

Stakeholder Comments Template

Submitted by	Company	Date Submitted
Dr. Barbara R. Barkovich Barkovich & Yap, Inc. Barbara@barkovichandyap.com (707) 937-6203	California Large Energy Consumers Association	10/9/15

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

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: None.

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: None.

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: None.

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: None.

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?

CLECA Comments: We are concerned about taking a performance evaluation that was created to determine demand response based on infrequent use of back-up generation (according to Mr. Coe) and using it to assess the performance of DR with Behind-The Meter (BTM) generation and/or storage that is used regularly. We understand that if the back-up generation is only used during DR events or emergencies, the load

reduction it supports would be seen as a load reduction on the grid. If another BTM resource is used on a regular basis, and is sometimes used to support a load reduction for DR, the circumstances from the perspective of the grid could be quite different unless in the DR case the load reduction is a greater than that which would occur on a routine basis.

We are also concerned that the development of MGO is occurring before the policy decisions have been made about how customers can participate in both wholesale and retail markets and can provide real resource value in each without double compensation. The retail tariffs have not yet been fully developed for retail compensation. In addition, current CPUC decisions state that there is no requirement for metering BTM generation or storage resources if customer loads are under 10 kW. The MGO options being considered in this initiative assume some form of metering for the BTM resources, except for option A, which is likely to be less accurate. For loads over 10 kW, interval metering is required for a combination of storage and NEM.

- b. What specific options do you believe need further evaluation in terms of its appropriate use under PDR/RDRR performance measurement methodology?

CLECA Comments: There are at least two situations in which additional evaluation is needed, and these may apply across the “options” proposed by the CAISO. The first is using net load without taking into account the occurrence of event days. While the concept of an event day exclusion is a baseline concept, failure to exclude event days underestimates the potential for load reduction.

The other concern, which cuts the other way, is that a load reduction in response to a PDR or RDRR dispatch that is supported by BTM generation or by storage that is regularly used for NEM or peak-shaving may not offer any incremental load response over the regular behavior of the customer/resource. We question how this would qualify as an incremental resource in the CAISO’s markets. The AMS proposal at the July 15 meeting established a baseline for the use of storage for peak-shaving and measured the demand response against this baseline. Such an approach means that any incremental load reduction at the time of a CAISO dispatch would indeed appear to the grid as a demand response, rather than a continuation of routine customer load patterns.

In addition, the use of BTM resources that qualify for net energy metering (NEM) for DR raises several concerns about double compensation as well as the export prohibition. These issues need to be addressed at the LRA/CPUC level.

- 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.

CLECA Comments: While it is not clear what the i.e. refers to, if it is using a baseline to track the output of the BTM resource at times when there is no PDR/RDRR dispatch and thus the net load against which a PDR/RDRR dispatch would be measured, this proposal appears to have merit.

- d. Are there concerns on the use of MGO for “frequent” use of load offsetting behind the meter generation?

CLECA Comments: Yes. See above. Demand response must be seen and measured as an identifiable change in load apart from normal behavior that can be relied on by the CAISO to offset a need for supply resources.

- 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?

CLECA Comments: Creating a baseline using recent behavior (i.e. performance in intervals prior to being dispatched as PDR/RDRR) would be a viable means of distinguishing routine behavior from demand response, as noted above, as long as event days are distinguished from non-event days. Reserving capacity for wholesale or retail use is another possibility, although it is likely that having made the investment, the customer/resource would want to use it for multiple purposes. The real concerns are 1) double compensation, and 2) distinguishing a response to a dispatch producing some change in performance from routine operations.

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?

CLECA Comments: The statistical sampling methodology being proposed should be helpful in cases where the market requires more granular meter data than is currently supported on a regular basis. With such sampling, the amount of metering at the more granular intervals required to participate in certain markets (like real-time energy and ancillary services) would be reduced.

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

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

Comments: None.

Non-resource adequacy multiple use applications

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

Comments: None.

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

Comments: None.

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

CLECA Comments: First, CLECA strongly supports PG&E’s recommendation that the CAISO “allow discrete dispatch capability for demand response resources.”¹ As PG&E explained, “Current CAISO rules include the possibility of demand response resources being partially dispatched. However, due to constraints, this may not be feasible for many demand response resources.”² PG&E concludes that discrete dispatch should be allowed for demand response resources, “to ensure these resources are not given infeasible awards.”³ CLECA agrees.

Second, in section 7.5, the revised straw proposal recognizes the demand forecasting complications associated with the expansion of DER, but the proposal suggests that these issues be addressed in the Energy Commission’s Integrated Energy Policy Report proceeding, specifically the Demand Analysis Working Group. The CAISO reasons, “although DER participation in the ISO markets represents one of the complications, there are DER-related forecasting questions to be addressed whether or not the DER participates in the ISO

¹ PG&E Comments on ESDER Issue Paper and Straw Proposal, dated August 18, 2015, at 5.

² Id.

³ Id.

markets.”⁴ The CAISO also states, for a BTM storage installation, “it is not obvious how to estimate the activity of the BTM storage based on observable variables such as installed capacity and weather.”⁵ The CAISO concludes, “this and other DER scenarios need to be addressed first in the absence of DER participation in the ISO market and responses to ISO dispatch instructions, and only then can we develop ways to account for the effects of ISO dispatches in the demand forecasting process.”⁶

While ESDER may not be “the appropriate venue”, CLECA is concerned about yet another potential misalignment in timing. Based on the timeline for this phase of the stakeholder process, DER expansion and participation in CAISO markets will probably occur in 2016. CLECA is not sure the impact of DER expansion was already considered by the DAWG, but if not, it seems too late at this point for it to be included in the ongoing 2015 IEPR update. Thus the DER expansion may occur prior to or at least concurrently with the consideration by the DAWG of the impact of DER expansion on the demand forecast in the CEC’s IEPR process.

Finally, CLECA again asks that the CAISO explicitly include in ESDER’s scope the development of a product for DR to provide through increased load to help with overgeneration situations, in addition to the products now able to be provided through decreased load; this could be through an NGR-DDR (dispatchable demand resource, able to increase or decrease load). This should be considered in 2016, the next phase of the ESDER initiative. CLECA accordingly asks that the development of this needed new product be considered as early in 2016 as possible.

⁴ ESDER Revised Straw Proposal, dated Sept. 17, 2015, at 48.

⁵ ESDER Revised Straw Proposal, dated Sept. 17, 2015, at 49.

⁶ ESDER Revised Straw Proposal, dated Sept. 17, 2015, at 49.