



**Comments on the Proposal for
Flexible Resource Adequacy Criteria and Must-Offer Obligation
Department of Market Monitoring
January 14, 2013**

The Department of Market Monitoring (DMM) appreciates the opportunity to provide comments on the Flexible Resource Adequacy Criteria and Must-Offer Obligation proposal posted on December 13, 2013. DMM supports the ISO's effort to ensure the efficient and reliable operation of the grid as the state moves toward a 33% renewable goal and stricter environmental standards.

The ISO anticipates the California Public Utility Commission (CPUC) will enhance the Resource Adequacy (RA) program by establishing a flexible capacity procurement requirement for the 2014 RA requirement year. This will be a separate Flexible Resource Adequacy (FRA) requirement imposed by the CPUC on Load Serving Entities (LSEs) under their jurisdiction and imposed by the CAISO on non-CPUC jurisdictional LRAs. At this point it appears ISO's responsibility and function will be to (1) define one or more system level flexible capacity requirements and allocation; (2) create an accounting methodology that calculates an individual resource's flexible capacity; (3) develop must-offer obligation requirements for FRA resources, and finally; (4) create flexible backstop procurement triggers and resource selection criteria.

Given the large scope of the ultimate goal, the first stage proposes to both narrow the options within function (1) and (2), and to put off function (3) until a later phase. Although DMM contends that all 4 functions will eventually be necessary to ensure an efficient and competitive flexible market, at this time we limit our comments to the defined scope of the proposal. Fundamentally we believe that even a design with limited scope should be aligned with the following principles:

- Any system flexible requirement implemented should at a minimum ensure that both projected 3-hour ramping needs and 5-minute ramping needs can be met through FRA resources. If the ISO continues to use a single dispatchability metric based on forecasted 3-hour ramping needs, DMM encourages the ISO to provide an internal analysis that demonstrates the likelihood that resources procured to meet the 3-hour requirement will also meet the ISO forecasted monthly peak 5-minute requirement.
- There is a temporal lag between the FRA implementation incentive for flexible resources to remain or come into the grid and when market participants can respond to this incentive. Therefore given

the projected need for flexible resources in the intermediate term, it is important to create a structure that rewards fast, flexible resources that will be needed as soon as possible.

- Any accounting methodology should distinguish higher quality flexible resources from lower quality ones. While the ISO has expressed the need for a simple accounting methodology that calculates an individual resource's flexible capacity, there is still room to adjust the methodology to better capture the difference between resource's flexibility attributes. It would be useful to see a comparison of representative resource's effective flexible capacity under various simple methodologies.

Below we respond to the questions outlined in the ISO stakeholder template.

(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.

It would be helpful to see (1) a 5-minute needs assessment and (2) more details on the current flexible capabilities of RA resources.

(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?

It seems appropriate to use flexibility metrics within the cost allocation, as supported by the ISO's cost causation principles. An alternative could be to use the contribution to the system peak during the concurrent forecasted monthly flexible capacity needs peak. Specifically, the cost allocation could be derived from the contribution to the system peak concurrent with the hourly system peak within the forecasted monthly 3-hour ramping peak.

(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?

This seems appropriate and at this time we offer no other considerations to be included.

(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 levels in part should be determined by how the ISO decides to treat hydro resources. If the expected variation between monthly and annual estimates of FRA hydro changes it may be prudent to also change the annual and monthly showing obligation requirement ratio.

(5) The ISO is proposing new backstop authority if 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?

DMM believes the backstop authority to be appropriate. We would like more details on how a CPM event and exceptional dispatch would specifically trigger flexible capacity backstop procurement. Additionally, we support the principles outlined in the proposal regarding how a flexible backstop designation would occur in the case where the resource is already an RA resource or under a generic CPM designation. We would appreciate further clarification on the relationship and interaction between the generic CPM and the flexible CPM (fCPM) as outlined in the next section.

(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 rate does not seem appropriate as it could lead to double payment if a resource is needed for flexible capacity and generic capacity as pointed out by the proposal. We encourage the ISO to further make clear the relationship between CPM triggers and fCPM triggers. We believe the ISO is therefore suggesting something like the tiered payment structure below:

ISO Need	Resource Contract Type	Flexible CPM payment
Generic capacity and flexible capacity	No RA contract, no CPM	current CPM + fCPM (B) payment
Generic capacity and flexible capacity	Generic RA contract	fCPM (A) payment
Generic capacity and flexible capacity	CPM contract	fCPM (B) payment
Flexible capacity only	No RA contract, no CPM	fCPM (A) payment

The current CPM payment includes both generic capacity and flexible capacity as when it was developed these markets were not separate and the price can be considered an “all-in” price. In contrast to this, all new RA-contracts that are solely for generic capacity will be a “generic-only” price. Therefore, assuming the CPM price is not renegotiated to solely reflect generic energy costs, a resource that has a generic CPM should be treated differently than a generic RA resource when receiving an fCPM designation.

(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

This seems appropriate. We would request further clarification on cost allocation in the case when the backstop designation is employed and no LSE's are deficient.

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

DMM has no comment on this at this time.

(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?

DMM agrees with PG&E that the ISO proposed FRA requirements for hydro are overly restrictive and would likely prevent a significant amount of hydro use-limited resources that could be flexible from being FRA resources. The proposed use-limited resource requirements seem reasonable, although from discussions with the ISO it appears that the optimization may need to be modified to ensure that the use-limited hours could be modified from the DAM award and through a longer-term optimization preserved for peak hours if needed.

Currently use-limited resources are bid-into and optimized in the DAM and then any additional MWs not picked up in the DA market are available during those hours in the RTM. For example, if a resource has 1,000 MW over 8 hours and are only awarded for 100 MW an hour, then the additional 200 MW are available in the RTM. At this time, it is our understanding, that the 200 MW if accompanied by a low market bid could be entirely used within the first hours. This potentially could lead to over-counting the flexible availability of hydro resources during the forecasted 3-hour ramping peak.

There is also potential for withholding under the current optimization. A market participant with multiple resources could bid the use-limited resources into the market at a low price during the morning hours. This would cause the flexibility to be used up in the first 6 hours and therefore be unavailable in the afternoon. The remaining resources would benefit from the potentially higher

flexible ramping and energy price that arose from significant amounts of flexible resources being withdrawn from the market.

(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?

As noted in our introduction, we believe both the 3-hour ramping and 5-minute ramping needs should be contained within the requirement. We ask the ISO in Stage Two to link explicitly flexible procurement to the flexible product. This will ensure not only that the correct resources are procured in the FRA, but also it will help limit future market power in flexible energy in the spot market.

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

The counting methodology for MSG resources appears unnecessarily restrictive. We encourage the ISO in the next draft to develop an alternative methodology that captures the significant flexibility MSGs currently provide on the grid.