

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to
Establish Policies, Processes, and
Rules to Ensure Reliable Electric
Service in California in the Event of an
Extreme Weather Event in 2021.

Rulemaking 20-11-003
(Filed November 19, 2020)

**REPLY COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON
THE ORDER INSTITUTING RULEMAKING ON EMERGENCY RELIABILITY**

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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”) hereby submits these comments on the *Order Instituting Rulemaking on Emergency Reliability* (“OIR”), issued by the Joint Commissioners on November 20, 2020.

I. INTRODUCTION.

CESA appreciates the many comments offered by parties in response to the OIR and believes that most parties generally agree with the importance of this proceeding, especially in the aftermath of the August 14-15, 2020 rotating outages driven by a significant heat storm and in response to the Joint Agency Preliminary Root Cause Analysis Report. After reviewing opening comments, CESA would like to emphasize the following points in response:

- Exports should be a key feature of the Emergency Load Reduction Program (“ELRP”) where interconnection safety and incrementality issues are surmountable concerns that can be addressed in this proceeding.
- Storage-backed demand response (“DR”) should be differentiated for its ability to provide enhanced DR.
- The supplemental analyses conducted by the California Independent System Operator (“CAISO”) and Southern California Edison Company (“SCE”) should

inform not only procurement of incremental capacity for Summer 2021 but also for years thereafter.

- State of charge (“SOC”) management tools can be used to better enable energy storage resources to perform during the net load peak period.

II. EXPORTS SHOULD BE A KEY FEATURE OF THE EMERGENCY LOAD REDUCTION PROGRAM WHERE INTERCONNECTION SAFETY AND INCREMENTALITY ISSUES ARE SURMOUNTABLE CONCERNS THAT CAN BE ADDRESSED IN THIS PROCEEDING.

CESA observes that there is general support for the ELRP in concept, with differing views on whether and how potential exports from standalone storage or hybrid solar-plus-storage would be compensated. CESA appreciates the CAISO’s willingness to develop the appropriate dispatch trigger and dispatch window for the ELRP and agrees that it is important to develop the after-the-fact financial settlement, verification, and incorporation to short-term forecasting processes.¹ We also agree with many commenters on how such a program could be developed outside of the current Resource Adequacy (“RA”) framework as an emergency reliability or “insurance” program,² which enables a quicker path for these resources to begin performing (*e.g.*, instead of having to address market integration challenges). However, CESA found several parties arguing against compensating exports and only rewarding capacity or performance down to 0 kW customer load reduction, or in favor of addressing this topic in the appropriate proceeding (*e.g.*, R.19-11-009), citing concerns around incrementality and grid safety and reliability.³

By disallowing or not compensating exports, the Commission would lose out on significant stranded capacity that could be delivered in an expeditious way, as early as Summer 2021 from

¹ CAISO comments at 6-7.

² *See, e.g.*, CAISO comments at 8.

³ *See, e.g.*, CAISO comments at 8, SCE comments at 8, and SDG&E comments at 11-12 and 17.

already deployed storage assets and even more so in subsequent years. For customers with low customer loads during times of emergency reliability need (*e.g.*, schools during the 4-9pm period), exports from behind-the-meter (“BTM”) energy storage can deliver incremental capacity to the grid in the near term. Concerns about interconnection reliability and safety can be addressed appropriately through the Rule 21 interconnection process, with some consideration here and/or in R.17-07-007 to develop those pathways. By no means would the ability to provide exports bypass this process, making some of the concerns expressed by other parties in this regard to be addressable.

In addition, CESA acknowledges the need to guard against double compensation. Though a universal and granular incrementality framework is desired, the near-term focus could be on recognizing, valuing, and compensating for the incremental service by providing dispatchable emergency reliability service outside of the RA framework. By extension, as a service distinct from RA, the current incrementality rules established in R.14-08-013, R.14-10-003, and R.12-11-005 should be applied while not preventing these resources from the provision of regular cycling for RA services. As the Joint DR Parties expressed, this compensation needs to cover the opportunity costs for prioritizing customer services, such as customer bill management.⁴ Again, incrementality concerns are not an insurmountable problem that would preclude its consideration in this proceeding.

Furthermore, CESA supports a near- and longer-term approach in establishing the ELRP. Given the urgency of these emergency reliability needs, the ELRP can focus on energy, not capacity, payments for exports and pursue these ends as an add-on to an existing DR program that pays for the sub-metered exports of the BTM storage resource. Over time, the ELRP can evolve

⁴ Joint DR Parties comments at 8.

and be considered in the broader context of the promised New Models for Demand Response proceeding and/or as a track within the RA proceeding (R.19-11-009). In other words, the Commission should not wait or assume other proceedings will address certain issues prior to its consideration here in this proceeding. Rather, any determinations in R.20-11-003 can be reassessed or evaluated for permanence, continuance, or incorporation into the regular processes, programs, and frameworks in the appropriate proceeding once emergency reliability measures are addressed.

Finally, CESA observes that there is general support for lifting the dual participation prohibition, which is leading to many otherwise DR participants to be prohibited from economic supply-side DR programs or possibly with the establishment of a new ELRP.⁵ The Commission should reconsider this policy, or at the very least, lift this prohibition in the near term for certain dual DR participation use cases.

III. STORAGE-BACKED DEMAND RESPONSE SHOULD BE DIFFERENTIATED FOR ITS ABILITY TO PROVIDE “ENHANCED” DEMAND RESPONSE.

In considering enhancements to existing DR programs and/or development of new DR programs, CESA recommends that the Commission create participation parameters, products, and other program features that incentivize the types of DR resources (*e.g.*, storage-backed DR) capable of more frequent dispatch and less or not impacted by customer attrition due to such frequent dispatch. To this end, several parties raised the concern of customer attrition related to some of the proposed solutions around increasing availability, enrollments, and dispatch of certain DR programs.⁶ Such customer attrition is less acute for storage-backed DR resources and other types that involve load reduction separate from and/or in supplemental to direct customer loads,

⁵ See, *e.g.*, SDG&E comments at 24-25 and SCE comments at 6.

⁶ See, *for example*, SCE comments at 21-22 on how their Base Interruptible Program (“BIP”) lost 68 MW in 2020 due to more frequent emergency dispatches, attributed to customer attrition effects.

where, as recommended by CAISO, programs can be modified, enhanced, or developed that provide longer or more frequent calls that “offset attrition” concerns.⁷

In addition, concerns about DR performance or ability to address emergency reliability needs should be viewed within the context of potential differentiated capabilities, improvements to the performance requirements of various programs or sourcing mechanisms, and whether wholesale market prices drove certain dispatch behavior. For example, Middle River Power (“MRP”) cautioned against reliance on DR resources due to findings from the recently-published Department of Market Monitoring (“DMM”) Report, which highlighted the preliminary performance results from different resource types relative to qualifying capacity.⁸ Not only is DMM still in the process of evaluating performance of DR resources that were dispatched,⁹ but it also does not differentiate DR resource performance as a resource category that may highlight that certain types, such as storage-backed DR, as performing reliably.

Similarly, several utilities cast doubt on the ability of a supplemental auction for the Demand Response Auction Mechanism (“DRAM”) as delivering the incremental capacity needed for Summer 2021 due to declining demonstrated capacity levels, fewer market participants, and/or until further evaluation is conducted to determine whether past performance concerns are addressed.¹⁰ However, as noted by multiple parties, third-party DR portfolios are an expedited means to bring incremental capacity online to address emergency reliability needs, especially if DRAM QC methodologies are leveraged in lieu of more complicated and time-consuming load

⁷ CAISO comments at 21.

⁸ MRP comments at 3-4.

⁹ *Report on system and market conditions, issues and performance: August and September 2020* published by the Department of Market Monitoring on November 24, 2020 at 5.

¹⁰ SDG&E comments at 19-20 and SCE comments at 24-25.

impact protocols (“LIP”) methodologies,¹¹ and the DRAM has gone through a number of refinements through annual working group processes to address key improvement areas. Broadly, in considering DR measures to address emergency reliability, it is important to differentiate performance of different DR resource types, including in the DRAM, where storage customers were identified as being the DRAM segment that had the highest scheduling rate,¹² so any reported concerns about DR performance should be viewed with this nuance as well as within the context of other key factors (*e.g.*, wholesale market prices, program limitations). Taken together, CESA continues to believe that DR will play a critical role in addressing emergency reliability needs and thus the Commission should continue to explore/pursue many of the proposed solutions suggested in the Preliminary Scoping Memo and as recommended by parties.

IV. THE STACK ANALYSIS PERFORMED BY CAISO AND SCE SHOULD INFORM NOT ONLY THE PROCUREMENT OF INCREMENTAL CAPACITY FOR 2021 BUT ALSO FOR YEARS THEREAFTER.

The CAISO and SCE both submitted separate supplemental stack analyses of the current and expected resource portfolio for the critical Summer 2021 months, with the former using a stack analysis based on a 20% planning reserve margin (“PRM”) applied to the peak hour and the end of the net load peak period (8pm) and the latter conducting a loss of load expectation (“LOLE”) study for all of the net load peak hours (5-8pm).¹³ While CAISO found shortfalls up to 3,300 MW in some critical hours, SCE found that the current expected resource mix has small margins to ensure reliability, depending heavily on recently procured resources to come online on time. In addition to these supplemental analyses, Energy Division also presented 2022 LOLE preliminary

¹¹ See, *e.g.*, Joint DR Parties comments at 11.

¹² *Energy Division’s Evaluation of Demand Response Auction Mechanism Final Report* published on January 4, 2019 at 58-59.

¹³ SCE comments at 16 and CAISO comments at 2 and 12.

results showing shortages when a higher PRM is applied.¹⁴ CESA generally finds these analyses to be supporting evidence of the need to focus not only on addressing the Summer 2021 emergency reliability need but also beyond since short-term RA contracts or backstop procurement may be the only means to secure resources in the near term. However, this shortfall will persist as the Commission cannot continue to rely on a perpetual cycle of extending compliance deadlines or contracting for gas resources on a short-term basis; otherwise, at this time next year, the Commission will be faced with the same near-term reliability issue. Instead, this analysis should inform the Integrated Resource Planning (“IRP”) process as well to support near-term new and/or incremental capacity procurement under long-term contracts.

As with the procurement directed pursuant to D.19-11-016 in R.16-02-007, many stakeholders will likely find issue with the simplified or less-vetted nature of the analyses estimating the shortfall and directing procurement. However, until the Commission is able to get out of the current “just-in-time” or short lead-time procurement approach, the Commission must take action now, using, replicating, or enhancing the available analyses from CAISO, SCE, and others. More sophisticated modeling and analyses can inform long-term planning and procurement needs for reliability, but at this time, there is insufficient time to achieve that while still being able to direct the procurement actions and sourcing the new resources needed. The 20% PRM, as proposed by the CAISO based on a higher system peak forecast, estimated forced outage rates, and operating reserve requirements,¹⁵ appears reasonable in the near term to address 2021 and

¹⁴ “Presentation 3: 2022 Loss of Load Expectancy Study Preliminary Results” presented by Donald Brooks, Supervisor, Energy Resource Modeling, CPUC at the Commission’s RA Track 3B workshop (R.19-11-009) on November 23, 2020.

¹⁵ Attachment A of CAISO comments

2022-2024 procurement needs until the Commission is able to make a determination in the IRP/RA proceedings on the appropriateness for its use for IRP/RA planning going forward.

In light of these analyses, CESA agrees that there is nothing that could be done to bring on new resource procurement by August 2021, even if a decision was issued today, other than to extract incremental capacity from existing resources (*e.g.*, stranded export capacity from BTM storage) and perhaps increase enrollments or budgets for existing programs or third-party DR portfolios (*e.g.*, SCE's VPP Pilot, supplemental DRAM auction).¹⁶ Using these analyses, CESA urges the Commission to ensure that any procurement decision from this proceeding to address needs beyond 2021 be issued as soon as possible, or by May 2021 at the latest, to ensure solicitation processes can be launched and run, and development activities can work to bring these incremental new resources online in a timely manner.

V. STATE OF CHARGE MANAGEMENT TOOLS CAN BE USED TO BETTER ENABLE ENERGY STORAGE RESOURCES TO PERFORM DURING THE NET PEAK LOAD PERIOD.

The CAISO commented on the importance of having energy storage resources charged and ready to perform during the net peak load period, with the potential need for contractual arrangements to ensure those outcomes.¹⁷ CESA generally supports this objective but believes that the CAISO market has adopted the market tools to manage the SOC of energy storage resources to address this need, without the need for new contractual arrangements and/or other non-market-oriented measures (*e.g.*, minimum charge requirements). In the CAISO's Energy Storage and Distributed Energy Resources ("ESDER") Phase 4 Initiative, new end-of-hour ("EOH") SOC bid parameters were approved in October 2020 to give storage operators the market

¹⁶ *See, e.g.*, SCE comments at 18 and 20.

¹⁷ CAISO comments at 3.

bidding parameters to better manage their SOC in the real-time market. If non-market-oriented measures are pursued, compensation and settlement rules are required in the real-time market.

VI. CONCLUSION.

CESA appreciates the opportunity to these reply comments on the OIR and looks forward to working with the Commission and other stakeholders in this proceeding.

Respectfully submitted,



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