

**GENERAL SESSION MINUTES
MARKET SURVEILLANCE COMMITTEE MEETING
January 16, 2014
ISO Headquarters
Folsom, CA 95630**

January 16, 2014

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
Shmuel Oren

GENERAL SESSION

The following agenda items were discussed in general session.

PUBLIC COMMENT

No public comment was offered at this time.

DECISION ON THE MINUTES

Motion

Committee member Hobbs:

Moved, that the Market Surveillance Committee, Advisory Committee to the ISO Board of Governors, approve the general session minutes from the October 30, 2013 meeting.

The motion was seconded by Committee member Bushnell and approved 4-0-0.

Motion

Committee member Hobbs:

Moved, that the Market Surveillance Committee, Advisory Committee to the ISO Board of Governors, approve the general session minutes from the November 15, 2013 meeting.

The motion was seconded by Committee member Bushnell and approved 4-0-0.

Motion

Committee member Hobbs:

Moved, that the Market Surveillance Committee, Advisory Committee to the ISO Board of Governors, approve the general session minutes from the September 6, 2013 meeting.

The motion was seconded by Committee member Oren and approved 4-0-0.

DISCUSSION OF FULL NETWORK MODEL INITIATIVE

Dr. Harvey made a presentation that addressed testing and calibration elements of the initiative. He explained that it should be possible for the ISO to develop methods that will enable it to improve its current forecast of loopflow impacts on internal transmission constraints. Such improvements would enable it to better account for real-time conditions in its day-ahead unit commitment and interchange scheduling, reduce real-time congestion rent shortfalls, and improve convergence between day-ahead and real-time prices.

Dr. Harvey explained the ISO would need to be prepared to test its predictions, and adjust its methodology to achieve the intended level of accuracy in loopflow predictions. Adjustments would need to be made prior to implementation of the full network model to ensure that the initial implementation provided some immediate improvement. Furthermore, he explained how the implementation would also need to be flexible and be able to accommodate the likely need for continuing adjustments in the models and methods used to predict real-time loopflows following the initial implementation.

He described that there will be challenges in improving the modeling of real-time loopflows for several reasons. ISO net interchange will initially be modeled as sourcing and sinking on tie lines, not at balancing authority areas; not all balancing authority areas would initially be modeled in detail; the distribution of generation and load in

modeled balancing authorities would not be accurate for every hour; the impact of real-time loopflows would be impacted by changes in network topology external to the ISO; and lastly the schedules available to the ISO at the time it solved the day-ahead market would be incomplete.

The MSC members engaged in a conversation about the Eastern ISO's representation of interconnections and analysis of loop flows.

Mark Coleman, on behalf of Powerex, offered comments regarding whether the modeling by the ISO of the Western Interconnect would be successful. Dr. Harvey responded that it would be hard to predict the outcomes at first. Mr. Coleman continued his comments and suggested that the ISO develop a real time model. Dr. Harvey responded that the ISO would start with the day ahead because it was inaccuracies day-ahead that caused problems, while the actual flows are much better known in real time and that the ISO would make ad hoc adjustments as necessary.

Discussion ensued between Chairman Hobbs and Mr. Coleman concerning Powerex's hydro schedules.

Discussion ensued between Dr. Harvey and Alex Morris, on behalf of PG&E concerning calibration.

Delphine Hou, Senior Market Design and Policy Specialist, made a clarifying statement concerning benchmarking metrics and compensating injections.

Dr. Harvey continued his presentation and addressed modeling of physical transmission constraints. He explained why enforcing physical transmission constraints on tie lines in the day-ahead market, and including their congestion component in prices, was not a fundamental change, as it was simply adding a few more physical constraints to the many physical transmission constraints that were currently enforced in the day-ahead market and impact the price of interchange.

Mr. Coleman provided concerning statements about physical limits and loop flows. Dr. Harvey and Ms. Hou responded with clarifying comments.

Dr. Harvey continued his presentation and addressed contract path entitlements. He explained that while the contract path scheduling system had to be used between balancing authority areas that do not coordinate congestion management, it was the physical limits that ultimately limited transfer capability.

Mr. Coleman provided comments concerning transmission investments and physical constraints. Discussion between Mr. Coleman and the MSC committee members

followed regarding the circumstances in which contract path or physical constraints provided efficient incentives for transmission investments.

Mr. Coleman requested clarifying information regarding a statement found in the draft final proposal. Ms. Hou clarified the statement and noted the ISO would provide further clarification.

Dr. Harvey continued his presentation and addressed congestion rent shortfall allocation. He explained how cost causation principles would require allocating the cost of real-time loopflows to the entities whose transactions create the loopflows, assuming that their identity could be established. He further explained how the cost of real-time loopflows was always ultimately borne by transmission customers through their inability to fully use the transmission system, even in the case of the customers of a traditional vertically integrated utility.

Dr. Harvey and Wei Zhou, on behalf of Southern California Edison, and Mr. Morris engaged in a discussion concerning uplift costs, loopflows and the day-ahead market.

Ms. Hou provided clarifying comments concerning cost causation.

Mr. Coleman asked clarifying questions regarding the 15-minute market design and loop flows. Ms. Hou responded to his comments.

Chairman Hobbs confirmed there was no additional public comment.

RECESSED

There being additional general session matters to discuss, the general session was recessed at approximately 12:30 p.m.

RECONVENED

The Market Surveillance Committee reconvened the general session at approximately 1:20 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
Shmuel Oren

GENERAL SESSION

DISCUSSION ON FLEXIBLE RESOURCE ADEQUACY CRITERIA AND MUST OFFER OBLIGATIONS INITIATIVE

Dr. Meeusen, Market Design and Regulatory Lead, gave a presentation on the fifth revised straw proposal. He reviewed the changes reflected in the fifth revised straw proposal such as technology-agnostic flexible capacity offer obligations based on system needs; all components of the flexible capacity requirement being calculated using monthly top five 3-hour net-load change observations; and backstop procurement of flexible capacity priced at the Capacity Procurement Mechanism rate.

Dr. Meeusen further explained technology specific offer obligations were designed to provide feasible solutions for a wide range of resources including Demand Response, storage, and Variable Energy Resources

Mike Castelhana, Market Monitoring Analyst asked questions concerning flexible capacity categories. Mr. Cooper responded with clarifying statements.

Marie Fontenot, on behalf of PG&E, offered statements regarding offer obligations. Dr. Meeusen and Mr. Cooper provided clarifying statements.

Discussion followed among the MSC members and Dr. Meeusen in regards to flexible capacity categories.

Dr. Meeusen continued his presentation and addressed proposed offer-obligations associated with each category. He explained that categories would provide lower cost solutions to meeting flexible capacity requirements and would allow a broader portfolio of resources to provide flexible capacity. He stated that the ISO had developed these categories acknowledging not all resources are available all the time.

Mr. Castelhana asked clarifying questions concerning flexible resource adequacy. Committee member Bushnell and Dr. Meeusen responded with clarifying statements.

Discussion followed among the MSC members and Dr. Meeusen in regards to categories.

A discussion between the MSC members, Dr. Meeusen and Mr. Coleman ensued concerning ramping.

Marie Y. Fontenot, on behalf of PG&E, asked a question regarding the relationship between the new requirements methodology and the proposed allocation methodology. Dr. Meeusen, Mr. Cooper and Committee member Oren provided clarifying statements.

Dr. Meeusen confirmed there was no additional public comment.

FUTURE AGENDA ITEMS

Chairman Hobbs confirmed that the next MSC in-person general session meeting would be scheduled for March 2014. He also stated that a general session teleconference was scheduled on January 30, 2014, to consider and adopt the MSC Opinion on Management's full network model.

ADJOURNED

There being no additional general session matters to discuss, the general session of the Market Surveillance Committee was adjourned at approximately 3:30 p.m.