

GENERAL SESSION MINUTES MARKET SURVEILLANCE COMMITTEE MEETING

September 8, 2017 10:00 a.m.

General Session

Offices of the ISO

250 Outcropping Way

Folsom, CA 95630

September 8, 2017

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:

Benjamin Hobbs, Chair
James Bushnell
Scott Harvey

GENERAL SESSION

The following items were discussed in general session.

PUBLIC COMMENT

No public comment

DECISION ON GENERAL SESSION 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 July 7, 2017 meeting.

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

DYNAMIC COMMITMENT COST MARKET POWER MITIGATION DISCUSSION

Cathleen Colbert, Senior Market Design Policy Developer, briefed the Market Surveillance Committee on commitment cost and default bid enhancements. Her presentation presented a comprehensive overview of the principles, issues, and potential changes that could be made.

Two particular market design issues were discussed:

- (a) What is a robust approach to testing whether a resource may have been committed to relieve a constraint that does not bind in the final dispatch?
- (b) Should local market power mitigation tests be performed and applied separately for energy and commitment cost components?

The first issue arises because commitment of a generator in order to relieve congestion on a particular transmission constraint in general results in a “lumpy” addition of energy representing a significant fraction of that generator’s capacity. This can result in that constraint becoming nonbinding with a significant amount of slack, even though it forced commitment of the unit. Thus, any local market power mitigation procedure has to consider not only transmission constraints that are binding in the market solution, but also nonbinding constraints that may have triggered commitments. Unfortunately, this means that the philosophy of the energy bid mitigation procedure, which considers shadow prices of binding transmission constraints in deciding whether a generator possesses local market power, cannot be used. This is because nonbinding constraints by definition have zero shadow prices.

Michael Castelhana, Ph.D, Department of Market Monitoring made a presentation about the department of market monitoring’s current position on CCDEBE. DMM suggest that reference levels and adjustments need additional work and clarity before DMM will support this initiative. DMM also suggests splitting CCDEBE into two pieces. In, Dr. Castelhana elaborated upon DMM’s position on four issues:

- (a) The use of static tests of local market power mitigation on a seasonal basis to identify noncompetitive transmission constraints. They believe that such tests are insufficiently reflective of actual market conditions. In contrast, Dr. Harvey’s proposed approach would consider just the constraints that actually could have forced commitment in the particular market intervals being considered.

- (b) The burden of proof: in the ISO's procedure, a constraint is considered competitive unless shown to be potentially non-competitive, while DMM prefers that constraints should be assumed to be non-competitive unless demonstrated otherwise.
- (c) Inter-temporal issues in bidding commitment costs, especially minimum operating costs. A concern they and stakeholders have raised is that once a generator has been committed, there is a need to mitigate the generator's ability to inflate those bids in later intervals in which the generator will need to continue producing due to limited ramp rates or long minimum run times.
- (d) The final issue concerned the treatment of constraints (especially nonbinding constraints) in the test for local market power for commitment costs. DMM argues that a fundamentally different approach than one based on aggregating across constraints is needed. At least some of the MSC members expressed agreement with that position.

The ISO's proposal for handling nonbinding constraints was then discussed by Ms. Colbert as well as by MSC members, DMM and attending stakeholders. Dr. Scott Harvey, member of the MSC, summarized the merits of an approach to identifying constraints that had been discussed by MSC members and ISO staff, which would consider only constraints that are generated in the iterative transmission feasibility checks used in the market software. Since constraints that are not generated in these checks and then enforced in the unit commitment could not have forced the commitment of a generating unit, it was observed that it would not be necessary to consider other constraints, such as those that would have been identified in the ISO's proposed seasonal identification of noncompetitive constraints.

Dr. Harvey also explained the rationale for the proposal that a generator's commitment cost bids be mitigated if the generator has significant market power on any single transmission constraint, as opposed to a procedure that would aggregate across all system constraints. Although this proposal would be conservative, it was pointed out by MSC members that it would still provide generators more bid flexibility than the present procedure, which in essence mitigates all commitment cost bids in all circumstances.

The second issue was discussed by the Ms. Colbert, the MSC members, DMM, and attending stakeholders. Dr. Hobbs pointed out that, in theory, commitment cost bids and energy offers could interact in complicated ways to confer market power, but that unless a full market price and bid cost recovery impact test was conducted (similar to the eastern ISOs), these interactions would not be practical to evaluate. The MSC members tentatively agreed that the present LMPM procedures for energy bids appear to be widely accepted as sufficient to identify

local market power in energy, in which case commitment cost bids should also be mitigated. But there also needs to be an additional test to account for how non-binding constraints might have triggered commitment and provide opportunities to increase bid cost recovery payments.

RECESSED

The meeting was recessed at approximately 12:15 p.m. for lunch. Chair Hobbs stated the meeting would reconvene at 1:00 p.m.

DISCUSSION ON FLEXIBLE RAMPING PRODUCT

Lin Xu, Ph.D, Senior Advisor Engineering Specialist, Market Analysis briefed the Market Surveillance Committee on the flexible ramping product. The issue addressed was the following: In a number of real-time intervals in the past few months, there have been energy price spikes while, at the same time, either upward flexible ramping prices have been zero and/or flexible ramp was not acquired in the previous period, or capacity that had been designated as upward flexible ramp was not available to generate energy as intended. As a result, the intention of the flexible ramping product to help meet energy needs and prevent power balance violations has not been fully realized.

In his presentation, Dr. Xu showed the results of the ISO's analysis of the possible reasons why this occurred. One reason was the implementation of an unnecessary constraint upon the ability of generators to provide flexiramp. Correction of this oversight should make more flexible ramping product available when it is economic and needed. Another reason is the disregarding of energy limits in assigning flexible capacity, which can result in generators not being able to provide energy when called upon. MSC members suggested that this should be readily corrected, and ISO staff agreed.

A third reason is apparently the fact that capacity designated to provide flexible ramping capability in one interval was prevented from generating energy in the next interval because of transmission congestion. The MSC members and staff discussed whether this was due to constraints between balancing areas in the energy imbalance market, or constraints within those areas. Dr. Harvey of the MSC suggested further analyses to better understand the role of transmission constraints and the reasons for the problem. Dr. Hobbs of the MSC suggested that an approach similar to the contingency modeling enhancements initiative could address this problem, in which corrective dispatches in response to contingencies are modelled. Such an approach could be used at some point in the future to make zonal flexible ramping capacity designations that would be able to provide needed flexibility during unexpectedly high or low net load episodes despite transmission congestion.

DISCUSSION ON EIM GREENHOUSE GAS ATTRIBUTION ENHANCEMENTS

Don Tretheway, Senior Advisor, Market Design Policy, briefed the Market Surveillance Committee, providing an update on the ISO's proposal for attributing greenhouse gases to power imports to California under the AB32 emissions trading process. The two-pass solution is intended to first calculate a counterfactual in which California does not, on net, import power, and, second, perform the market optimization, identifying generators whose output increased and can be identified as being associated with imports.

The two pass approach presents some conceptual difficulties concerning the pricing of power, in that unlike a single pass market dispatch, the resulting energy prices might be inconsistent with the energy dispatch. Such an inconsistency might mean that, given the energy and greenhouse gas prices, a generator would find it more profitable to have a different energy production schedule, or different allocation of its output between non-California and California sales. Such a situation of "non-supporting prices" can encourage generators to make energy and commitment cost offers that deviate from their true costs, possibly leading to market inefficiencies. ISO staff, MSC members, and attending stakeholders then discussed several issues, including the strength of this possible incentive, the impacts on market efficiency, and the extent to which contract shuffling and emissions leakage would be avoided by this proposal.

Mr. Tretheway pointed out that the first pass calculations are also useful for documenting the carbon impacts of EIM. Dr. Hobbs of the MSC asked if it would be possible to do an additional set of runs in which there would be zero imports or exports from California in real-time, so that an aggregate assessment of the net carbon effects of the energy imbalance market over a longer period of time (e.g., yearly) could be assessed. Although such a study might not meet the present requirements of the California Air Resources Board, it could contribute to building understanding of and support for the energy imbalance market within and outside of California.

FUTURE AGENDA ITEMS

Dr. Hobbs announced that the next in person meeting would tentatively be held in November or possibly December.

ADJOURNED

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