

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

Order Instituting Rulemaking to
Oversee the Resource Adequacy
Program, Consider Program Reforms
and Refinements, and Establish
Forward Resource Adequacy
Procurement Obligations.

Rulemaking 21-10-002
(Filed October 7, 2021)

**REPLY COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON
THE ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENTS ON THE
FUTURE OF RESOURCE ADEQUACY WORKING GROUP REPORT**

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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 *Administrative Law Judge’s Ruling Seeking Comments on the Future of Resource Adequacy Working Group Report and the Local Capacity Requirement Working Group Report* (“Ruling”), issued on March 4, 2022, by Administrative Law Judge (“ALJ”) Debbie Chiv.

I. INTRODUCTION.

CESA appreciates the opportunity to provide responses to the parties’ comments on the Future of Resource Adequacy Working Group Report (“Report”). Overall, most parties have retained their positions as articulated in the Report, even after the publication of Energy Division’s (“ED”) loss-of-load expectation (“LOLE”) and effective load carrying capability (“ELCC”) study. As a result, most parties focused their opening comments on outlining the necessary steps to adopt each of their preferred slice-of-day (“SOD”) alternatives for Resource Adequacy (“RA”) reform. In this context, CESA offers replies regarding the additional steps necessary to implement the 24-hourly slice proposal as well as a host of issues that the Commission will need to address regardless of which proposal it ultimately prefers. Thus, CESA’s reply comments can be summarized as follows:

- The hourly trading of obligations, not assets, balances near-term implementation, transactability, and simplicity.

- Since either SOD proposal will require significant work, the Commission should consider a test year in transitioning to a new RA framework.
- If the Commission decides to further develop an unforced capacity (“UCAP”) paradigm, it should be in alignment with the California Independent System Operator’s (“CAISO”) definitions and processes.
- Transition to either SOD proposal will require further refinement of hybrid and co-located counting rules, particularly with regards to charging restrictions.
- Concerns regarding representation of multi-day and seasonal needs in the 24-hourly slice proposal can be alleviated in part by adopting CESA’s proposed seasonal charge scheme.

II. THE HOURLY TRADING OF OBLIGATIONS, NOT ASSETS, BALANCES NEAR-TERM IMPLEMENTATION, TRANSACTABILITY, AND SIMPLICITY.

In opening comments, a wide variety of parties, from investor-owned utilities (“IOUs”) and environmental groups to trade associations and ratepayer advocates, voiced their support for Southern California Edison’s (“SCE”) 24-hourly slice proposal. In their comments, the California Community Choice Association (“CalCCA”) offers conditional support for this alternative, noting that if the 24-hour slice proposal is modified to improve transactability, the 24-hour slice proposal best meets the principles set by the Commission in Decision (“D.”) 21-07-014.¹ Other community choice aggregators (“CCAs”) share this concern, with Central Coast Community Energy, CleanPowerSF, San Diego Community Power, Silicon Valley Clean Energy Authority and Valley Clean Energy Alliance (collectively, the “Joint CCAs”) noting that the transactability challenges of the 24-slice proposal must be addressed if it is to be implemented since not doing so could result in overprocurement, especially for smaller load serving entities (“LSEs”).²

CESA agrees with the concerns expressed by these parties. While SCE’s proposal would retain a reasonable level of transactability by allowing resources to sell fractions of their capacity to different LSEs, its lack of more granular transactability leaves efficiency gains on the table. CESA acknowledges that developing hourly transactability could be somewhat burdensome,

¹ CalCCA at 3.

² Joint CCAs at 4.

particularly in the early stages of establishing the tools and mechanisms, as it would require calculating hourly values. In this context, if the Commission moves forward with SCE’s proposal, we urge the Commission to direct further development of the obligation trading concept proposed by CESA, Peninsula Clean Energy and San José Clean Energy (collectively, “Joint Parties”), as it fairly balances near-term implementation, transactability, and simplicity.

In opening comments, CalCCA observes that RA obligation trading is a critical component for transactability under a 24-hour slice proposal with only minor increases in complexity.³ CESA agrees, as it would only necessitate additional fields in the compliance matrix and coordination between the Commission and CAISO, which has committed to coordinate to the extent possible to ensure a reliable and efficient RA program.⁴ Other parties noted that this proposal could prove significantly complex, yet they fail to offer arguments to support their hesitation. The Western Power Trading Forum (“WPTF”) notes that “there are a host of complex policy and technical issues surrounding such inter-LSE trading” and offers an incomplete citation as evidence of these complexities.⁵ In addition to those unmentioned complexities, WPTF indicates that new legislation may be needed to authorize inter-LSE trading.⁶ This relates to the wording of Public Utilities Code (“PUC”) Section 366, which “allows CCAs to serve their customers and does not provide recourse for a CCA to shift customer load to another LSE”, as noted by CalCCA.⁷ CESA disagrees with WPTF’s characterization of Section 366 as it represents a fundamental misunderstanding of the concept of load obligation trading. As argued by CalCCA, the Joint Parties’ proposal to trade obligations would not shift the responsibility of serving customer load, it would only shift the compliance obligation.⁸ CCAs or other LSEs who engage in obligation trading would still be responsible for customer load service, making the concept of obligation trading no different than an LSE trading a resource to another LSE.

The trading of obligations enhances transactability under SCE’s proposal, it can be easily implemented in the near-term, and it is much more administratively simple than hourly resource

³ CalCCA at 8.

⁴ CAISO at 6.

⁵ WPTF at 6. *See* footnote 18 does not refer to any page of the Report.

⁶ WPTF at 6.

⁷ CalCCA at 9.

⁸ *Ibid.*

trading as it would not require development of hourly capacity values. As such, CESA reiterates the importance of expeditiously developing this framework once the Commission indicates support for SCE's proposal, ideally ahead of summer 2022.

III. SINCE EITHER SOD PROPOSAL WILL REQUIRE SIGNIFICANT WORK, THE COMMISSION SHOULD CONSIDER A TEST YEAR IN TRANSITIONING TO A NEW RA FRAMEWORK.

In opening comments, a number of parties highlighted different issues that must be resolved ahead of the implementation of any new RA framework. While parties that support SCE's framework underscored the need to further work on issues regarding transactability and resource counting, a number of parties supporting Gridwell's proposal argued that their preferred approach requires minimal additional effort to be implemented by 2024. The Joint CCAs, Middle River Power ("MRP") and WPTF all argue that Gridwell's proposal is readily implementable.⁹ CESA disagrees with this characterization, as, while ED recently released a LOLE study that includes ELCC values ("ED's LOLE Study"), transitioning to Gridwell's paradigm would necessitate a new LOLE Study given the significant methodological deficiencies of ED's LOLE Study, as well as its concerning lack of party input and vetting. Moreover, the new LOLE study would need to develop even more ELCC values than those included in ED's LOLE Report, including values for long-duration energy storage ("LDES"), different hybrid configurations (*see* Section V of these reply comments), and regional values for wind assets. As the outstanding delay on the latter values demonstrates, these analyses are time-consuming, not only in running the models but also in the process of ensuring the inputs and assumptions are accurate and incorporate stakeholder input, especially since the models are highly sensitive to the inputs and assumptions and the assumed dispatch models and algorithms. Parties characterizing Gridwell's proposal as immediately applicable and implementable appear to understate either the complexity of these analyses or the importance of party input.

In this context, it appears that both proposals might benefit from a smooth, paced transition. In opening comments, the Joint CCAs and the Public Advocates Office ("CalAdvocates") advocated for the Commission to consider a test year or a year of non-binding implementation that could be used as a form of shadow compliance to sort out details of the framework and protect

⁹ See Joint CCAs at 3, MRP at 10, and WPTF at 8.

reliability.¹⁰ RA Year 2024 could be that test year if the Commission determines that implementing its preferred alternative by 2024 might not be feasible. This proposal is reasonable as either of the SOD approaches will represent a significant departure from the current status quo and a trial year of shadow compliance would only enhance the future framework. CESA therefore urges the Commission to consider this arrangement when evaluating SOD alternatives and implementation timelines.

IV. IF THE COMMISSION DECIDES TO FURTHER DEVELOP AN UNFORCED CAPACITY PARADIGM, IT SHOULD BE IN ALIGNMENT WITH THE CAISO'S DEFINITIONS AND PROCESSES.

In opening comments, some parties noted that there are significant differences between the UCAP definitions and processes proposed by the CAISO, the originator of the UCAP concept for RA purposes, and ED, as included in ED's LOLE Study. CalCCA and MRP, in particular, argued that, if the Commission is to move forward in developing a UCAP framework, it should be in alignment with CAISO.¹¹ CESA strongly echoes this recommendation as conflicting definitions across jurisdictions and agencies only add undue complexity, increase uncertainty, and result in increased transaction costs for doing business in California. In order to minimize these risks, the Commission should adopt CAISO's definitions and language from their RA Enhancements initiative and continue to refine this concepts in coordination with CAISO and parties to this proceeding.

V. TRANSITION TO EITHER SOD PROPOSAL WILL REQUIRE FURTHER REFINEMENT OF HYBRID AND CO-LOCATED COUNTING RULES, PARTICULARLY WITH REGARDS TO CHARGING RESTRICTIONS.

As CESA noted earlier in Section III, either proposal will require significant work to properly represent hybrid and co-located assets in all their configurations. As stated in our opening comments, CESA is primarily concerned with the representation of charging restrictions in the counting methodology. While today we have a counting methodology that covers the 100% on-site-charging case, the Commission has yet to adopt a methodology for assets with no charging restriction and for assets that partially claim the Investment Tax Credit ("ITC") (*i.e.*, charging from

¹⁰ See Joint CCAs at 2, CalAdvocates at 3.

¹¹ See CalCCA at 16, and MRP at 17.

on-site renewables between 75% and 99% of the time). In opening comments, CalAdvocates offers a potential solution for the current lack of direction, suggesting that hybrids and co-located resources that are subject to grid-charging limitations are appropriately represented by current QC rules and that if grid-charging limitations do not exist or expire, then the total QC value should be the sum of the QCs of the storage and generation, subject to interconnection limits. CESA agrees with this recommendation, however this still fails to account for the partial ITC case, in which assets charge from on-site assets between 75% and 99% of the time. In this context and considering that the Commission is expecting record-breaking levels of paired assets to come online in the coming years,¹² the Commission should provide further clarity on this issue prior to implementation of the new RA framework, per CESA's opening comments.

VI. CONCERNS REGARDING REPRESENTATION OF MULTIDAY AND SEASONAL NEEDS IN THE 24-HOURLY SLICE PROPOSAL CAN BE ALLEVIATED IN PART BY ADOPTING CESA'S PROPOSED SEASONAL CHARGE SCHEME.

In opening comments, a number of parties expressed concerns regarding the inability of SCE's proposal to represent multi-day and seasonal reliability needs by virtue of its 24-hour compliance mechanism. CESA understands these risks and agrees that the SOD framework rests on the critical assumption that the interactions between demand and supply can be simplified to a 24-hour timeframe with significant certainty. While this approach might be adequate for a grid largely reliant on conventional fossil-fueled assets, CESA and other parties have expressed concerns regarding the durability of this methodology considering the potential for multi-day reliability events triggered by low solar conditions, drought, or other outlier events.

In a system that relies heavily on VERs and energy-limited assets, the interactions between weather, load, and supply are more impactful for reliability purposes. While the daily reliability needs could be easily addressed by refining the SOD framework, the same cannot be said about multi-day interactions. CESA has noted that the currently proposed 24-hour compliance framework might overlook multi-day reliability needs. Moreover, this 24-hour framework is not well-equipped to recognize the value provided by resources with operational timeframes that extend beyond a single day, such as some LDES technologies, which may span multiple days in its charge-discharge cycle and/or may focus on weekly or even seasonal arbitrage. A daily snapshot

¹² In this context, paired resources refer to both hybrid and co-located assets.

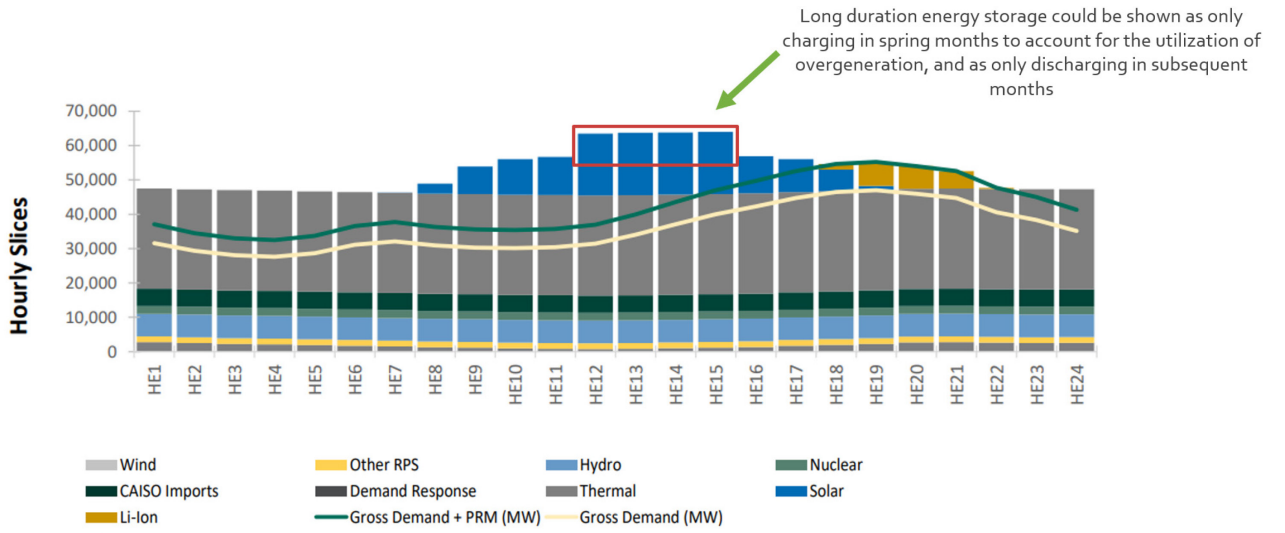
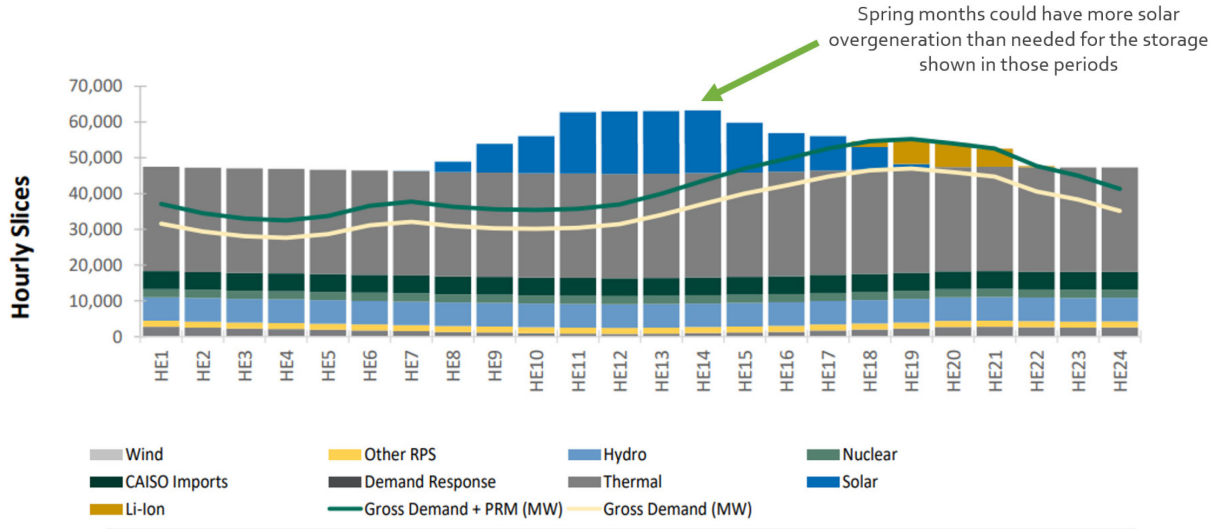
of RA slice requirements would not capture how excess energy to charge storage resources beyond the daily RA needs could be used to support multi-day reliability events.

At this time, CESA considers that the potential for outlier conditions that may induce multi-day reliability events may be better addressed through sensitivity modeling in the IRP proceeding, which is also better positioned to address the procurement of resources for these events and needs in a cost-effective manner. Nevertheless, the RA SOD framework will still require a means to represent LDES assets with operational timeframes that exceed 24 hours and have a means to count their attributes for RA compliance purposes. To this end, at minimum, CESA recommended within the SOD workshop process the consideration of a “seasonal charge scheme,”¹³ which may not address all multi-day considerations but adds some flexibility to the compliance framework.

The seasonal charge scheme is a mechanism that would allow LSEs to take excess spring-month overgeneration to provide charging sufficiency for energy storage assets shown in summer or winter months. This approach recognizes that there may be particular value in taking shoulder-month solar overgeneration to not serve spring month loads but to serve summer and winter loads. This solution would allow for carryover excess energy to be used in future seasons (showings) for storage charging. In essence, this would not set a “use it or lose it” approach for excess generation and allow for “banking” of these RA attributes across different showing periods. This way, the charging of LDES can be represented and accounted for as presented during the December 17, 2021, workshop and illustrated in Figure 1 below.

¹³ See Report at 211-213.

Figure 1: Illustrative Compliance Showing with Seasonal Charge Scheme



VII. CONCLUSION.

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jin Noh', written in a cursive style.

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Date: April 1, 2022