

**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 ISSUING ENERGY DIVISION'S SELF-
GENERATION INCENTIVE PROGRAM GREENHOUSE GAS SIGNAL STAFF
PROPOSAL FOR COMMENTS AND REVISING COMMENT SCHEDULE**

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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 in response to comments filed on the *Assigned Commissioner’s Ruling Issuing Energy Division’s Self-Generation Incentive Program Greenhouse Gas Signal Staff Proposal for Comments and Revising Comment Schedule* (“Ruling”), issued by Assigned Commissioner Clifford Rechtschaffen on September 6, 2018.

¹ 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, AltaGas Services, Amber Kinetics, American Honda Motor Company, Inc., Axiom Exergy, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Centrica Business Solutions, 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, Enerport, ENGIE, E.ON Climate & Renewables North America, esVolta, Fluence 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, National Grid, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., NRG Energy, Inc., Parker Hannifin Corporation, Pintail Power, Primus Power, Range Energy Storage Systems, Recurrent Energy, Renewable Energy Systems (RES), Sempra Renewables, Sharp Electronics Corporation, SNC Lavalin, Southwest Generation, Sovereign Energy, Stem, STOREME, Inc., Sunrun, Swell Energy, True North Venture Partners, Viridity Energy, VRB Energy, Wellhead Electric, and Younicos. 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. ABOUT CESA.

CESA is a non-profit membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy, education, outreach, and research. CESA's mission is to make energy storage a mainstream energy resource which accelerates the adoption of renewable energy and promotes a more efficient, reliable, cleaner, affordable, and secure electric power system. As a technology-neutral group that supports all business models for deployment of energy storage resources, CESA membership includes technology manufacturers, project developers, systems integrators, consulting firms, and other clean-tech industry leaders. More than 75 companies comprise CESA's membership.

II. INTRODUCTION.

CESA reiterates our support for the role of behind-the-meter ("BTM") energy storage in supporting the state's decarbonization and grid-support goals. CESA supports the Commission staff's efforts to evolve Self-Generation Incentive Program ("SGIP") rules and requirements to support the greenhouse gas ("GHG") emissions reduction goal and offers our response to other parties' comments on the SGIP GHG Signal Staff Proposal ("Staff Proposal") below.

III. FLEET COMPLIANCE STILL ADDRESSES GHG REDUCTION GOALS AND SHOULD BE ALLOWED.

Fleet compliance approaches were discussed often and deeply in the GHG Signal Working Group. Generally, a large working group majority seemed to indicate near-consensus support for some version of a fleet-compliance approach, with differing views on the duration of fleet compliance, among other things. In comments on the Staff Proposal, multiple parties signaled support for fleet compliance approaches, including CESA, the California Solar and Storage Association ("CalSSA"), Center for Sustainable Energy ("CSE"), Pacific Gas and

Electric Company (“PG&E”) Stem, and Tesla. CalSSA recommended that “developers should have the option of complying on a fleet-wide basis from the outset, rather than a complicated structure that combines individual project-based compliance followed by fleetwide compliance after systems receive their final performance-based incentives payments.”² CSE supported a five year or less period for fleet compliance, recommending that the “PAs should not monitor new projects as a fleet after those projects have finished their PBI period.”³ The fleet-wide compliance approach recognizes that every customer is different, and that a fleet of SGIP systems can provide GHG reductions while still addressing unique customer needs.

Based on the efforts of the working group to vet concerns and build consensus, CESA is concerned with Southern California Edison Company’s (“SCE”) position to “not support the use of a fleet concept when evaluating GHG reductions for SGIP qualified projects.”⁴ While SCE seems to base its views with an eye towards the GHG goal of the program and towards historical project-by-project compliance views, CESA believes that fleet-level flexibility is appropriate for SGIP energy storage systems. SGIP systems are dispatchable and can function in a fleet as ‘virtual power plants’. This dynamism is useful to the grid and can still support GHG emissions reductions. In light of advances made in market participation and in allowing flexibility for developers, the fleetwide compliance approach is useful, reasonable, and achieves program goals.

² CALSSA’s comments at p. 3.

³ CSE’s comment at p. 6.

⁴ SCE’s comments at p. 5.

IV. MULTIPLE-USE APPLICATION ELIGIBILITY AND INCREMENTALITY IS OUT OF SCOPE HERE.

SCE raises points about multiple-use applications (“MUAs”), eligibility for participation in multiple services, and incrementality in its comments. SCE generally conveys that an SGIP system operating pursuant to a GHG signal may not necessarily warrant eligibility or payment for a coincidentally-directed demand response (“DR”) service. CESA views this issue as out of scope for the GHG Signal Staff Proposal but believes nevertheless that the Commission could clarify that the cycling requirements of any SGIP system are limited and do not guarantee dispatch on any specific day since cycling requirements are primarily one possible method for demonstrating that resources are not being used for back-up only services.

SGIP systems may or may not cycle pursuant to the customer’s needs or other factors on any given day, including with the important goal of GHG savings. These loose operating parameters differ starkly from the obligatory performance requirements associated with DR, Resource Adequacy (“RA”), or other reliability services. To illustrate, consider that non-RA resources are *not* restricted from providing services to the grid and are still eligible to offer and sell themselves as RA. The purpose of the RA contract is to guarantee performance and availability. In many instances, resources may be paid for RA capacity yet will not dispatch nor provide energy. The state historically and prudently requires RA contracts despite the fact that non-RA resources or imports may happen to deliver energy or grid services even without the RA contract, as well as the fact that some RA resources may not deliver energy or ancillary services on a given day based on market economics. By this logic, the possibility for SGIP systems to cycle on some days, in accordance with program rules, neither fulfills nor replaces the purpose of RA nor other grid support programs or services, as CESA understands it. It would thus be

inappropriate to categorically deem SGIP systems ineligible for incremental services such as RA by virtue of having a GHG signal that they will respond to on some occasions.

V. THE PROGRAM SHOULD HAVE RULES THAT BALANCE SIMPLICITY WITH ASSURANCES FOR PROGRAM GOALS.

Multiple parties commented on the emissions-reduction threshold and performance expectations laid out in the Staff Proposal, with differing views on the level of penalties and program complexity. Relatedly, variation exists on the extent to which incentives should be withheld or reduced to drive compliance, or if other methods, such as a dollar-per-ton penalty, are more appropriate for SGIP. CESA recommends the Commission pursue ‘win-win’ solutions whereby goals are reasonably achieved while still allowing developers reasonable levels of flexibility. The program is designed to achieve GHG emissions reductions and other goals through the deployment of energy storage resources, so the workability of the program remains an important consideration.

CSE, PG&E, and many industry parties all indicate that the 25 kg-CO₂/kWh approach is excessive.⁵ CSE indicates that any reduction level is sufficient, and PG&E proposed a reduction level of 10 kg-CO₂/kWh, subject to escalation factors. CESA recommends the use of the zero threshold as fitting. This structure provides the most flexibility to developers, and can greatly simplify the expectations of developers. CESA agrees with PG&E that the 25 kg-CO₂/kWh will be difficult to achieve under normal operations. CESA disagrees with PG&E, however, that the 10 kg-CO₂/kWh threshold is instead needed. CESA believes such a threshold goes beyond the stated intent of the program unnecessarily.

⁵ PG&E’s comments at p. 6 and CSE’s comments at p. 6.

CESA further disagrees with the “ratcheting factor” that PG&E proposes whereby a kg-CO₂/kWh emissions reduction threshold is increased over time. A ratcheting factor may be appropriate for generation technologies, where the resources must operate to offset grid generation across a time where the grid is deemed to be getting cleaner and cleaner, but that approach is not applicable to energy storage. For energy storage, GHG operations can be achieved through cycling and heat-rate arbitrage effects, build-margin benefits, or other factors. PG&E’s proposal errantly applies the logic of GHG reduction roles for *generation* technologies to energy storage. The ‘generation philosophy’, if applied to energy storage, also complicates operations, tracking, and forecasts for developers, raising risks that will amount to barriers to SGIP system deployments. Instead of a ratcheting factor, it may also be reasonable to include a “buffer band,” as suggested by CSE, since actual operations may involve many factors.⁶ This approach is more user-friendly while keeping the threshold reductions goal in mind.

CESA supports the PG&E proposal to explore an additional pathway to compliance – *i.e.*, the DR option.⁷ An additional pathway will provide compliance flexibility to developers and should be leveraged, where reasonable. Generally, if SGIP systems opt into DR programs, they will be exposed at times directly to wholesale grid conditions, which in turn may mitigate any limitations of the retail rate signal to reflect grid conditions or marginal GHG resources. Since the limitations of the retail rate signal were identified as a barrier to high GHG emissions reductions in some cases, it seems prudent to provide this compliance pathway as recommended by PG&E.

⁶ CSE’s comments at p. 7.

⁷ PG&E’s comments at p. 14.

Finally, the program should remain usable to industry through rules that, while still directing achievement of program goals, reasonably reduce financing risks by making the incentives as available as possible. Stem notes that the Staff Proposal permanently eliminates incentives, even though resources may respond to opportunities to outperform in later intervals to earn incentives. While many industry parties favor penalties on a per-metric-ton basis, parties still responded to the Staff Proposal's approach of reducing incentives based on performance. To this, Stem recommends that any incentive reductions not necessarily be permanent, but instead be recoupable in later years where appropriate.⁸ Another major financing risk factor is the amount of upfront incentive withheld. PG&E and CSE both recommend capping the withheld amount at 50%,⁹ while many parties suggest a lower withholding percentage for smaller systems (*i.e.*, akin to a "PBI Lite").¹⁰ CESA supports approaches that keep costs down by limiting the incentive amount that is withheld or at risk to a degree where goals can still be achieved without excess risk.

VI. RETROACTIVE CHANGES TO PROGRAM TERMS AND CONDITIONS SHOULD BE OPTIONAL, NOT MANDATORY.

San Diego Gas and Electric Company ("SDG&E") recommends that legacy resources be placed under the same rules for new resources.¹¹ This type of obligatory retroactive change should be avoided, as it could be extremely confusing or disruptive to legacy customers and creates concerning precedent that the Commission may retroactively change terms and conditions for projects. Such an environment, if allowed, is extremely problematic and

⁸ Stem's comments at p. 2.

⁹ PG&E's comments at p. 9 and CSE's comments at p. 4.

¹⁰ CALSSA's comments at p. 17.

¹¹ SDG&E's comments at p. 2.

unreasonable for project development, particularly when a multitude of factors, such as rate design, may be driving performance outcomes. CESA also disagrees that providing compliance pathways for legacy systems automatically “perpetuates unproductive operating incentives and program disfunction.”¹² The Commission staff proposed a ‘pathways approach’ that is structurally sound in that resources can fairly remain on their current contract, or can opt into new contracts. Avoidance of retroactive rate-making was discussed often in the GHG Signal Working Group, and this principle should be part of any updates to the SGIP rules.

VII. CONCLUSION.

CESA appreciates consideration of these comments. SGIP is a landmark program that has led to widespread deployment of BTM storage to support the State’s environmental goals and support ongoing climate adaptation and resiliency efforts. CESA believes it is possible to evolve program rules to better ensure GHG reduction goals are met while also promoting high-levels of industry participation in the SGIP program.

Respectfully submitted,



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¹² SDG&E’s comments at p. 2.