

Stakeholder Comments Template

Flexible Resource Adequacy Criteria and Must-Offer Obligation Revised Straw Proposal, June 13, 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 June 13, 2013, and issues discussed during the stakeholder meeting on June 19, 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 fcg@caiso.com no later than the close of business on June 26, 2013.

1. The ISO has outlined the a methodology to allocate flexible capacity requirements to LSE SC based one possible measurement of the proportion of the system flexible capacity requirement to each LSE SC based on its contribution to the ISO's largest 3 hour net-load ramp change each month. Please provide comment regarding the equity and efficiency of the ISO proposed allocation. Please provide specific 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. Has the ISO identified the core components for allocation? Are more needed? If so, what additional components should be considered and how should ISO consider them? Are fewer needed? If so, what should the ISO include? *But for the DG resource category, SCE believes the ISO's proposed resource categories are reasonable for purposes of allocating the flex requirement. SCE recommends the ISO do away with a separate DG category and instead include individual DG resources in the wind, solar thermal or solar PV categories based on their underlying resource type.*

- b. Has the ISO used the right allocation factors for the identified components (i.e. load ratio share, percent of total capacity contracted)? If additional or fewer components should be considered as identified in 1a, above, please provide specific allocations factors for these components. *SCE does not agree that peak load ratio share is a reasonable basis for allocating flex requirements attributable to load. The Joint Parties proposal advocated using peak load ratio share as the flex allocator not because it was considered the best representation of load's contribution to flex requirements, rather, as a necessary process accommodation to ensure the JP proposal could be fully implemented in 2014 (i.e., by relying only on existing RA program data and processes). To best achieve the causation objectives of the ISO's allocation proposal in 2015, SCE believes an allocator based on a "change" measure of load would more appropriately reflect load's contribution to flex needs. Which change measure of load should be the topic of further stakeholder discussion, but SCE suggests a load allocator based on each LSEs' average daily/weekly load factors (relative to ISO system load factor) is a good place to start that discussion. SCE agrees in concept that percent of total contract capacity is a reasonable basis for allocating flex requirements attributable to wind, solar thermal and solar PV resources. That said, SCE is concerned the processes and rules that will need to be developed in order to fairly implement this allocation could be administratively complex and overly subjective. For example, determining each LSE's share of "planned" on-line resources using individual resource contracts could be a very contentious process given what is certainly a wide range of contract terms regarding initial production dates, dates of commercial operation, allowances for schedule slippage, phased-in production, etc. Further stakeholder discussion will be required to determine if the practical implementation of contract-based allocators can be made workable, reasonable and fair.*
- c. Does your organization have any additional comments or recommendations regarding the allocation of flexible capacity requirements? *SCE does not agree with the ISO's proposed method of allocating flex requirements based solely on the characteristics of the monthly max 3-hr net load ramp. As originally conceived in the Joint Parties Proposal, and throughout the CPUC RA proceeding, the max 3-hr net load ramp was discussed only in the context of it being a reasonable basis for determining the total quantity of flex capacity needed to maintain reliability. Joint Parties never intended it to be, nor was the max 3-hr net load ramp ever vetted as a reasonable means of representing load's and each resource type's contribution to the ISO's flex needs over time. Consider the now-famous "duck chart" which clearly shows how wind and solar resources each negatively and positively impact net load changes over the course of a typical day. To snapshot one 3-hr portion of a month*

and conclude from that snapshot that a particular resource type either always increases or always decreases the ISO's flex needs over the entire course of that month – which is the very implication of the ISO's proposal – is not only inconsistent with what we know to be the overall impact of intermittent resources on flex requirements, it also threatens to create inefficient and unstable RA procurement and showing objectives for LSEs¹. To better achieve the causation objectives of the ISO's proposal, SCE strongly recommends the ISO develop an allocation methodology based on load and each resource type's overall contribution to flex needs measured over the entire month, not just the snapshot of the highest 3-hr period in that month. The specifics of defining what "overall contribution" means should again be the topic of further stakeholder discussion, but SCE is aware of at least two existing methods that should be considered: one would be to apply the ISO's existing method to all 3-hr periods of the month (effectively take load and each resource type's average contribution to all 3-hr net load ramps), another would be to adapt the Westar statistical method for allocating regulation costs to load and intermittent resources². SCE does not have a current point of view on which of these methods best accomplishes the causation objectives for allocating flex, but does believe either would produce results more representative of the actual contribution of load and resources to flex needs, and would create more consistent, predictable procurement targets for LSEs.

2. The ISO believes that there are either tools in place or under development to manage a resource's use-limitations while still be subject to economic bid must offer obligation. The ISO, consistent with the CPUC's RA proposed decision, will require hydro resources to be able to provide a minimum of 6 hours of energy at Pmax to be eligible to provide flexible capacity. However, some resources, including demand response and storage resources may have use limitations that may do not fit well within these mechanisms.

¹ To encourage multi-year forward procurement, LSEs must have some reasonable ability to forecast their forward RA requirements, including flex. Depending on the relationship of forecast net load ramps in future months, the ISO's proposal could result in a spurious "toggling" of flex allocations where a given month's max 3-hr net load ramp could occur in the evening in year 1, in the morning in year 2, then back to evening in year 3. The ISO's "snapshot" proposal would change dramatically the allocation of flex requirements to individual LSEs even though the ISO's total flex need for that month may have changed very little and the total solar capacity on the system (and LSE-specific contract holdings of that capacity) were fixed. This also creates a false impression that the integration costs of solar are higher in years 1 and 3, but lower in year 2, when in fact nothing really changed at all.

² The Westar method, while developed as a means of allocating regulation costs, could be easily and appropriately adapted to measuring the relative contribution of loads and intermittent resources to monthly flex needs. Westar has the further benefit of being a FERC approved methodology already deployed in two jurisdictions. The following link provides more details on Westar:

http://www.caiso.com/Documents/SCE_Comments_StrawProposal_Pay_PerformanceRegulation.pdf

- a. Please provide comments regarding what use-limitations are currently managed by existing or proposed ISO tools and what must-offer obligation should apply to these resources.
 - b. Should the ISO consider other minimum energy or run time limits for other types of use limited resources to be eligible to provide flexible capacity? If so, what should these limits be? Why?
3. The ISO is assessing how bid validation rules could work for flexible capacity resources that are subject to an economic bid must offer obligation. The ISO provided two examples of bid validation rules and potential interpretations. Please provide comments regarding how the ISO should address each of these examples and any others that may need to be considered.
4. The ISO currently has a tool in place that allows for a resource to include the opportunity costs associated with run-limitations into the default energy bid. The ISO is considering a similar mechanism to allow resources with annual or monthly start limitations to include the opportunity costs of start-up in the resource's start-up and minimum load costs. Please provide comments on how the ISO should consider the opportunity costs for start limitations and how that opportunity cost should be calculated.
5. The ISO is proposing that all flexible capacity resources should be required to submit economic bids between 5:00 am and 10:00 pm. Please provide comments regarding this proposed must-offer obligation. Please connect to the response to this question to any responses to questions **Error! Reference source not found.** or 5 as appropriate.
6. The ISO has proposed to include 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.
7. Are there any additional comments your organization wished to make at this time? *The CAISO proposes to allocate "Flexible Capacity" requirements to LSEs based on their portfolio of Variable Energy Resources (VER) contract holdings [as well as their load characteristics.] While matching VER contracts to LSEs may be a workable construct for determining LSE obligations, the proposal fails to address VER resources that do not have contracts with CAISO LSEs or are only partially contracted with LSEs. For example, a merchant VER generator located within the CAISO's balancing area will place flexibility burdens on the CAISO. The same holds for a dynamic VER resource imported into the CAISO. Following principles of causation, such resources should have a comparable flexible capacity obligation to address this burden. However, the CAISO's*

proposal fails to address how such resources will be allocated a flexible capacity requirement.

The CAISO should develop rules that treat such partially contracted or uncontracted VERs and Dynamic Imports in a manner comparable with the obligation placed on LSEs with associated VER contracts.