

## **GENERAL SESSION MINUTES MARKET SURVEILLANCE COMMITTEE MEETING**

July 15, 2015, 10:00 a.m.

General Session

Offices of the ISO

250 Outcropping Way

Folsom, CA 95630

---

July 15, 2015

The Market Surveillance Committee (MSC), an advisory committee to the ISO Board of Governors, convened the general session at approximately 10:00 a.m. and the presence of a quorum was established.

### **ATTENDANCE**

The following members of the Market Surveillance Committee were in attendance:

James Bushnell  
Scott Harvey  
Benjamin Hobbs, Chair

### **GENERAL SESSION**

The following items were discussed in general session.

### **PUBLIC COMMENT**

Eric Little, representing Southern California Edison, and Mark Smith, representing Calpine, both asked if the Market Surveillance Committee had an opinion on the Energy Imbalance Market's governance structure.

Dr. Bushnell, stated he was not sure the level of which the MSC should be involved and comment due to the Market Surveillance Committee's structure.

No further comments.

### **BRIEFING ON DAY-AHEAD MARKET RUN TIME**

Dr. Guillermo Bautista Alderete, Manager of Market Validation and Quality Analysis, gave a presentation on market run times. Dr. Bautista-Alderete began

his presentation with a brief overview of the day-ahead market timeline and process.

Next, Dr. Bautista-Alderete walked the MSC and stakeholders through a graph that demonstrated that recently the monthly timing of the day ahead market results have been published late – which subsequently had raised concerns by some market participants. Dr. Bautista-Alderete discussed some of the factors that were involved including, unexpected issues arising only in DA+1 run not identified in DA+2, and bad input data, process issues, software issue and deployment/defects.

Finally, Dr. Bautista-Alderete concluded his presentation by outlining actions the ISO would be taking to regain on-time publication, including: upgrading hardware, evaluating how to consider & validate outages in external areas, improving the quality of distribution factors, improving handling of default positions in the network model, a network model upgrade to be deployed on July 23, and improving the existing process of proactive validation of DA+2 and DA+3 processes.

Discussion ensued between the MSC and stakeholders.

## **BRIEFING ON DUCK CURVE AND CURRENT SYSTEM CONDITIONS**

Clyde Loutan, Senior Advisor, discussed the net load predication for 2020. Mr. Loutan clarified what is meant by the term “net load”; the load minus wind and solar production which results is the net load. Next, Mr. Loutan noted that the original predictions did not consider rooftop photovoltaic. Further, Mr. Loutan stated that through 2020 the ISO could expect to see an additional 3,000 of distributed photovoltaic coming online and will further impact the loads. Moving forward the impact to the grid will come from rooftop photovoltaic.

Next, Mr. Loutan explained the assessment of a balancing authority control performance is based on three components: 1) control performance standard, 2) balancing authority ace limit, and 3) disturbance control standard.

To conclude, Mr. Loutan discussed how there has been a shift of negative prices from 3:00 – 4:00 a.m. to the middle of day. Further noting that negative prices are an indication of excess generation on the system.

Discussion ensued between the MSC and stakeholders.

## **RECESSED**

There being additional general session matters to discuss, the meeting was recessed at approximately 12:00 p.m. Chairman Hobbs stated the meeting would reconvene at approximately 1:15 p.m.

## **RECONVENED**

The Market Surveillance Committee, an advisory committee to the ISO Board of Governors, reconvened the general session at approximately 1:15 p.m. and the presence of a quorum was established.

## **ATTENDANCE**

The following members of the Market Surveillance Committee were in attendance:

James Bushnell  
Scott Harvey  
Benjamin Hobbs, Chair

## **GENERAL SESSION**

The following items were discussed in general session.

## **DECISION ON THE MINUTES**

### **Motion**

**Committee member Bushnell**

***Moved, that the Market Surveillance Committee, Advisory Committee to the ISO Board of Governors, approve the general session minutes from the April 17 and May 18, 2015 meetings.***

**The motion was seconded by Committee member Harvey and approved 3-0-0.**

## **BRIEFING ON FLEXIBLE RAMPING PRODUCT**

Don Tretheway, Lead market Design and Regulatory Policy Developer, gave a presentation that highlighted the changes that have been made in the flexible ramping product technical appendix. According to Mr. Tretheway, the ISO has changed its initial strategy and what it would like to accomplish with the flexible

ramping product. He stated that changes would include: 1) increment improve in terms of how the ISO manages the resource flexibility in the real time market. He stated that the ISO would like to replace the current model with an actual product that has a more properly designed compensation mechanism and appropriate cost allocation, 2) only manage flexibility in the upward direction, but add the flexible ramping downward direction, and 3) only focused on procuring in fifteen minute market and real-time market. Further, Mr. Tretheway asserted that the ISO will not procure the flexible ramping product in the day-ahead market. He described how clarifications and enhancements have been made to formulation of the flexi ramping product, histogram and demand curve construction

Moving on, Mr. Tretheway noted that the ISO has simplified the “no – pay proposal and modeled the rules to be more similar to energy settlement rather than ancillary services settlement.

Next, Mr. Tretheway discussed the histogram construction and indicated that the key to the construction is to develop a distribution of the net forecast errors in the upward and downward direction of net movement.

Wrapping up the presentation, Mr. Tretheway noted that the ISO is proposing two alternative methods of measuring unavailable flexible ramping capacity:

- 1) comparing a resource’s metered output, upper and lower economic limits to the flexible ramping product award
- 2) simply assume any positive uninstructed imbalance energy makes the corresponding amount of flex ramp up unavailable and any negative uninstructed imbalance energy makes the corresponding amount of flex ramp down unavailable.

Before concluding the presentation, Mr. Tretheway noted that the ISO plans to move forward with option 1 and that the flexible ramping produce initiative is planning to go before the Board in December.

Scott Harvey, member of the MSC, gave a presentation on the flexible ramping product bidding rules. Dr. Harvey described how the ISO has decided there would not be a day-ahead product and that he wanted to review some of logic for the bidding rules for the product. Dr. Harvey noted that once you decide that you are not going to have a day-ahead product, it simplifies the bids and offers - reviewing again. He stated the initial design was not going to have a day-ahead market which meant there will be no offer prices, clearing prices or payments for flexi ramp in the day-ahead market. Dr. Harvey then discussed the consequences of this design with no real-time offer prices from the standpoint of market efficiency and performance.

Roger Avalos, Lead Market Monitoring Analyst, gave a presentation deriving the flex ramp product demand curve based on the expected power balance violation costs. Mr. Avalos noted that demand curve prices are the probability that a forecast error is greater (less) than the amount of flex ramp up (down) multiplied by the violation penalty price.

Discussion ensued between the MSC and stakeholders.

## **BRIEFING ON COMMITMENT COST OPPORTUNITY COST METHODOLOGY**

Kallie Wells, member of Infrastructure Policy team, gave an update on the commitment cost enhancements phase 3 initiative. Ms. Wells started a brief overview of the background on this initiative. From there, Ms. Wells moved on to note that the ISO developed and continues to test two prototype models: 1) testing scheduling coordinator selected resources, and 2) methodology and results to be discussed at an upcoming technical workshop in July.

Ms. Wells next posed four methodology questions that the policy team was seeking MSC feedback on: 1) day-ahead or 15 minute LMPs to use in the model and whether the ISO should continue to only use estimated fifteen minute prices in the model or also estimate day-ahead prices for long start resources, 2) triggering impromptu re-runs to capture unanticipated pricing events. She stated the ISO would like the MSC's opinion on what triggers, if any, should the ISO consider to prompt a re-run and would more scheduled re-runs, i.e., monthly instead of quarterly, minimize this concern, 3) updating limits during scheduled re-runs. Ms. Wells pointed out the ISO is seeking advice from the MSC on what is the most effective way to update the limit while maintaining an unbiased opportunity cost.

Next, Ms. Wells laid out three options for the MSC to consider: option 1 involves the re-run the model for April-December adjusting the limit by actual usage, option 2 involves the re-run the model for April – December adjusting the limit by estimated usage, and option 3 involves the re-run the model January - December with the full limit using actual LMPs for the months past and estimated LMPs for the remaining months.

Discussion ensued between Ms. Wells, the MSC, and stakeholders about which option is more optimal.

Next, Ms. Wells moved to the fourth and final element: 4) translating permits to limits. She stated the issue involves what would be an acceptable method for scheduling coordinators to translate emission or fuel burn limits to start, run hour,

or energy limits. She stated the ISO would like the MSC to comment on how the ISO should model limitations that are on a rolling 12 month period.

Ms. Wells noted that at the upcoming workshop, the ISO would go into deeper details of this proposal.

Discussion ensued between the MSC and stakeholders.

### **FUTURE AGENDA ITEMS**

Mr. Hobbs announced that the next in person meeting would be held tentatively in September.

### **ADJOURNED**

There being no additional general session matters to discuss, the general session meeting was adjourned at approximately 4:00 p.m.

The MSC has approved these Minutes of the July 15, 2015 MSC Meeting at the following MSC Meeting:

Date of approval:      December 11, 2015