Stakeholder Comments Template

Flexible Resource Adequacy Criteria and Must-Offer Obligation Straw Proposal, July 25, 2013

Submitted by	Company	Date Submitted
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This template is for submission of stakeholder comments on the topics listed below, covered in the Flexible Resource Adequacy Criteria and Must-Offer Obligation revised straw proposal on July 25, 2013, and issues discussed during the stakeholder meeting on August 1, 2013.

Please submit your comments below where indicated. Your comments on any aspect of this initiative are welcome. If you provide a preferred approach for a particular topic, your comments will be most useful if you provide the reasons and business case.

Please submit comments (in MS Word) to fcp@caiso.com no later than the close of business on August 15, 2013.

1. The ISO has proposed a process by which an annual flexible capacity requirement assessment would be conducted. Please provide any comments or questions your organization has regarding this proposed process.

   Wellhead supports the proposed process at this time.

2. The ISO has outlined a methodology to allocate flexible capacity requirements to LRAs. It is based on one possible measurement of the proportion of the system flexible capacity requirement to each LRA and calculated as the cumulative contribution of the LRA's jurisdictional LSE's contribution to the ISO's largest 3-hour net load ramp each month. Please provide comments regarding the equity and efficiency of the ISO proposed allocation. Please provide specific alternative allocation formulas when possible. The ISO will give greater consideration to specific allocation proposals than conceptual/theoretical ones. Also, please provide information regarding any data the ISO would need to collect to utilize a proposed allocation methodology. Specifically,

   a. Over the course of a day or month, any of the identified contributors to the change in the net load curve may be positive or negative. How should the

ISO account for the overall variability of a contributor over the month (i.e. how to account for the fact that some resources reduce the net load ramp at one time, but increase it at others)?

b. What measurement or allocation factor should the ISO use to determine an LRA's contribution to the change in load component of the flexible capacity requirement?

c. Does your organization have any additional comments or recommendations regarding the allocation of flexible capacity requirements?

No comment on the specific proposal but Wellhead is generally supportive of reasonable/fair cost causation principles that promote the desired behaviors/actions.

3. The ISO has proposed must-offer obligations for various types of resources. Please provide comments and recommendations regarding the ISO's proposed must-offer obligations for the following resources types:

a. Resources not identified as use-limited

There will be (are) variations of each of the identified technologies that will not fit the specific buckets created for them by the CAISO. Wellhead recommends that the CAISO create technology agnostic buckets for resources whose technology does not fit into the specified buckets. In this way the appropriate obligation can be selected by participants with the risk of that obligation being normalized by the incentive. The buckets would be:

- 10 hour energy
- 3 hour ramp
- 10 hour regulation

A resource type may have specific restriction on the quantity of FRA that it can offer (hydro for example), but allowing technology agnostic buckets will allow for the maximum participation on a non-discriminatory basis.

b. Use-limited resources

1. Please provide specific comments regarding the ISO's four step proposal that would allow resources with start limitations to include the opportunity costs in the resource's start-up cost.

Wellhead supports the CAISO's proposed methodology provided that the system is dynamically biased on a monthly basis to ensure that the methodology is not over or under shooting the annual limits. The biasing factor should be applicable to operating hours (default energy bids) as well as starts.

2. Please provide information on any use-limitations that have not been addressed and how the ISO could account for them.

   Many resources have use limitations that are a function of both starts and operating hours. Annual fuel limits and/or emissions limitations are typical of this type of function where the opportunity costs for both starts and operating hours are dynamic based upon how the resource is dispatched. For example, if a resource has an annual NOx limitation of 15,000 lbs/yr and is permitted to emit 4.0 lbs/hr during normal operation and 20.0 lbs/start, then the resource will be constrained as shown in the table below:

Starts	Operating Hours	Annual NOx Emission (lbs)
-	3,750	15,000
250	2,500	15,000
375	1,875	15,000
450	1,500	15,000
500	1,250	15,000
536	1,071	15,000

   This means that the individual opportunity cost for starts and operating hours is changing as a function of the starts/operating hours a unit has incurred to date (each year). Wellhead is recommending that the CAISO allow for the calculation of opportunity costs for units that have dynamic limits at 5% intervals of the starts/operating hour ratio from 0 to 1.0. On a monthly basis, the individual opportunity cost for starts and operating hours can then be updated by the CAISO based upon actual dispatch ratios.

c. Hydro Resources

d. Specialized must-offer obligations (please also include any recommended changes for the duration or timing of the proposed must-offer obligation):

   See 3(a) above.

1. Demand response resources

2. Storage resources

3. Variable energy resources

4. The ISO has proposed to include a backstop procurement provision that would allow the ISO to procure flexible capacity resources to cure deficiencies in LSE SC flexible capacity showings. Please provide comments regarding the ISO's flexible capacity backstop procurement proposal.

   Wellhead supports this proposal at this time.

5. The ISO is not proposing to use bid validation rules to enforce must-offer obligations. Instead, the ISO is proposing a flexible capacity availability incentive mechanism. Please provide comments on the following aspects of the flexible capacity availability incentive mechanism:

   a. The proposed evaluation mechanism/formula

      1. The formula used to calculate compliance

      2. How to account for the potential interaction between the flexible capacity availability incentive mechanism and the existing availability incentive mechanism (Standard Capacity Product)

         Standard RA capacity is valued by market participants based upon the risk (availability incentive) of non-performance. The FRA, as we understand it, is to remain a bundled product with standard RA (i.e. a 100 MW unit cannot sell 100 MW of RA to one party and 100 MW of FRA to another party). Therefore, since the standard RA risk is already known, an independent component for FRA must be established. This will allow two separate availability incentives to be applied to the bundled product without conflict.

   b. The use of a monthly target flexible capacity availability value

      1. Is the 2.5% dead band appropriate?

         Yes, Wellhead supports the 2.5% dead band.

2. Is the prevailing flexible capacity backstop price the appropriate charge for those resource that fall below 2.5% of monthly target flexible capacity availability value? If not, what is the appropriate charge? Why?

   If the prevailing flexible capacity backstop is intended to cover the bundled standard and flex RA, then no, it would not be appropriate to charge the full bundled value on just the flexible portion. If the prevailing flexible capacity backstop is only to cover the flexibility component, then yes.

c. Please also include comments regarding issues the ISO must consider as part of the evaluation mechanism that are not discussed in this proposal.

6. Are there any additional comments your organization wishes to make at this time?

   Wellhead encourages the ISO to continue to assess the need for provisions that would limit the amount of baseload and/or PMin as part of capacity showings by publishing a soft target.