Stakeholder Comments Template

Flexible Resource Adequacy Criteria and Must Offer Obligation - Phase 2 Straw Proposal

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the straw proposal for the Flexible Resource Adequacy Criteria and Must Offer Obligation - Phase 2 that was posted on December 11, 2015. The straw proposal and other information related to this initiative may be found at: http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **January 6, 2016.**

If you are interested in providing written comments, please organize your comments into one or more of the categories listed below.

1. Provision of flexible capacity by import or export resources,

   The CAISO has proposed to allow imports to provide flexible capacity subject to these conditions:

- The import must be 15-minute dispatchable.
- The import must be resource-specific.
- The import must economically bid into day-ahead and real-time markets.
- The LSE counting the resource as flexible capacity must have sufficient Maximum Import Capability (MIC) allocation for the resource.
- The resource must have a firm energy schedule. (And, presumably, an e-tag for that schedule.)
- An LSE cannot use imports to meet more than 50% of their flexible capacity requirement.
- The resource-specific resource providing flexible capacity is subject to RAAIM.

  NRG agrees that these criteria should apply to import resources providing flexible capacity. Further, NRG finds reasonable the CAISO's proposal to limit imports to 50% of an LSEs' flexible capacity. All of the implications and incentives of having some flexible capacity (e.g., from internal resources) subject to five-minute dispatch which other flexible capacity is subject only to 15-minute dispatch are not yet fully apparent, and a limitation on using imports for flexible capacity is therefore appropriate. Moreover, the current interim flexibility requirements, defined exclusively by the three hour net load ramp, are almost certain to be revisited in the coming time, and the development of a durable flexible ramping paradigm based on other considerations that just the three-hour net load ramp will likely re-introduce some additional considerations with regards to the use of imports to meet flexibility requirements.

CAISO seeks feedback as to whether the resource-specific criterion is required for non-Energy Imbalance Market capacity to provide flexible capacity. NRG holds that the resource-specific criterion is still required for several reasons. First, the resource-specific criterion is required for the reason offered by the CAISO, namely, to ensure that the resource is committed exclusively to California. The resource-specific criterion is also because there is no other way to equitably apply RAAIM except to a resource-specific resource, and applying RAAIM to internal resources that provide flexible capacity without applying it to external resources providing the very same product would be discriminatory. Finally, there is no way to accurately assign a valid EFC without tying that EFC to a physical resource.

2. Flexible capacity from pumped-storage hydro model

NRG supports the CAISO's position to allow pumped storage resources with non-zero transition times to receive an EFC value.

3. Merchant Variable Energy Resources

NRG supports the CAISO's position to not allocate any flexible requirement to merchant variable energy resources given the *de minimis* contribution these resources make to the overall three-hour net load ramp.

4. Allocating negative contributions to flexible capacity requirements

NRG supports the CAISO's position to allocate LSEs a negative contribution to the flexible capacity requirements and allow those LSEs to transfer that allocation to other LSEs.

5. Resource adequacy showing requirements for small LSEs

NRG supports the CAISO's position to allow LSEs with an RA obligation of less than one (1) MW to show zero (0) MW for that obligation and be deemed to have met the obligation.

6. Other.

Limiting the flexibility requirement to the upwards direction only. On the CAISO's December 21, 2015 call, a CAISO representative offered that part of the reason why the CAISO was comfortable limiting to flexibility to the "upward" direction at this time was that a downward flexibility requirement was "largely an economic matter." NRG urges caution in representing that the need for downward flexibility is just, or even largely, an economic matter. Unlimited curtailment of renewable resources is not a viable option for addressing over-generation, nor is having the dispatchable fleet pushed to its unresponsive minimum load levels across swaths of contiguous hours simply an economic matter.

With regards to the three "market design" issues related to flexibility that the CAISO is proposing to take up in later stakeholder processes – lowering the bid floor, re-examining curtailment priority for self-schedules and extending the look-ahead for the Short-Term Unit Commitment (STUC) engine, NRG looks forward to those discussions, but offers the following concern. Lowering the bid floor will produce more negative prices, and increasing the look-ahead horizon for STUC will increase the likelihood that resources will be committed based on expectations and for prices that will not materialize. Both of these consequences will affect Bid Cost Recovery for units that provide flexibility and are not the primary driver of flexibility requirements. NRG asks that, as the CAISO takes up these issues in later processes, it fully considers and mitigates the negative impacts of these proposed changes on some resources. While it is reasonable to create economic signals to motivate behavior that supports operational needs, resources that cannot respond to those signals due to operational constraints should not be punished.