

Memorandum

To: Board of Governors
From: Frank A. Wolak, Chairman, ISO Market Surveillance Committee
Date: August 29, 2007
Re: *Market Surveillance Committee Activities from June 22, 2007 to August 10, 2007*

This is only a status report. No Board action is requested.

The Market Surveillance Committee (MSC) held a joint MSC/Stakeholder Meeting at the California ISO in Folsom on August 10, 2007. This memo summarizes the meeting.

Frank Wolak called the meeting to order at 9:15 am. **Benjamin Hobbs** was not present at the start of meeting because of a flight delay, but he joined the meeting during the afternoon. Wolak asked for public comment. **Jeff Nelson** of Southern California Edison, **Brett Franklin** of the Electricity Oversight Board, and **Bishu Chatterjee** of the California Public Utilities Commission all commented on topics to be discussed at the meeting.

Convergence Bidding

The first half of the meeting was devoted to a discussion of convergence bidding. The MSC heard presentations from CAISO staff and several market participants. One of the most controversial design issues is the granularity of convergence bidding. Suppliers and traders generally favor allowing virtual bidding at individual nodes while the large load-serving entities (LSEs) prefer limiting it to the LAP. A compromise solution advocated by the MSC is to allow virtual bidding at a nodal level but limit the trading quantities that any single market participant can submit at each node. These nodal bid restrictions are referred to as position limits. The CAISO Department of Market Monitoring (DMM) presented a number of issues that they felt would need to be addressed if virtual bidding were allowed at the node. These include: (1) the need to explicitly identify convergence bids versus physical bids, (2) the ability to re-run the day-ahead market with and without convergence bids, (3) the ability to re-run settlement outcomes if significant differences in charges (for example, Congestion Revenue Rights (CRR) payments) exist between the two market outcomes. The DMM emphasized the greater ongoing market monitoring and up-front design challenges of allowing nodal convergence bidding.

MSC members suggested a starting point of 10 percent of the peak demand or peak generation at the node as the starting point for these position limits, but they noted that this percentage could be increased as the CAISO and market participants gained more experience with nodal convergence bidding. One MSC member stated that the choice of position limits would benefit from an analysis of bid and market outcome data from several of the eastern markets. He recommended that the CAISO obtain bid and market outcome data from several of the eastern markets to perform this analysis. This MSC member also recommended against setting the \$/MWh charge for accepted convergence bids too high. He noted that the size of the \$/MWh charge for convergence bids limits the magnitude of price convergence that can occur between the day-ahead and real-time markets. The lower the

\$/MWh charge for accepted convergence bids, the smaller the average difference will be between day-ahead and real-time prices. For this reason, he urged the CAISO to keep this trading charge smaller than the \$/MWh charge for physical demand and supply bids. Another important issue raised during the discussion is the importance of clear rules from the California Public Utilities Commission (CPUC) on how utilities they regulate can use convergence bidding.

Scarcity Pricing

Bishu Chatterjee of the CPUC compared the implementation of scarcity pricing mechanisms across U.S. ISOs. He then discussed the role of scarcity pricing in an energy-only versus capacity market environment. Chatterjee concluded by stating that his presentation did not represent the official position of the CPUC.

The discussion among stakeholders and MSC members following Chatterjee's presentation emphasized the need to make the CPUC's administrative demand response programs compatible with the CAISO's ancillary services and energy markets. Currently a large fraction of load reductions in the CAISO control area come from administrative demand reduction programs that can only be called upon when the CAISO declares a Stage 2 emergency. These programs can lead to real-time market prices that are inconsistent with scarcity conditions despite the fact that the CAISO operators called on interruptible load.

Several stakeholders argued that to be compatible with scarcity pricing as it exists in the markets for other products, loads should be curtailed based on the price at which they are willing to reduce their actual consumption relative to their day-ahead schedule. For example, if a load is willing to curtail consumption at a price of \$1500/MWh, then this load should be able to offer its willingness to curtail into the real-time market. If this offer is accepted, the market price should be set at \$1500/MWh, which is reflecting the fact that this bid was accepted in the real-time energy market. Interruptible loads should also be able to submit their willingness to supply consumption reductions into the CAISO's ancillary services market as non-spinning reserve. If a non-spinning reserve offer from a load at \$1200/MW is necessary to meet the CAISO's day-ahead demand for non-spinning reserves, then the day-ahead price for this ancillary service should equal \$1200/MW, reflecting acceptance of the load's non-spinning reserving bid. Several commenters noted that although CAISO rules impose caps on the bids from generation units to provide ancillary services or energy, there is no reason to require loads to submit bids to provide non-spinning reserve and energy below these bid caps. Several MSC members and stakeholders urged the CAISO implement a version of scarcity pricing where the willingness to curtail of loads set scarcity pricing instead of an administratively determined demand curve.

Bid Caps on Start-Up and Minimum Load Costs

The CAISO presented its latest proposal on bid caps on start-up and minimum load costs. The MSC provided preliminary comments on this proposal and is in the process of preparing an opinion on this topic for the upcoming CAISO Board meeting.

MRTU Road Map

The CAISO presented a road map for ranking market initiatives for inclusion in future releases of MRTU. The presentation referred to two documents posted on the CAISO web-site relating to this initiative: (1) Updated 5-Year Market Initiatives Roadmap and (2) Initial Scoping of Post-MRTU Market Design Enhancements. The CAISO requested that stakeholders provide input on their preferences for implementing future enhancements to the MRTU market design. After collecting this information, the CAISO proposes to release a summary of the results to stakeholders with the ultimate goal of the process a list of Release 1A elements and Release 2 elements that will be submitted to the CAISO Board.

Day-Ahead Scheduling Requirement Under MRTU

The CAISO presented its revised proposal to address potential day-ahead under-scheduling under MRTU. The original CAISO proposal would implement an interim scheduling charge for real-time consumption by loads that are more than 15 percent larger than the cleared day-ahead schedule of the Scheduling Coordinator (SC). Load would be exempt from this charge when the real-time price is below the day-ahead price or when the CAISO's load forecast is sufficiently far below actual real-time load. The original proposal called for the CAISO to compile data on the scheduling behavior of all SCs and report this to the Federal Energy Regulatory Commission (FERC) on a weekly basis so that FERC could determine if persistent under-scheduling had occurred. If FERC made such a determination, then the CAISO would implement the Interim Scheduling Charge on a going forward basis against the violating SC.

The revised proposal has the CAISO, not FERC, determining if persistent under-scheduling has occurred according to a bright line test. This test is based on the total number of violations of the 15 percent under-scheduling requirement within a month or year. The CAISO proposed 36 times per month or 438 times per year as the bright line. If either of these thresholds is crossed, the CAISO would implement the interim scheduling charge on the violating SC on a going-forward basis. For the case of a monthly violation, the charge would be in effect for the remainder of the month and the SC would start the next month as a non-violator. For the annual violation threshold, the charge would be in effect for the remainder of the time the Interim Scheduling Charge mechanism is in effect.

There was an animated stakeholder discussion of the Interim Scheduling Charge. The generation community was unhappy with the 15 percent threshold, arguing that a substantial amount of persistent under-scheduling to reduce day-ahead prices could occur before this threshold was crossed. The competitive energy service providers (ESPs) expressed support for the small load exemption in the proposal. The large load-serving entities felt that these exemptions were too large and argued that the Interim Scheduling Charge was discriminatory in the sense of only impacting three or four large LSEs in California. The MSC members continued to express their discomfort with the Interim Scheduling Charge because of its potential to punish economically rational behavior by loads and failure to catch some behavior solely intended to reduce the day-ahead price. This led to a discussion between MSC members and stakeholders of other ways to address the under-scheduling problem that did not have these unintended consequences.

Following this discussion, Frank Wolak adjourned the meeting at 5:10 pm.