

# Energy Storage and Distributed Energy Resources (ESDER) Phase 3 Issue Paper

Comments by Department of Market Monitoring  
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## Summary

DMM appreciates the opportunity to comment on the Energy Storage and Distributed Energy Resources (ESDER) Phase 3 Issue Paper. DMM proposes one additional topic for the scope of the initiative. Among the topics already proposed to be in scope of the initiative, DMM is particularly supportive of demand response and NGR modeling enhancements which address concerns raised by DMM in earlier reports and comments. Additional comments on specific topics are provided below.

### I. Demand Response Issues

#### **Potential expansion of scope: PDR load and baseline data**

The ESDER 2 initiative established a rule change that scheduling coordinators of PDR resources would become responsible for calculation of PDR baselines and submission of settlement quality meter data (SQMD). DMM and other stakeholders noted that robust audit procedures would need to be established to maintain integrity of these data. However, as DMM understands, the final policy only requires submission of SQMD by the scheduling coordinator and only requires these data for intervals in which there was a dispatch. It does not require PDR scheduling coordinators to submit load data or calculated baseline data that were used as inputs to the calculation of SQMD. DMM notes that in addition to SQMD, the ISO needs to collect load data and calculated baseline data for PDR resources. Having these data for all intervals is essential to facilitate monitoring and auditing of submitted SQMD for PDR resources. DMM recommends the ISO expand the scope of the ESDER 3 initiative to develop policy and processes necessary to collect load and calculated baseline data for PDR resources in all intervals.

#### **Items in proposed scope**

The issue paper proposes to address multiple issues related to demand response resources. Among these issues, the ISO proposes to address modeling limitations such as those related to PDR commitment costs, recognition of operational constraints on resources that can be committed at a 0 MW PMIN, and the inability of many PDR resources to respond to 5-minute dispatch. DMM highlighted these issues in its 2016 Annual Report and supports the ISO's consideration of these issues in ESDER 3<sup>1</sup>.

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<sup>1</sup> See 2016 Annual Report on Market Issues and Performance, Department of Market Monitoring, May 2017, pp. 259-262: <http://www.caiso.com/Documents/2016AnnualReportonMarketIssuesandPerformance.pdf>

The scope of ESDER 3 also includes a proposed “load shift” demand response product. This product is intended to facilitate increased load consumption by behind-the-meter storage resources modeled as PDR to store energy for later use. DMM recommends that any such product be designed to facilitate competition among a variety of load-increasing demand response resources. The ability to bid for increased load consumption should be competitive and technology neutral, with no preference given to any particular resource type. By providing this market functionality to any possible increase in load consumption rather than focusing on behind-the-meter storage modeled as PDR, other load which is not time-sensitive and participates in demand response may be willing to shift consumption from peak periods to periods with lower prices and excess supply. It should not be assumed that this load response would be any less efficient than behind-the-meter storage increasing consumption to store energy for later use.

## **II. Non-Generator Resource Issues**

### **Items in proposed scope**

Stakeholders have raised several issues related to non-generator resource (NGR) use limitations that are contemplated in the ESDER 3 issue paper. As discussed in earlier phases of the ESDER initiative, many of these limitations appear economic in nature, based on negotiated warranties, contracts, or performance guarantees. The Issue Paper proposes to continue exploration of the costs faced by NGR resources and to explore ways in which these costs can be explicitly reflected in the ISO market optimization. DMM previously provided comments on this topic and supports the explicit inclusion of costs in market optimization rather than hard constraints in the market to avoid violation of performance guarantees<sup>2</sup>. Additionally, DMM supports the ISO’s position that use limited status for NGR resources is only appropriate to the extent that it aligns with the use limited definition applied to other resources. Contractual obligations are not an appropriate basis for use limited status of NGR or any other resource.

## **III. Multiple-Use Applications Issues**

### **Items in proposed scope**

The Issue Paper contemplates a rule change which would not require 24x7 energy settlement for NGR resources in the CAISO market. Such a change would allow NGR resources to be exempt from CAISO market settlement for selected periods when providing services outside of the CAISO market. As an initial comment, DMM notes that such a change has potential to create real time imbalance energy offset (RTIEO) uplift when energy produced or consumed by an NGR is considered in the CAISO power balance but not settled in the CAISO market. DMM continues to assess other possible impacts of this contemplated rule change.

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<sup>2</sup> See *2016 Annual Report on Market Issues and Performance*, Department of Market Monitoring, May 2017, pp. 262-264: <http://www.caiso.com/Documents/2016AnnualReportonMarketIssuesandPerformance.pdf> Also *Energy Storage and Distributed Energy Resource Phase 2 (ESDER 2) Third Revised Straw Proposal*, Comments by Department of Market Monitoring, May 24, 2017: <http://www.caiso.com/Documents/DMMComments-EnergyStorageandDistributedEnergyResourcesPhase2-ThirdRevisedStrawProposal.pdf>