



Advanced Microgrid Solutions

Comments of Advanced Microgrid Solutions
on
CAISO ESDER Phase 3 Issue Paper

Submitted by	Company	Date Submitted
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I. BACKGROUND:

Advanced Microgrid Solutions (“AMS”) is an energy platform and services company that assesses, designs, develops, finances, aggregates, optimizes, and monetizes portfolios of distributed energy resources to maximize customer value, provide dynamic grid and utility services, and earn revenues in wholesale energy markets. AMS’s business is powered by its industry leading Transactive Energy Management Platform, which AMS and its partners utilize to offer compelling and innovative energy management services to customers, utilities, and asset owners and operators. AMS’s first virtual power plant went live late last year and already has over 200 MWhs of dispatch in the CAISO after only two months of operation.

AMS appreciates the opportunity to comment on the Energy Storage and Distributed Energy Resources (“ESDER”) Phase 3 scoping workshop and discussion on January 16,

2018.¹ AMS contends that ESDER remains a critically important stakeholder initiative to the energy storage industry.

II. COMMENTS

AMS disagrees with some key aspects of the prioritization plan laid out at the workshop. AMS believes that several of the 'low priority' items should be 'high-priority'. AMS's position is based on a concern that 'low priority' items may not be included in the scope. For this reason, AMS submits that the following items should be included in the scope of ESDER Phase 3:

- Multiple Use of Battery Storage Systems: AMS assumes that the following will be addressed in the scope of ESDER Phase 3, but requests that the CAISO clarify or add the following:
 - Amending CAISO rules to allow for a single service account to be enrolled in more than one program if different services are being provided.
 - Amending CAISO rules to allow for a service account to have more than one DRP if different services are being provided.
- Resource Adequacy Eligibility for Aggregated DERP: The DERP model should be considered a 'high priority' item. It is imperative to address the DERP model because currently it has major utilization barriers for behind-the-meter resources. Foremost of these is that behind-the-meter resources may not be eligible to provide resource adequacy when aggregated under DERP. It is paramount for CAISO and CPUC to clarify resource adequacy rules for aggregated DERP and work with stakeholders to remove any barriers.
- Recognition of Behind-the-Meter Resources to Provide all Ancillary Services: Behind-the-meter energy storage systems can add to grid reliability by providing ancillary services such as frequency regulation with the same precision as transmission connected storage systems. Other North American ISOs such as ISO New England

¹ <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=263724F0-4524-4B2B-9497-1C56AA541F0D>

and PJM have worked towards adopting solutions that allow fair and equal access for behind-the-meter resources when it comes to frequency regulation market participation. CAISO should priorities this item and explore market design concepts in this area.

- Managing Overall Usage of NGR Resources: This item should be ‘high priority’ because NGR resources should have the right to limit their usage in daily operations. Secondly, the qualification for use-limited status, especially in a month, is appropriate for energy storage resources which may have legitimate throughput limitations.
- DERP 24x7 Requirement Limiting Multiple Use: Although theoretically a behind-the-meter resource can participate in CAISO energy and ancillary service markets under DERP, there exist major limitations that prohibit fair market access for such resources. As it exists today, behind-the meter resources cannot pursue retail applications without exposure to wholesale markets. This is deemed as uncontrolled risk and can be mitigated by removing 24x7 participation requirement.
- Recognition of a Behind-the-Meter Resource in Load Curtailment: This item should be a ‘high priority’ because as behind-the-meter resources continue to evolve in multiple-use applications, it is imperative that the CAISO address how single service accounts should be treated.
- MGO Baseline: The MGO Baseline ‘lookback window’ should be considered a ‘high priority’ item because it better reflects battery backed DR operations. The ‘lookback window’ for baseline measurements should, at the very least, align with billing periods, in order to prevent discrimination against battery backed DR resources. The CAISO should also evaluate the feasibility of a seasonal adjustment.

III. CONCLUSION

AMS commends the staff at the CAISO for their detailed and incisive work on the critically important issues for energy storage resources. We look forward to working together to continue to open the distributed resource market in California.

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Respectfully submitted,
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