

# Memorandum

**To:** ISO Board of Governors

**From:** Frank A. Wolak, Chairman, ISO Market Surveillance Committee

**Date:** December 7, 2010

**Re:** *MSC Activities from October 15, 2010 to December 7, 2010*

---

*This memorandum does not require Board action.*

The Market Surveillance Committee held a meeting on November 19, 2010. Four topics were discussed by the MSC, staff from the Department of Market Monitoring (DMM) and Market and Infrastructure Development (M&ID), and stakeholders. For a number of these topics, the MSC is likely to be asked to issue a formal opinion in conjunction with market design changes under consideration by the California Independent System Operator Corporation.

## ***Regulation Energy Management***

Don Tretheway of M&ID gave a presentation on the ISO's current proposal for allowing battery storage technologies to provide Regulation Up (RegUp) and Regulation Down (RegDown). An important issue addressed in the presentation is how a battery storage technology can provide continuous amounts of RegUp or RegDown in spite of the fact that the battery can only store a finite amount of energy. Mr. Tretheway presented several examples of how these issues were addressed by the proposal. Ben Hobbs of the MSC presented a detailed example of how the proposal would work. This topic attracted substantial comment and discussion among MSC members, ISO staff, and stakeholders.

## ***Measures to Address Self-Scheduling***

Jeff McDonald of DMM provided a presentation summarizing an analysis by DMM relating to the causes and impacts of high levels of generating unit self-scheduling. During some off-peak hours, high levels of self-scheduled generation capacity have made it difficult for the ISO to maintain system balance in real-time by only relying on market-based bids, without having to resort to reducing self-schedules. When self-schedules are reduced, this triggers administratively set penalty parameters that cause negative energy prices below the -\$30/MWh energy bid floor. Frank Wolak of the MSC gave a presentation outlining his perspective on the causes of the high levels of self-scheduling and provided some suggested market rules changes to reduce the

magnitude of self-scheduling. This topic also attracted significant stakeholder discussion with ISO staff and the MSC.

### ***Energy Bid Floor***

Cindy Hinman of M&ID gave a presentation on the question of whether the ISO should lower the energy bid floor. Frank Wolak of the MSC then laid out the major factors to consider in setting the level of energy bid and offer caps. He offered a possible procedure for setting the bid cap and bid floor. A lively stakeholder discussion followed these presentations and a number of the issues raised in the previous discussion on self-scheduling were also revisited.

### ***Participating Intermittent Resource Program***

Gillian Biedler of M&ID gave a presentation of the ISO's participating intermittent resource program (PIRP). She summarized the operational challenges for the ISO that this program has created and why it may not be possible to continue the program in its current form given the state's ambitious renewable energy goals. Frank Wolak of the MSC then discussed in more detail a number of the incentives for intermittent resource owner behavior created by the PIRP program. This presentation also questioned the long-term viability of the PIRP program and provided general recommendations for providing subsidies to intermittent resources in a manner that minimizes the adverse impacts on short-term market performance.

### ***Thank you to Chairman Mason Willrich***

The MSC would like to thank Mason Willrich for his many years of service as the Chairman of the ISO Board. It is our understanding that the end of his term is imminent and he is not seeking reappointment. We have greatly enjoyed our interactions with him during his time as Chairman and we wish him the best in his future endeavors.