March 9, 2020

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Re: Protest of the California Energy Storage Alliance to Advice Letter 4218-G/5764-E of Pacific Gas and Electric Company (U 39-M), Advice Letter 4167-E of Southern California Edison Company (U 338-E), Advice Letter 5589-G of Southern California Gas Company (U 904-G), and Advice Letter 109-E of Center for Sustainable Energy

Dear Sir or Madam:

Pursuant to the provisions of General Order 96-B, the California Energy Storage Alliance ("CESA")[1] hereby submits this protest to the above-referenced Advice Letter 4218-G/5764-E of Pacific Gas and Electric Company ("PG&E"), Advice Letter 4167-E of Southern California Edison Company ("SCE"), Advice Letter 5589-G of Southern California Gas Company ("SoCalGas"), and Advice Letter 109-E of Center for Sustainable Energy ("CSE"), *Supplemental: Proposed Revisions to the Self-Generation Incentive Program Handbook to Further Incorporate Requirements Pursuant to Decision 19-09-027* ("Joint PA Advice Letter"), submitted on February 18, 2020.

[1] 174 Power Global, 8minutenergy Solar Energy, Able Grid Energy Solutions, Aggreko, Alligent Scientific, AltaGas Services, Amber Kinetics, Ameresco, Aparrent, Avangrid Renewables, Axiom Exergy, Better Energies, Boston Energy Trading & Marketing, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Clean Energy Associates, ConEd Battery Development, Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, E.ON Climate & Renewables, Eagle Crest Energy, East Penn Manufacturing, EDF Renewable Energy, Enel X, Energport Inc., Energy Vault, Engie, esVolta, Fluence, Form Energy, General Electric, Greensmith Energy, Gridwiz, Hecate Energy, Highview Power, Honda, Hydrostor, Jensen Hughes, Lendlease Energy Development, LG Chem Power, Li-Ion Tamer, Lockheed Martin AES, LS Energy Solutions, LS Power Development, Magnum CAES, Malta, Munich Re, NantEnergy, National Grid, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Nuvve, Ormat, Pattern Development, Pintail Power, Plus Power, PolyJoule, Primus Power Corporation, PxiSE, Quidnet Energy, Range Energy Storage, Recurrent Energy, Reimagine Power, RES Americas Inc., SNC-Lavalin, Soltage, Southwest Generation Company, Stem, STOREME Inc., Sumitomo Electric, Sunrun, Swell Energy, Tenaska, Tesla, Trane, True North Venture Partners, UL, VRB Energy, WattTime, and Wellhead Electric. 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.

The Self-Generation Incentive Program (SGIP) has evolved to play an important role in supporting near-term resiliency needs in the face of the upcoming wildfire season and to address risks related to public safety power shut-off (PSPS) events. The Commission thus modified the Equity Budget and established a new Equity Resiliency Budget with the issuance of Decision (D.) 19-09-027 that modified the Equity Budget and established a new Equity Resiliency Budget. Subsequently, the Commission issued D.20-01-021 that made further efforts to modify Self-Generation Incentive Program (SGIP) rules (*e.g.*, customer eligibility, system sizing, developer cap) to support customers in need of resiliency solutions ahead of the 2020 (and beyond) wildfire seasons, in addition to allocating funds authorized under Senate Bill (SB) 700 across the various budget categories. Pursuant to Ordering Paragraph (OP) 4 and 18 of D.20-01-021, the SGIP Program Administrators (PAs) are submitting this Joint Tier 2 advice letter on February 18, 2020 to implement the program revisions of the Equity Resiliency Budget for non-residential customers.

In reviewing the Joint PA Advice Letter, CESA finds the implementation details related to the inverter sizing limit to be non-compliant with D.20-01-021 as it is not addressed in modifications to the SGIP Handbook. Furthermore, CESA views the implementation of the details related to customer eligibility and marketing, education, and outreach (ME&O) plans to be either lacking in specificity or in need of improvement. In this protest, CESA makes the following points:

- The sizing limit to the customer peak load should be removed for storage projects claiming Equity Resiliency Budget incentives or the resiliency adder, per the intent of D.20-01-021 and consistent with the flexibility afforded to the PAs in implementation.

- The sizing limit to the customer peak load should be removed for storage projects that do not qualify for Equity Resiliency Budget incentives or the resiliency adder but would still seek to size the storage system for resiliency needs.

- Customer eligibility and identification should be easier to understand and more accessible.

- ME&O efforts and materials should incorporate feedback and review from storage vendors.

Additionally, CESA also raises the following issues that were not addressed in the Joint PA Advice Letter at hand but should be addressed in subsequent, imminent Advice Letters and/or through Commission corrections or actions. These concerns include:

- All Equity and general market energy storage projects with longer than two-hour discharge duration should not be required to demonstrate it can provide backup power.

- Incentive rate step-down structure by duration from D.19-09-027 should be extended to general market energy storage systems, as explained in D.20-01-021.

II. DISCUSSION.

In the below sub-sections, CESA elaborates on the grounds for our protest to the Joint PA Advice Letter, which need to be addressed to not only ensure compliance with D.20-01-021 but to also provide clear, consistent, effective, and efficient implementation of the decision's proposed modifications.

A. The sizing limit to the customer peak load should be removed for storage projects claiming Equity Resiliency Budget incentives or the resiliency adder, per the intent of D.20-01-021 and consistent with the flexibility afforded to the PAs in implementation

D.20-01-021 removed the SGIP sizing limitations based on inverter size for equity resiliency projects and projects using the resiliency incentive adder and determined that such projects may receive full incentives, upon demonstration, for a system that is sized above peak load if this is necessary due to modular component sizes.[2] In making this determination, the decision cited the comments from CESA, among others, where we pointed to how the program places storage rated capacity sizing limitations based on the maximum customer demand over the prior 12 months, though inverter components are often sized and procured in discrete kW blocks.[3]

However, in the Joint PA Advice Letter, the PAs declined to make the modifications directed in D.20-01-021 and explained as such:[4]

> *"The system's rated capacity is not equivalent to the inverter size rather, it is the rated capacity defined in Section 5.1.1. As such, the PAs are unable to edit the Handbook to remove a rule limiting systems to the size of the inverter because this limitation currently does not exist."*

CESA believes that this is a misinterpretation of the intent of D.20-01-021, which sought to give customers the ability to more effectively address their resiliency needs, recognizing the commercial availability of today's inverters and the unviability of having

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[2] D.20-01-021 at 72, Conclusion of Law 26, and Ordering Paragraph 30.

[3] See *Comments of the California Energy Storage Alliance to the Proposed Decision Regarding Self-Generation Incentive Program Revisions Pursuant to Senate Bill 700 and Other Program Changes* filed on January 3, 2020 in R.12-11-005 at 10.

[4] Joint PA Advice Letter at 6.

every customer install a critical load panel.[5] We disagree that the current 2019 SGIP Handbook does not limit the storage system's rated capacity based on inverter sizing since the continuous maximum power output of the system is one of the specifications used to calculate rated capacity (W). If, for example, a storage system is rated at 70 kW but is only able to install 50-kW inverters, the continuous maximum power output will be limited by the inverter capacity.[6] Furthermore, the PAs also acknowledge how inverter capacity is a factor that determines whether a system is oversized, noting that applicants must provide documentation to demonstrate that the oversized component is necessary for the project.[7]

More importantly, upon demonstration, it is thus appropriate to modify the SGIP Handbook to allow energy storage systems to be sized larger than peak customer load given these component-specific issues. Specifically, CESA recommends the following language modifications (as **bolded**) in Section 5.2.4 of the SGIP Handbook:

> "Energy storage projects, whether paired or stand-alone, may be sized up to the Host Customer's previous 12-month annual peak demand (kW). For new construction or projects with future load growth, projects can be sized up to future peak demand, but the load must be substantiated before the incentive can be paid. **For projects intending to provide back-up and resiliency services, projects can be sized beyond the Host Customer's previous 12-month annual peak demand (kW) so long as all information submittal requirements are met for resiliency projects and the storage sizing is substantiated.**"

Since the decision gave the PAs latitude to go beyond the order in terms of what changes are needed to facilities sizing systems for system needs,[8] CESA urges the PAs to adopt our recommended changes.

B. The sizing limit to the customer peak load should be removed for storage projects that do not qualify for Equity Resiliency Budget incentives or the resiliency adder but would still seek to size the storage system for resiliency needs

[5] D.20-01-021 at 72-73.
[6] At the same time, CESA recognizes that the rated capacity of the project is limited to the storage rated capacity when the inverter is oversized relative to the battery storage system. CESA raised the point regarding commercial availability of inverters in discrete blocks to highlight how there may be cost efficiencies and greater resiliency capabilities to size storage up to or near the larger inverter capacities, even if the SGIP incentive payments are only paid up to the storage capacity needed to serve customer peak load.
[7] Appendix A of Joint PA Advice Letter at 59.
[8] D.20-01-021 at 73.

D.20-01-021 expanded the scope of energy storage projects that would be incentivized to provide resiliency via the adoption of the resiliency adder, which would allow customers who meet the Equity Resiliency Budget criteria minus the Equity-related criteria to be eligible.[9] To support storage-backed resiliency for all customers, regardless of whether they qualify for either the Equity Resiliency incentive or resiliency adder, CESA recommends that the PAs make modifications to allow the system sizing limitations (as discussed in Section II.A of our protest) to be lifted upon demonstration and substantiation for sizing beyond customer peak load, in addition to being subject to the additional information submittal requirements that should be applicable to resiliency-focused projects only. In doing so, the benefits of resiliency will be expanded beyond those customers who would be eligible for the Equity Resiliency incentive or resiliency adder while also not requiring additional SGIP funds to support such projects. CESA believes this is a reasonable request and within the implementation flexibility afforded to the PAs in the implementation advice letters.[10]

C. Customer eligibility and identification should be easier to understand and more accessible

With D.19-09-027 and D.20-01-021 making a number of rules and modifications to customer eligibility for the Equity Resiliency Budget, developers face a challenge and have expressed confusion regarding the eligibility of their prospective customers and project sites. The Joint PA Advice Letter, however, does not ease of understanding or a more streamlined process for confirming eligibility.

First, the Joint PA Advice Letter references and cites the SGIP Equity Decision (D.17-10-004) and the De-Energization Phase 1 Guidelines Decision (D.19-05-042) in the proposed SGIP Handbook modifications to implement the new customer eligibility criteria.[11] Such citations do not support ease of understanding for developers who must reference a separate document to assess their customer's eligibility. Instead, in the interest of more efficient and clear understanding, the PAs should transpose the actual tables and lists from the two decisions and put them directly into the SGIP Handbook. Especially for non-regulatory personnel who may face more difficulty in accessing and interpreting Commission decisions elsewhere, the SGIP Handbook should generally serve as the catch-all resource for navigating through the SGIP program.

Second, the PAs provide no detail on how it will define "partially" serving an eligible "community" consisting of disadvantaged communities ("DACs") and low-income customers. Instead, it appears that the burden of proof is placed on the SGIP applicant to

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[9] D.20-01-021 at 47.
[10] *Ibid* at 73.
[11] Joint PA Advice Letter at 9.

demonstrate that their customer serves at least 50% of eligible community members,[12] which offers little clarity and certainty to developers and may create administrative burden for the PAs. To support application certainty and efficiency, documentation requirements should be provided.

D. ME&O efforts and materials should incorporate feedback and review from storage vendors

ME&O will play an important role in supporting timely and informed adoption of energy storage technologies to support a customer's needs, including for resiliency. The PAs attached their statewide "base plan" for ME&O activities, which they say will be later tailored to be territory-specific.[13] While lacking specifics, CESA supports the PAs' general plans to leverage community-based organizations (CBOs) to support more local and trusted outreach as well as to integrate messaging into other programs that may already be conducting ME&O to the same customer population. To ensure accuracy and consistency of information, the PAs should also collaborate with key storage vendors to develop overall high-level messaging on how energy storage adoption can support customer bill savings, environmental objectives, and resiliency needs. Finally, the utilities are also well-positioned to directly educate customers about their eligibility to access Equity Resiliency incentives given their knowledge of which customers are medical baseline customers, are located in Tier 2 or 3 High Fire Threat District zones, and/or have been subject to two or more PSPS events. Their role in direct education or in collaborative ME&O with CBOs and other third parties should be specified in the utility- and territory-specific ME&O plan.

III. OTHER ISSUES.

While not the direct subject of this protest, CESA has identified a number of miscellaneous issue areas that should be acknowledged and addressed in the PAs' subsequent Advice Letter filings or through other Commission clarifications and/or procedural actions. Due to the expedited nature of changes made in D.19-09-027 and D.20-01-021 to modify SGIP to address an urgent resiliency need ahead of the upcoming wildfire season, some of these details modifying SGIP were overlooked or may have been made in error.

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[12] Attachment A of Joint PA Advice Letter at 57 and 63.
[13] Joint PA Advice Letter at 9.

A. All Equity and general market energy storage projects with longer than two-hour discharge duration should not be required to demonstrate it can provide backup power

The Joint PA Advice Letter does not propose any modifications to the General Budget for SGIP energy storage projects per D.20-01-021 since such implementation details will be provided in a subsequent Advice Letter to be submitted by the PAs no later than April 15, 2020. However, CESA has identified an issue with D.20-01-021 that needs to be addressed in the PA implementation advice letters, or more likely, through Commission action.

Specifically, CESA has concerns with the requirement in D.20-01-021 that all Equity and general market storage projects with a longer than two-hour discharge duration to attest to and provide estimates on their resiliency capabilities.[14] Our concerns stem from the fact that not all Equity and general market storage projects are configured to provide back-up or intend to provide back-up when the storage system has durations of more than two hours. Many Equity and general market storage projects may be designing four-hour storage systems for energy shifting applications or commercial demand charge management. Considering D.19-09-027 and D.20-01-021 was adopted to address an urgent resiliency need, this modification may have been unintended to apply to general market projects with no intention to provide islanding and resiliency services. In the rush to modify the program, this issue was overlooked by all parties.

CESA recommends that the Commission correct these errors and oversights and that the PAs implement these informational submittal requirements only for projects claiming Equity Resiliency incentives or the resiliency adder incentives, given that such projects have an explicit intent to provide resiliency to its customers and must provide assurances to the Commission and the PAs of its resiliency capabilities. While longer-duration storage is generally more suitable to provide backup power, there are other reasons for the Commission to support longer-duration needs (*e.g.*, peak load shifting, renewables integration) for customers that may not necessarily want backup and resiliency services.

B. Incentive rate step-down structure by duration from D.19-09-027 should be extended to general market energy storage systems, as explained in D.20-01-021

The Joint PA Advice Letter proposed no change to the incentive rate step-down structure by duration, maintaining a change made in a previous Advice Letter filing where the incentive rate structure is established for Equity and Equity Resiliency projects at: 100% of the applicable incentive rate for 0-4 hours of duration; and 50% of the applicable incentive rate for 4-6 hours of duration. Importantly, no change was made for General energy storage projects despite changes adopted and explained in D.20-01-021 that would, as CESA

[14] D.20-01-021 at 53-54, Finding of Fact 52, and Ordering Paragraph 28

interprets it, extend the Equity and Equity Resiliency incentive rate step-down structure by duration to General energy storage projects, which is current set in the following way: 100% of the applicable incentive rate for 0-2 hours of duration; 50% of the applicable incentive rate for 2-4 hours of duration; and 25% of the applicable incentive rate for 4-6 hours of duration.[15]

In D.20-01-021, the CPUC determined that an incentive rate step-down structure by duration should be similar for all storage projects, explaining as follows:[16]

> *"We approve the incentive step-down structure adopted in the Equity Resiliency Decision for SGIP general market energy storage systems. The rationale provided in the Equity Resiliency Decision to support modifying the incentive step-down structure for equity budget and equity resiliency storage projects applies equally well to general market storage projects. Modifying the step-down in incentives for storage systems with longer than a two-hour discharge provides customers with more system design and configuration options to ensure they are able to meet their specific resiliency needs during PSPS and other outage events."*

The incentive step-down structure that is adopted in D.20-01-021 and is being referred to can be found in D.19-09-027:

> *"We approve CSE's proposed modifications to the incentive rate step-down structure based on duration, with the modification that storage systems with a discharge duration of four to six hours receive 50 percent of the base incentive rate for capacity beyond four hours, rather than no incentive."*[17]

> *"We approve CSE's proposed modifications to the incentive rate step-down structure based on duration, with the modification that storage systems with a discharge duration of four to six hours receive 50 percent of the base incentive rate for capacity beyond four hours, rather than no incentive."*[18]

CESA recognizes that the PAs are not directed to implement all adopted general-market and other miscellaneous changes in D.20-01-021 until a separate Advice Letter filing by April 15, 2020, but these non-changes and/or piecemeal implementation efforts have been

[15] Attachment A of Joint PA Advice Letter at 54-55.
[16] D.20-01-021 at 56-57.
[17] D.19-09-027 at 30.
[18] *Ibid* at 91.

a source of confusion, which could be better addressed through a one-time implementation effort, where feasible and practical.

Furthermore, CESA raises this point here because of potential inconsistencies or errors that must be corrected prior to the April 15, 2020 Advice Letter filing. Despite the explanations and references above in D.20-01-021 and D.19-09-027, Conclusion of Law 18 and Ordering Paragraph 26 in D.20-01-021 maintained the existing/previous incentive step-down structure for general market storage projects.[19] However, these Conclusions of Law and Ordering Paragraphs are inconsistent with the body of the decision. To support timely and accurate implementation by the PAs of the Commission's intent, CESA urges that these inconsistencies be fixed, wherein the same incentive step-down rate structure by duration is adopted for all storage projects.

IV. CONCLUSION.

CESA appreciates the opportunity to submit this protest to the Joint PA Advice Letter and supports timely implementation and launch of the Equity Resiliency Budget for all eligible customers, including for non-residential customers, by April 1, 2020. CESA looks forward to reviewing the Joint Tier 2 advice letter expected on April 15, 2020 to implement all other D.20-01-021 changes.

Respectfully submitted,

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[19] See also Attachment A of D.20-01-021 #9.