

Stakeholder Comments Template

**Flexible Resource Adequacy Criteria and Must-Offer Obligation
Revised Straw Proposal, June 13, 2013**

Submitted by	Company	Date Submitted
Brian Theaker brian.theaker@nrgenergy.com	NRG Energy, Inc. ("NRG")	June 26, 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 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?

The CAISO's proposed allocation methodology is reasonable. NRG offers no proposed modifications.

- 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.

Yes.

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

The CAISO's allocation method, based on the interim approach of simplifying the flexibility requirement to a single three-hour ramp, is workable as an interim solution but will have to be expanded as load following and regulation requirements are added.

- 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.

- 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.

NRG must manage annual start-up limits for some of its resources. NRG does not object to having to offer those resources as a condition of having them count towards meeting flexibility requirements. That offering obligation already exists as a prerequisite for having resources count towards meeting Resource Adequacy requirements. NRG is very interested in ensuring that the use limits of its resources are accounted for and respected and that it does not incur undue risk (such as the imposition of Standard Capacity Product penalties for violating use limits if there are not reasonable tools in place for managing those limits) for providing such services.

- 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?

Because the interim flexibility requirement is defined by a three-hour ramp, resources must be able to provide continuous energy across this three-hour period to qualify for providing flexibility. If a resource meets this requirement, it should be considered to be available to provide flexibility. However, this should not be the only consideration. Consistent with the current “bucket” approach to Resource Adequacy, the CAISO should have limits on certain resources that can only provide three hours of ramping for a very few days in a month. It would not be beneficial to rely on those kinds of resources to reliably provide flexibility when their consistent availability is in question.

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.

NRG encourages the CAISO to consider and adopt validation rules that minimize the likelihood that the CAISO would reject what would otherwise be legitimate market bids. In the examples provided on page 18, NRG supports option (c) – creating an economic bid for 5 MW to cover the amount of flexible capacity provided, but not rejecting the self-schedule or the submitted market bid that did not cover the entire range of flexibility provided.

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.

The CAISO’s proposed approach for allowing opportunity costs to be included in default start-up and minimum load bids seems promising. The success of such an approach will depend on how difficult it will be to agree on what adders should be included in those default bids.

The opportunity cost should be structured in a way that would ration the amount of available use across the limitation period. Given that this is likely to involve forecasting LMPs for some future period (perhaps even an entire year), there should be an opportunity to adjust this opportunity cost adder as time progresses, so that the resource is not locked into an adder based on an initial forecast that may not prove accurate.

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.

Focusing on the nature of the must-offer obligation while deferring discussion about how use-limited resources can provide flexibility under the current paradigm, defined by a three-hour ramp, reinforces the need to ensure that resources must be able to provide an amount of energy no less than the amount the resource counts towards meeting flexibility requirements for at least a continuous three-hour period. The CAISO has proposed, for example, that hydro resources must produce a six-hour energy equivalent (June 13 Proposal at page 19). NRG concurs with such a requirement.

The requirement to submit economic bids across this significant time frame must be tempered by rational default bids that prevent a use-limited resource from being used up too early in the applicable limit period. The CAISO's proposed approach to allow for an opportunity cost adder to the resource's default bids holds promise for preventing use-limited resources from being prematurely exhausted.

NRG supports subjecting all resources that meet flexibility requirements to the same offering obligation. This may bring in question whether certain resources can provide flexibility services across the entire period proposed by the CAISO. For example, NRG questions whether Demand Response (DR) resources would have sufficient load variability, and, consequently, sufficient flexible response capability, at 5 AM.

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.

Despite NRG's concerns about whether the CAISO is appropriately designating capacity that the CAISO relies on to provide reliability, as agreed to in the principles underlying the 2011 settlement, NRG supports expanding the scope of the current Capacity Procurement Mechanism (CPM) to allow the CAISO to use this mechanism to procure flexibility in the case of a shortfall. NRG agrees with the CAISO that efforts to design a new backstop capacity procurement mechanism should begin soon, with the CPM mechanism set to expire in 2015. Ideally, parties should focus on the development of a centralized multi-year forward capacity procurement mechanism to address other ongoing problems with capacity procurement and not focus solely on a short-term backstop.

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

NRG supports option 2 for dealing with long-start resources (page 21 of the proposal).

While the CAISO acknowledges the need for new availability incentive mechanisms in light of the incorporation of flexibility requirements into the RA program, NRG urges the CAISO to move forward with applying the existing availability requirements of the Standard Capacity Product to the Demand Response that currently counts towards meeting RA requirements, as ordered by FERC back in 2009 (127 FERC ¶ 61,298 at paragraphs 57-58).