

Stakeholder Comments Template

**Flexible Resource Adequacy Criteria and Must-Offer Obligation
Straw Proposal, December 13, 2012**

Submitted by	Company	Date Submitted
Brian Theaker brian.theaker@nrgenergy.com 530-295-3305	NRG Energy, Inc. ("NRG")	January 10, 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 straw proposal dated December 13, 2012, and issues discussed during the stakeholder meeting on December 20, 2012. The ISO will also review comments filed with the CPUC in R.11-10-023¹ that respond to the questions asked on the Joint Parties' Proposal per the CPUC's December 4, 2012 Scoping Memo.² Therefore, the ISO has not included questions in this template that have already been asked by the CPUC. However, stakeholders that have not submitted comments to the CPUC may include comments regarding those questions at the end of this document.

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 fcp@caiso.com no later than the close of business on January 9, 2013.

1. The ISO has outlined the basic considerations and assumptions that it proposes (in conjunction with the "Joint Parties") for the flexible capacity needs assessment for 2104. Please provide any general comments/questions/clarifications regarding the needs assessment.

NRG questions why the CAISO used only half of the contingency reserve requirement (3.5% of the monthly peak load) in establishing the flexibility requirement. If the CAISO must deploy all of its contingency reserve prior to the end of the maximum daily ramp, it may not have sufficient flexibility to satisfy that ramp. The rationale for including only half the contingency reserve requirement as explained at the December 20 stakeholder

¹ The record for R.11-10-023 can be found at http://delaps1.cpuc.ca.gov/CPUCProceedingLookup/f?p=401:56:1171820792119401::NO:RP,57,RIR:P5,PROCEEDING_SELECT:R1110023.

² The Scoping Memo can be found at <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M031/K723/31723210.PDF>.

meeting is that the maximum three hour ramp will never coincide with the the need to dispatch operating reserve in response to a contingency. Procuring an amount of flexibility equal to half of the contingency reserve requirement introduces a stochastic element into what otherwise is a deterministic needs assessment. Unless the CAISO has analysis that demonstrates that, with a reasonable degree of confidence, it would be able to meet both the maximum ramping requirement and need for contingency dispatch, the default assumption should be that the full 7% contingency reserve is included in the flexibility requirement.

2. The ISO proposes to allocate flexible capacity procurement obligations to LRAs based on the LRAs contribution to forecasted monthly system peak. Is this the appropriate allocation methodology? What other allocation methodology could be considered?

As an interim measure, it is appropriate to allocate the flexibility requirement based on LSE contribution to forecasted monthly system peak. In reality, each LSE's portfolio of procured resources likely imposes different flexibility requirements, and, ultimately, assigning the flexibility requirement based on resource portfolio would better align with cost-causation principles and encourage more effective procurement. However, LSE-specific portfolio analysis is difficult and complicated and developing a method to do so will be controversial. So assigning flexibility requirement on load share is a reasonable interim approach.

3. The ISO proposes to include default tariff provisions for LRAs that do not set flexible capacity procurement obligations. The default level would be the flexible capacity requirement established in the ISO's flexible capacity assessment. Are there other considerations that should be included in the default provisions?

NRG supports this to address a potential "free rider" problem.

4. The ISO is proposing a year-ahead and 12 monthly showings demonstrating that an LSE has procured sufficient quantities of flexible capacity for each month, with 90 percent of the total flexible capacity obligation be shown in the year-ahead showing and 100 percent in the month-ahead showing. Are these the right levels? Are there any other attributes that should be included in these showings?

These showing requirements mirror the current RA showing requirements and seem appropriate. As NRG understands, the CAISO is not proposing to assign local flexibility obligations, however, as NRG understands, the CAISO has already struggled with having adequate flexibility in the SCE and SDG&E areas under certain conditions. Therefore NRG questions whether assuming that enforcing a flexibility obligation only on a system level will be sufficient. The CAISO should provide some empirical analysis that considers whether a system flexibility obligation is reasonably likely to address local flexibility needs. To the extent flexibility obligations are enforced on local levels, the

showing requirements for local flexibility should be consistent with those in the RA program (100 percent year-ahead). Additionally, system flexible capacity should be eligible to replace local flexible capacity that is unavailable due to a planned outage approved by the CAISO (just as system capacity can replace local capacity on an approved outage today).

5. The ISO is proposing new backstop authority in the system is deficient in the total amount of flexible capacity required. Are the triggers for issuing a backstop procurement designation sufficient? What else should the ISO consider?

Again, NRG questions whether flexibility can be assured on a system level or whether local areas are flexibility constrained. A backstop designation could be triggered by either a system or local deficiency.

6. The ISO is proposing to use the current CPM rate in procuring backstop flexible capacity. Are there additional considerations in the use of this rate?

This is an appropriate rate for backstop procurement.

7. The ISO proposes to allocate costs for backstop procurement designations to all LSEs that are deficient in their flexible capacity showings. Is cost allocation for backstop correct? If not, what other options should be considered?

Assuming flexibility can be assured only on a system level, allocating flexibility backstop procurement costs to deficient LSEs pro rata to the amount of their flexibility deficiency is appropriate. Again, if flexibility requirements are determined locally, a different cost allocation mechanism will be needed.

8. Are the ISO's proposed criteria for determining selecting resources to procure for any flexible backstop procurement designation correct?

The CAISO's proposed criteria and order of application seem appropriate for a regime in which the flexibility and RA attributes cannot be unbundled.

9. The ISO has put forth a proposed counting convention for hydro resources. PG&E presented an alternative approach. Please comment on the relative merits of each proposal? Does your organization have any additional suggestions to enhance either proposal?

The CAISO uses conservative (1-in-5 dry year) hydro conditions to establish hydro Net Qualifying Capacity (NQC). The CAISO proposes to use average hydro conditions over the past five years to establish the amount of flexibility hydro resources can provide. It is not consistent to use conservative assumptions to

establish NQC, but use other assumptions to determine the flexibility contribution. NRG hopes the CAISO will use consider using consistent, conservative assumptions to establish the capacity and flexibility contributions from hydro resources or provide a more in-depth explanation of the need to use different assumptions.

10. Beyond the three issues identified by the ISO, are there any other issues the ISO needs to consider in Stage Two of this stakeholder initiative and why?

NRG does not yet understand why the CAISO is seeking to develop a rate other than the CPM rate for backstop procurement of flexible resources, especially because the CAISO has proposed to bundle the flexibility and RA attributes. The process to develop the CPM rate was long and difficult, and the CPM rate is the result of settlement. NRG expects that trying to develop an alternate backstop rate for flexibility will be equally long and contentious.

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

Yes.

NRG supports the proposed interim approach, targeted at developing flexibility requirements to be implemented for the 2014 RA procurement year. Even if the flexibility requirement is not likely to bind soon, it will be better to implement this program for 2014 and for RA buyers and sellers and the CAISO to gain some experience with this requirement rather than waiting until it is possible or likely for the flexibility constraint to bind. NRG agrees that a permanent, durable program for incorporating flexibility will require much additional consideration and design by all parties, but supports moving forward with an interim approach now.

NRG is greatly concerned by one aspect of the proposal – that use-limited resources that exceed their limits in a given month and do not provide substitute resources will be assessed Standard Capacity Product non-availability penalties. In NRG's experience, it is very difficult to ration a use-limited resource's use across a year or even a month such that the resource will be guaranteed to be available at all times. A resource that submits high-priced energy bids to ration its use may be accused of economic withholding. To the extent bids are mitigated, the use of cost-based default energy bids may further impair a use-limited resource's ability to reasonably ration available starts and operating hours. Further, regardless of how a resource bids, the CAISO, not the resource owner, determines how and how often a resource will run. While NRG understands the CAISO does not intend to initially subject resources that satisfy flexibility requirements to a must-offer obligation, if such resources are also providing RA capacity they will be subject to a must-offer obligation. The topic of use-limited resources warrants much more discussion and consideration.

NRG supports the CAISO’s simplified interim approach to incorporating flexibility into RA procurement requirements, and supports the differentiated capacity approach to assessing individual resources’ contributions to providing flexibility, but the interim approach hinges on a critical element – the 90-minute start-up time as to when a resource’s flexibility contribution is determined to be its entire capacity or whether its flexibility contribution excludes its Pmin capacity amount and is ramp-constrained. NRG would appreciate further discussion, and, if available, analysis, that supports selecting 90 minutes as the threshold value.

Finally, NRG looks forward to more discussion about “bundling” the flexibility attribute with the RA attribute, what incentives or disincentives bundling may create for both RA buyers and sellers, and the impact of bundling or not bundling on existing RA contracts.

12. Please feel free to respond to any comments already submitted to the CPUC in R.11-10-023 as they apply to the ISO straw proposal or the Joint Parties proposal.