GENERAL SESSION MINUTES
MARKET SURVEILLANCE COMMITTEE MEETING
April 29, 2011, 10:30 AM
General Session Meeting
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 (final released April 27, 2011), posted on the CAISO Web site at http://www.caiso.com/23c2/23c2c4412f6c0.html.

ATTENDANCE

The following members of the MSC were in attendance:

James Bushnell
Benjamin Hobbs
Steven Stoft
Scott Harvey

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

George Angelidis, representing Pacific Gas and Electric, provided comments in support of using a shift factor metric instead of a marginal price metric to identify generators to mitigate in the proposed LMPM modifications.

DISCUSSION OF DYNAMIC ASSESSMENT OF CONSTRAINT COMPETIVENESS

Dr. Jeff McDonald, Manager of Analysis and Mitigation, provided the MSC and stakeholders an overview of the Dynamic Path Assessment proposal. First Dr. McDonald reminded the MSC and Stakeholders that there was a whitepaper published on this topic. He further explained that his presentation wasn't designed to present new material but rather to stimulate discussion on some open items. According to McDonald, the Department of Market Monitoring (DMM) would be conducting a dynamic path assessment for competitiveness in line with the software. Currently, DMM does a static path assessment four times a year and is only able to account for changes in system conditions, grid conditions, or resource availability to the extent that DMM can anticipate such changes.

Furthermore, Dr. McDonald noted DMM is proposing to have this process migrated into the market software. He went on to explain that it will take place in both the day-ahead and real-time market. The path designations will be re-evaluated. The test that will be used to determine whether or not a path is competitive or uncompetitive is the pivotal supplier test. Also, DMM is proposing to use a residual supply index approach that accounts for the three largest potentially pivotal suppliers. A path would be deemed uncompetitive if the capacity from the RSI is less than one after the three potential pivotal suppliers are removed. So unlike the circumstance today in which a default designation for paths is uncompetitive, DMM is proposing with this dynamic approach to alter the default designation to be competitive. So any path, any branch group, transformer, and transmission line that is not projected to be binding and therefore not subject to the pivotal supplier test would be considered in the market software as competitive. Dr. McDonald described some advantages to switching to a dynamic competitive path assessment and concluded his presentation by outlining some open issues.

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

Ellen Wolfe, on behalf of Western Power Trading Forum, provided remarks requesting the MSC's input on the default action alternatives that the ISO plans to lay out.

Bonnie Blair, of Thompson Coburn LLP, asked a clarifying question regarding how market power is exercisable and if the ISO isn't able to predict how the pattern of constraints will change, then how do market participants predict market power?

Dr. McDonald provided responding comments to Ms. Blair's questions and provided an example using the real-time market.

DISCUSSION OF LOCAL MARKET POWER MITIGATION MODIFICATIONS

Cynthia Hinman, Senior Market Design and Policy Specialist, gave the next presentation and provided a brief summary of the local market power mitigation straw proposal. Ms. Hinman outlined the upcoming timelines for the proposal and provided brief background on how the LMPM effort started. Ms. Hinman concluded her presentation by discussing the steps involved in the process developed by Dr. Lin Xu.

Jack Ellis, of Resero Consulting, requested clarification about how the non-competitive constraint component of the price relates to the bid.

Dr. Benjamin Hobbs, MSC member, provided responding comments by stating that the bid is not what's being decomposed -- the decomposition is into the competitive and non-competitive components of the price.

Turning to questions on the phone, Pushkar Wagle, representing Flynn Resource Consulting, asked if the ISO could identify the one resource under the RMR contract for 2011. Being of confidential nature, Ms. Hinman was unable to provide that identity.

Receiving no further comments or questions, the meeting proceeded with the next presentation from Dr. Benjamin Hobbs. That presentation focused on the framework for thinking about what the practical effect of changes in any LMPM procedure may be. Dr. Hobbs's presentation included studies that focused on when there are changes made to the LMPM procedures and the market impact involved.

Concluding Dr. Hobbs presentation, Mr. Angelidis asked a clarifying question about the study Dr. Hobbs referenced in his presentation. Mr. Angelidis stated it was not clear whether Dr. Hobbs is recommending that the ISO or the MSC conduct a study and would they be concerned about the cost of the study.

Dr. Scott Harvey, MSC member, provided the next presentation that focused on some of the significant elements of the proposed change of the application of the market power mitigation. Dr. Harvey outlined some of the potential benefits of the new approach, including that it will comply with FERC orders and account for virtual supply – virtual demand, price cap load bids. Dr. Harvey went on to say that the potential for spurious mitigation and spurious non mitigation arises from the two pass approach, with the initial pass schedule being wired in at zero prices or slightly negative in the second pass. That feature will be eliminated under this change. There will be less non-mitigation when it should be mitigated and less mitigation when it shouldn't be mitigated focusing on the offer prices.

Next, Dr. Harvey noted some of the limitations and stated the reference bus choice is very important. However, it will not operate as intended if the reference bus price is impacted by congestion and non-competitive constraints. Finally, the obvious limitation is that the HASP run will not identify all binding, non-competitive constraints. If HASP does not see a constraint binding, it isn't going to dispatch any generation. Dr. Harvey concluded his presentation and asked for public comment and discussion.

Mr. Angelidis provided remarks that PG&E suggested a particular reference be used for this analysis. PG&G suggested using the distributed marginal resource reference, based on the problem solution that is obtained after relaxing the non-competitive constraints because that is the source of where the marginal energy comes to the distributed load in that particular case. In this solution, the non-competitive constraints are ignored, which in turn produces a competitive benchmark for the LMPs that can be the basis of applying mitigation.

Dr. Lin Xu, Senior Market Development Engineer, provided responding comments and stated that PG&E's suggestion to use the distributed marginal bus is problematic, because one of the marginal resources could be the unit that exercises market power. If this is used as a reference then the ISO would be including the market power mark-up in the "competitive" price. This is exactly what the ISO did not want to include.

Next Ms. Wolfe asked if the MSC felt there was some benefit of coupling these two changes together as opposed to implementing one and then the other.

Cynthia Hinman provided responding comments and reminded Ms. Wolfe and stakeholders that the LMPM and CPA proposals are both scheduled to go to the ISO's Board in June. In order to meet the FERC requirement for the bid-in demand, the primary goal is the LMPM proposal. The implementation team is working to get both implemented at the same time and all agree it will be beneficial.

Dr. Xu further pointed out that in the design process of the new market power mitigation the team considered the option of using individual shift factors to do the mitigation. However, after further analysis, they concluded that the overall non-competitive LMP component has several advantages over the individual shift factor approach.

Mr. Angelidis provided cautionary remarks regarding the benchmark that the ISO is proposing to use – this being the marginal cost component excluding contributions from non-competitive constraints. PG&E believes this is not the appropriate benchmark. More elaboration is needed.

DISCUSSION OF REAL TIME IMBALANCE ENERGY OFFSET

Don Tretheway, Senior Market Design and Policy Specialist, provided the MSC and stakeholders a presentation on the impact of convergence bidding on the real-time imbalance energy offset. Mr. Tretheway began by stating that the real-time imbalance energy offset is a neutrality charge that is either charged or credited to metered demand.

As been reported in ISO studies, the HASP price historically has been lower than the real-time price which allows a bidding pattern to be put into place that essentially arbitrages the systemic difference between the prices.

Next Mr. Tretheway explained that the ISO is proposing a settlement rule that reverses the HASP–RTD energy price differential for a scheduling coordinator's balanced position. This can result in a charge and credit. The proposal addresses both instances in terms of price differential whether RTD is greater than HASP or less than HASP. The ISO is working through the stakeholder process and plans to take the proposal to the Board in June. The ISO has identified a $25M threshold that could potentially trigger an emergency filing. In conclusion, Mr. Tretheway next walked through the settlement rule and identified some key variables.

Ms. Wolfe provided a remark that the data seemed to show a correlation between the payments and the virtual bidding activity and feels what's missing is causality.

Mark Rothleder, Director of Market Analysis and Development, provided additional remarks that the ISO has done analysis trying to correlate the relationship and the magnitude for the same price differential change between HASP and real-time, with the magnitude of the impact of the real time energy offset. He concluded that the ISO does not see a shift in the impact on the real-time energy offset for the same amount of change in the price. Further, the offset is unrelated to the bid price cap going up. Mr. Rothleder noted that the ISO does have some information and analysis showing that a correlation does exist with volume. Furthermore, Mr. Rothleder stated that the ISO is not saying that the virtual bids are driving the HASP and real-time price divergence; those are due to other causes. But once the prices do diverge, the increased volume that arises from those positions increases the pressure on the real-time energy offset.

Ryan Kurlinski, Senior Market Monitoring Analyst, provided the next presentation that focused on the history and key elements of the proposal. Mr. Kurlinski stated that the proposal is not a charge to virtual bids and that the proposal is to assign the uplift to the responsible parties to the extent that the ISO can calculate which parties are responsible for the uplift. According to Mr. Kurlinski, the root of the cause is the RTD – HASP price differential. Also, to the extent that these offsetting virtual bids are earning profits from the difference between average energy prices of RTD – HASP, those profits are directly causing uplift. Mr. Kurlinski went on to note that although DMM came up with the basics of this strategy, it is not a silver bullet designed to solve all of the uplift issues.

DISCUSSION OF DEMAND RESPONSE COMPENSATION

John Goodin, Demand Response Lead, provided the MSC and stakeholders an overview of the proposal and FERC Order 745, which is the final rule dictating how ISOs and RTOs should compensate demand resources in organized electricity markets. The Order was intended to establish consistent rules and ensure there are minimal variations in compensation rules among ISOs. Mr. Goodin went on to highlight the two issues FERC dealt with in Order 745. Mr. Goodin further explained the ISO's response to FERC Order 745 was to file a motion for clarification and request for a rehearing. As part of the filing, the ISO requested a formal MSC Opinion on DR Compensation.

Dr. Steven Stoft, MSC member, provided the next presentation and discussed FERC's Order 745. Dr. Stoft focused on a strategy for supporting the ISO's request for rehearing and any eventual appeal. The Order contains many flaws, but the ones to focus on should support a legal point, be irrefutable, and easy to explain clearly. The clearest such flaw is that identical generators are rewarded differently depending on which side of a retail meter they operate. This can demonstrate the arbitrary and capricious nature of Order 745. A second key flaw is the inefficiency it causes, and the resulting burden on consumers. Finally, the supposed "net benefit" of the order is only a short-run benefit that comes at the expense of needed generator profits and that will soon disappear.

The final presentation of the day came from Dr. Hobbs. Dr. Hobbs briefly discussed the Net Benefits test as proposed in Order 745, and identified several flaws. One important type of flaw is its failure to account for long-term contracts and utility-owned generation, both of which affect the benefits to ratepayers of demand response. Depending on the amount of contracted and utility-owned generation and the relationship of price and marginal cost, demand response may result in more or, in most cases, less short-run benefits to ratepayers than assumed in Order 745. The effect would be to decrease and increase, respectively, the price threshold at which the short-run benefits to ratepayers is positive. A mathematical formula was presented for a test that corrects for these effects, and Dr. Hobbs urged FERC and the ISO to adopt this version.

Further discussion ensued on this matter and the MSC proceed to take action on their draft opinion.

<u>Motion</u>

Committee member Bushnell:

> *Moved, that the Market Surveillance Committee adopts the draft opinion entitled "Opinion regarding FERC Order 745, Demand Response Compensation in Organized Wholesale Energy Markets", dated April 14, 2011, and as modified at the April 29, 2011 meeting.*

The motion was seconded by Committee member Hobbs, and approved 4-0-0

ADJOURNED

There being no additional general session items to discuss, the general session of the MSC was adjourned at approximately 4:15 p.m.

The MSC has approved these Minutes of the April 29, 2011, MSC Meeting at the following MSC Meeting: Date of approval: July 1, 2011