

**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
(Filed November 8, 2012)

**REPLY COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
ON THE ASSIGNED COMMISSIONER'S RULING SEEKING ADDITIONAL
INFORMATION REGARDING THE POTENTIAL ELIGIBILITY REQUIREMENTS
FOR THE SELF-GENERATION INCENTIVE PROGRAM**

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”)¹ hereby submits these reply comments on the *Assigned Commissioner’s Ruling Seeking Additional Information Regarding the Potential Eligibility Requirements for the Self-Generation Incentive Program*, issued by Assigned Commissioner Michael Picker on February 25, 2016 (“Ruling”).

I. INTRODUCTION.

In its opening comments, CESA expressed its outright opposition to the minimum blending requirement. CESA continues to advocate for its position that allowing the blending of

¹ 1 Energy Systems Inc., Advanced Microgrid Solutions, AES Energy Storage, Aquion Energy, Brookfield, CODA Energy, Consolidated Edison Development, Inc., Cumulus Energy Storage, Customized Energy Solutions, Demand Energy, Dynapower Company, LLC, Eagle Crest Energy Company, East Penn Manufacturing Company, Ecoult, ELSYS Inc., Energy Storage Systems, Inc., Enersys, Enphase Energy, EV Grid, GE Energy Storage, Gordon & Rees, Green Charge Networks, Greensmith Energy, Gridtential Energy, Inc., Hitachi Chemical Co., Ice Energy, IMERGY Power Systems, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Invenergy LLC, K&L Gates, LG Chem Power, Inc., LightSail Energy, Lockheed Martin Advanced Energy Storage LLC, LS Power Development, LLC, Mitsubishi Corporation (Americas), NEC Energy Solutions, Inc., NextEra Energy Resources, NRG Solar LLC, OutBack Power Technologies, Panasonic, Parker Hannifin Corporation, Pathfinder, Powertree Services Inc., Primus Power Corporation, Princeton Power Systems, Recurrent Energy, RES Americas Inc., S&C Electric Company, Saft America Inc., Sharp Electronics Corporation, Skylar Capital Management, SolarCity, Sovereign Energy, Stem, SunEdison, SunPower, Toshiba International Corporation, Trimark Associates, Inc., Trina Energy Storage, Tri-Technic, UniEnergy Technologies, Wellhead Electric, Younicos. The views expressed in these Reply Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (<http://storagealliance.org>).

zero greenhouse gas (“GHG”) emitting fuels for natural gas fueled technologies does not honor SGIP’s GHG reduction goals. Not allowing minimum blending as a condition for receiving SGIP incentives is the prudent path to minimize the administrative burden of enforcing a minimum blending requirement. Multiple parties do not support minimum blending requirements for different reasons, with the exception of Bloom Energy (“Bloom”), which supported the requirements by linking blended biogas percentage to an equivalent level of GHG emissions reductions. CESA focuses its response here to Bloom’s comments in this regard. CESA also briefly responds to comments made by Doosan Fuel Cell America (“Doosan”) and National Fuel Cell Research Center (“NFCRC”) that the minimum zero-GHG fuel requirement be applied to all SGIP technologies, including advanced energy storage.

II. THERE IS CURRENTLY NO BASIS TO TRANSLATE BIOGAS PERCENTAGES TO GREENHOUSE GAS EMISSION REDUCTION LEVELS.

To CESA’s knowledge, there has been no publicly available precedent or record of a generating project meeting its GHG threshold by blending biogas or any other zero-GHG fuel. However, Bloom includes a chart in its comments showing the required fuel mix to meet the GHG eligibility factor that becomes more stringent over time through 2020.² CESA does not understand how Bloom arrived at these percentages or what the formula for translating percentage of biogas to GHG emission reductions should be. Bloom does not provide any information explaining its calculations and its argument should therefore be disregarded. Doosan Fuel Cell America (“Doosan”) also alludes to a similar equivalence of some percentage of zero-GHG fuel used to meet the GHG emission reduction requirement, and that “projects that use zero-GHG fuel should receive an additional incentive directly proportional to the percentage

² *Bloom Comments*, p. 3.

of zero-GHG fuel utilized.”³ Even though Doosan does not go as far as quantifying the GHG emission reduction benefits of zero-GHG fuel blending, CESA similarly disagrees with its suggestion that the level of blending could be expected to contribute to GHG emission reduction.

Furthermore, as CESA stated in its opening comments, the minimum blending requirement would be administratively burdensome, ineffective, and controversial. For the sake of argument, even if Bloom’s calculations are somewhat accurate, compliance of biogas blending has been difficult to administer, regulate, and enforce in practice, as evidenced by the experience with overseeing the biogas blending ratio for the current biogas adder. In its comments, the Office of Ratepayer Advocates (“ORA”) highlights how “current SGIP rules allow directed biogas projects to receive SGIP incentives without verification of biogas deliveries.”⁴ As a result, ORA prefers a 100% minimum zero-GHG fuel requirement to be eligible for SGIP incentives, similar to CESA’s position, to minimize measurement controversies or any ambiguities.⁵ CESA agrees with the ORA in that a minimum blending requirement of 100% is easier to administer and better ensures that the promised GHG emission reductions are delivered.

If, however, minimum blending requirements are to be adopted, then CESA recommends that the blending threshold be consistent with the standards included in the California Energy Commission’s *Renewables Portfolio Standard Eligibility Handbook* (“RPS Handbook”) rather than apply the 75% minimum blend ratio that already exists as a condition for receiving the biogas adder. Due to the administrative complexity of verification, the 75% requirement should have strict requirements and standards to verify to ensure the 75% threshold is met by the recipient of an SGIP incentive. The RPS Handbook only attributes the renewables portion of the electricity to be considered RPS-eligible and sets a *de minimis* quantity of nonrenewable energy

³ *Doosan Comments*, p. 3.

⁴ *ORA Comments*, p. 3.

⁵ *Ibid*, p. 2.

resources at 2% of the annual energy input to the facility for it to be fully counted as RPS-eligible (with this quantity to not exceed 10%).⁶ This *de minimis* quantity is intended to allow for non-renewables to be used to allow for increased overall renewables generation or reduced electrical output variability related to renewables generation.

III. THE BIOGAS INDUSTRY DOES NOT NEED ANOTHER STATE SUPPORTED PROGRAM TO GROW ITS INDUSTRY.

In D.11-09-015, the Commission established market transformation as a program goal for SGIP. In support of the minimum biogas requirement, Bloom argues that it would “provide a long-term market signal to biogas developers and financiers to jumpstart this burgeoning sector which in turn will help drive prices down through increased volume.”⁷ CESA disagrees with Bloom because there is already a large market for biogas projects due to the RPS and Low Carbon Fuel Standard (“LCFS”). The LCFS in particular creates a high-value market for biogas. By supporting the minimum blending requirement through the SGIP, the Commission would be allowing the biogas industry to collect a third major statewide subsidy from the SGIP, which has limited funds as compared to other existing programs.

If the Commission introduces a minimum blending requirement to the SGIP, it should only provide incentives to generation technologies that use fuel from *new* and *in-state* biogas projects in order to assure that GHG emissions reduction is actually occurring. The focus on new biogas projects supports the SGIP’s GHG emission reduction goals by generating incremental GHG emission reductions. If the SGIP is to allow generation technologies to blend fuel from existing biogas projects, there would simply be a reshuffling of GHG emission reduction generated from participating in the RPS program or from buying renewable energy

⁶ *Renewables Portfolio Standard Eligibility Eighth Edition Commission Handbook*, p. 33.

⁷ *Bloom Comments*, p. 5.

credits from existing projects, rather than generating additional GHG emission reductions from participating in the SGIP. Furthermore, by requiring biogas blending to come from in-state sources, the Commission is better assured that SGIP funds are used to support California biogas.

IV. ADVANCED ENERGY STORAGE HAS ALREADY BEEN DETERMINED TO BE ELIGIBLE FOR THE SELF GENERATION INCENTIVE PROGRAM.

NFCRC and Doosan argue that minimum zero-GHG fuel requirements should be applied to all SGIP technologies, including advanced energy storage. Doosan states that “requiring generation technologies to use a minimum zero-GHG fuel would be an unfair treatment of generation technologies compared to energy storage technologies,”⁸ while NFCRC argues that “it is incorrect to also assume that the batteries are only receiving renewable power (such as solar power, which is not available off-peak).”⁹ However, advanced energy storage eligibility has already been established by the Commission’s decision that set the new GHG emissions factor determining SGIP eligibility for eligible distributed technologies, and reasonably assumes that “storage devices charge during off-peak hours and discharge during peak hours.”¹⁰ Given the current rate schedules for a large number of advanced energy storage customers, it is reasonable to assume that advanced energy storage systems “would be discharging exclusively during on-peak hours to help reduce a customer’s peak energy and demand charges.”¹¹ The issue of advanced energy storage eligibility has already been clearly established by the Commission as recently as November 2015. CESA thus finds it completely out of scope for purposes of the

⁸ *Doosan Comments*, p. 4.

⁹ *NFCRC Comments*, p. 5.

¹⁰ *Decision Revising the Greenhouse Gas Emission Factor to Determine Eligibility to Participate in the Self-Generation Incentive Program Pursuant to Public Utilities Code Section 379.6(b)(2) as Amended by Senate Bill 861*, D.15-11-027, issued on November 19, 2015, p. 31.

¹¹ *Administrative Law Judge’s Ruling Requesting Comments on Staff Proposal Regarding Modifications to the Self-Generation Incentive Program, Attachment 1: Self Generation Incentive Program Staff Proposal*, issued on September 30, 2010. pp. 38 and 59.

Ruling, and an unnecessary attempt to re-litigate an issue that has already been fairly and reasonably settled.

NFCRC states that “actual charge and discharge times should be used for the assessment of GHG emissions impacts of energy storage systems.”¹² CESA finds this proposal to be extremely burdensome to administer and enforce. Hourly or sub-hourly metering data would need to be collected on energy charging and discharging behavior, as well as determining when and by how much the generation mix from the grid is zero-GHG renewables. As demonstrated by the difficulty in assessing the biogas blend ratio of directed biogas projects, it is extremely difficult to administer and enforce these fuel mix requirements, and it would not be a prudent use of limited SGIP funds. Most likely, the administration and enforcement of fuel mix requirements for energy storage would come at a high cost and would ultimately reveal that energy storage systems for the most part do in fact charge during off-peak hours and discharge during on-peak hours, verifying that the Commission was right to assume this was the case in the first place. As CESA and ORA stated in opening comments, administrative complexity and cost are very sound reasons to support a 100% biogas requirement.

V. CONCLUSION.

CESA appreciates the opportunity to submit these reply comments on the Ruling and looks forward to working with the Commission on this matter.

Respectfully submitted,



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¹² *NFCRC Comments*, p. 5.