GENERAL SESSION MINUTES
MARKET SURVEILLANCE COMMITTEE MEETING

March 30, 2012, 9:00 a.m.
General Session
Offices of the ISO
250 Outcropping Way
Folsom, CA 95630

A meeting of the Market Surveillance Committee (MSC) was held at the time and place referenced above, pursuant to the Public Notice announcing the meeting (final notice released March 28, 2012), posted on the CAISO Web site at: http://www.caiso.com/Informed/Pages/BoardCommittees/MarketSurveillanceCommittee/Default.aspx

ATTENDANCE

The following members of the Market Surveillance Committee were in attendance

Benjamin Hobbs, Chair
James Bushnell
Scott Harvey

GENERAL SESSION

The following agenda items were discussed in general session:

INTRODUCTION

The Chairman, Benjamin Hobbs, gave a brief introduction of the newest member of the Market Surveillance Committee, Shmuel Oren. Dr. Oren was attending the meeting as a member of the public and that Dr. Oren's term would begin April 1, 2012.

PUBLIC COMMENT

Jeffrey Nelson, representing Southern California Edison, provided comments regarding convergence bidding and the current suspension. Southern California Edison has filed comments and laid out a framework on what they believe is a solution, and would like to further bring this to the MSC's attention.

Discussion on Commitment Costs, part 2

Gillian Biedler, Senior Market Design & Policy Specialist from the Market and Infrastructure Development department (M&ID), briefed the MSC and stakeholders on the overview of the 2012 commitment cost refinements. The first proposed refinement involves a proposed change to the registered cost cap allowance. The second element involves greenhouse gas allowance costs. The third element involves operational flow order costs. The fourth element involves costs due to grid management charges. The fifth element involves a major maintenance adder and the sixth and final element involves the multi-stage generating units' transition costs.

To conclude her presentation, Ms. Biedler reviewed the timeline for changes to the registered cost options. These include dealing with the operational flow order penalties, inclusion of major maintenance, and grid management charges. These changes would be done in concert with the lowering of the registered costs cap together with the separation of netting calculations in the day-ahead and the real-time bid cost recovery calculations.

Dr. Hobbs provided the next presentation and discussed four principles for the registered cost option. The first principle, the *Goldilocks* principle, involves avoiding both negative margins (where generators lose money in starts and thus are discouraged from participating) and payments for minimum load or start-ups that are far more than costs (because that may encourage strategic behavior in the absence of effective competition). The second principle is that only incremental costs should be recovered and not fixed costs; it is sometimes difficult to distinguish the difference between the two. The third principle is that the ISO should avoid recalculations that take a lot of work and take place long after the fact. The fourth principle is that the design should motivate efficiency, giving incentives to reduce costs.

Dr. Hobbs then turned to public comment. Shmuel Oren expressed a concern about the added cost recovery components that are not explicitly accounted for in the commitment decisions. Dr. Oren added that the whole point of uplift is to dispatch units, which are socially efficient to have on, but which would not be able to recover their costs through energy sales. In such cases, the generators are not compensated. The more components that are added to cost recovery that are not explicitly accounted for in the dispatch decision, the more distorted incentives can become, which in turn could result in inefficient operations.

Turning to the phone for comments, Brian Nelson representing San Diego Gas & Electric provided clarifying comments regarding the issue with the number of start-ups and the associated contractual constraints. San Diego did mention in their stakeholder comments that they do have units that have a limited number of start-ups.

Discussion on Bid Cost Recovery Mitigation

Gillian Biedler of MI&D then returned to give a brief overview of the ISO's proposed BCR mitigation measures. Ms. Biedler explained there are three elements in the BCR proposal as it stands now. The first element involves the ISO proposing a modified version of the metered energy adjustment factor (MEAF) to the energy portion of the day-ahead bid cost recovery calculation. The second element involves the ISO

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proposing a performance metric that would scale components of the real-time bid cost recovery calculation based on the portion of the deviation from the ISO dispatch. Ms. Biedler went on to say that the performance metric will replace the real-time metered energy adjustment factor. The third element involves the ISO proposing to put in place a real-time persistent UIE check that will disqualify real-time energy from real-time bid cost recovery in ten-minute settlement intervals in the case that the resource exceeds persistent deviation thresholds over the course of a day.

Discussion followed Ms. Biedler's presentation and several remarks were received.

Discussion on Inter-tie Pricing and Settlement

Karl Meeusen, Market Design & Regulatory Policy Lead, from M&ID, briefed the MSC and stakeholders with an update to the ISO's proposal on the settlement of interties in real-time. Three major points were made in his presentation. The first was that the real-time imbalance energy offset is caused primarily by the price divergence between the real-time price and the HASP advisory price. The second concerned convergence bidding at the interties. In particular, the ISO has seen some bidding behavior and strategies on the interties that have led to increased real-time imbalance energy uplifts, so the ISO filed with FERC to suspend convergence bidding while the ISO sought alternative solutions to resolve the market structure. Finally, Mr. Meeusen discussed price inconsistencies caused by intertie constraints – also known as the dual constraints problem. He went on to explain two options: (1) implement an interim solution followed by a longer term solution and (2) not implement an interim solution, instead going directly to a longer term solution.

To conclude the presentation, Mr. Meeusen stated that the ISO was seeking the MSC's input on whether the ISO should pursue an interim solution, and was asking if the MSC had comments on the proposed longer-term solution.

Next, Scott Harvey, MSC committee member, briefed stakeholders on (1) drivers of the energy offset, (2) the ISO's trigger values and whether it would be desirable to go down that interim approach (in which case, Dr. Harvey has some suggestions on how it could work), and then (3) dual constraint pricing and what Dr. Harvey sees as the underlying issues.

Discussion followed regarding Karl Meeusen and Scott Harvey's presentations and remarks were received.

Discussion on Flexible Ramping Product and Cost Allocation

Introducing the final topic, Dr. Lin Xu, Senior Market Development Engineer, briefed the MSC and stakeholders on the characteristics of the flexible ramping products and how they compare with current ancillary services in the ISO market. The first characteristic is fast ramping. Flexible ramping based on how much a resource can ramp within 5 minutes, while ancillary services are based on a 10 minute ramping capability. The second and very important characteristic is that ramping products would be dispatched in the RTD on a regular basis, while ancillary services are not regularly dispatched in RTD. The third is the preservation of capacity now to be used in the future. For example, IFM flexible ramping is capacity is set aside to be used in RTD. RTD flexible ramping,

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in turn, is capacity preserved in the current RTD interval to be used in the next RTD interval, while ancillary services are capacity set aside for a trade interval and to be used for the same trade interval if certain conditions are triggered.

Discussion followed Dr. Xu's presentation and remarks were received.

ADJOURNED

There being no additional general session items to discuss, the general session of the Market Surveillance Committee was adjourned at approximately 4:10 p.m.

The MSC has approved these Minutes of the March 30, 2012, MSC Meeting at the following MSC Meeting:

Date of approval: June 22, 2012

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