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 Draft Framework Proposal posted on May 1, 2017.

Submit comments to InitiativeComments@CAISO.com

Comments are due December 13, 2017 by 5:00pm

The Draft Framework Proposal posted on November 20, 2017 and the presentation discussed during the November 29, 2017 stakeholder web conference may be found on the FRACMOO webpage.

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

Introduction

Comments:

Cogentrix continues to support the development of a Flexible Capacity Framework that 1) aligns Flexible Capacity with operational needs, 2) distinguishes assets by proper flexible attributes definitions and categorizations, 3) incents generation to invest in flexible attributes and 4) encourages the orderly retirement of assets that lack the flexible attributes required for continued renewable and distributed resource integration. However, Cogentrix remains concerned that this

current CAISO proposal does not send the proper signals for "efficient retention and retirements of existing generation."

First, Cogentrix proposes both a simplification of the CAISO proposal and a bright line distinction between capacity that is eligible to meet general flexible needs and capacity eligible to meet uncertain flexible needs. Providing certainty of revenue to both resources through distinct markets that provide compensation for needed flexible attributes will ensure that resources are available to operate when needed, especially during peak conditions, and direct sufficient capital investment towards resources with the most beneficial operating parameters.

Second, Cogentrix is concerned that the proposed timeline for completion of the Draft Flexible Capacity Framework proposal is unnecessarily long. The CAISO system has evolved toward intermittent and distributed (behind the meter) resources very rapidly, and the new system mix has fundamentally altered the system dispatch in a manner that renders flexible capacity essential to maintain system reliability and efficiency. Cogentrix is enthusiastic about participating in a transition, however, these resources need to recover investment costs long before the scheduled full implementation of the market enhancement in the Draft Flexible Capacity Framework Proposal.

The delayed timelines in this process are already sending a signal to the market and continued delays will lead to disorderly retirements, more RMRs and more CPMs. At the CAISO meeting on November 29, 2017, Cogentrix asked if staff could support an interim or transitional framework that could be implemented in the current CPUC RA Proceeding (R17-09-020) for the 2019 RA season as CAISO and stakeholders work towards a final RA solution on the longer timeline. CAISO staff stated they would be open to receiving proposals in these comments. Therefore, in addition to solicited comments on stated topics, Cogentrix also proposes a Track 1 to phase-in a Transitional Needs-Based Flexible RA Program to be adopted in time for the 2019 RA season and a Track 2 with longer term schedule that deals with holistic RA reform.

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 related to operational needs.

Comments:

Cogentrix supports the concept that Flexible RA is comprised of predictable daily ramps and uncertainty (load following, VER forecasting, unexpected generator outages, etc..). In order to send market signals to both distinct resource types, the optimal refinements must include two distinct sets of eligibility criteria that reserves and compensates capacity for both categories separately.

Cogentrix agrees that CAISO must be prepared to address the largest uncertainties that occur with the shortest notice. Predictable daily ramps may be forecasted with reasonable accuracy, and thus committed in a day-ahead market. However, for a market to remain efficient, uncertainty that occurs in real time is most efficiently met by resources that do not require a day-ahead commitment and do not contribute to as PMin burden to be responsive to real time need. Qualifying predictable daily ramp resources and uncertainty resources separately allows CAISO to quantify both general and uncertainty ramping requirements to avoid over- or under-procurement of either category of product and more efficiently manage system contingencies. It also has the benefit of mitigating middle of the day over-generation challenges by not relying on combined cycle ramping capacity to meet the peak period load variances.

Quantification of the flexible capacity needs

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

Comments:

Cogentrix questions whether the 3-hour net load ramping requirement is the best foundation for quantifying the flexible need. Although the 3-hour net load ramping requirement has been referenced throughout this process, it is more intuitive that the flexible requirement is the maximum trough-to-peak net load delta. This is the amount of flexible requirement that must be met by CAISO to maintain grid reliability. The 3-hour net load ramping requirement, although useful at one time for planning purposes, does not encompass or represent well this flexible need despite how widely adopted it has become. Cogentrix submits that the basis for quantification of the ramping requirement should the forecasted trough-to-peak delta.

More importantly, Cogentrix submits that the observable peak ramping requirement, whether 3-hour net load or trough-to-peak net load, includes both predictable and uncertainty components. Unplanned deviations from the forecasted ramp rate, for example, could give rise to a need for ramping flexibility that is not available from the resources committed day-ahead. Even if the ramping requirement meets the forecasted total, some portion of the 16,000 MW to 16,500 MW requirement shown on slides 16 and 43 of the Nov 29th stakeholder meeting presentation is, at any given point, uncertain and must be quantified as such. This will increase the amount of the uncertainty requirement, but will reduce the amount of the general flexible requirement, which will prevent over-commitment in the day-ahead and result in a more efficient overall resource procurement given market equilibrium.

In addition to the requirement to meet the observable flexibility need, Cogentrix agrees that an uncertainty reserve is necessary for reliability. Cogentrix believes that the CAISO proposed 50% upward uncertainty adjustment to the flexible requirement is prudent.

Eligibility criteria and must offer obligations

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. Additionally, the ISO has identified a preliminary list of resources characteristics and attributes that could be considered for resource eligibility to provide each product. Additionally, the ISO is considering new counting rules for VERs that are willing to bid into the ISO markets.

Comment:

Cogentrix disagrees with the need to implement a 5-minute real time capacity product. Given that CAISO has identified two broad drivers of flexible capacity need we propose to simply establish two broad flexible capacity products: (1) a day-ahead load shaping product, and (2) a 15-minute real time fast flexible product. A 5-minute market is not necessary with a properly designed 15-minute market. The amount of day-ahead load shaping that is dispatched will depend on the anticipated variability and intermittency that is predicted for renewable resources based upon modern forecasting methods. The fast flexible product will be reserved for dispatch to compensate for deviations from expected output and actual load and generation.

In the Transitional Needs-Based Flexible RA Program proposal the eligibility criteria for Flexible Capacity are straightforward. The day-ahead product criteria should maximize day-ahead flexibility and minimize PMin burden, which could be done by requiring a reasonable maximum start time in conjunction with a reasonable PMin-PMax ratio.

A fast flexible product should maximize real time flexibility and minimize unnecessary overhang from long minimum run times and/or lack of ability to restart a resource. In a two-product construct where the CAISO-proposed 15-minute and 5-minute products are consolidated, the fast flexible product would require a 15-minute start time. Fast start time criteria are necessary to provide capacity for situations where forecast errors or system events require fast response and day-ahead reserves are insufficient to meet the demand. The product also provides a mechanism to retain access to resources that assist in minimizing PMin burden potential from day-ahead commitments. To reduce overhang, a short minimum run time and ability to start again (cycle multiple times per day) are critical criteria.

All Flex RA procured should have a Must Offer Obligation, including imports and VERs.

<u>Equitable allocation of flexible capacity needs</u>

Equitable allocation of flexible capacity needs is a critical element of a new flexible RA framework. The ISO seeks comments on potential allocation methodologies.

Comments:

No Comments.

Other

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

Comments:

As noted above, Cogentrix remains concerned that it will take several years to carry the rigorous stakeholder process to implementation. We support CAISO's efforts to maintain flexibility with existing generators, but it can impose significant costs to, and revenue reductions for, those generators. Flexibility needs to be valued by the market so that eligible generators can receive appropriate compensation for this service. Cogentrix will continue working within this stakeholder process for a durable RA program, but we require a more immediate solution to the revenue shortfalls, and propose the following.

Cogentrix proposes to split this effort into two tracks. Track 1 would develop a Transitional Needs-Based Flexible RA Program which has products to provide Flex capacity similar to CAISO Draft Flexible Capacity Framework proposal, will satisfy the stated objectives of the program, and will simplify the program. The proposal has only two products: Flexible RA and Fast Flexible RA. The Flexible RA would serve the needs of the day-ahead load following function and the predictable ramps. The Fast Flexible RA will be available to serve the uncertainty needs in the real time markets. This one-time transition proposal should be implemented for the 2019 RA season and should have a three-year term. One of the only CAISO requirements would be for the Final Flexible Capacity Needs Assessment for 2019 (for the CPUC 2019 RA proceeding) to provide the Flex Capacity Requirements split into day-ahead and uncertainty. Track 2 would develop the long term reformation of Resource Adequacy and include all of the other issues raised in the current Straw Proposal and be implemented by the 2022 RA season.

Intertie resources eligible to provide Fast Flexible RA must have firm capacity over firm transmission and connected to specific resources. This may be a single specific resource or electrically connected system of resources and total intertie availability must be known in the day ahead. It would require a change to the EIM ramp sufficiency tests to credit ISO with flexible capacity, as well as a change to the MOO by requiring the external resources to commit to both day-ahead and real-time availability.

This Transitional Needs-Based Flexible RA Program, along with a proposed three-year RA requirement in the CPUC's 2019 RA proceeding (R17-09-002), will assure CAISO access to the flexibility of the fleet for grid reliability and will provide the signals to help ensure the efficient retention and retirement of existing resources.