

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

Submitted by	Company	Date Submitted
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The San Francisco Public Utilities Commission (San Francisco) provides the following comments on the California Independent System Operator's (ISO) Third Revised Straw Proposal on Flexible Resource Adequacy Criteria and Must-Offer Obligation, issued on October 3, 2013. San Francisco also provides comments on issues raised during the Stakeholder Meeting on October 9, 2013.

- 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.

San Francisco supports the ISO's proposal to allocate the load portion of an LSE's contribution to the flexible capacity requirement using the LSE's percentage of the average load change, based on the previous two years of historical load data, during ISO's historic daily coincident maximum 3-hour gross load ramps. For purposes of load, San Francisco believes that this approach is much more consistent with the cost causation principle than previous methods proposed by the ISO (e.g., LSE peak-load ratio share and LSE monthly load factors).

However, San Francisco believes that a superior approach to allocating the Δ load component would be to use LSEs' historic percentage of average load change during the same interval as the ISO forecasted net 3-hour maximum load ramp (i.e., net of forecasted variable renewable resources). This method would align the Δ load component with the forecasted system ramping requirement, as opposed to aligning it with the ISO's historic 3-hour gross load ramp, which could be a different interval.



During the stakeholder meeting on October 9th ISO staff explained that LSEs that, on average, have a negative contribution to the ISO's maximum 3-hour ramp will be given a factor of 0 for the load allocation component. These LSEs will not be given a negative allocation factor for the load component. In contrast, changes in wind, solar PV and solar thermal are allowed to have negative values (i.e., if the change in one of these resource components helps to reduce the net load ramping requirement).

San Francisco believes that the ISO should apply a consistent approach when calculating each of the components that are used to determine an LSE's flexible capacity allocation. Allowing the load allocation factor to be negative may provide a signal to loads to modify behavior in a way that reduces the system ramping requirement by potentially reducing the LSE's total flexible capacity allocation. To avoid the administrative challenges associated with negative total flexible capacity allocations, the ISO can assign LSEs with net negative allocations a value of zero.

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).

It may not be practical to look at each LSE's historic net-load ramp on a daily or monthly basis, as it would require netting the hourly generation from each LSE's variable renewable resources against each LSE's load curve. However, it may be practical to look at each LSE's <u>average gross</u> load change during the time of the <u>historic</u> ISO maximum net-load ramp. If the latter approach is used, particularly once significant intermittent resources are reflected in the historic calculation, using the LSE's average gross load contribution during the historic daily ISO maximum 3-hour net-load ramps may be a better indicator of LSEs' contributions to the Δ load component than the proposed method of comparing LSE historical averages to the ISO's historical gross load ramp.

A drawback of this approach would be an obvious lag effect as the proportion of solar and wind generation increases. As noted above, this drawback could be avoided by identifying the time interval of the <u>forecasted</u> ISO 3-hour net-load ramp for each month and applying the same interval for the calculation of each LSE's contribution to the historic ISO 3-hour ramp.

San Francisco encourages the ISO to provide examples of the Δ load component allocation using the different methods being considered. We suspect that there may not be a significant difference in the results between the various methods, in which case it may then be appropriate to adopt the method that is administratively reasonable to implement. Ultimately, differences in the level of effort required to implement each method should be weighed against expected improvements in reflecting causation in the resultant allocations when choosing the preferred method.



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?

San Francisco has no comment at this time.

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

San Francisco does not yet have a position on whether the ISO should pursue seasonal allocations for each component or a recommendation on what the allocation methodology might look like. However, to the extent seasonal allocations would make the process less administratively cumbersome and more transparent without sacrificing accuracy and consistency with cost causation, such an allocation methodology may be worth pursuing. San Francisco encourages the ISO to explore seasonal allocations in a subsequent straw proposal and to provide quantitative examples of what a seasonal allocation might look like compared to the current 12-month allocation.

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 cost causation principle requires that market participants that cause particular system costs be allocated those costs. For purposes of the current flexible capacity requirement, this means that entities contributing to the drivers of the ISO's monthly maximum 3-hour net load ramping requirement should be allocated a share of the system flexible capacity requirement that is proportional to their contribution to the maximum 3-hour net load ramp.

San Francisco believes the ISO's current proposal is generally consistent with cost causation principles. Under the current proposal, the ISO has identified the drivers of its system maximum 3-hour net load ramps and a methodology for calculating each LSE's contribution to those causal factors. San Francisco believes that identifying the causes of the maximum 3-hour ramping requirement and assigning flexible capacity procurement to LSEs in proportion to their contribution to each driver will send the correct signal to market participants. This is consistent with fundamental economic principles to place the cost obligation on the entity that has the most control over the behavior that causes the cost to be incurred in the first place.

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?



San Francisco has no comment at this time.

- 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

San Francisco has no comment at this time.

b. Dispatchable gas-fired use-limited resources

San Francisco has no comment at this time.

c. Hydro Resources

San Francisco has 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):

San Francisco has no comment at this time.

5. The ISO has proposed a flexible capacity availability incentive mechanism

The ISO should explore the possibility of using confidential CPUC data collected under its resource adequacy program to develop the flexibility adder.

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:

San Francisco has no comment at this time.

- 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



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

San Francisco has no additional comments at this time.