Comverge, Inc. Comments

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.

Comverge has no comment at this time on the assessment process at this time but reserves the opportunity to submit comments in the future.

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?

Comverge has no comment at this time on the methodology used to allocate FCRs to LRAs as addressed in the preceding section at this time but reserves the opportunity to submit comments in the future.

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

No comment at this time

    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.

Certain types of DR resources may be use-limited over certain periods of time, in which case the opportunity cost calculation will have to be used in the resources start-up cost. It will be important to acknowledge that opportunity costs are likely to differ between resource types and across different time frames. As an example, an aggregated DR resource in which multiple residences have controllable programmable thermostats as well as controllable pool pumps or electric water heaters will have different opportunity costs for multiple starts depending on the time of day. Alternatively a large industrial load may have an opportunity cost that is different at the beginning of the month than it is at the end of the month as a result of business cycles.

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

As discussed above, flexibility in the calculation of opportunity costs will be a necessity in order for use-limited resources to participate in the FRA market. In the case of demand response, Comverge encourages the ISO to look toward "value of lost load" studies as one possible approach to evaluating opportunity costs for loads. London Economics recently presented a survey of these studies to the Electric Reliability Council of Texas that may also be useful for the Califonia ISO's purposes. The literature review can be found at:
http://www.ercot.com/content/news/presentations/2013/ERCOTValueofLostLoad-LiteratureReviewandMacroeconomicAnalysi.pdf

c. Hydro Resources

No comment at this time.

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

1. Demand response resources

The shift from a 17 hour availability period to two 5 hour periods for the Must Offer Obligation is a critical improvement that significantly increases the ability of Demand Response (DR) to participate in the FRA market. The time frames established in the Second Revised Straw Proposal however are likely to restrict the amount of DR able to participate at a level far below the potential for DR during some parts of the ramping periods identified by the ISO. As an example, residential DR is likely to be available during much of the 4:00pm to 9:00pm time period. If residential DR availability is reduced during any part of that period the ISO risks losing a substantial amount of flexible resource potential from a preferred resource due to the inflexible nature of the must-offer obligation.

Comverge proposes two potential solutions to this issue that we believe will enhance the ISO's ability to meet flexible resource adequacy needs cost-effectively while maximizing the use of preferred resources. First, the ISO may look to shift both time frames to hours that more closely fit DR availability profiles for residential, commercial and industrial DR. We believe this could be accomplished by working with DR providers who can help the ISO establish time periods and obligation lengths that would allow DR to participate in flexible resource adequacy procurement.

If the proposed time periods and lengths are not flexible from the perspective of the ISO, we propose allowing specialized resources to offer their services jointly with other resources that can provide complimentary services. For instance a DR provider that is able to meet 4 of the 5 hours proposed for the afternoon obligation period could offer their resource jointly with an energy storage provider who can only provide resource adequacy services for one hour. We certainly support and appreciate the ISO's recognition of different resource characteristics by developing character-specific resource obligations, and we believe the permitting this cross-pollination of resources with differentiated characteristics can strengthen the ISO's approach.

We also believe that the specific morning time frame proposed by the ISO is unlikely to attract significant participation from residential, commercial or industrial DR as it begins at a time when many commercial and industrial customers are inactive while residential AC load is generally low in the morning. This time period does contain several hours in which significant DR resources are likely to be available, however customers are unlikely to participate given the lake of sufficient load in the earlier hours of this period. As discussed above, this limitation need not prevent the participation of preferred resources as flexible resource adequacy providers; we believe our proposals above could help address both morning and afternoon DR periods.

The changes proposed above would greatly improve the technical ability of DR to provide capacity to meet the ISO's flexible resource adequacy needs but we feel that the risk associated with imposing must offer obligations on electric customers' needs to be further mitigated before DR can participate in this program. While it would be extremely unlikely, it appears possible given the ISO's current draft that a DR resource that is bid into the market for a particular month could be called upon for an unlimited number of weekdays during that month, and for the full period of that obligation. This is of course an extreme example which nevertheless demonstrates the risk DR providers are exposed to under the current draft.

The ISO could substantially limit this risk by establishing maximum thresholds for required starts, days or hours deployed during a monthly procurement period. We understand the ISO's need for these resources to be available during every weekday of the month should the need to deploy that resource arise. However, we believe that by not bounding the number of deployments using some reasonable threshold the ISO imposes unnecessary additional costs to the market while substantially restricting the type of resource that is able to provide flexible resource adequacy capacity.

2. Storage resources

No comment at this time.

3. Variable energy resources

No comment at this time.

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.

No comment 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

As discussed in our comments in section 3.d.1 we remain extremely concerned with the nature and design of the must offer obligation, which although improved from the first straw proposal still imparts a great deal of risk to DR providers specifically. While the formula used to calculate compliance seems reasonable given our understanding of the incentive mechanism, our concern regarding the structure of the must offer obligation supersedes any potential issues with the evaluation mechanism.

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

No comment at this time.

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

        1. Is the 2.5% dead band appropriate?

No comment at this time.

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?

No comment at this time.

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

This is an interesting and in some ways elegant proposal, however we are concerned that this assumes a level of symmetry that is not likely to be present between over- and under-performance. If a resource over-performs during a month where no resources under-perform there will be no incentive mechanism. It seems that there could easily arise a misalignment between the ISO needs for flexible capacity availability and the inability of some providers to be available as bid, since the two are not directly correlated except under this provision.

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

Thank you for the opportunity to make these comments. We look forward to continuing to engage with the CAISO and other stakeholders regarding the issues contained in our comments.