

## 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 [fcf@caiso.com](mailto:fcf@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.

LSA understands that the CAISO and other parties have expressed a preference for having a limited initial definition of flexible resources and may consider expanding that definition in the future. LSA is concerned, however, that the current 3-hour continuous ramp definition – which requires continual provision of the service for three hours – may be unduly restrictive and will unnecessarily exclude resources that could address the CAISO’s operational issues when combined with other resources (e.g., three resources that could provide the service for an hour each would give the CAISO at least the same flexibility as one resource for three hours).

The data shared by CAISO in the CPUC’s Resource Adequacy proceeding earlier this year, suggested that there might be sufficient resources to meet the Flexible Resource Adequacy Requirement (“FRAC”) under this narrow definition.<sup>1</sup> However, the extent to which existing resources can meet the FRAC requirement under this revised proposal is unclear. Moreover, LSA is concerned that the cost to Load Serving Entities (“LSEs”) to procure flexible resources would be higher with a resource pool that is significantly restricted in this manner, and this concern do not appear to be considered in the Straw Proposal.

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<sup>1</sup>CAISO Initial Comments on CPUC Workshop Issues, April 5, 2013, pg. 24.

LSA requests that the CAISO provide an updated and more detailed estimate of how much of the total FRAC requirement could be met with existing resources based on its current calculation method, and how that result would change with SONGS and expected once-through cooling (“OTC”) retirements. Alternatively, the CAISO should indicate how this information will be made available in other regulatory proceedings (e.g. the CPUC’s RA or LTPP proceedings).

This information is necessary to provide sufficient context for the revised proposal being contemplated here and to allow all stakeholders to more fully understand the potential impacts of the proposal.

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,

LSA appreciates the change in the Second Revised Straw Proposal that now allocates FRAC to local regulatory agencies (“LRA”) based on each LRA’s jurisdictional load sharing entities’ (“LSE”) contribution to the largest 3-hour net-load ramp change each month. LSA supports this change as aligned with the current process for allocating other resource adequacy requirements.

LSA is concerned, however, that the current allocation methodology looks only at changes in wind and solar output (in addition to load) and ignores the contribution to system inflexibility of other generation sources. For example, the lack of flexibility of long-start resources, to the extent they are coming online or offline during the 3-hour ramp, may also influence the amount of ramping required to manage those changes in output.

- 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)? [No comment at this time.](#)
- 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? [No comment at this time.](#)

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

Certain VERs, particularly those integrated with energy storage, possess operational flexibility, which should be reflected in the FRAC requirement assessment. These resources, or the flexible portion of their capacity, should not be included in the intermittent resource portfolios when calculating the three-hour ramp component of the flexible capacity requirement. If these resources are not removed from the intermittent resource portfolios, it will result in redundant procurement of flexible capacity resources. Additionally, the kind of standard location-based, generator-type production profile as proposed to be used by CAISO will not be relevant for these resources, which have the ability to increase and decrease production based on market signals.

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

- b. Use-limited resources

LSA has some concerns about the inclusion of long-start resources in the proposal due to potential contribution of these resources to over-generation conditions and believes this issue requires further examination. LSA requests that the CAISO explain the following:

- How much capacity of this type remains on the system and would be eligible to be counted under the FRAC;
- How much of this capacity the CAISO would have to rely on regularly to meet its flexibility needs; and
- The degree that the need to pre-dispatch those resources could increase curtailment risk to VERs and other resources.

This more complete picture about the extent to which these resources may participate will allow for more informed decision-making about whether and how they should be allowed to qualify to be counted in the FRAC and how the MOO for these resources should be designed to ensure it avoids adverse impacts on other generators.

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. [No comment at this time.](#)

2. Please provide information on any use-limitations that have not been addressed and how the ISO could account for them. [No comment at this time.](#)

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):

LSA appreciates CAISO's development of initial MOO proposals for specialized resources and views this approach as consistent with that taken in the general RA framework, where the Standard Capacity Product is as uniform as possible but still accounts for the operating characteristics (including the MOO) of different resource types. As the details of these MOOs are refined, LSA wants to ensure that MOO for specialized resources are appropriately designed to fully utilize the capabilities of those resources and give credit for doing so.

For example, while the procurement requirement for LSEs is based on their contribution to the largest 3 hour net-load ramp change each month, the provision of flexible capacity by VERs should not necessarily be for a 3-hour duration but rather for individual hourly periods that could then be combined by CAISO for effective management of the system. (See comments above on this point.)

1. Demand response resources
2. Storage resources
3. Variable energy resources

LSA is still evaluating the proposed MOO for VERs and offers only initial comments on the proposal at this time. For example, LSA is concerned that the Day Ahead ("DA") bid requirement may be highly problematic for VERs.

Specifically, it is unclear what impact a DA bid requirement will have on VERs under the implementation of Order 764 changes and the "New PIRP" rules. LSA requests CAISO explain the potential implications of this requirement under the New PIRP before we can opine on whether the DA requirement is viable.

LSA also recommends that the CAISO closely coordinate implementation of the VER MOO with Order 764 implementation to ensure that there are no unintended consequences due to the VER MOO. LSA also recommends the following:

- Hours of MOO requirement for solar resources should be consistent. Any difference in hours should be related only to solar resources with on site storage.
  - The CAISO consider that there may be several different scenarios for a flexible VER to offer flexibility, and that each resource’s ability to offer flexibility may be a function of energy delivery requirements in a PPA. LSA recommends that the CAISO have further discussions with stakeholders on these issues that include the following scenarios:
    - Generator contracted to PMax with allowance for curtailment to X% of PMax (for flexibility), whereby  $(1-X\%)*P_{Max}$  = Effective Flexible Capacity (“EFC”).
    - Generator contracted to  $(P_{Max} - N)$ , whereby N capacity is entirely flexible (merchant or contracted differently) and may be offered as EFC.
    - Generator with on site storage contracted. EFC = storage MW output capacity
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:

Similar to hydroelectric facilities, a flexible VER should be deemed to have fulfilled its must-offer obligations so long as it has submitted economic bids to the extent feasible based on the availability of the relevant natural resource. Presumably, once these resources have met their must-offer obligation, no penalties for non-availability would accrue. The CAISO should clarify the treatment of flexible VERs within the Availability Incentive Mechanism proposal.

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)
  - b. The use of a monthly target flexible capacity availability value
    1. Is the 2.5% dead band appropriate?
    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?
  - 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? [LSA has no further comments at this time.](#)