

**Comments of Viasyn  
Energy Storage and Distributed Energy Resources (ESDER) Stakeholder  
Initiative // Issue Paper**

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
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Viasyn appreciates the opportunity to comment on the ISO's Energy Storage and Distributed Energy Resources (ESDER) Stakeholder Initiative.

**Enhance NGR Documentation**

Viasyn supports enhanced documentation of the NGR model, however such changes are beyond administrative enhancements and will be fundamental products of this stakeholder initiative. We therefore seek confirmation that the ISO is not proposing to move forward with the BPM Change Management process necessary for such documentation to take place until after this initiative is concluded, and encourage the ISO to incorporate the proposed BPM review, as appropriate, into this initiative to support a more thorough policy development phase.

Potential documentation enhancements will introduce more fundamental questions regarding the role of energy storage and distributed energy resources in the wholesale markets. By incorporating such review as supporting information for this initiative the ISO will receive a more robust stakeholder response, create a more targeted proposal for the integration of storage and distributed resources, and minimize the confusion of concurrent NGR initiatives (BPM Change Management and ESDER Stakeholder Initiative).

**Clarify Use of SOC in Market Optimization**

Viasyn supports the disclosure and clarification of how the state-of-charge (SOC) is used in the market optimization, however Viasyn encourages the ISO to remain open to stakeholder feedback on potential enhancements regarding how the SOC is modeled and incorporated into the market optimization.

**Evaluate Initial SOC as Submitted DAM Parameter**

Viasyn supports a biddable SOC in the day-ahead market (DAM), however the ISO should not constrain such functionality to be used "only on the first interval of participation for the trading day."<sup>1</sup> As well, the biddability of the SOC in the DAM should not be constrained by the problem of real-time SOC reconciliation, as this can be resolved via an accounting mechanism.

The SOC should be permitted to be bid as an "Initial SOC" component in every hour of the day. NGRs have use-cases that often times permit their availability during noncontiguous hours of the day, similar to a conventional resource with a temporal constraint. The Initial SOC bid could apply to the first online interval during an online block, allowing the resource to be awarded in the DAM for noncontiguous blocks within the same day. Furthermore, the ISO should permit an Initial SOC bid to be offered into the real-time market (RTM).

The reconciliation of the DAM and RTM SOC can be performed via an accounting mechanism similar to a clawback applied to a regulation resource awarded in the DAM but determined to be unavailable in the RTM.

**Evaluate Options For NGRs to Participate Without Energy Limits or SOC**

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<sup>1</sup> Issue Paper at pg. 13

Viasyn believes an NGR could participate similar to a conventional resource in certain energy markets without being required to communicate energy limits or the SOC. To the extent that an existing resource is not required to provide telemetry (for non-regulation applications), an NGR should be able to be similarly modeled.

The ISO should consider the use of PMin and PMax type rates to help facilitate the participation of NGRs, either through OMS or SIBR. For RTM participation such parameter adjustments would be more appropriate through SIBR.

### **Proxy Demand Resource (PDR) and Reliability Demand Response Resource (RDRR) Enhancements**

Viasyn supports the expansion of baseline methodology options. For purposes of energy storage and distributed energy resources, however, Viasyn views the use of PDR and RDRR models as incomplete approximations to the actual value and performance of such resources, and more idealized participation of such resources in the wholesale markets is gained through wholesale resource models.

### **Non-Resource Adequacy (non-RA) Multiple Use Applications**

Viasyn supports SolarCity's comments on this section.

How should conflicting real-time needs be managed: Distribution utilities and the ISO should utilize price signals and performance requirements to provide market-based incentives for resources to be optimized. Performance requirements would be similar to those required for resources offering regulation.

Is there concern about double payment: To the extent that a resource can economically offer multiple products in different markets while maintaining performance specifications in each market, the resource should be compensated in each market. To the extent that a resource is dispatched in such a way so as to align with the service provided by a distribution utility, the resource should be compensated in both markets. Similarly, if the resource is dispatched counter to a service being provided to a distribution utility, the resource would be penalized. This relationship will incentivize the appropriate level of dual participation.

Should there be limitations on the provision of distribution-level services by a multi-node DER aggregation or on the sub-resources: The ISO should explore limitations on a service-by-service basis and should not administer blanket limitations on all aggregations, despite what markets they participate in. The ISO should acquire additional information from utilities regarding the types of services that can be expected to be procured from these resource categories and examine each service category relationship individually.

### **DER Installed Behind End-Use Customer Meter and Operated without Net Injection onto Distribution Grid**

Viasyn supports allowing wholesale market access for this resource category outside of the PDR model. Resource aggregations operating in unison and operating in conjunction with a distributed energy resource provider (DERP) could provide many benefits to the wholesale market, whether or not the resource results in a net injection into the distribution system. This benefit is an emergent property of the aggregation and is not an end-use-customer benefit. The ISO should explore to what extent this resource category can participate in wholesale markets outside of the PDR model.

In the worst instance, a behind-the-meter DER should be permitted wholesale access as a resource if the resource is individually metered and onsite load is properly accounted for. The ISO should also explore expanding the markets that are available to PDR if such wholesale market access is decided to be completely unworkable.