Stakeholder Comments Template

Frequency Response Phase 2 Initiative Working Group

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the working group for the Frequency Response Phase 2 initiative held on February 9, 2017. Information related to this initiative may be found at:
http://www.caiso.com/informed/Pages/StakeholderProcesses/FrequencyResponsePhase2.aspx

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **March 17, 2017**.

The ISO includes a summary of the brainstormed options for potential solutions to reference while responding to Question 1 and its subparts. Seven potential options were brainstormed, they include:

1. Annual Forward Procurement - external BAAs
    a. Only procures incremental amount to cover expected shortfall
    b. Requires one contract type (TFR)
    c. Supports bid submission and settlement of that price if procured
    d. Does not require any day-ahead or real-time market co-optimized constraint
2. Annual Forward Procurement - external BAAs and internal resources
    a. Only procures incremental amount to cover expected shortfall
    b. Requires two contract types (TFR and frequency response awards)
    c. Supports bid submission and settlement of at least that price if procured
    d. Requires day-ahead and real-time co-optimized constraint
3. Day-ahead or Real-Time Market Product
    a. Procures amount to meet total requirement
    b. Requires one contract type (frequency response awards)
    c. Supports bid submission and settlement of at least that price if procured
    d. Requires day-ahead and real-time co-optimized constraint
4. Day-ahead and Real-Time Constraint
    a. Procures amount to meet total requirement
    b. Does not support bid submissions but would include some type of settlement for service
    c. Requires day-ahead and real-time co-optimized constraint
5. Combination Annual for externals and Day-ahead/Real-Time Product
    a. Procures incremental amount in annual forward procurement that would support bid submission and settlement of at least that price if procured

b. Separately procures remainder of the amount to meet the total requirement that would support bid submission and settlement of at least that price if procured
c. Requires day-ahead and real-time co-optimized constraint
6. Combination Annual for externals and Day-ahead/Real-Time Constraint
a. Procures incremental amount in annual forward procurement that would support bid submission for TFRs and settlement of that price if procured
b. Separately procures remainder of the amount to meet the total requirement that would not support bid submission for market constraint but would include some type of settlement
c. Requires day-ahead and real-time co-optimized constraint
7. "Do nothing"
a. Take no proactive action including procuring TFR from external BAAs

Questions:

1. The ISO seeks stakeholder input on the brainstormed options for a potential solution to the ISO need to take proactive action to ensure its frequency response is sufficient to support reliability in the event of a loss of two Palo Verde units (BAL-003-1 requirement). These include

a. Provide description of view of advantages, disadvantages, or position on option 1 - Annual Forward Procurement - external BAAs.

Seattle City Light would support option 1.

b. Provide description of view of advantages, disadvantages, or position on option 2 - Annual Forward Procurement - external BAAs and internal resources.

Option 2 provides the ISO the best approach because it allows Transferred Frequency Response to compete economically with the provision of Frequency Response from resources in the CAISO's Balancing Authority Area. This is the only option that allows Transferred Frequency Response to directly compete with internal resources. Seattle City Light supports this approach, as it creates a level playing field between Transferred Frequency Response and internal resources. We believe that the entire western interconnection, including CAISO's ratepayers, will benefit from such an effort to establish a frequency response market.

c. Provide description of view of advantages, disadvantages, or position on option 3 - Day-ahead or Real-Time Market Product.

Seattle City Light strongly opposes options 3 and 4 because it prevents cost-effective Transferred Frequency Response from providing service to the ISO. Seattle City Light and other western BAAs can provide Frequency Response services in excess of their NERC requirements without any additional capital investments at our generating

facilities. Failing to allow Transferred Frequency Response Agreements unnecessarily requires California's ratepayers to invest capital in providing frequency response service that could be procured more economically from outside the ISO's BAA.

> d. Provide description of view of advantages, disadvantages, or position on option 4 - Day-ahead and Real-Time Constraint.

See above.

> e. Provide description of view of advantages, disadvantages, or position on option 5 - Combination Annual for externals and Day-ahead/Real-Time Product.

If the ISO makes a policy decision to implement a real-time optimization of Frequency Response and other ancillary services, Seattle City Light recommends further developing options 5 and 6. These options allow for the procurement of Frequency Response service from external BAAs and internal resources, and compensates each. Seattle City Light does not currently have enough information to select one over the other at this time.

> f. Provide description of view of advantages, disadvantages, or position on option 6 - Combination Annual for externals and Day-ahead/Real-Time Constraint.

See above.

> g. Provide description of view of advantages, disadvantages, or position on option 7 - "Do nothing".

Under this approach the ISO may fail to meet its NERC obligations.

8. ISO seeks stakeholder input on the proposed frequency response service specifications for fast frequency response, primary frequency response and fast regulation attached separately in the draft frequency control product specifications document found here.

No comment.

9. ISO seeks stakeholder input on the proposed scope of services for which a procurement mechanism would be designed. The proposed scope shown in the product specification handout is that the ISO only needs to evaluate procurement of primary frequency response whether from external BAAs or internal resource and does not need to procure fast frequency response or fast regulation capable of providing the secondary response shown on slide 47 in the appendices to the working group presentation. If any stakeholders believe that the scope should include the fast frequency response or fast regulation services under its evaluation of a procurement mechanism please provide an explanation.

No comment.

10. ISO seeks stakeholder input on whether load responsive devices can perform with a proportional response or does it require shedding load at a specific trigger point? Also, whether there has been any exploration of the concept of stopping non-critical processes for short periods has been evaluated?

No comment.

11. ISO seeks stakeholder input on whether pump storage hydro is pumping rather than generating would frequency control device perform with a proportional response or require shedding load at specific trigger points?

No comment.

12. ISO seeks stakeholder input on the statement made on Slide 15 of the ISO presentation, "Frequency control services require reserves above operating reserves that are not procured for RA". The ISO stated that it believes that resource adequacy or flexible resource adequacy capacity procured to ensure RA to ensure energy deliverability cannot be awarded frequency responsive reserves since these reserves cannot be released by ISO dispatch to ensure deliverability during peak or ramping needs. If any stakeholders hold a different belief, the ISO asks that additional information and explanation be provided to continue to move the dialogue forward.

No comment.