MEETING MINUTES OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR (CAISO) MARKET SURVEILLANCE COMMITTEE

Meeting Date: June 17, 2009, 10:00 a.m.

Held at: Lake Natoma Inn 702 Gold Lake Drive Folsom, CA 95630

With Simultaneous Meeting Web Cast (Web conference via Internet (visual) and telephone (audio))

A meeting of the Market Surveillance Committee (MSC) was held at the time and place referenced above, pursuant to the Public Notice (final released June 15, 2009), posted on the CAISO Web site at http://www.caiso.com/23c2/23c2c4412f6c0.html. This meeting was also a joint CAISO stakeholder with regard to topics contained within the Public Notice.

COMMITTEE MEMBERS ATTENDING

Frank Wolak	Committee Chairman
James Bushnell	Committee Member
Benjamin Hobbs	Committee Member
Absences:	None

GENERAL SESSION

The Director of Market Monitoring, Keith Casey, officially started the meeting shortly after 10:00 a.m., beginning with a quick run down of the agenda.

Public Comment

The meeting then proceeded with Chairman Wolak asking if any member of the public wished to make general public comment before the committee addressed the items on the agenda. Public comments were received by Joseph Yan of SCE.

After the conclusion of public comment, Chairman Wolak went on to the first item on the agenda.

1. Decision on the March 12, 2008 Minutes

Market Surveillance Committee Meeting Minutes, June 17, 2009 Page 1 of 4 Chairman Wolak then turned to the agenda item for MSC decision on the meeting minutes for the March 12, 2009 joint Stakeholder/MSC meeting. He noted that this item called for the members to review and approve the meeting minutes.

Upon a motion duly made and seconded to approve the draft meeting minutes for the meeting, a vote was taken as follows:

Yes: 3 No: 0

Meeting minutes for the March 12, 2009 meeting were approved.

2. Review and Discussion of ISO Market Performance

Next, the Committee turned to the next agenda item, for which presentations were made to discuss the ISO's market performance. This agenda item was informational only, and did include an action item for the committee members.

Jeff McDonald (Manager, Monitoring and Reporting, ISO Department of Market Monitoring) presented on the ISO's market performance from April – May 2009, focusing primarily on a review of recent trends in price convergence and price volatility in the real-time market. During Dr. McDonald's presentation, the MSC and market participants asked various questions about the observed trends. With regard to trends in real-time price volatility, MSC Member Benjamin Hobbs shared some statistics from other ISOs that were derived from a study performed by Potomac Economics and suggested that the ISO might want to calculate a similar metric for comparison. Joseph Yan of Southern California Edison (SCE) then presented some of SCE's observations on price volatility, which raised numerous issues for which SCE requested answers.

3. Potential Changes to Start-up and Minimum Load Bidding Rules

Gillian Biedler (Senior Market Design & Policy Specialist, ISO Market and Infrastructure Development) presented an ISO proposal to change the current restrictions for bidding Start-Up (SU) and Minimum Load (ML) from 6 months to 30 days. She explained that, under the new market, the ISO commits generating units based on their Start-Up and Minimum Load bids. Biedler further explained that the ISO has identified a couple of options to deal with this issue and proposes a two-phased approach.

Option 1 is considered short-term and could be implemented rather quickly as it would only require a Tariff change and not a change to the software. Option 1 provides for a change to the restriction on updating the registered-cost value or opting for the fuel-cost option from 6 months, to once every 30 days. Options 2a and 2b involve a longer-term change to Start-Up (SU) and Minimum Load (ML) bidding. Biedler explained that Option 2a involves making a relatively simple modification to SIBR that would enable daily or hourly bidding of SU and ML. Market Participants would still submit an election for either the cost –based

option or a registered-cost value for SU and ML costs to the Master File. Submitted bids under Option 2a would be bounded between 0 and the Registered Cost Option bid cap. In contrast, Ms Biedler explained that Option 2b requires more extensive changes to SIBR than described in 2a, to enable hourly bidding of SU and ML, without the restriction that SU/ML bids be between zero and the registered-cost option value thus requiring the development of default SU and ML bids which would be inserted in place of the bid-in values if the unit were subject to Local Market Power Mitigation.

During her presentation several market participants expressed their gratitude that the issue had been brought forward for discussion by the ISO. Biedler concluded her presentations with a timeline of the next steps for advancement of the proposal and asked market participants to submit their comments on or before June 26, 2009.

Like agenda item number 2, this agenda item number 3 was a discussion item that did not present an action item to the MSC.

4. Review & Discussion of ISO Market Review of May 19, 2009

Next, Dr. Mark Rothleder (Principal Market Developer, ISO Market and Infrastructure Development) made a presentation on the conditions contributing to Real-Time Price Volatility for May 19, 2009. On this date, in Southern California, the Real-time Market encountered more sustained LAP prices above \$500 than other days. Throughout his presentation, Rothleder responded to various questions from MSC members and market participants. He then reviewed various actions the ISO has taken or is planning to take to reduce excessive real-time price volatility.

Again, no action item was presented to the MSC with regard to this agenda item.

5. <u>"Lossy versus Lossless" Shift Factors</u>

Lorenzo Kristov (Principal Market Architect, ISO Market and Infrastructure Development) delivered a presentation comparing "Lossy" to "Lossless" shift factors in the ISO markets. Kristov began his presentation with a brief definition of shift factors and explained how the use of lossless shift factors can, in certain circumstances, result in very inefficient generation dispatches that can produce relatively extreme pricing outcomes. He then explained how switching to a "lossy shift factor" would, under similar circumstances, produce more moderate dispatch and pricing but noted that there may be other unintended consequences to using lossy shift factors. He concluded by noting that the ISO would continue to explore this issue but that there were no immediate plans to move to using lossy shift factors in the ISO markets. Throughout his presentation, he responded to various questions from the MSC and market participants.

This agenda item was a discussion item only and did not require any action be taken by the MSC.

6. Potential Change to LMPM Rule

Keith Casey (Director, ISO Market Monitoring) gave the final presentation of the day, discussing a proposal whereby the ISO would consider modifying a current market rule that limits the pool of bids considered in the Integrated Forward Market to resources that are dispatched in the Local Market Power Mitigation procedures run prior to the Integrated Forward Market. Dr. Casey described that the pool of bids considered in the Integrated Forward Market are limited under the ISO Tariff to units that are dispatched in the pre-IFM Local Market Power Mitigation procedure. Dr. Casey stated that the Department of Market Monitoring (DMM) had performed analysis to better assess the pros and cons of removing the restriction on resources considered in the IFM. The analysis DMM prepared encompassed a sample of 13 days that were representative of IFM conditions during April and May 2009. He went on to present the results of the analysis and discussed the three options for the MSC and stakeholders to consider. The three options were as follows: 1) maintain the rule but continue to monitor market impacts under different market conditions: 2) modify tariff/BPM to give ISO operators the option of relaxing the rule if it is significantly impacting IFM results: or 3) modify tariff to require consideration of all bids in IFM.

The next steps outlined by Dr. Casey called for stakeholders submitting written comments by June 24, the ISO issuing a draft recommendation by June 2, and depending upon the option selected, the ISO potentially seeking Board approval of a tariff modifications at the July 20 Board meeting.

Executive Session

There was no executive session.

There being no further business, the Market Surveillance Committee meeting was adjourned at approximately 4:20 p.m.

The MSC has approved these Minutes of the June 17, 2009 MSC Meeting at the following MSC Meeting:

Date of approval: July 16, 2009