

**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  
TO THE ASSIGNED COMMISSIONER'S RULING ISSUING ENERGY DIVISION'S  
REVISED SELF-GENERATION INCENTIVE PROGRAM GREENHOUSE GAS  
STAFF PROPOSAL FOR COMMENTS**

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January 28, 2019

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”)<sup>1</sup> hereby submits these reply comments on the *Assigned Commissioner’s Ruling Issuing Energy Division’s Revised Self-Generation Incentive Program Greenhouse Gas Staff Proposal for Comments* (“Ruling”), issued by Commissioner Rechtschaffen on December 31, 2018.

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<sup>1</sup> 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, AltaGas Services, Amber Kinetics, American Honda Motor Company, Inc., Avangrid Renewables, Axiom Exergy, Boston Energy Trading & Marketing, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Centrica Business Solutions, Clean Energy Associates, Consolidated Edison Development, Inc., Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, Eagle Crest Energy Company, East Penn Manufacturing Company, Ecoult, EDF Renewable Energy, ElectrIQ Power, eMotorWerks, Inc., Enel X North America, Energport, ENGIE, E.ON Climate & Renewables North America, esVolta, Fluence, Form Energy, GAF, General Electric Company, Greensmith Energy, Ingersoll Rand, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Iteros, Johnson Controls, Lendlease Energy Development, LG Chem Power, Inc., Lockheed Martin Advanced Energy Storage LLC, LS Power Development, LLC, Magnum CAES, Mercedes-Benz Energy, NantEnergy, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., NRG Energy, Inc., Parker Hannifin Corporation, Pintail Power, Primus Power, Quidnet Energy, Range Energy Storage Systems, Recurrent Energy, Renewable Energy Systems (RES), SNC-Lavalin, Southwest Generation, Sovereign Energy, Stem, STOREME, Inc., Sunrun, Swell Energy, Tenaska, Inc., True North Venture Partners, Viridity Energy, VRB Energy, WattTime, Wellhead Electric, and Yunicos. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (<http://storagealliance.org>).

## **I. INTRODUCTION.**

CESA continues to support the objectives of the program to reduce greenhouse gas (“GHG”) emissions, transform the market for energy storage, and provide grid support. Thus, as noted in our opening comments, CESA is appreciative of the improvements included in the Revised Staff Proposal, though there are still areas of change and improvement that are needed to ensure a viable program that invites greater participation. In these reply comments, CESA responds to certain points raised by parties in regards to the Revised Staff Proposal.

## **II. ADDING COMPLEXITY TO THE ADMINISTRATION, PROCESS, AND REQUIREMENTS OF THE PROGRAM WILL REDUCE PARTICIPATION.**

Multiple parties introduced ideas designed to add controls or ‘sticks’ such that participation in the Self-Generation Incentive Program (“SGIP”) would be more complex or that SGIP rules and conditions would be uncertain across time. While these ideas may be well intended (*e.g.*, they seek to better ensure or promote GHG reductions), these ideas also create burdens on participation and will work against the broad intent of SGIP to support energy storage deployments. Comments directing an increase in complexity or future uncertainty include:

- Pacific Gas and Electric Company’s (“PG&E”) proposal to escalate the GHG emissions reduction threshold<sup>2</sup>
- PG&E’s proposal for post-five-year administration of individual large (greater than 30 kW) projects<sup>3</sup>
- PG&E’s proposal for immediate adjustments to rules (which would apply to all projects) pending findings at some later date regarding the 5 kg-CO<sub>2</sub>/kWh threshold<sup>4</sup>

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<sup>2</sup> PG&E’s comments at p. 5.

<sup>3</sup> *Ibid*, pp. 4-5.

<sup>4</sup> *Ibid*, p. 7.

- Southern California Edison Company’s (“SCE”) proposal to revisit the 5 kg-CO<sub>2</sub>/kWh threshold annually<sup>5</sup>
- San Diego Gas and Electric Company’s (“SDG&E”) proposal for GHG emissions related performance-based incentive (“PBI”) structures for residential customers<sup>6</sup>

CESA asserts that these proposed programmatic changes, in addition to the Commission staff’s harsh and seemingly excessive \$1,000/ton penalty price related to GHG emissions reductions that exceed a threshold, effectively saddle SGIP projects with excessive risk. As PG&E states, “Participation by commercial developers (*i.e.*, application volume) did not come close to expectations in 2018, and it is PG&E’s opinion that the unsettled nature of the potential [GHG] rules may have negatively affected adoption. Developers may be awaiting *firm* new program rules before they apply” [emphasis added].<sup>7</sup> This statement by PG&E will also apply to projects going forward if rules remain in flux or if difficult-to-predict circumstances can also lead to rule changes. This fundamental reasoning is why the avoidance of contentious retroactive rule changes is so sacrosanct.

While CESA supports many of the proposed overhauls, the program remains fundamentally focused on the deployment of energy storage and other distributed energy resources (“DERs”). Without such deployments, the programs goals cannot be achieved. Thus, the rules being changed should, on balance, pursue both the technology deployment goals of SGIP as well as other critical goals of the program, including GHG emissions reductions. In developing its implementation rules for SGIP, the Commission, Program Administrators (“PAs”), and other parties should recognize that rates are changing and that GHG signals, additional experience with

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<sup>5</sup> SCE’s comments at p. 3.

<sup>6</sup> SDG&E’s comments at pp. 4-5.

<sup>7</sup> PG&E’s comments at p. 1.

program rules, and other factors can effectively improve (and reduce) GHG emissions outcomes from SGIP-funded projects.

### **III. BOTH THE \$1,000/TON PENALTY AND GHG THRESHOLD CONCEPTS IN THE PROPOSAL LACK SUFFICIENT ANALYTICAL BASES.**

CESA is concerned that, after a year's worth of discussions, modeling, and exploration of solutions, newly introduced concepts are being considered for addition to the SGIP rules. Foremost among these new concepts is the \$1,000/ton penalty, which is generally 40 times the current cost of carbon, as well as the 5 kg-CO<sub>2</sub>/kWh threshold for emissions reductions.

The Revised Staff Proposal notes that the \$1,000/ton value originates from the original Staff Proposal's 'penalty bands' discussion section and related extrapolation, in which staff generally sought to reduce incentives by 25%. To CESA, this general 25% reduction goal was not discussed in the GHG Signal Working Group, and the value does not seem especially substantiated by modeling efforts.<sup>8</sup> Since SGIP involves a step-down incentive, CESA expects that many future projects may face more than a 25% incentive reduction 'hammer' if such a high penalty price is enacted.

Penalties should logically be oriented around cost-causation principles, which the Commission has relied on extensively in many proceedings – *e.g.*, rate designs. Based on cost causation, a logical 'penalty', where applicable, would be the cost of carbon. As the actual real-

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<sup>8</sup> See *Self-Generation Incentive Program Greenhouse Gas Staff Proposal* ("Staff Proposal"), R.12-11-005, published on September 6, 2018, p. 12.

Footnote 9 notes that modeling discussions and the GHG Working Group report proposed and discussed a reduction of a PBI payment at a "4x multiple of the California Cap and Trade price of carbon at the time in which the project applied to the program." CESA believes this analysis did not involve discussions or proxies that resulted in a \$1,000/ton value. Moreover, the Staff Proposal notes that the base logic of structuring penalties to be commensurate with penalty bands for generation projects was inapplicable because the generation-related penalty bands were focused on emissions *increases*, not the targeted *decreases* for storage projects. (Staff Proposal, p. 13)

world statutorily-directed (AB 32) market cost of carbon has been anecdotally deemed ‘low’ by some, stakeholders have also explored ‘societal costs of carbon’ based on Commission-administered or Commission-approved values. The Revised Staff Proposal references such a value in the Commission’s Integrated Resource Planning (“IRP”) proceeding, an active and up-to-date proceeding, which pinpoints a cost of carbon at \$150/ton.<sup>9</sup> A deviation from an analytical cost of carbon is a deviation from cost-causation principles. CESA remains unclear on the links between SCE’s support for the \$1,000/ton concept *vis-a-vis* its alignment with a Clean Net Short methodology.<sup>10</sup>

The goal of wanting ‘even more emissions reductions’ is laudable but should not be implemented in SGIP at this time. This goal manifests in the form of the 5 kg-CO<sub>2</sub>/kWh threshold. Some parties suggest a more stringent threshold. PG&E, for instance, recommends a threshold of 10 kg-CO<sub>2</sub>/kWh, based on the Revised Staff Proposal’s data points from the OSES MO model.<sup>11</sup> To this, CESA reiterates its points that this is unnecessary and that the OSES MO model, while helpful, is a ‘perfect foresight’ model, and thus, at most, an ideal proxy for real-world operations. Real-world operations will invariably differ from perfect foresight models. A perfect foresight model designed to optimize GHG emissions savings will generally overstate the GHG emissions savings from a similarly intended real-world operating project. The OSES MO findings, therefore, should be calibrated. CESA believes the analytical base for the 5 kg-CO<sub>2</sub>/kWh threshold is thus flawed. A simpler and statutorily-aligned rule of ‘non net-GHG emitting’ better allows projects to lower GHG emissions while managing real-world conditions and customer needs.

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<sup>9</sup> Revised Staff Proposal, p. 29.

<sup>10</sup> SCE’s comments at p. 3.

<sup>11</sup> PG&E’s comments at p. 5.

As CESA and many industry members read the statute, it is clear that the achievement of *exceptional* GHG emissions reductions was not explicitly intended by SGIP.<sup>12</sup>

“CSE continues to believe that penalizing projects that are actually reducing GHG emissions is unfair and could negatively impact program participation. Furthermore, in 2018 the California Legislature amended PUC Section 379.6 via Senate Bill (SB) 700 (Stats. 2018, Ch. 839) to specifically require the Commission to “adopt requirements for energy storage systems to ensure that eligible energy storage systems *reduce the emissions of greenhouse gases*” (emphasis added). The Legislature had the opportunity to provide additional qualifiers or expand this requirement but did not. Thus, if SGIP projects actively reduce GHG emissions, CSE contends those projects lawfully meet SGIP’s goals and should not be penalized. Based on these factors, CSE strongly recommends that the threshold for GHG penalties should begin at more than 0 kg CO<sub>2</sub>/kWh emitted.”<sup>13</sup>

Parties should recall that the incentive rates in SGIP were designed to support steady deployments of SGIP under the rules being established at that time. These incentives were not designed to drive a singular focus on GHG emissions reductions but instead were intended to support an array of broad, useful, state-aligned goals – *e.g.*, locating SGIP projects in the Aliso Canyon area to avoid reliance on a natural gas storage facility that was leaking methane. For all these reasons, there is insufficient bases for the proposal’s desire to achieve excessive GHG reductions at the expense of other important goals and to penalize GHG-reducing projects.

Finally, PG&E argues that a stringent threshold is appropriate because SGIP is an incentive that offsets a subjectively high percentage (14%) of project costs.<sup>14</sup> PG&E does not source this finding, but indicates that the 14% value could be low, indicating that reporting by companies may be inaccurate, and the percentage of costs covered by the incentive could be even higher. PG&E

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<sup>12</sup> See comments by the California Solar and Storage Association (“CALSSA”), Center for Sustainable Energy (“CSE”), Stem, and Tesla.

<sup>13</sup> CSE’s comments at p. 3.

<sup>14</sup> PG&E’s comments at p. 7.

then concludes that, since costs are purportedly being covered, allowing resources to receive incentives for merely reducing GHG emissions at a number below PG&E’s preference is “far too lenient.” CESA interprets PG&E’s statements to generally indicate a view that, as SGIP may help defray costs for projects that otherwise would not occur, project developers should accept additional obligations – *e.g.*, focus heavily on GHG emissions reductions even if challenging and costly.

Beyond interpretations of statute, CESA does not find this logic compelling. First, the lack of movement of PG&E’s SGIP funds suggests that SGIP incentives are not nearly as lucrative as indicated, even with existing rules.<sup>15</sup> Second, incentive programs will logically reduce investment costs, but this does not necessarily support a view that resource behavior should be overly directed or overly managed beyond the general terms and conditions of contracts, basic operational parameters, and the goals of getting systems deployed. For instance, the tax credits for electric vehicles (“EVs”) are based solely on purchasing or leasing an EV. Likewise, SGIP rules and arguments should focus on how best to deploy SGIP projects in line with statute while minimally setting administrative or other parameters.

#### **IV. DUAL PARTICIPATION ISSUES ARE OUT OF SCOPE.**

SCE states that the “Revised SGIP Staff Proposal should provide additional clarification for SGIP project demand response dual participation.”<sup>16</sup> These comments are out of scope and are better discussed in the context of an Energy Storage successor proceeding focused on multiple-use applications (“MUAs”) or in a Demand Response (“DR”) proceeding where rules and requirements around DR participation are front and center. Dual participation is a complex issue.

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<sup>15</sup> PG&E’s comments at p. 1.

<sup>16</sup> SCE’s comments at p. 4.



CESA and others have explored these matters, including finding that ‘incrementality’ evaluations can be sub-divided into categories, such as incentive incrementality versus available capacity incrementality. CESA recommends that dual participation discussions be deemed out of scope in relation to the Revised Straw Proposal. CESA looks forward to discussing these important matters at the proper time in the proper venue.

**V. NEW ENFORCEMENT APPROACHES AND NEW RETROACTIVE PENALTIES FOR LEGACY PROJECTS ARE IMPROPER.**

Despite the novelty and special pioneering roles of early-era SGIP projects (*i.e.*, legacy projects), multiple parties seek or support contentious and potentially punitive retroactive rule changes as a ‘stick’ for these projects. CESA opposes these proposed changes. Most arguments in favor of these retroactive changes focus on ensuring achievement of GHG emission reduction goals, which is laudable. However, it is impractical and improper to change the rules such that they apply to legacy projects that were deployed in good faith based on rules in place at the time. Southern California Gas Company (“SoCalGas”) states that a legacy fleet compliance structure, which was not authorized in the rules at the time of legacy system contracts, is worth doing because excess administrative funds are available.<sup>17</sup> The Public Advocates Office (“PAO”) comments that some additional assurances may be appropriate to avoid misspent ratepayer funds.<sup>18</sup>

These comments overlook the essential role of SGIP in deploying systems. It is indisputable that legacy SGIP incentives helped in the deployment of SGIP systems, and thus the systems met some or all of the program’s goals as established at that time. Retroactive or punitive changes are improper and may be counter-productive to energy storage deployments. Legacy

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<sup>17</sup> SoCalGas’ comments at p. 3.

<sup>18</sup> PAO’s comments at p. 5.

systems should be deemed as meeting SGIP goals and parties should focus on rules for new systems. That said, CESA is hopeful that a GHG signal, sufficient cycling, and evolving rates that align with grid conditions or other optional tools can support improvements in the GHG emissions reductions from legacy systems.

**VI. CONCLUSION.**

CESA appreciates the opportunity to submit these reply comments to the Ruling and the Revised Staff Proposal. CESA looks forward to working with the Commission and stakeholders in this proceeding.

Respectfully submitted,



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Date: January 28, 2019