

State Regulatory Authorities Sector Responses by OMS

To the December 1 Advisory Committee Questions

11-29-2010 by OMS Resources WG

Opening Statement

The OMS appreciates this opportunity to comment on the Midwest ISO's proposed changes to resource adequacy requirements. In order to understand the OMS response, it is important first to understand and address the motives for the Midwest ISO's proposal to initiate a forward capacity market. Forward capacity constructs, or capacity "markets," specifically the PJM Reliability Pricing Model (RPM), have been established under the premise of accomplishing two distinct goals. Investigating the need for the Midwest ISO to accomplish either or both of these goals is vital to judging the legitimacy of the Midwest ISO proposal. The Midwest ISO has not been consistently clear about what the goal of the proposed forward capacity auction is.

One expressed goal of forward capacity "markets" is recovery of so called missing money. Missing money, or revenues missing from the energy and operating reserves markets, has not been and will not be a significant problem in the Midwest ISO footprint given the vast majority of generation capacity is regulated under the traditional vertically integrated structure. Under the vertically integrated structure, generation assets are fully compensated by inclusion into retail rates for costs they incur--for expenses as well as capital investments. Therefore, the vast majority of generation assets in the Midwest ISO are not experiencing any "missing money" problem.

Another expressed goal of a forward capacity "market" is to incent new generation. The market clearing mechanism of the PJM RPM, a variable resource requirement demand curve, is based on the theoretical cost of new entry of a peaking plant. Theoretically, the model is expected to return, on average over time, and in combination with energy rates, revenues equal to the cost of new entry of a combustion turbine power plant. The RPM and other forward capacity markets are built on the premise that they provide a forward guarantee of revenues to investors who could potentially construct a new combustion turbine power plant. Both the Midwest ISO and PJM footprints currently have significant excess capacity in their respective footprints. Therefore, a forward capacity market in the Midwest ISO cannot be justified at this time based on the need to incent new entry, even for weather related summer peak demand. When viewed in terms of these goals, the construct is essentially an outside-of-market uplift to account for insufficient revenue from energy and operating reserves markets, including scarcity price revenues. This is contrary to the direction the Midwest ISO is taking with Extended LMP, which is to improve market design by minimizing out-of-market uplifts.

The Midwest ISO is experiencing the migration of two large members to PJM. Those two large utilities which are migrating away from the Midwest ISO are predominately located in a retail choice state where generation is not integrated with load. Those utilities were presumably motivated to migrate from the Midwest ISO to PJM in search of greater revenues for their generating affiliates. The source of additional revenues not provided for in wholesale energy market rates or guaranteed in the rates of retail ratepayers is instead the forward capacity market, specifically PJM's RPM. The Midwest ISO appears to be acknowledging that the attrition it experienced is a result of the reduction in revenues due to economy-related demand levels, and in response, is prepared to design a forward capacity auction to compete with RPM for valuable voluntary membership. The OMS reiterates its belief that membership retention is not a valid reason to establish a forward capacity market. Furthermore, many

states in the Midwest ISO are engaged in energy efficiency, peak demand reduction, and other smart grid policy initiatives aimed at reducing the need for future investment, particularly during the summer peak. Paying to retain aging capacity or incenting new capacity to meet a diminishing peak demand is therefore contrary to the policy goals of state legislatures and state resource adequacy plans and will confer costs on customers that are avoidable through much less costly and more efficient management of electrical demand. The management of electrical demand has been the historical reason why inefficient amounts of centrally planned generation capacity has been built in this country, and establishing another mechanism to entrench the continued mismanagement of demand in preference to incenting new supply will undermine policy makers' efforts to rectify this age old problem.

The OMS is not convinced that the implementation of a forward capacity auction will achieve any desirable goal. The OMS instead sees the effort to establish a forward capacity auction as a means to preserve generator membership at the expense of electric power consumers. The result is a wealth transfer from consumers to generators.

Response to Questions

1. If there is a mandatory forward capacity auction, what procurement percentage should be required for the forward period?

As identified in the OMS's opening statement and in prior submissions to the Advisory Committee, the OMS does not believe that a forward capacity market is necessary at this time. The answers to this question, as well as the remainder of the questions addressed here should not be construed as modifying or limiting the core OMS position.

However, if a forward capacity market is pursued, the OMS would not support 100 percent procurement of the Planning Reserve Margin Requirement (PRMR) five years forward. The OMS would suggest that a better market design would hold back a fraction of the forecasted capacity requirement for procurement in reconfiguration auctions so that load serving entities (LSEs) may reduce capacity obligations during the forward period. This fraction held back from the full forward period procurement should be greater than load forecast uncertainty, and should be incrementally procured in successive reconfiguration auctions as the delivery year approaches. Not a single member state commission favors a 100 percent procurement requirement beyond one year. Suggested percentages range from 80 to 97 percent.¹ Making accurate forecasts of coincident peak is difficult and increasing the forecast time horizon increases the uncertainty which could increase forecast error in either direction.

A 100 percent obligation on a non-retractable forecast made five years forward is not flexible enough to accommodate load and supply forecast uncertainty due to changing market and regulatory conditions. Overestimates of capacity requirements could be in conflict with state requirements and could impose substantial and unnecessary costs on load. A requirement to secure all resources at one point in time also dictates the types of resources required because resources with shorter lead times that do not exist today are essentially barred from participation. This impinges on states resource adequacy rights. Holding back a fraction of the forecasted procurement requirement would allow the Midwest ISO load to avoid unnecessary

¹ The fraction that should be held back may depend on the goal of the forward capacity market. Since the goal of this market is yet to be clearly defined, identifying a specific percentage is difficult.

costs associated with overestimates of load five years forward and would allow resources with shorter lead times, such as demand response, to participate. Under-procurement resulting from underestimates can be rectified through procurement in an intermediate or reconfiguration auctions. This is not practical, however, for over-procurements resulting from over-estimates. Over-procurements are harder to rectify in an intermediate or reconfiguration auction because of the scarcity of buyers. This is why the holdback is valuable.

According to the Business Rules dated November 10, 2010, there will be no opportunity for LSEs to sell excess capacity in the reconfiguration auction. Reconfiguration auctions should allow both the demand and supply side to retrospectively adjust their five year forward procurement based on updated information.

2. Who should set the standards for reserves?

To date, the states rely on the Midwest ISO to calculate the various types of planning reserve margin percentages for the coming planning year. At this time, the OMS believes that the Midwest ISO should continue to undertake loss of load studies and develop planning reserve margins, but states should retain the right to require different margins for LSEs within their jurisdiction.

Almost all the load in the Midwest ISO is subject to state regulatory jurisdiction, which has primary authority over the corresponding LSEs regarding resource adequacy and the ordering/approval of new generation and/or demand response resources. The Midwest ISO's tariff specifically recognizes this authority with language that preserves state jurisdiction, state authority to set and enforce adequacy standards, and the right for states to set planning reserve requirements that are more or less than what the Midwest ISO sets. (Sections 68, 68.1) A mandatory auction raises federal-state jurisdictional issues and, in states that actively set and enforce resource adequacy, may violate the federal-state jurisdictional boundaries in the Federal Power Act as discussed in the response to question 1.

The OMS is concerned that a drastic change to the Module E resource adequacy construct could have unintended consequences. Module E was intended to provide the Midwest ISO with the ability to incent load serving entities to contract independently for capacity needed for the reliable operation of the system while meeting the NERC reliability standards or the regional entities such as the MRO, RFC and SERC. The current Module E provides LSEs with an incentive to compensate resources for shared excess capacity. A penalty incepts LSEs to pay resources to commit for the month prior to the operating month and not jeopardize the resource pool of compliant LSE's suppliers.

3. Who should do the load forecasting?

Most of the OMS states prefer a MISO aggregation of individual utility (the local wires company) level forecasts over a centralized forecast by the Midwest ISO.² The advantage of utilizing

² Ohio and Illinois prefer a centralized forecast by the Midwest ISO in the instance that there is a mandatory forward auction.

utility level forecasts is that utilities will have access to specific information such as local temperature data at the coincident peak hour, local economic and demographic data, and customer specific information not available to the Midwest ISO.

The Midwest ISO should continue to determine peak day diversity and adjust the forecast accordingly as it is currently doing. The Midwest ISO should also provide a protocol to ensure forecasts by multiple entities serving load in retail choice states sum to total load to prevent missed or double counting, and in a manner that is fair to both the incumbent utility and retail choice providers.

Some have suggested that a longer forward planning period with financial binding commitments would incent utilities to “under-forecast” as a compliance strategy. This incentive could be discouraged with the review process conducted by the Midwest ISO such as that described at the October 7th SAWG meeting.

4. Based on Midwest ISO’s proposal for a mandatory forward capacity market, which elements of the proposal do you favor, and which do you believe need revisions?

If an auction is to be used, OMS favors an auction design with a vertical demand curve located at the capacity requirement. We do not favor the use of a sloped demand curve in the capacity auction because it would result in a variable resource requirement instead of the fixed resource requirement. The OMS believes that a LSE should be left financially neutral if it has offered supply equal to its fixed resource requirement. The Midwest ISO’s auction design lacks sufficient details to determine if this can occur. This is significant because the majority of states prefer “opt in” or “opt out” options whereby the LSE who has sufficient resources can choose whether or not to participate in the auction. Such states are concerned that, after demonstrating to the states they serve in and to the Midwest ISO that they have adequate resources to meet locational resource adequacy requirements to meet load, they will be saddled with additional costs as a result of participating in the auction. Illinois and Wisconsin, in contrast, support the required inclusion of all load and supply into the auction’s consideration.³ Regardless, the design details of the auction are critical to address these and other issues.

For those that do participate in the auction to secure additional capacity, it is not clear how the revenue from capacity prices paid relates to revenue from scarcity prices paid in energy and operating reserves markets. It appears that the Midwest ISO scarcity pricing is also designed to archive the same missing money recovery and new entry incitement goals as its proposed resource adequacy revisions. Revenues achieved by both could therefore exceed the stated goals and result in excess costs to ratepayers. To prevent any double recovery of missing money, the Midwest ISO may need to re-evaluate these goals as well as develop a mechanism that prevents double collection of revenues.

³ Meaningful mandatory participation by all load and supply resources increases the likelihood that the outcome of the auction is competitive. Lower numbers of participants means fewer competitors, which may lead to greater potential for exercise of market power through collusion or unilateral behavior increases. It could also result in different clearing prices. Wisconsin’s position on this issue is based on an understanding of the market design described by the Midwest ISO staff and that capacity that is self-supplied would not be required to be offered into the capacity auction, but would be “considered” for purposes of meeting the overall capacity requirements in the auction.

The current Midwest ISO proposal includes one reconfiguration auction one year before the delivery year. The current reconfiguration auction is designed as an opportunity for generators to buy out of obligations that they are unable to meet. A reconfiguration auction must also allow those who have purchased a capacity obligation to sell or buy capacity based on a more accurate updated load forecast. One reconfiguration auction can also lead to problems on the supply side. What if a coal plant is retired due to EPA regulation sometime between the five year base auction and the reconfiguration auction? Are we jeopardizing future reliability of grid operations by not addressing significant changes in available capacity until one year prior to delivery? Therefore, OMS supports the use of more than one reconfiguration auction.

The proposed design would also lead to poor decisions because they were based on dated information. It is not prudent for the Midwest ISO to force LSEs to procure and contractually hold 100 percent of a planning reserve margin requirement for the out years based on a load forecast that will be over five years old. No other ISO enforces capacity procurement based on a forecast that is over five years old. PJM has a three year forward capacity auction with a 2.5 percent holdback provision with three subsequent incremental auctions. ISO-NE has a three year forward descending clock auction with four subsequent reconfiguration auctions.

The OMS also does not support the use of transitional auctions. The Midwest ISO has expressed the desire to incent new entry in anticipation of the need to replace aging facilities with growing environmental costs. Transitional auctions would not incent new entry as the time between the auction and the delivery year is not sufficient or at least less likely to incent new entry. Therefore, allowing the Midwest ISO to use transitional auctions can only result in the increased cost of capacity that is already in existence, the vast majority of which will be unlikely to be affected by environmental regulations in the next five years. The OMS believes the transitional auctions amount to a significant wealth transfer, with little possible value to the operation of the market, and therefore opposes the use of them.

Moreover, the proposed design is not adequately developed. Another area of concern for OMS is the plan for monitoring attempts to manipulate the auction. The Independent Market Monitor should be actively engaged in developing a plan to monitor and mitigate, when appropriate, any capacity auction. Our understanding is that a mandatory auction means generators must offer capacity if it is not committed elsewhere. How do the Midwest ISO and /or Independent Market Monitor ensure that all capacity is offered into the auction? Based on presentations to the SAWG, the Midwest ISO seems to recognize the need to monitor for withholding and exercise of market power, but neither the Midwest ISO or the Market Monitor have proposed any substantive plan for monitoring a capacity auction. A Midwest ISO representative told the SAWG that "fewer MW's withheld can have a greater effect on prices" as compared to energy markets. Given the experience in PJM, where the independent market monitor mitigates each auction resulting in cost based offer, it is not evident that a mandatory forward auction provides a clear market signal or, for that matter, any market signal. Monitoring a forward capacity auction is more complicated than the day ahead or real time energy and operating reserves markets because we are dealing with less information in the years out and a lot more reasons for unavailable capacity. Will the alleged benefits of a mandatory forward capacity auction outweigh all of the costs?

If the Midwest ISO intends to establish a forward auction OMS recommends use of a voluntary auction similar to the current month ahead auction but with forward periods beyond one month. These forward voluntary auctions would give LSEs the opportunity to procure (and “unprocure”) the amount of capacity that is more likely to meet both the Midwest ISO and state requirements before the delivery period rather than an amount of capacity based on a five year old forecast. It would also send a more granular signal to generators about capacity needs further into the future.

In summary, the OMS does not support the mandatory forward capacity auction design as currently proposed. We would support voluntary capacity auctions similar to the current monthly auctions held today for forward periods beyond one month. We believe that such auctions with planning zone capacity requirements would comply with the locational requirements of the June 8th FERC order.