

March 26, 2021

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Re: Protest of the California Energy Storage Alliance to Advice Letter 5750-A, et al. of the Joint SGIP Program Administrators

Dear Sir or Madam:

Pursuant to the provisions of General Order 96-B, the California Energy Storage Alliance (“CESA”) hereby submits this Protest to the above-referenced Advice Letter 5750-A of Southern California Gas Company (“SoCalGas”), Advice Letter 4356-G/6046-E-A of Pacific Gas and Electric Company (“PG&E”), Advice Letter 4387-A of Southern California Edison Company (“SCE”), and Advice Letter 121-E-A of Center for Sustainable Energy (“CSE”), *Partial Supplement - Proposed Dynamic Methodology for Large Thermal Energy Storage Incentive Calculations and Updates to the Self-Generation Incentive Program (SGIP) Handbook in Compliance with Ordering Paragraphs (OPs) 2 and 3 of Resolution E-5106* (“Supplemental Advice Letter”), submitted jointly by the program administrators (“PAs”) on March 17, 2021. In accordance with the shortened protest period, CESA is timely submitting this protest on March 26, 2021.

I. INTRODUCTION & BACKGROUND.

With the issuance of Resolution E-5106 on November 5, 2020, CESA lauded the Commission for affirming that large thermal energy storage (“LTES”) systems should have a site-specific, data-driven, and performance-based incentive calculation methodology in place to support their participation in the Self-Generation Incentive Program (“SGIP”), in line with Decision (“D.”) 19-08-001 and as comparable to the performance-based measures established for battery energy storage systems. This Resolution represented the culmination of a pain-staking process that began on December 8, 2017 with Trane US, Inc. (“Trane”) submitting a SGIP Program Modification Request (“PMR”) for such a methodology to be put into place. CESA was thus eagerly anticipating timely implementation of an overdue change that would finally enable the participation of LTES in the program ever since the Permanent Load Shifting (“PLS”) Program was discontinued in 2017.

Subsequently, after a 30-day extension to file the advice letter pursuant to Ordering Paragraph (“OP”) 2 of Resolution E-5106, the PAs jointly submitted an Advice Letter on January 4, 2021 that essentially would leverage the methodology developed by University of California (“UC”)

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Davis' Western Cooling Efficiency Center ("WCEC") to calculate the 1-in-10-year peak kilowatt (kW) power consumption of a building's chillers for the sizing of the LTES system, as well as the attendant energy (kWh) impacts. Since these implementation details were compliant with Resolution E-5106 requirements and was the type of methodology and process advanced by CESA and other LTES industry members, CESA was supportive and did not find a need to submit a protest or response.

However, upon further delay when the advice letter was suspended by staff, the PAs submitted the Supplemental Advice Letter on March 17, 2021 that incorporates additional requirements that are material in nature and does not place LTES on a level playing field with battery energy storage technologies. Specifically, the additional requirement would subject chiller system(s) to monitoring prior to installation of the LTES system and as a condition of being able to submit an Incentive Claim Form ("ICF") – *i.e.*, among the substantiation documents required in the ICF to receive the upfront incentive payment. Such monitoring would have to occur for a minimum of one month during the summer, one month during the winter, and one month during a shoulder month and could occurring during the period between the Confirmed Reservation Date and Incentive Claim Date.¹ The result of these modifications is that LTES will be disadvantaged in its ability to claim SGIP incentives in a timely and fair manner and will have projects delayed beyond what is necessary to collect the baseline pre-LTES energy consumption of the facility.

CESA thus submits this protest to the Supplemental Advice Letter on the following grounds:

- The three-month baseline energy consumption measurement process does not need to all occur prior to LTES installation but can occur both prior to and after installation using event/non-event day approaches.
- For incentive calculation purposes and to be comparable to battery energy storage systems who are paid incentives on rated capacity, only summer months need to be measured to establish baseline energy consumption for LTES.
- The proposed pre-monitoring requirements violate technology neutrality and would significantly delay LTES technology deployment when accounting for project development lifecycles
- The PAs failed to "work with industry" to avoid additional disputes and have only caused even further delay.

To support expeditious resolution on this baseline measurement issue, CESA offers an alternative methodology to allow for efficient establishment of the baseline energy consumption by more flexibly sampling hot-weather days to estimate the peak capacity value of LTES systems, which will in turn, support quicker deployments of LTES systems.

¹ Supplemental Advice Letter at 2 and Attachment A at 66-68 and 70.

II. DISCUSSION.

In the below sections, CESA discusses the shortcomings of the proposed methodology in the Supplemental Advice Letter and recommends that the Commission reject this proposal. Instead, the Commission should reject the PAs' proposed modifications and instead adopt CESA's alternative monitoring methodology via a Non-Standard Disposition Letter, as outlined in Section III of our protest below, to ensure timely and efficient implementation of SGIP Handbook changes. Further delay and dispute is unacceptable given the history of resolving LTES participation issues in SGIP. To give LTES projects a shot at being deployed for Summer 2021, let alone 2022, CESA urges the Commission to adopt CESA's alternative solution.

A. The three-month baseline energy consumption measurement process does not need to all occur prior to LTES installation but can occur both prior to and after installation using event/non-event day approaches.

While understanding of the need to establish baseline energy consumption levels to adequately measure LTES capacity and performance of the LTES installation, the monitoring of performance for an entire month for three different seasons prior to LTES installation is wholly unnecessary, inefficient, and discriminatory. Even after the LTES system has been installed, there is an alternative means to determine baseline energy consumption and the resulting peak-capacity effects of having the LTES system installed and operation. Simply put, an alternative approach could be established to have the installed LTES "turn off" or not be used during a select number of hot-weather days to measure the baseline energy consumption and then on other "similar days" have the LTES system "turn on" to measure the peak-capacity reduction impacts.

This follows a long-established capacity and performance measurement practice used for demand response ("DR") that assesses "typical use" on non-event days and then assesses load reduction impacts during event days. With a sufficient sampling of non-event days, a reasonably certain energy baseline can be established, upon which performance on event days could be assessed (*e.g.*, 10-in-10 baseline where energy consumption on 10 similar non-event days are identified and measured across a 45-day lookback period). However, the way in which the PAs have proposed baseline energy consumption for LTES systems in SGIP would be akin to having DR resources be subject to pre-monitoring across 30 days each "season" before enabling DR participation in load reduction programs. Such an approach would be untenable to encourage customer participation in DR programs and would be similarly unreasonable for LTES performance measurement.

Instead, as an alternative approach, a sampling of event and non-event days should be collected for LTES systems in a select summer month (*e.g.*, August) that capture a representative range of weather conditions and hours to establish a baseline energy consumption level and peak capacity reduction impacts. Where weekday and

weekend energy consumption levels may differ for certain customers (*e.g.*, commercial customers), separate sampling of event and non-event days across different times of the week could be pursued. The important point is that there is no reason to have discrete and sequential pre-monitoring prior to LTES installation to establish a baseline energy consumption level.

B. For incentive calculation purposes and to be comparable to battery energy storage systems who are paid incentives on rated capacity, only summer months need to be measured to establish baseline energy consumption for LTES.

The Supplemental Advice Letter would require LTES projects to be subject to pre-monitoring requirements across three months in different seasons – *i.e.*, summer, winter, and fall/spring (shoulder). However, it is unclear why a sampling of baseline energy consumption is necessary for the winter and shoulder months when the PAs are proposing to use the UC Davis methodology to calculate the 1-in-10-year peak kW power consumption of a specific building’s chillers for the sizing of the LTES system installation. Since LTES resources provide their greatest kW contribution to overall system capacity at extreme 1-in-10 heat storm conditions, the baseline energy consumption measurement in the winter and shoulder months are unnecessary for incentive reservations, incentive claim submissions, and receipt of payments. All other energy storage resources can make reservations and claims based on the maximum rated capacity of the project, such that LTES resources should be treated comparably for the purposes of incentive calculation, reservations, and claims, where their “rated capacity” is measured as a function of their peak summer capacity impacts.

At the same time, CESA is not saying that baseline energy consumption and performance is unnecessary for M&E purposes across all months of the year since one of the very advantages of LTES is that they can be cycled daily and frequently across many months of the year. However, baseline energy consumption measurement for these other months are not necessary as a precondition for incentive calculations, reservations, and claims. Otherwise, this would constitute an unlevel playing field where LTES resources would be subject to requirements beyond those required of battery energy storage resources and would only serve to delay LTES projects in being able to claim the upfront incentive portion of their reservation. Furthermore, the ongoing M&E across all months can follow the same event and non-event day approach, as discussed above.

C. The proposed pre-monitoring requirements violate technology neutrality and would significantly delay LTES technology deployment when accounting for project development lifecycles.

Whereas battery energy storage projects are able to immediately make incentive claims and become operational without monitoring-related delays, LTES resources would be subject to an additional requirement that could create up to 12 months in delay in being able to be paid out incentives. This is discriminatory and violates the technology neutrality of SGIP to support all forms of energy storage within the energy storage budget categories. Especially with limited thermal storage participation in SGIP to date, this only serves to further the divide by creating an artificial and unnecessary barrier.

Moreover, the three-month pre-monitoring requirement across three different seasons could create additional delay depending on when the project development cycle begins. For example, if a customer becomes interested in an LTES installation after the summer months, more than a year of delay could occur before baseline energy consumption could even begin under the current proposed approach. In such cases, project developers would have to wait until the first eligible month of the next summer season and await a month of data collection before even being able to submit an application since incentive calculations are based on the peak summer capacity contributions and ratings of the LTES system. No LTES project could withstand such a delay.

D. The PAs failed to “work with industry” to avoid additional disputes and have only caused even further delay.

Despite being directed to work with industry to mitigate the likelihood of additional disputes on the adoption of a new methodology, the PAs have failed to follow this direction from the Commission.² CESA and other industry members cannot report being consulted on the concerns related to and solutions to address adequate pre-installation data collection in order to evaluate the performance of LTES projects. The Supplemental Advice Letter even admits as such, with the third-party measurement and evaluation (“M&E”) consultant, third-party technical consultant, PAs and Energy Division being consulted and discussing the matter.³ Critically absent in these reported discussions are industry participants such as CESA, who could have identified practical, fair, and appropriate alternative solutions to these issues. Unfortunately, as a result of this lack of industry consultation and collaboration, the additional requirements included in the Supplemental Advice Letter have resulted in a dispute that perhaps could have been otherwise avoided.

As a result of the lack of consultation with industry, alternative approaches such as the one presented above were not considered or discussed. This has only served to prolong the lack of program incentives for LTES since PLS was closed in Summer 2017. If the PAs’ proposed pre-monitoring process is adopted as is, LTES projects could face

² Resolution E-5106 at 20.

³ Supplemental Advice Letter at 2.

up to 12 or more months of delay to receive SGIP incentives, even if LTES projects could reasonably submit an ICF many months earlier. Since LTES resources are inherently load modifying and thus are not subject to interconnection processes of any kind, LTES projects could be developed to come online within as little as one or two months, yet under the three-month pre-monitoring requirement, these projects would have their incentive payments unnecessarily and unfairly delayed by more than six times a typical project development cycle.

III. ALTERNATIVE SOLUTION.

CESA offers several clarifications to ambiguous elements in the Supplemental Advice Letter that the Commission could adopt in a Non-Standard Disposition Letter that would address many of the PAs' identified concerns. This would reduce the time needed to get an effective program into operation, and while far from perfect, would allow project developers to begin working with ratepayers on LTES projects.

- **Timing of measurement:** The Commission should clarify that, for systems where the underlying equipment is being materially altered, pre-installation monitoring needs to occur before the installation of the LTES system. This pre-monitoring does not need to be completed prior to submission of the SGIP Reservation Request Form (“RRF”). For systems where the energy performance of underlying equipment is *not* being materially altered by the installation of the LTES equipment, baseline measurements could be taken after installation but prior to submission of the ICF, provided that the LTES system is not in operation during the measurement period.
- **Duration:** The Commission should clarify that the 18-month period between Conditional Reservation and ICF submission is the maximum amount of time allowed for monitoring, not a requirement. This would remove any ambiguity that installed and ICF-ready projects do not need to wait for 18 months of data collection prior to receiving SGIP upfront incentives and starting their performance-based incentive (“PBI”) period.
- **Definition of a summer month:** The Commission should clarify that, for LTES baseline measurement purposes, the Commission should clarify that a “summer month” is defined as: (a) any 30-day period;⁴ and (b) at least 15 of the 30 days fall within a “summer month” as defined by the investor-owned utility (“IOU”);⁵ and (c) at least 5 of the 30 days are non-holiday weekdays that are measured with ambient temperatures of 85°F or above.

⁴ This sample of 30 days do not have to be consecutive or fall within the same month.

⁵ For example, this could fall within the summer months as defined by the IOUs for their rate schedules (*i.e.*, June through September).

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The above approach and clarifications are reasonable and more efficiently address the issue of establishing a baseline energy level to calculate LTES incentives that focus on summer days and allow for measurement across some hot-weather days outside of summer that will essentially capture peak-capacity contributions of the LTES installation without the rigid and unreasonable approach, as proposed by the PAs.

IV. CONCLUSION.

CESA appreciates the opportunity to submit this Protest in response to the Supplemental Advice Letter and looks forward to collaborating with the Commission and PAs to better enable program participation from LTES projects pursuant to D.19-08-001 and Resolution E-5106.

Respectfully submitted,



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