

Stakeholder Comments Template

Flexible Resource Adequacy Criteria and Must-Offer Obligation Third Revised Straw Proposal, Posted October 3, 2013

Submitted by	Company	Date Submitted
Brian Cragg <u>bcragg@goodinmacbride.com</u> 415-765-8413	Independent Energy Producers Association	October 16, 2013

This template is for submission of stakeholder comments on the topics listed below, covered in the Flexible Resource Adequacy Criteria and Must-Offer Obligation third revised straw proposal on October 3, 2013, and issues discussed during the stakeholder meeting on October 9, 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 <u>fcp@caiso.com</u> no later than the close of business on <u>October 16, 2013</u>.

- 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 3hour net load ramp each month. Please provide comments regarding the equity and efficiency of the ISO proposed allocation. Specifically, please comment on:
 - a. The ISO's proposal to use an LSEs average contribution to historic daily ISO maximum 3-hour load changes to allocate the Δ load component of the flexible capacity requirement.
 - b. The potential of using historic average daily maximum 3-hour net-load ramps or time of day system maximum 3-hour load ramps (morning vs. evening ramps).
 - c. What other measurement or allocation factor should the ISO consider to determine an LRA's contribution to the change in load component of the flexible capacity requirement?



d. Should the ISO consider seasonal allocations for each component? What would these seasonal allocations look like?

The challenge for allocating flexible capacity requirements is to balance causation with a workable simplicity. The proposed allocation approach achieves a reasonable balance between identifying the responsibility for the need for flexible capacity and developing an allocation formula that does not depend on undue complexity.

2. The ISO believes the proposed methodology reflects causation principles. Specific to allocating flexible capacity requirements, what does "causation" mean to your organization and how would this definition be most accurately reflected in a flexible capacity requirements allocation process?

The potential "causes" of the need for flexible resources include hard-to-quantify elements like the state's policy of encouraging the development of renewable and low-carbon energy, the clean water regulations that will require the retirement of once-through-cooling resources, flat electric rates for residential customers, and the overall effectiveness of energy efficiency and demand response programs. It is not practical to attempt to assign these types of "causes" to individual customers or customer classes. The proposed allocation approach's focus on changes in load during the 3-hour ramp and the level of an LSE's procurement of wind and solar resources is a workable solution.

3. What are the appropriate bounds for the maximum and minimum for the error term as well as how to address year-to-year variability? What are the appropriate actions if such bounds are reached?

IEP has no comment on these questions.

- 4. 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

Resources that are not subject to use limitations are proposed to be required to submit economic bids into the day-ahead and real-time markets from 5:00 a.m. to 10 p.m. Use-limited resources that are not required to meet this obligation may provide somewhat lesser value to the CAISO, and lesser (or greater) value should be reflected in the compensation to different types of flexible resources.

b. Dispatchable gas-fired use-limited resources



1. Please provide comments regarding the ISO's proposal that would allow resources with use- limitations to include the opportunity costs in the resource's default energy bid, start-up cost, and minimum load cost.

Including the opportunity costs in the default energy bid, start-up cost, and minimum load cost should in theory provide a way to efficiently manage the limitations of dispatchable gas-fired limited resources. The difficulty may come in the initial attempts to quantify opportunity costs. For that reason, a "hard stop," which would allow the generator to control production as needed to meet environmental or other limitations, should also be available to these resources, at least in the first few years of the flexible resource adequacy program.

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

The proposed treatment of hydro resources is acceptable, but IEP agrees with the sentiment expressed at the stakeholder meeting that the differences in the MOO of hydro resources and the MOO for other flexible resources should be minimized.

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

It may be difficult for individual demand response, storage, and variable energy resources to meet the proposed MOOs and definitions of flexible resources. However, these types of resources may be combined to produce a resource that, in aggregate, can provide flexible capacity and meet the must-offer requirements. For example, solar thermal resources combined with storage (in the form of molten salt) can both flatten the solar drop-off at the end of the day and continue to provide energy into the evening peak. Similarly, demand response resources can be aggregated to form a portfolio that can meet the requirements for flexible resources. Storage resources may be linked in a way that provides a reliable, full 3hour response and the ability to be available to response from 5 a.m. to 10 p.m. Rather than developing exceptions and special rules for these resources, the CAISO should ensure that any roadblocks to the efficient combination of different resource types are removed.



Combined heat and power (CHP) facilities present another type of use limitation. Some CHP resources have the ability to provide a flexible capacity product to the CAISO and to adhere to performance obligations for flexible capacity. For example, a 50 MW CHP facility may have 30 MW devoted to its thermal host and 20 MW of flexible capacity it can offer to load-serving entities with a compliance obligation. The capacity available for dispatch as flexible capacity is 20 MW, not the difference between the facility's Pmin and Pmax. Rather, the amount of flexible capacity available to the CAISO should be calculated as the difference between "Pmin-plus" (the capacity dedicated to the thermal host) and the facility's Pmax. The facility's Capacity would be specified in the unit's master file, and the facility's capacity would not be dispatched beyond the range defined as Pmax minus Pmin-plus. Within that range, the availability and performance obligations of flexible resources would apply.

- 1. Demand response resources.
- 2. Storage resources.
- 3. Variable energy resources.
- 5. The ISO has proposed a flexible capacity availability incentive mechanism Please provide comments of the following aspects of this mechanism:
 - a. The selection of the adder method as the preferred option

The adder method is the leading option, but the stakeholder meeting revealed a few areas where more thought is required. IEP looks forward to the next version of the incentive proposals.

- 1. Should the ISO still consider the bucket method, the "worse-of" method, or some other method not already considered? Why?
- b. The price for the flexibility adder. Specifically, if the ISO proposed price is not correct, what price or data source should the ISO consider and why?

Ultimately, the flexibility adder should be based on the market's valuation of flexibility. IEP agrees that the initial adder should be derived from publicly available information, but the initial level of the adder should be increased if it fails to produce the desired behavior.

c. The interaction between the existing SCP and the proposed SFCP



- d. The proposed SFCP evaluation mechanism/formula
 - 1. The formula used to calculate compliance (including the treatment of long-start and use-limited resources)
 - 2. The treatment of forced and planned outages
 - 3. The minimum availability thresholds for use-limited resources
- e. The proposed substitution rules for forced outages
- f. Please also include comments regarding issues the ISO must consider as part of the evaluation mechanism that are not discussed in this proposal.
- 6. 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 following issues of ISO's proposed flexible capacity backstop procurement proposal:
 - a. The inclusion of the adder methodology
 - b. The opportunity for LSEs to provide a list of uncommitted flexible capacity that can be used to help cure flexible capacity deficiencies

In the present market structure, a backstop procurement provision for flexible capacity is necessary. Including the adder methodology to ensure and compensate availability and the list of uncommitted flexible resources is a good idea. Ultimately, as the straw proposal recognizes, the Reliability Services Auction should be the source of backstop flexible capacity.

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