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)

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

Alex J. Morris Vice President, Policy & Operations

Jin Noh Policy Manager

CALIFORNIA ENERGY STORAGE ALLIANCE

2150 Allston Way, Suite 400 Berkeley, California 94704 Telephone: (510) 665-7811

Email: amorris@storagealliance.org

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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")¹ hereby submits these 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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¹ 174 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 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. INTRODUCTION.

CESA appreciates this opportunity to comment on the Revised Staff Proposal to the Self-Generation Incentive Program ("SGIP"). CESA believes input from stakeholders will materially inform the Revised Staff Proposal as it seeks to achieve the objective of greenhouse gas ("GHG") emissions reductions in a program that must also be sufficiently flexible to be used by various customers and for other program objectives. CESA also appreciates the Commission's requests for input regarding thermal storage approaches to GHG performance. In these comments, CESA structures our comments around the six main components as outlined in the Ruling and makes the following recommendations:

• Proposed GHG signal:

- The proposal to develop and publish a GHG signal should be adopted, potentially through a separate and expeditious decision.
- Proposal for new commercial projects:
 - The 5 kg-CO₂/kWh threshold is inappropriate and should be revised to zero or some lower threshold that reflects real-world forecast uncertainty.
 - The \$1,000/ton penalty price is unreasonably high and should instead be set at the cap-and-trade allowance price or at one of the Commission-approved values for GHG emissions.
 - The proposed underperformance penalties are harsh and should instead incentivize energy storage projects to outperform on goals in later years to 'make up' for underperformance in earlier years.
 - o The fleetwide enforcement approach for Year 6-10 should be removed.
 - o Enforcement provisions after Year 10 should be clarified.
- Proposal for new residential projects:

 While supportive of the deemed path, the proposal for new residential projects should also create a path for projects that deploy and install energy storage solutions with less than 85% single-cycle roundtrip efficiency ("SCRTE").

Proposal for legacy projects:

- Legacy projects have encouraged innovation and learning and should not be punished.
- o Publication of developer performance could be misconstrued and misapplied and should be avoided.
- Non-investor-owned utility ("non-IOU") new residential options:
 - Additional deemed pathways for non-IOU residential projects should be developed through analytical criteria; and
- Applicability to thermal energy storage ("TES"):
 - A comparable approach for evaluating GHG reduction progress to TES projects should be applied.

II. PROPOSED GHG SIGNAL.

A. The proposal to develop and publish a GHG signal should be adopted, potentially through a separate and expeditious decision.

The Revised Staff Proposal includes a proposal to develop and publish a rolling GHG signal that is digitally downloadable and can be incorporated into energy storage operating algorithms in order to improve consideration of GHG goals and the effects of energy storage system charging or discharging. This proposal directs the development of an interim solution within five months of a Commission decision, and the development of a finalized GHG signal within eight months.

CESA supports the rapid development of a GHG signal. CESA recommends the Commission proceed with this aspect of the proposal urgently, potentially via a separate (and more

expeditious) decision. While other parts of the proposal should undergo further adjustments and considerations, the provision of a GHG signal is broadly supported and can proceed with development and implementation. CESA believes the five-month and eight-month implementation timelines are reasonable. CESA supports ongoing work with WattTime, a nonprofit organization with a relevant GHG signal and related experience that has been explored for SGIP uses thus far, especially because WattTime has indicated it can meet or beat the applicable implementation timelines.

Finally, the Commission may wish to authorize some flexibility for the Program Administrators and GHG signal providers to update the various parameters of the signal in in the future in appropriate ways (e.g., with stakeholder input). While the GHG signal must meet the minimum requirements, additional experience with the signal may identify where and how tweaks to the signal can more accurately inform energy storage solutions. For example, experience with the signal may yield that a two-week ahead signal is useful and should also be provided. CESA recommends the Commission provide for this flexibility in the Revised Staff Proposal.

III. PROPOSAL FOR NEW COMMERCIAL PROJECTS.

CESA appreciates that the Commission reviewed stakeholder feedback and adjusted its proposal for new commercial projects. However, CESA believes that the proposal still has several key flaws that require adjustment. To clarify CESA's views for the Commission, CESA summarizes them in the table below. While many components of the proposal are workable and fit with program goals, multiple major flaws exist. CESA appreciates the Commission's consideration of these important change recommendations.

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Commission Proposal	CESA Position
PBI approach for all commercial projects	No comment at this time.
PBI for 50% of project incentive	Support at this time: This should be adopted in conjunction with the below-recommended changes to the proposal for new commercial projects.
PBI recovery period is five years and existing Handbook enforcement authority applies thereafter	Support but clarification needed: While supportive of the five-year concept, oversight of SGIP projects should be expressly limited to ten years of project life. As written in the Revised Staff Proposal, the authority could be misconstrued to apply in perpetuity, which would be unreasonable. SGIP is typically viewed as a ten-year program, and this standard should be clarified in the proposal.
GHG minimum reduction threshold	Oppose: The threshold should be set so that any non-zero GHG emission reductions are achieved.
Incentive reduction for emissions over the threshold (\$1,000/ton)	Oppose: There is already a Commission-approved or reasonable 'market value' that should be used. There should be no reductions in incentives if any emissions reductions are achieved.
Inability for incentive recovery in later years	Oppose: Net GHG emissions across the five years should be evaluated. If emissions reduction requirements were not met in certain years, developers should be able to 'make-up' the required emissions reductions in other years.
Elimination of operational round-trip efficiency ("RTE") requirement	Support: This is a logical change given that other mechanisms will be in place to direct GHG emissions reductions.
130 cycles per year requirement	Support but could be lower or eliminated: With a GHG goal, it may no longer be necessary to have a cycling requirement. CESA seeks to ensure wasteful or problematic compliance-based cycling is avoided. The Commission could remove the cycling requirement and instead pay out the remaining (50%) of the incentive <i>pro rata</i> across the five-year performance period, based on successful GHG performance. Alternatively, CESA recommends a 104-cycle requirement, which would amount to cycling twice per week, reasonably indicating that a resource is not used for backup only and ensuring that a resource is used actively.
Fleet compliance approach for years 6-10 of the project	Oppose at this time: CESA believes ongoing data sharing is appropriate but complex oversight approaches should be avoided. If a fleet approach is used, a key issue to address is how legacy fleets are merged (or not) with new compliance fleets.

Contract with a	Support with one change: CESA recommends that the
Performance Data Provider	Commission authorize a 'hardship waiver' that could be
("PDP") and install	authorized on a project-specific basis by the Program
metering equipment per	Administrator ("PA") if a project justifies how such a waiver
CEC's Eligible System	is needed for economic viability of the project, ensures GHG
Performance and Revenue	emissions goals, provides accurate project data, and allows
Grade Meters list	for project review.
Semi-annual performance information	Support.

A. The 5 kg-CO₂/kWh threshold is inappropriate and should be revised to zero or some lower threshold that reflects real-world forecast uncertainty.

The proposal directs excessive GHG emissions reductions beyond the broad requirements of statute. Specifically, the proposal directs emissions reductions of at least 5 kg-CO₂/kWh of energy capacity. While CESA supports GHG emissions reductions, this 'much better than zero' floor is unnecessary to align with statute,² may limit participation, and could disrupt otherwise viable projects that could still achieve GHG reductions. The proposed threshold is thus inappropriate. As the grid becomes cleaner in California, energy storage will provide many benefits and GHG emissions reductions. By deploying energy storage, the Commission is readying our grid for the future. Unnecessary hurdles to their deployment do not support the SGIP goals. While CESA does not support a 'much better than zero' approach due to the unwieldiness and risks associated with this, CESA believes the Commission, if determined to pursue this approach, should direct a 0.5 kg-CO₂/kWh or some similarly lower, but reasonably determined, hurdle. CESA also notes that the OSESMO model invoked by the Commission for justifying some of these hurdles is a 'perfect foresight' model, making its findings potentially inaccurate for some projects. In reality, projects will never have perfect foresight. Expected customer load actions,

greenhouse gases."

² California Public Utilities Code Section 379.6 (b) (3) states that the "commission shall adopt requirements for energy storage systems to ensure that eligible energy storage systems reduce the emissions of

weather, and GHG marginal emissions can be forecast but not with 100% accuracy. The natural inaccuracy of any forecast indicates that adjustments will be made, potentially introducing inefficiencies into the overall GHG performance. While CESA is confident that GHG emissions reductions are achievable from energy storage systems, CESA believes it is prudent to understand how 'perfect foresight' does not apply in real-world systems.

B. The \$1,000/ton penalty price is unreasonably high and should instead be set at the cap-and-trade allowance price or at one of the Commission-approved values for GHG emissions.

The proposal is flawed in setting an extremely high penalty price associated with not meeting GHG emissions reduction goals in an applicable calendar year. While CESA has supported reasonable 'sticks' to support the achievement of statutory goals, CESA believes the severity of the proposal is unreasonable. The proposal directs an incentive reduction of \$1,000/ton, which is an extremely high price compared with current GHG allowance prices (*i.e.*, reflecting cap-and-trade requirements) of approximately \$25/ton. CESA sees no justification for a 40x penalty! Similarly, the \$1,000/ton reduction could amount to as much as 57% of the SGIP incentive, potentially destabilizing a project's economics. Such risks invariably could limit participation and development. The Commission should recall that none of the 'build-margin' benefits identified in Decision ("D.") 15-11-027 are reflected,³ but such benefits can be presumed to be non-zero, assuring the Commission that more GHG benefits exist across time.⁴ CESA has

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³ 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, issued on November 23, 2015.

http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M156/K044/156044151.PDF

⁴ For example, the Commission evaluated the renewables integration performance of energy storage in the form of how energy storage improved the Effective Load Carrying Capacity ("ELCC") value of solar and wind and energy storage on the system could boost solar ELCCs by varying but material degrees across the year, particularly in spring months experiencing significant overgeneration where curtailments would

reasonably suggested potentially justifiable and 'high' values to ensure energy storage system operators and developers are properly oriented to achieve GHG emissions reductions goals. The 'high' values have included a societal cost of carbon value or a value derived from the Integrated Resources Planning ("IRP") proceeding, which the Commission has calculated and vetted as part of analytical and stakeholder processes. CESA recommends the Commission revise its proposal to use one of these already approved values.

C. The proposed underperformance penalties are harsh and should instead incentivize energy storage projects to outperform on goals in later years to 'make up' for underperformance in earlier years.

The proposal would establish a new rule that would cause SGIP-funded projects to forfeit a year's worth of incentives if performance in the applicable year is below the requirements. CESA believes this is excessive and too harsh. Instead, the Commission should authorize 'make-up' payments if resources can 'beat' performance goals by some degree in certain years to make up for underperformance in other years. CESA believes this 'make-up' approach could apply for the first seven years of a project's life and would provide for necessary learning and improvement of the dispatch algorithm. Some years may have very different marginal GHG emissions profiles. For instance, extended droughts may change the hydro generation profile such that zero-emissions hydro is less frequently the marginal resource. By contrast, high hydro years may lead to frequent or long periods of overgeneration and curtailments of zero-emissions resources, such as solar. SGIP rules should support some level of flexibility so that energy storage resources have incentives to outperform on goals in later years, and CESA's proposed fix provides this incentive.

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otherwise occur. Such renewables integration benefits are also seen in the greater than 100% ELCC calculations for energy storage, including a maximum ELCC percentage of 201% in the March calculation. See "Energy Division Monthly ELCC Proposal for 2020 RA Proceeding," by Donald Brooks, published on November 27, 2018.

D. The fleetwide enforcement approach for Year 6-10 should be removed.

CESA believes the Commission can also drop the fleetwide enforcement approach for Years 6-10 of new commercial projects. While CESA understands these goals, CESA also believes the compliance obligation for projects in later years adds complexity. Commercial projects have strong financial signals to continue operating, and sufficiently aligned rates will ensure these projects operate smartly. For these reasons, it may be reasonable to remove the fleet compliance approach.

E. Enforcement provisions after Year 10 should be clarified.

The proposal should clarify that all enforcement provisions end after ten years of program participation. As written, it could be interpreted that the proposal authorizes PAs to have existing SGIP Handbook authority in perpetuity. CESA believes that this is not the intent. The proposal should be clarified to end PA oversight and enforcement after ten years. The provision of data from SGIP projects to evaluators after the ten-year period should be optional.

IV. PROPOSAL FOR NEW RESIDENTIAL PROJECTS.

CESA salutes the Commission for its responsiveness to stakeholder feedback and for finding a path forward that can reasonably achieve program goals while providing reasonable administrative simplicity to SGIP applicants, customers, and users. CESA strongly supports the authorization of a deemed path, which should be an effective, analytically-backed approach to support successful SGIP deployments while meeting state goals. CESA agrees with the findings and criteria associated with authorizing the Deemed Compliance model, including that it need not necessarily be paired with solar.

A. While supportive of the deemed path, the proposal for new residential projects should also create a path for projects that deploy and install energy storage solutions with less than 85% SCRTE.

CESA recommends that the Commission also authorize a path for new residential projects that may not desire or comply with deemed path requirements. There may be cases where residential customers choose to cycle their energy storage systems more often but rely on technologies with less than 85% SCRTE. CESA recommends that such developers and projects submit a compliance plan, not unlike some of the ideas being considered for residential projects in non-IOU territories. While usage of such an approach may be infrequent, CESA believes this flexibility will ensure an appropriate array of energy storage solutions remain eligible, so long as they comply with the base 66.5% SCRTE requirement. A goal is to allow for robust competition and participation of various energy storage solutions in support of SGIP goals.

V. PROPOSAL FOR LEGACY PROJECTS.

CESA appreciates that the Commission reviewed stakeholder feedback but believes serious flaws remain in the proposal for legacy projects, many of which were early adopters who entered into contracts under a previous regime of rules. CESA strongly believes it is inappropriate to require conformity to new rules retroactively in many cases, as proposed in the Revised Staff Proposal. CESA instead suggests the Commission provide options that will likely lead to desired outcomes. Moreover, CESA believes an excessive focus on the handful of legacy projects may be unreasonably misleading about the performance risks of energy storage to support California goals. As Senator Wiener noted in remarks to the Commission at the October 22, 2018 workshop on the initial Staff Proposal, the Commission should generally seek to avoid excessive or unnecessary

⁵ The Revised Staff Proposal notes how pairing with solar may ensure operations such that GHG reductions are more likely, thus pairing storage with solar may be one alternative compliance path that could be approved.

actions that might misalign with the broad policy objectives being effectuated across time through SGIP - i.e., it should not "use a bazooka to kill a fly" when considering programmatic changes.

CESA thus continues to advocate for the Commission to focus more on how best to direct operations and goals from new projects while recognizing the pioneering nature of older projects, many of which were operated under older rates and without a GHG signal or under early-generation dispatch algorithms, which supported the grid through demand response or other programs. Many legacy projects also faced extremely high cycling requirements. Perhaps most importantly, parties must recall that legacy projects were not solely directed at that time to achieve GHG reductions but instead were tasked with meeting one or more program goals. CESA believes that these projects have successfully met one or more of the project goals enacted at their time of SGIP application. To clarify CESA's views for the Commission, CESA summarizes them in the table below.

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⁶ See Decision Revising the Self-Generation Incentive Program Pursuant to Senate Bill 861, Assembly Bill 1478, and Implementing Other Changes, D.16-06-005, issued on July 1, 2016, p. 63.

Commission Proposal	CESA Position
Elimination of RTE requirement	Support: This proxy approach using RTE requirements has not sufficiently directed GHG reductions, given the various operating and customer profiles found in legacy systems, rates, and other factors, many of which were targeting market transformation goals.
Minimum 130 cycles requirement	Support: This avoids problematic or wasteful compliance-based cycling. CESA maintains that an even lower 104 annual cycle requirement provides more flexibility while still ensuring usefulness. The fact that the extremely high 260 annual cycle requirement existed highlights how parties have learned much from early generation SGIP projects, and that optional flexibility away from the earlier rules of SGIP may be appropriate.
Use infraction process specifically to support GHG reductions from legacy systems fleetwide, even if other goals are being met	Oppose: Further enforcement actions will be time- and resource-consuming for little gain (<i>e.g.</i> , it could amount to a cost equivalent of \$250/ton of GHG emissions reductions). This is especially the case where rates are already evolving and a GHG signal is being developed, in turn supporting the potential for improved timing of operations from legacy systems. Additionally, legacy SGIP resources had an array of goals that they could target and meet. So long as any of these goals is being reasonably met, pursuit of infractions related to the GHG goal are statutorily unnecessary.
Residential customers who enroll in new rates are exempt from above infraction process	Supports optional flexibility but opposes infraction process: CESA generally supports this type of optional flexibility but also generally opposes the use of infraction processes on legacy projects that are meeting one or more program goals. CESA agrees that it may be prudent for legacy projects to opt into new rates.

A. Legacy projects have encouraged innovation and learning and should not be punished.

SGIP is an important program, and many projects which fit with the state's trajectory for renewables integration, local capacity needs, demand response capabilities, and customer benefit would not exist without the SGIP program. This was especially true for legacy projects which deployed storage and educated customers about this relatively new technology class. Due to the

pioneering nature of SGIP projects, historical SGIP statute listed an array of applicable goals that program participants could meet. While CESA understands that the GHG emissions benefits of some legacy projects have been lower than expected, much learning and evolution of the rules has been possible by learning from legacy projects. These approaches and lessons-learned will not only help California in its policy approaches (e.g., in the new rules being proposed for new projects) but will also inform policy approaches around the world. Further, retroactively 'punishing' legacy projects that met the program rules at the time they were deployed could have the unintended consequence of discouraging participation/interest in future innovative programs in California for fear of downstream retribution. In this regard, by encouraging innovation, the benefits of legacy SGIP projects are significant.

While CESA supports ongoing tracking and evaluation of legacy projects for learning purposes, any contentious retroactive rulemaking is likely counter-productive and should be avoided.

B. Publication of developer performance could be misconstrued and misapplied and should be avoided.

CESA encourages the Commission to avoid publication of information which could be misconstrued or misapplied by parties. Such public information may include otherwise well-intended praise lists. Since rules for new projects will set a sufficient 'floor' for GHG emissions reductions, CESA instead recommends that developers provide more information to customers about how configurations of energy storage systems can change or increase GHG emissions reductions. Just as customers have the option to pursue more or less fuel-efficient vehicles, or more or fewer solar panels, customers can evaluate how changes to their proposed installation could conceivably change the GHG emissions reductions as well. Information about legacy

projects that could have completely different rates and operating goals should not be compared 'apples-to-apples' with new projects, as CESA understands it.

VI. NON-IOU NEW RESIDENTIAL OPTIONS.

This is an especially important area for rule finalization as there may be thousands of prospective SGIP customers in non-IOU territories that should be eligible for the program and have contributed to it through their IOU rates (e.g., through natural gas bills). CESA appreciates that, absent grid-aligned time-varying rates, the deemed pathway for residential projects may not by itself sufficiently guarantee that a GHG emissions reduction goal is met. However, CESA believes a deemed path is the appropriate 'low touch' oversight and enforcement approach for residential applications, which are very small and much lower in cost than larger commercial projects. As such, CESA supports efforts to authorize a deemed approach in areas that may not, at this time, have retail rates that qualify for the 'normal' deemed path for new residential projects.

A. Additional deemed pathways for non-IOU residential projects should be developed through analytical criteria.

CESA recommends a deemed path be available in non-IOU areas based on analytically-derived criteria and or sworn affidavits about system performance. CESA believe analytical criteria could include: pairing with solar, solar-only charging, solar self-consumption operational modes, other operational plans that align with GHG goals, no-charge times, or other ideas discussed in the GHG signal working group. The Commission could retain the 85% SCRTE but should also authorize paths for other energy storage devices that still exceed the 66.5% RTE threshold. CESA also believes that it could be workable to approve a deemed path for developers who sign affidavits regarding system performance and who have a GHG signal available. System performance parameters should generally focus on meeting cycling requirements and have the

timing of cycling to approximately align with time-varying rates that are available in other service territories.

VII. APPLICABILITY TO THERMAL ENERGY STORAGE.

Commercial TES systems should be treated no differently than commercial battery energy storage systems from a GHG compliance and tracking perspective. To ensure that GHG savings are achieved, valuation of a TES resource's grid and GHG impacts should be based on actual performance.

A. A comparable approach for evaluating GHG reduction progress to TES projects should be applied.

Because TES is a dynamic asset, its actual contribution to the capacity and energy needs of the grid are directly linked to outdoor ambient air temperature and the operational status of the building it serves. By extension, it follows that TES's theoretical maximum impact (*i.e.*, capacity) to the grid should be determined by the worst hour of a 1-in-10 heat storm – a similar approach to the theoretical maximum capacity impact of a natural gas peaker whose output is also impacted by temperature. Historically, calculating the actual real time impact of TES has been too difficult to address because of the data collection and analysis cost required to perform the necessary calculations. That has changed, as the costs of sensors, communications, cloud data storage and analytics are less expensive than in times past, according to active thermal storage developers. Today it is not only feasible to determine GHG impacts from TES, but it is a reasonable and accurate way that ratepayers and California will be ensured of accurate GHG savings and accounting. By calculating GHG content of the actual kWh displaced by the TES over time, PAs will ensure that the TES systems are achieving their desired objectives. Securing accurate

measurements of GHG savings requires the measurement of actual equipment performance as

opposed to deemed assumptions.⁷

Given that TES has a high RTE, a long asset life that is not subject degradation over time,

and is typically applied in high utilization applications (e.g., daily cycles of more than 4 hours),

CESA is confident that TES will perform well toward achieving GHG reductions for California.

CESA thus strongly recommends that TES follow the same GHG reduction approach as other

commercial energy storage systems. Similarly, CESA recommends that this apply to future

projects only to provide the necessary market signals and avoid destabilizing existing projects.

VIII. <u>CONCLUSION</u>.

CESA appreciates the opportunity to submit these comments to the Ruling and the SGIP

Revised Staff Proposal. CESA looks forward to working with the Commission and stakeholders

in this proceeding.

Respectfully submitted,

Alex J. Morris

Vice President, Policy & Operations

CALIFORNIA ENERGY STORAGE ALLIANCE

2150 Allston Way, Suite 400

Berkeley, California 94704

Telephone: (510) 665-7811

Email: amorris@storagealliance.org

Date: January 22, 2019

⁷ CESA notes that, in some discussions on TES, the word 'deemed' has been used in regarding how to determine average performance. This use of the word 'deemed' should not be confused with 'deemed

approaches' for residential systems.

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