

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE:
Energy Storage and Distributed Energy Resources Enhancements**

Submitted by	Company	Date Submitted
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The California Energy Storage Alliance (CESA)¹ offers these comments on the California Independent System Operator’s (CAISO’s) Energy Storage and Distributed Energy Resources (ESDER) Initiative’s Draft Final Proposal.² This proposal advances the CAISO’s proposed plans for Non-Generator Resources (NGR) model enhancements, Proxy-Demand Resource (PDR) and Reliability Demand Response Resource (RDRR) alternative performance evaluation methodologies, and non-Resource Adequacy (RA) multiple use applications (MUAs). Through the ESDER, energy storage and distributed energy resources (DERs) will have better avenues to participate in CAISO markets via aggregation. Until now, small resources such as distributed storage and other fast load modifying resources such as electric vehicle chargers have lacked sufficient avenues to provide services to CAISO markets. In the context of California’s renewable energy future, these resources can provide significant benefits in terms of flexibility, capacity, and liquidity, and should be encouraged.

The ESDER initiative has had an extensive stakeholder process in which stakeholders have thoroughly discussed the conceptual market design ideas of the CAISO staff and others. CESA salutes and appreciates the efforts of the CAISO.

In these comments, CESA provides up-front points and then includes responses to the CAISO’s ESDER Revised Straw Comments Response Template.³

I. CESA Comments

1. The CAISO’s stakeholder process has been robust.

This CAISO’s robust stakeholder process for the ESDER has included multiple iterations of its issue paper and/or proposal as well as related working group sessions. Every iteration of the proposal involved some form of stakeholder meeting during which to raise points, ideas, or concerns

¹ 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>)

²<http://www.caiso.com/Documents/DraftFinalProposal-EnergyStorageandDistributedEnergyResources.pdf>

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or to ask questions. Additionally, the CAISO solicited comments following all of the proposals, including seeking detailed feedback at times through a ‘comments response template’. Further, the CAISO detailed its responses to comments through a ‘comments response matrix’. These actions were also accompanied by numerous discussions or exchanges with stakeholders to allow for further discussion, clarification, and input.

Collectively, these actions built a robust record of views and enhanced the CAISO’s design in helpful ways. As the proposal advances towards review and potential approval by the CAISO Board of Governors, CESA believes the CAISO has overwhelmingly vetted and responded to stakeholder feedback such that the CAISO’s design is both tailored and principled.

2. CESA supports the proposal at this time.

While CESA believes further work remains to be done to expand access to CAISO markets by energy storage and distributed energy storage resources, CESA supports the current proposal as an important step. The proposal advances key critical path capabilities that should be promptly approved and implemented.

The stakeholder process occasionally requires the CAISO to develop reasonable rules that promote market efficiency and reliability, despite stakeholder request to go further with designs. In ESDER, CESA originally requested further or different rules, but believes the current designs are workable. These ESDER initiatives will help clear the path forward for resources and provide a clear structure that other market design or regulatory efforts can reference and or build upon. For instance, the California Public Utilities Commission (CPUC) is already taking steps to address energy storage related matters within its jurisdiction, and defined rules for wholesale market participation will inform and benefit these efforts.

3. The Proposal will enhance market competition and efficiency.

A clear benefit of the ESDER is that it improves access to markets from certain resources, creating a more competitive and thus efficient market. This efficiency translates to lower costs for energy customers.

4. Through design iterations, the proposal reasonably addresses stakeholder concerns and can be approved.

As mentioned, the CAISO’s robust stakeholder process allowed CAISO staff and stakeholders to work through potential points of concern or confusion regarding the design. In some cases, the CAISO adapted its design to consider less robust elements of the design. The outcome of these efforts is a robust market design.

As CESA understands it, every major and reasonable concern raised by stakeholders was addressed.

<u>Potential Concern</u>	<u>How Addressed or Mitigated</u>
Resources not performing to CAISO dispatch should face consequences similar to other resources	ESDER resources will be exposed to UIE, similar to other deviating resources. Poor performance may also lead to other consequences, such as Availability Incentive Mechanism feedback, or exposure to eventual Flexible Ramping Product cost allocations. Further, resources on NGR will face 24-hour a day metering and can never truly 'exit the market'.
The electric system should see a discrete response from MGO PDR resources per instructions	Rules for PDR MGO compensate for actions which would otherwise occur and which are already reflected in the market price, e.g. regular load reductions.
'Non-event' actions from resources should be excluded from qualifying as market responses	Rules for PDR MGO establish a long (45 days) lookback period and conservatively exclude 'non-event' actions seen on a minimum number of days (5 weekday, 4 weekend).
Multi-nodal resources may deliver power in a distributed manner that differs from their generation distribution factor.	DER Aggregations are within the same sub-lap where nodal prices and congestion conditions are similar, so there will be little market price incentive to deliver energy differently from the GDF. Basic conduct rules also require reasonable good-faith adherence to the CAISO Tariff.
Participation that links to customer (retail) meters creates new jurisdictional uncertainties	The design's use of retail meters uses existing tariff-approved authorities.
Potential adjustments to the baseline could occur with an MGO through 'positive adjustments'	Rules prohibit positive adjustments and market compensation will not apply to positive export (vs. load-reducing) actions.

5. The CAISO should ensure rules for 'adjusting away' but not disqualifying exports under PDR MGO alternatives are adequately represented in the design presented for Board Approval.

ESDER materials presented in the 11/9 stakeholder call detailed several design aspects relating to baselining and performance measurements for PDR MGO resources with export capabilities. CESA supports these capabilities. The CAISO should ensure these capabilities are sufficiently included in the package and design to be approved by the Board. The written proposal may lack sufficient detail on this aspect of the design.

6. The 2016 ESDER enhancements will be important.

CESA believes further benefits and market efficiency gains are available through additional enhancements to ESDER. CESA thus looks forward to the CAISO’s ESDER Phase 2, and believes the CAISO should prioritize this work for 2016. Reflecting on the current ESDER Phase 1 design, the CAISO should explicitly consider the following for ESDER Phase 2:

- Less than 24hour/day metering for NGR
- Alternate PDR/RDRR approaches and potentially raising the minimum day requirements needed for establishing a non-zero baseline.

RESPONSES TO CAISO COMMENTS RESPONSE TEMPLATE

Topic Area	Overall Level of Support (Fully support; Support with qualification; or, Oppose)	Comments (Explain position)
Proposed enhancements to the non-generator resources (“NGR”) market participation model	Support	See above
Proposed enhancements to demand response performance measures and statistical sampling for the proxy demand resource (“PDR”) and reliability demand response resource (“RDRR”) market participation models	Support	See above
Proposed clarifications to rules for non-resource adequacy multiple-use applications (provision of retail, distribution and wholesale services by the same resource)	Support	CESA looks forward to ESDER Phase 2 to further develop NGR rules and PDR MGO Alternatives. These future efforts should consider less-than 24-hour a day NGR in order to enhance the use of NGR, and to consider a higher ‘minimum days’ for establishing a baseline under the PDR MGO Alternative Performance Measurements.