIETY OF USERS.**

To provide robust solar system installation and performance data useful to a variety of users, including regulators, developers, installers, consumers, researchers and policymakers, a minimum set of data fields must be collected. CCSE contends that, at a minimum, the following data should be collected in addition to those fields already called out in the Ruling: total cost of the solar system to the system owner; installer's Contractors State License Board (CSLB) license number; dates including but not limited to, application submittal date, utility review date, and commissioning date; capacity of the solar system in CSI system size along with the capacities already called out in the Ruling; shade and mounting method; estimated annual production; and the installation contract/third-party ownership agreement.

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<sup>4</sup> <http://www.californiasolarstatistics.ca.gov/>

For a streamlined transition to collecting this data via the utilities' interconnection processes, CCSE urges the continued use of the CSI Program's EPBB calculator. Use of the EPBB calculator requires the collection of detailed information which will not only continue to provide calculated capacity based on DC watts and CEC-AC watts, but also calculated capacity that utilizes design metrics, including tilt, azimuth, shade and mounting method. The collection of this data from pre- and post-installation siting ensures the practices to which contractors became accustomed while participating in the CSI Program continue to be fostered and utilized for purposes of better system design, grid management and consumer awareness and education. In addition, requiring contractors to utilize the EPBB calculator as part of the interconnection application process will help ensure data integrity. For example, when applicants perform calculations in the EPBB calculator, rather than entering the equipment makes and models into open fields, they utilize drop-down menus, allowing for consistent and accurate provision of data. Furthermore, given that the list of makes and model numbers for inverters and PV modules is taken directly from the list of eligible equipment maintained by the California Energy Commission (CEC), there is an opportunity for policymakers, consumers and other industry stakeholders to leverage that list to enhance safety and performance.

As noted, a potential benefit of requiring use of the EPBB calculator in the interconnection application process will be the continued ability to estimate system performance. Among the numerous data points calculated by the EPBB calculator, estimated annual system performance is a key field to continuing consumer education and protection vis-à-vis benchmarking of proposed system production. While this estimate is not a guarantee of system performance, it does help to keep solar contractors honest when proposing system size and annual kilowatt hour production to customers. Providing this data in both an aggregate and individual format on CSS and in the working data set gives consumers, researchers and grid managers more insight into how they can expect systems to perform. This process will nearly be automated if the EPBB calculator is mandated to be merged into the

utilities' interconnection application processes. Moreover, because the EPBB calculator is an open source website, any entity looking to employ the CSI EPBB calculator can freely download the source code and merge it into its website and/or database.

Additionally, CCSE believes it is important for stakeholders to ascertain the time it takes for projects to be interconnected, as well as progress towards the net metering 5% cap or future targets set by the CPUC. By collecting a minimum number of dates, including but not limited to, the application submittal date, the utility review date, and the system commissioning date, as well as displaying the MW capacity of applications applying for interconnection, customers, industry, and policymakers alike will gain valuable insight into the efficiency of the interconnection application process.

Finally, to maintain the data integrity of CSS, it is important to track and validate contract cost data. Not only should cost data for interconnected projects be tracked, but the data should also be cross-referenced with the interconnected projects' contracts and/or third-party ownership agreements. This will allow for the cost entered into the interconnection application database to be checked against the actual cost information in the customer's agreements. Performing this check will ensure that the cost entered into the database by the applicant matches what the customer is actually paying for the system, maximizing the integrity and usefulness of the data moving forward. To build a database that collects cost data without the ability to verify it would create a low level of confidence by solar stakeholders when attempting to determine trends via detailed analysis.

**IV. COLLECTED SOLAR DATA SHOULD BE CENTRALLY LOCATED AND MANAGED TO ENSURE IT REMAINS READILY AVAILABLE TO A VARIETY OF USERS TO SET A FRAMEWORK FOR CONSUMER PROTECTION, EDUCATION, AND MARKET TRANSFORMATION.**

CCSE envisions a future in which solar systems are wholly plug-and-play, i.e., once installed, systems would automatically interconnect through the smart grid. With this ability, there would no longer be a need for permits or interconnection applications. However, we are not there yet; nor has the solar PV market been transformed to grid parity, as the market still requires NEM and federal tax credits. That the market is continuing to function without a CSI incentive is not an indication of a diminished need for continued data and information collection and dissemination of this data to facilitate market transformation and consumer protection. The availability of solar data afforded by the CSI Program's online database, PowerClerk, and via CSS has been central to the creation of a successful solar market in California. To maintain and build on this success, we must ensure that robust solar system performance and installation data remain readily available to the myriad of stakeholders that have come to rely on it, including regulators, developers, installers, consumers, researchers and policymakers. We encourage the Commission to implement a multi-prong approach to: (1) collect complete and accurate solar data; (2) post this data to a publicly accessible website, such as CSS; and (3) centrally manage the solar data statewide.

More specifically, in order to continue necessary consumer outreach, education and protection previously afforded by the CSI Program, solar data should be centrally located and made publically available so a proper framework of consumer protection can be developed. This framework could potentially involve collaboration with state agencies that have a stake in ensuring solar installations abide by current rules and regulations and, in turn, could lead to better, more informative displays of solar data for consumers. California's energy future will require greater installations of distributed generation technologies, including solar, and

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ensuring that these systems are installed properly and safely will be crucial to successful market transformation. The collection, public posting, and centralized statewide management of this valuable data is one way in which California can guarantee a sustainable energy future.

## V. CONCLUSION

CCSE very much appreciates the opportunity to provide these comments regarding the Ruling.

September 9, 2013

A handwritten signature in black ink, appearing to read "Sachu Constantine". The signature is fluid and cursive, with the first name "Sachu" written in a larger, more prominent script than the last name "Constantine".

Sachu Constantine  
Director of Policy  
California Center for Sustainable Energy  
9325 Sky Park Court, Suite 100  
San Diego, CA 92123  
Tel: (858) 244-1177  
[sachu.constantine@energycenter.org](mailto:sachu.constantine@energycenter.org)