

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the FRACMOO Phase 2 stakeholder initiative Second Revised Draft Framework Proposal posted on April 27, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due May 17, 2018 by 5:00pm

The Second Revised Draft Framework Proposal posted on April 27, 2018 and the presentation discussed during the May 3, 2018 stakeholder meeting may be found on the [FRACMOO](#) webpage.

Please provide your comments on the Second Revised Draft Framework Proposal topics listed below and any additional comments you wish to provide using this template.

Identification of ramping and uncertainty needs

The ISO has identified two drivers of flexible capacity needs: General ramping needs and uncertainty. The ISO also demonstrated how these drivers were related to operational needs.

Comments:

SDG&E continues to recommend that both the CAISO and market participants understand the impacts of the Day-Ahead Market Enhancements (DAMe) initiative on the existing Flexible capacity portfolio shown by LSEs prior to proceeding with the next iteration of the Flexible RA framework.

SDG&E requests the CAISO to provide analysis of the capacity that bid and self-scheduled into the CAISO's markets in aggregate in 2017 in comparison to the revised ramping and uncertainty

needs as detailed in the second revised proposal. This would help provide context to market participants on whether the current fleet of resources are failing to meet the operational needs. If sufficient economic bids exist to meet the expected and unexpected ramping needs after the implementation of the DAME changes, then market participants can focus on necessary changes

Definition of products

The ISO has outlined the need for three different flexible RA products: Day-ahead load shaping, a 15-minute product, and a 5-minute product.

Comments:

The CAISO acknowledges that the latest revision of the FRACMOO 2 proposal should align with the DAME proposal. Given that both residual unit commitment and an explicit real time must offer obligation will be removed with implementation of DAME and replaced with biddable imbalance reserve products, SDG&E questions the purpose of a flexible RA product if the imbalance reserve product compensates capacity that is bid into the CAISO for its new real time bidding obligations. In the current paradigm, RA capacity must bid \$0 RUC because the capacity is already compensated as RA capacity. However, under DAME, the capacity would be allowed to bid non-zero and therefore compensated again as RA capacity. The CAISO should consider the impacts to ratepayers for this double compensation. If the purpose of the imbalance reserve product is to “incentivize” capacity to bid, rather than self-schedule, and is able to reserve capacity by obligating bids into the RTM, how does procuring Flexible RA capacity ensure the resources will bid into the CAISO markets?

The three defined products do not simplify procurement, operations and/or implementation. It may be simpler to combine the products into a single product overall and allow the CAISO’s market products, i.e. imbalance reserve products, ensure sufficient capacity is available in the real time markets. The stacking of how a resource’s capacity count towards each product, no long necessary, would be simplified as well. This broad brush approach may provide the CAISO with the same quantity of flexible MWs that would be covered with three products but much easier to facilitate.

Quantification of the flexible capacity needs

The ISO has provided data regarding observed levels of imbalances, in addition to previous discussion of net load ramps.

Comments:

SDG&E disagrees with the CAISO’s use of the maximum imbalance based on a non-coincident day for use of the real time uncertainty need. Under the CAISO’s forecasted maximum net load ramp used to determine the daily ramping product, the uncertainty of up or down ramping may

be smaller than the day in which the maximum uncertainty may occur. If so, there should be sufficient capacity in which the CAISO may reserve from the day-ahead optimization with DAME. Therefore, SDG&E believes that the CAISO should only need additional capacity to cover uncertainty for the same coincident day as the largest maximum net load ramp of the month.

Eligibility criteria, counting rules, and must offer obligations

The ISO has identified a preliminary list of resource characteristics and attributes that could be considered for resource eligibility to provide each product. Additionally, the ISO has proposed new EFC counting rules for VERs and storage resources that are willing to provide flexible RA capacity.

Comments:

SDG&E requests the CAISO to provide specific details for the Flexible Deliverability study. SDG&E does not support discussing the specific conditions of the study in a separate stakeholder process and believes it is well within the scope of this stakeholder process due to the fact that it is within this process in which the CAISO is proposing to have such a study.

SDG&E also wonders whether resources that require an import allocation or the import allocation process itself must also be required to be studied for Flexible Deliverability study. The maximum import capability study only looks at four high peak hours of the previous two years rather than the hours in which flexibility may be needed most. If the CAISO contends that the Flexibility deliverability study is necessary due to the difference of the hours of need for internal generators, then the CAISO must be consistent for resources outside of the CAISO.

SDG&E believes that storage resources should be able to count for their full bidding range ($P_{min_{neg}}$ to $P_{max_{pos}}$) for real-time flexibility. The CAISO in its straw proposal, Dec 2015, provided an example of a smooth transition where a storage device turns on discretely and is able to decrease its charge continuously. This reduces the net load ramp at the belly of the duck and then the storage resource would discharge discretely and meeting the net load ramp. This is an optimization of the CAISO market and does not depend on the state of charge. SDG&E encourages the CAISO to continue to discuss and explore this policy in its next meeting.

Equitable allocation of flexible capacity needs

The ISO has proposed a methodology for equitable allocation of flexible capacity requirements. The ISO seeks comments on this proposed methodology as well as any alternative methodologies.

Comments:

First, SDG&E recommends the CAISO to revisit the need to have three separate products and see if it can be consolidated into one. Second, the uncertainty calculation based on coincident day may be smaller than the maximum uncertainty of the month. Therefore, the allocation of specific contributions may be too much work for very little gain especially if the CAISO will allocate “all other factors” based on load ratio share. This mixed bag of calculations may create more confusion to the framework at this phase. Finally, given that the CAISO is proposing to use a “simplified” average calculation of Effective Flexible Capacity for variable energy resources where only the calculated “average” EFC can be used by an LSE to meet its real time needs, the very specific calculation of uncertainty seems inconsistent. SDG&E recommends the CAISO to maintain the status quo for the allocation formula.

Next Steps

The ISO is currently planning to issue a draft final framework on June 6, 2018. However, given the schedule change in the CPUC’s RA proceeding, the ISO will not release a draft final framework until July 10, 2018. The ISO seeks stakeholder input regarding next steps that should be taken to further enhance the ISO’s framework. Options include, but are not limited to, another full iteration or working groups.

Comments:

SDG&E highly encourages the CAISO to hold additional workshops or working group meetings to tease out additional details for the CAISO’s draft final framework. Specifically, there were many comments and questions regarding the interaction with DAME. SDG&E recommends one workshop to discuss the intersection of DAME and FRACMOO 2, covering bidding, must offer obligation, optimization and analysis of a hypothetical flexible RA portfolio shown by LSEs. SDG&E recommends a second workshop to discuss the qualification criteria of resources, deliverability studies and the consolidation of the Flexible RA products from three to one. Finally, SDG&E requests the CAISO to provide a draft final framework by July 1st so that market participants can potentially provide feedback to the CAISO prior to the submission to the CPUC.

Other

Please provide and comments not addressed above, including any comments on process or scope of the FRACMOO2 initiative, here.

Comments:

SDG&E appreciates the opportunity to provide comments and looks forward to future discussions.