



# Memorandum

**To:** ISO Board of Governors

**From:** Benjamin F. Hobbs, Chair, ISO Market Surveillance Committee

**Date:** March 17, 2016

**Re:** **Briefing on MSC activities from January 27 to March 14, 2016**

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***This memorandum does not require Board action.***

Over the time period covered by this memorandum, members of the Market Surveillance Committee (MSC) held a general session meeting of the MSC on February 11, 2016, which is discussed in the next section. The MSC also drafted a combined opinion on the ISO's commitment cost enhancements phase 3 initiative and the bidding rules enhancement proposal, which is summarized at the end of this memo. The MSC adopted the opinion during a public call on March 14, 2016. Finally, the MSC will be discussing several ISO initiatives with ISO staff and stakeholders at the next general session meeting to be held in Folsom on April 8, 2016.

## **February 11, 2016 MSC General Session Meeting**

Five topics were addressed in the meeting, each being the subject of ISO staff presentations and subsequent MSC and stakeholder discussion.

1. Implications of contingency modeling enhancements for congestion revenue rights
2. Bidding rules enhancements
3. Commitment costs enhancements, phase 3
4. Requirement definition for the flexible ramping product
5. Flexible resource adequacy and must offer obligation, phase 2

The first topic concerned the potential for contingency modeling enhancements in the ISO spot markets to exacerbate revenue inadequacy problems experienced in the congestion revenue rights system. Two ISO presentations were made, beginning with a presentation on the status of revenue inadequacy problems by Bradford Cooper, Manager, Market Design and Regulatory Policy. These problems arise because of differences in topology and transmission limits between the transmission rights allocation system and the ISO's day-ahead market, as well as the inclusion of nomogram constraints in the latter that are not considered in the former. The contingency modeling enhancements would introduce new constraints into the ISO's

market. The second presentation, made by Perry Servedio, ISO Senior Market Design & Regulatory Policy Developer, reviewed several possible solutions to the potential revenue inadequacy problems that could arise from the contingency modeling enhancements. Three basic solutions, and several variants of each, were illustrated by simple numerical examples. This stimulated discussion among the stakeholders, ISO staff, and MSC members about the relative advantages of each of the proposals in terms of transparency and simplicity of the markets, computation, and how well they address the basic problem. The MSC anticipates writing an opinion about this initiative at an appropriate time.

The next two topics discussed concerned two closely related proposals that are before the ISO Governing Board during their March 2016 meeting. These proposals are the subject of the draft opinion summarized at the end of this memo. The discussion of the first of these two related proposals, the bidding rules enhancements initiative, began with a presentation by Mr. Cooper, in which he reviewed the principal features of the proposal. The discussion of the second of the two related proposals, the commitment costs enhancements phase 3 initiative, started with Ms. Kallie Wells, Market and Infrastructure Policy group team member at the ISO, making a presentation in which she gave an overview of that proposal. There was significant discussion of the proposed procedures for calculating opportunity costs of use limitations, especially whether revenues and/or penalties in the resource adequacy market should be considered in those calculations.

The flexible ramping product initiative has been the subject of many discussions at MSC meetings over the last few years, and was approved by the Governing Board in its February meeting. At this MSC meeting, the focus of this, the fourth topic on the agenda, was on the mechanics and assumptions of the procedure that is proposed for calculating the target amount of product to be acquired in the spot markets. Mr. Warren Katzenstein, ISO Lead Engineering Specialist, Market Quality and Renewable Integration, presented a review of how the ISO has estimated flexible ramping requirements in the past, along with the procedures that are proposed for implementation once the flexible ramping product is in place.

The fifth and final agenda topic was phase 2 of the flexible resource adequacy and must offer obligation, which is an ISO initiative that is in its early stages of development. Dr. Karl Meeusen, ISO Senior Advisor for Infrastructure Policy, discussed three issues to be addressed by the initiative:

1. Downward flexible capacity needs, and the ISO's plans to address them;
2. Requirements and offer obligations for flexible capacity from intertie resources;  
and
3. Treatment of pumped hydro in the flexible resource adequacy framework.

The second issue was of particular interest to the MSC because of the potential of intertie resources to help meet the ISO's need for flexibility, and the conceptual issues

involved in defining offer obligations for such resources.

## **Opinion on Bidding Rules Enhancements and Commitment Cost Enhancements Phase 2**

Over the time period covered by this memo, the MSC has been developing an opinion on these two initiatives which was adopted at the MSC's March 14, 2016 teleconference meeting. The final opinion will be submitted to the Governing Board of the ISO during its March meeting. Below are brief summaries of our conclusions from the posted final opinion.

### ***Use Limitation Definitions***

- We support the limitation to the environmental or design limitations for new resources or resources provided under newly signed contracts, although we think the ISO should show some flexibility in its interpretation of such limitations as the distinction between a contractual limitation and a physical or permit limitation can be subtle.
- We support allowing units operating under existing contracts approved by the California Public Utilities Commission to include negotiated use limitations in the calculation of opportunity costs through a transition period.

### ***Opportunity Cost Calculations***

- As we have stated in previous opinions, we strongly support the inclusion of opportunity costs in commitment cost and energy bid caps to replace use plans and ad hoc limits on resource availability. This inclusion will maximize the availability of resources to the market at the times they are most needed and will maximize the flexibility that the system operators have to determine when those resources are committed and used.
- The opportunity cost calculation procedure proposed by the ISO has necessarily made some simplifications with the objective of ensuring that timely calculations and updates are feasible. Improvements to the proposed calculation procedures are possible. However, it is crucial to implement opportunity cost-based caps as soon as practicable to ensure that operators have access to flexible resources when needed. Therefore, we believe that while advance testing of the methodology is needed, the opportunity cost calculation procedure should be implemented and then later improved as desirable and feasible adjustments to the procedure are identified. We support the ISO's proposal to evaluate and improve the procedure's performance as experience accumulates.
- Resources with a use-limitation should be encouraged to ration the use of their limited starts, run hours or energy to the times when they are most valued, and if

they are unavailable in a given month when they are committed to providing resource adequacy (RA), they should have a strong incentive to arrange replacement capacity. Thus, if the resource has been bidding commitment costs below the ISO opportunity cost-based cap, and if the resource then uses up enough of the use limitation such they do not qualify to provide RA at a later time, they should be exposed to penalties under the resource adequacy availability incentive mechanism (RAAIM), unless arrangements for substitute capacity are made. If they bid consistent with the opportunity cost-based cap calculated by the ISO, but errors in the ISO's initial opportunity cost calculation cause the resource to be started too often, then we believe that there should be a mechanism to correct the overuse before the load serving entity (LSE) becomes subject to RAAIM penalties as a result of possible flaws in the ISO calculations that prematurely used up resource starts.

We understand that the ISO proposes to address this possibility by allow scheduling coordinators to fall back to using short-term outage cards to limit resource use if the ISO opportunity cost proves too low to prevent overuse of the resource. This option will provide a balance among the needs to incent the resource to find replacement capacity, to follow ISO operating instructions, and to be able to use the resource to provide RA during the months that the resource is most needed in the event that imperfections in the opportunity cost calculations would cause the resource to use up too many of its limited starts, run hours, or MWh while following ISO instructions. Therefore, if this situation is observed to occur often, we recommend that that the RAAIM system be modified so that a portion but not all of the RAAIM penalty be waived if a resource no longer qualifies for RA because it has used up all of its use-limitation while bidding its full opportunity costs, as estimated by the ISO.

### ***After the Fact Filing for Cost Recovery***

- The ISO's proposal for after the fact cost recovery is an improvement on the current situation and would be an appropriate policy if the mechanism will very rarely be applied. It will not be an adequate policy if it turns out that market participants need to rely upon it to recover their costs in other than highly extraordinary circumstances.

### ***Mitigation of Market Power***

- One way for the ISO to reduce the potential for situations in which market participants need to rely on after the fact cost recovery would be to develop a mechanism to identify units potentially committed to manage congestion on local transmission constraints. This could then limit the application of commitment cost mitigation to such units and other resources committed out of market by ISO operators on a non-market basis.