Memorandum

To: ISO Board of Governors

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

Date: May 9, 2012

Re: **Briefing on MSC Activities from March 13 to May 7, 2012**

This memorandum does not require Board action.

Over the period covered by this memorandum, the MSC drafted a formal opinion on two ISO proposals. The opinion concerned the ISO proposals on Bid Cost Recovery Mitigation Measures (tentatively planned to be submitted for the July Board meeting) and Commitment Costs Refinement (to be submitted to the May Board Meeting), and was approved in a public teleconference meeting of the MSC on May 7, 2012. These two proposals were previously discussed during the public MSC meeting in Folsom on March 30, 2012, as well as in staff and stakeholder telephone meetings on those proposals. The March meeting was also devoted to discussing two other ISO initiatives: Flexible Ramping Product and Cost Allocation and Intertie Pricing and Settlement. Finally, the MSC has been working with ISO staff on the development of proposals addressing generation capacity and retirement issues, including forward procurement of flexible capacity.

1. Bid Cost Recovery Mitigation Measures

Earlier versions of this proposal were discussed during MSC meetings in 2011. The March 30 MSC meeting featured a presentation by Gillian Biedler of the ISO staff, and active discussions by MSC members and the stakeholder audience.

The proposal is part of the ISO's initiative to provide incentives for increased flexibility in real-time markets to facilitate integration of variable renewable power sources into the ISO markets. As part of that initiative, the ISO Board approved two elements of Phase I of the Renewable Integration: Market and Product Review at the December 2011 board meeting. These elements included lowering of the bid floor and revision of the bid cost recovery mechanism (BCR) to allow for separate calculation of BCR in the day-ahead and real-time markets. Among other features, the proposal included a feature to detect and disqualify persistent uninstructed energy deviations from BCR.

The MSC submitted an opinion to the Board in December offering general support for those proposals. In the opinion, the MSC cautioned that the performance of the revised BCR mechanism would depend on specific parameter choices, and that the system should be subjected to extensive testing before parameter values are selected and the system is implemented.

In the April 6 draft final BCR mitigation proposal, the ISO presented details of the mechanism, including parameters to be used in its implementation. In the opinion adopted on May 7, we expressed our support for its major features, including the modified day-ahead metered energy adjustment factor; the real-time performance metric; and the persistent uninstructed energy (PUIE) check.

However, the MSC recommended in its opinion that further examination be undertaken to determine the particular threshold values to be used to determine whether persistent uninstructed energy would be disqualified. In particular, although the analysis of historical data in the draft BCR proposal is very helpful in understanding the potential frequency of mitigation, it is not presently clear whether the instances in which generators would have had bid costs disqualified actually represent abuse or not. Nor is it clear whether or not significant cases of abuse might pass the proposed threshold and avoid mitigation. The MSC also suggested that the criteria used to determine whether mitigation take place also include consideration of a total dollar or dollar/MW of capacity threshold.

2. Commitment Costs Refinement

Part of the March 30 MSC meeting was devoted to presentations on this topic by Gillian Biedler of the ISO staff and MSC chair Ben Hobbs, as well as lively participation by the stakeholder audience and other MSC members.

This proposal was the subject of the second half of the MSC opinion that was adopted on May 7. In there, the MSC expressed its support for the recovery of legitimate and verifiable start-up (SU) and minimum-load (ML) costs when they are incurred as part of the least-cost operation of the ISO market. These issues were considered in previous MSC opinions from 2009 and 2010. Our previous recommendations attempted to balance the need for responsiveness to changing fuel and other costs, while limiting opportunities to take advantage of local market power to recover inflated as-bid levels of these costs. We expressed explicit support for accounting not only for fuel cost portion of SU and ML costs, but also the increased wear-and-tear costs to the generation unit due to the increased number of starts and the opportunity cost of a start due to maintenance, contract and environmental restrictions on the total annual number of starts or run-hours. The MSC supports the ISO’s new commitment cost proposal as a step in the right direction on this issue.

The present proposal offers an improved methodology for estimating certain components of SU and ML costs that are not presently included in proxy bid and registered cost calculations. The MSC expressed its strong support for that improved methodology. In particular, the proposal would allow for inclusion of grid management charges, CO_2 costs, and maintenance costs in SU and ML proxy bids, which we support, as well as recovery of operational flow order costs. The MSC also supported the ISO's proposal to lower the cap on registered bids to 150% of the proxy bid. The MSC furthermore recommended that the cap be lowered further to 125% a year later should further study of costs indicate that it is very unlikely that actual costs for the great major ity of units could exceed that value.

The opinion also identified two further enhancements to the commitment costs proposal that MSC believes could improve the efficiency of system operations by allowing bids to more fully reflect costs. Their complexity means that it is not practical to implement these enhancements in the commitment costs proposal at this time. Therefore, the MSC recommended that the ISO initiate, at an appropriate time, a stakeholder process that would consider those enhancements. The first enhancement whose consideration was recommended concerns SU and ML opportunity costs due to limited starts or run-hours. These can be significant for some units, but are not provided for in this proposal. At previous MSC meetings addressing the topic in 2009 and 2010, such costs were mentioned as important, and the MSC had previously recommended consideration of their inclusion. That recommendation is reiterated in the May 7 opinion.

Second, the MSC recommended in its opinion that consideration be given in a future stakeholder process for developing a proposal to include operational flow order (OFO) costs in SU and ML bids used in the real-time market software. If possible, this is much preferable to recovery based upon after-the-fact calculations because it is important for market efficiency that unit commitment decisions be based on all known costs. The opinion recommended that a study be undertaken of the potential magnitude of OFO costs under alternative market conditions with the objective of determining whether they could be large enough to be relevant to commitment decisions, and if significant efficiency improvements could then result from including them in SU and ML bids.

A final recommendation was that the ISO study possibilities for more tailored mitigation of market power in commitment costs. This would involve relaxing constraints on allowable bids where markets are likely to be highly contested, while having tighter constraints where exceptional dispatch, load pocket conditions, or other constraints limit contestability. The MSC was not able to identify a transparent, readily implemented, and defensible basis for such a refined system, and so it recommended that such tailored mitigation not be included in the present ISO proposal, but that it be studied for possible implementation in future BCR revisions.

3. Flexible Ramping Pricing and Cost Allocation

In addition to the two proposals that were the subject of the May 7 MSC opinion, two ISO proposals under development were also discussed at the March 30 MSC meeting. The first is the Flexible Ramping Pricing and Cost Allocation proposal. This is a complicated issue with many technical details, a number of which were the focus of discussion at the meeting. An example of such an issue is the determination of how much flexible ramping capability to procure day-ahead versus in real-time. A presentation at the meeting by ISO staff members Lin Xu and Don Tretheway lead to discussion of the proposals features by the MSC members and audience. MSC members also participated in phone and in-person meetings with MSC staff as well as in a stakeholder call, and provided extensive informal comments on the draft proposal. The MSC anticipates providing more feedback and suggestions in the coming weeks as the proposal is refined.

The MSC will issue an opinion on this topic at the time that a proposal is submitted to the Board.

4. Intertie Pricing and Settlement

At the March 30 meeting, Karl Meeusen of the ISO staff and MSC member Scott Harvey made presentations, followed by discussions by the MSC members and audience. A difficult issue that received significant attention was the pricing implications of two intertie constraints, one for all transactions and the other for just physical flows. Possible pricing anomalies and their potential implications were discussed.

MSC member Harvey participated in the April 30, 2012 stakeholder call on this topic, and the MSC continues to provide comments on the developing proposal. The MSC plans on issuing an opinion on this topic at the time that a proposal is submitted to the Board.

5. Generation Capacity

The set of issues that surround resource adequacy, generation retirements, and forward procurement of capacity with particular characteristics (especially flexibility) has been the subject of MSC member discussions with ISO staff. The MSC will continue to follow and provide comments on the issue. It is anticipated that the topic will be the subject of a MSC public teleconference in late May as well as, ultimately, a MSC opinion.