

Stakeholder Comments Template

| Submitted by | Company | Date Submitted |
|--|---|----------------|
| Please fill in the name, e-mail address and contact number of a specific person who can respond to any questions about these comments. | Spence Gerber sgerber@olivineinc.com 916.259.3690 | 10/9/2015 |

Please use this template to provide your comments on the Revised Straw Proposal posted on September 17, 2015 and as supplemented by the presentation and discussion during the stakeholder web conference held on September 28, 2015.

Submit comments to InitiativeComments@caiso.com

[Comments are due October 9, 2015 by 5:00pm](#)

All documents for the energy storage and distributed energy resources (ESDER) initiative, including the September 17, 2015 Revised Straw Proposal and the presentation discussed during the September 28, 2015 stakeholder web conference, are available on the webpage for the ESDER initiative at:

http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyStorage_AggregatedDistributedEnergyResources.aspx

Olivine has italicized its comments in this template to facilitate identification and tracking. In some instances, responses are embedded in the section subparts rather than comment area at the end of a section.

[Non-generator resources \(NGR\) enhancements](#)

Please provide your comments in each of the four areas of proposed NGR enhancement.

1. NGR documentation.

- a. What specific NGR areas do you think require additional documentation that are not already outlined in the revised straw proposal?

Comments:

2. Clarification about how ISO uses state of charge (SOC) in the market optimization.
 - a. What specific NGR SOC areas do you think require additional clarity that are not already outlined in the revised straw proposal?

Comments:

3. Allow for an initial SOC value as a daily bid parameter in the day-ahead market.
 - a. Are there any further considerations for allowing for a daily initial SOC bid parameter that are not already outlined in the revised straw proposal?

Comments:

4. Allow an option to not provide energy limits or have the ISO co-optimize an NGR based on state of charge. Under this NGR option:
 - NGRs that do not have SOC energy limits or choose to self-manage their SOC within resource energy limits, may choose to not use energy limit constraints and SOC in co-optimization or dispatch.
 - NGRs that have an SOC and choose to self-manage their SOC, must provide telemetry SOC values for ISO resource monitoring.
 - NGRs participating under Regulation Energy Management (REM) will not be eligible for this option.
 - a. Are there any further considerations for allowing NGRs to not use SOC and energy limit constraints that are not already outlined in the straw proposal?

Comments:

Proxy Demand Resource (PDR)/Reliability Demand Response Resource (RDRR) enhancements

Please provide your comments in each of the two areas of proposed enhancement.

1. Consider/develop an alternative ISO Type 1 performance evaluation methodology base on metering generator output (MGO) concepts.

- a. What is your opinion on the MGO options being considered to represent performance of load offsetting behind the meter generation?

In the case of B1, we disagree that there should always be an export check on $N \geq 0$. For example, in a case of a NET metered customer where G is composed of solar, G is actually uncontrollable and net-metering provides a retail billing compensation to the customer. Because of this – and particularly in this case – G should be able to be “carved out” of the wholesale settlement. As such, $N-G$ is the metering data that should be utilized as RQMD, and $N-G$ should be ≥ 0 . This is because the PDR will have been dispatched to reduce its load and regardless of the solar output at that time, it should get paid for reducing its load.

In the case of B2, there needs to be the provision that G can be negative, and therefore that the RQMD can also be negative, and that that does not necessarily indicate export. In addition, option B2 (or another option) should support the case of sub-metering that is not on a generator as discussed in public meetings. For example, imagine that the controllable load is the HVAC units in a facility, or a bank of V1G car chargers. In both of these cases, sub-metering could greatly improve the accuracy of the RQMD.

As a combination of options B1 and B2, option B3 appears to enable a single location being in more than one PDR.

- b. What specific options do you believe need further evaluation in terms of its appropriate use under PDR/RDRR performance measurement methodology?
- c. Are there additional variants, specific to configuration B, needing further consideration (i.e. baseline of directly meter generator/device). If so please provide examples of what the ISO might need to consider.
- d. Are there concerns on the use of MGO for “frequent” use of load offsetting behind the meter generation?
- e. What is your response to the ISO’s consideration of employing a “reservation of capacity” for load offsetting behind the meter generation to account for potential multi-use of the generator/device?

In the case of the “reservation capacity”, this is an interesting construct which would provide value in some use cases; however, it may artificially leave capacity unused, increasing the TCO for storage systems in particular.

Comments: *The option begins to address some of the issues that are a limitation to BTM resource participation in the wholesale market and Olivine generally supports the CAISO direction.*

2. Develop additional detail regarding use of statistical sampling and document that in the appropriate BPMs.

- a. What is your opinion on the statistical sampling methodology being proposed as an approved ISO Type 2?

As stated before, we feel that DRPs should have the flexibility to establish their own “p” value; however, this is a valid first step.

- b. Has enough detail been provided? If not, what additional detail is needed?

Yes, enough detail has been provided.

- c. What is your opinion on the applicability currently proposed and being considered by for ISO Type 2?

We feel the CAISO is unnecessarily performing a too-limited view on the definition of the term “availability” in the tariff.

- d. What additional information can you provide the ISO that will help in understanding the need for use of ISO Type 2 in cases where Hourly Interval Metering is available? (i.e. why is the “interval meter data” unavailable to meet SQMD submission timelines) Should provisions for its use for Hourly Interval Metering cases have limitations? What might those limitations be?

Yes, provisions should support hourly interval metering data as well. We are confused as to how the existence of hourly interval meter data that is not available in the meter data submittal timelines would be considered “available” by the CAISO. We know from experience that some smart meters must be read manually due to connectivity issues. In an absurd case, If an IOU states they are unable to meet the meter data submittal timelines as required by the CAISO, the DRP and customer should not be excluded from market participation.

Comments: *Embedded above following each subpart.*

Non-resource adequacy multiple use applications

1. Please comment on the ISO’s proposal regarding Type 1 multiple-use scenarios.

Comments:

2. Please comment on the ISO’s proposal regarding Type 2 multiple-use scenarios.

Comments: Olivine does not support the requirement for delivery of SQMD for all intervals of a DER resource that might not be a full time participant in the market. If the primary value of a DER is to provide customer side service and wholesale market participation is secondary to that, the CAISO would effectively impose wholesale price settlement for any non-market use of the resource potentially imposing a redundant settlement with the retail rate.

3. Please offer any additional comments on other aspects of the ISO’s proposal.

Comments: Olivine supports the direction of the CAISO to defer any effort to reconcile double payments issue. As a lesson learned from PDR double payment reconciliation in the form of a default load adjustment to the underlying LSE when the DR delivered is deemed to not be economic, the complexity of such a mechanism best wait until there is some notion of the actual economic impact.