



Memorandum

To: ISO Board of Governors

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

Date: October 28, 2015

Re: **Briefing on MSC activities from September 3, 2015 to October 20, 2015**

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 October 20, 2015, which is summarized in the next section. Members of the MSC have also interacted informally with staff and stakeholders on several ISO initiatives and market issues. These initiatives and issues include the following:

1. Flexible ramping product design and the statistical estimation of product requirements.
2. The calculation opportunity costs for generating units with daily constraints on the number of starts, energy generation, or operating hours, which is part of the commitment costs enhancements phase 3 initiative.
3. Supply offers on the interties during the fifteen minute market.
4. Reliability services initiative, phase 2.

The MSC anticipates submitting opinions to the Board of Governors on one or more of these topics in the near future. The MSC will also be reviewing some of these issues along with other ISO initiatives at the next general session meeting to be held in Folsom either in December 2015 or February 2016.

October 20, 2015 MSC General Session Meeting

There were four topics that were the subject of ISO staff presentations and subsequent MSC and stakeholder discussion.

First, Mr. Chris Devon, Senior Infrastructure Policy Developer at the ISO, gave a presentation on the reactive power requirements and financial compensation initiative. The presentation and subsequent discussion focused on the merits of payments for provision of reactive power in the ISO markets as well as payments for reactive power capability. Also reviewed was the ISO's proposal for a new exceptional dispatch category in which commitment and energy costs associated with exceptional dispatches

would be reimbursable. Stakeholders and MSC members discussed at some length the benefits and costs of a uniform requirement for asynchronous generators (primarily renewable) to provide reactive power capability.

Second, Dr. Karl Meeusen, Market Design and Regulatory Policy Lead at the ISO, presented a summary of three out of seven elements of phase 2 of the reliability services initiative, and responded to MSC and stakeholder questions on that topic. The three elements included:

1. substitution rules for planned outages of flexible capacity resources;
2. the addition of local capacity designation to resource adequacy showings, along with allowing like-for-like substitution of flexible capacity on forced outage; and
3. application of the resource adequacy availability incentive mechanism to combination flexible capacity resources, which presently are exempt from that mechanism.

On the third topic, the proposed flexible ramping product, Mr. Don Tretheway, Senior Advisor for Market and Regulatory Policy at the ISO, made a presentation on the proposal to divide the product settlement into two parts. The first part would pay or charge resources and load for forecast movements that decreased or increased, respectively, the need for the flexible ramping product. The second part is a monthly allocation of the ISO's expense for the portion of the product that is needed to cover uncertainty around forecasted ramps. This expense would be allocated to market participants whose actual output or consumption differ from the forecast level. The proposal would provide a more complete set of incentives for market participants to lessen the need for ramping capability.

The final topic discussed at the meeting was the opportunity cost methodology to be implemented as part of the commitment costs enhancement phase 3 initiative. Ms. Kallie Wells, Market and Infrastructure Policy group team member at the ISO, gave a presentation on the need for a methodology to calculate opportunity costs for generators that have constraints on start-ups, hours of operation, and/or energy output. The methodology will involve optimizing each generator's allocation of starts, operating hours, and/or energy over an appropriate time horizon under a set of projected 15 minute prices. The procedure would obtain the marginal opportunity cost of each by calculating how profitability is affected by reducing the number available of each. In the case of daily constraints, however, it is likely to be more effective to use price and schedule information from the day-ahead market, which would be the subject of a later, separate initiative. Ms. Wells also discussed how prices of electricity futures could be used to modify the input 15 minute prices to reflect market expectations about the effect of load conditions, hydro conditions, outages, and other factors other than natural gas prices. This modification is termed the "future power price conversion factor."

The MSC intends to address some or all of these initiatives in future formal opinions to be submitted to the Board of Governors.