

# 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](mailto: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

The Public Generating Pool (PGP) represents ten consumer-owned utilities in Oregon and Washington, three of which own and operate Balancing Authority Areas (BAA)s. PGP appreciates the opportunity to comment on the California ISO's Frequency Response Phase 2 working group meeting held on February 9, 2017.

PGP's comments are based on the written material, which provides a limited description of the options. Before narrowing to a single option, PGP recommends that more written detail be provided about potential options.

PGP's primary interest is as the ISO seeks to design a primary frequency response procurement mechanism, the ISO maintain the ability to procure Transferred Frequency Response from external Balancing Authority Areas. As such, PGP is supportive of Options #1, #2. If the ISO makes a policy decision to implement a real-time optimization of Frequency Response and other ancillary services, PGP supports Option #6.

### 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.

PGP supports Option #1 as it allows for Transferred Frequency Response contracts.

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

PGP supports Option #2 and believes it best allows Transferred Frequency Response to compete economically with the provision of Frequency Response from resources internal to the CAISO Balancing Authority Area.

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

PGP opposes Option #3 because it prevents cost-effective Transferred Frequency Response from external Balancing Authorities Areas from competing to provide service to the ISO.

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

PGP opposes Option #4 because it prevents cost-effective Transferred Frequency Response from external Balancing Authorities Areas from competing to provide service to the ISO.

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

PGP does not have sufficient information to comment on this option.

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

PGP supports Option #6 if the ISO were to implement a real-time optimization of Frequency Response and other ancillary services. This option allows for the procurement of Frequency Response service from both external Balancing Authority Areas and internal resources, and compensates each.

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

The ISO has expressed concern regarding not being able to meet its NERC obligations without some proactive action regarding procurement of frequency response services. If this is the case, it would not be prudent for the ISO to "do nothing".

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.