

Midwest ISO Board of Directors Hot Topics for June 2008

OMS Response

Summary:

On May 19th 2008, the OMS Board approved the final component of a resource adequacy construct which has been developed cooperatively with the Midwest ISO and other stakeholders. This component establishes a deficiency charge based on an administratively determined cost of new entry (CONE) and a seasonally variable multiplier as the preferred and primary method for assuring adherence to planning reserve margins. The OMS Board encourages both the RTO Board and MISO management to file such an approach with the FERC as part of its June 25, 2008 filing.

As compared with a market-based deficiency, the administratively-based charge is seen as less expensive to operate and can be easily adjusted to meet circumstances.

The OMS Board has consistently opposed a capacity market construct, believing that it brings substantial costs without commensurate assurance of capacity.

Obviously, no proposal is perfect or free from faults. Likewise, no proposal is free from controversy. Within the state regulatory community, there are differing views on these conclusions. In response to the MISO Board's thoughtful questions, the following discussion highlights cross currents on the various resource adequacy issues, indicating minority opinions where appropriate.

1. Does Module E as accepted by FERC (including financial settlement provisions to be filed 25 June 2008) provide the right incentives for investment in generation, transmission and demand response to support resource adequacy? What specific changes would you recommend? If you can, please address resource adequacy from the short-term (1-5 years) and long-term (6-15 years) basis.

Given the portions of Module E that are still unfinished, it is difficult to assess how effective it will be at incenting investment in resource adequacy infrastructure. While there is no unanimity among OMS members regarding the efficiency and practicality of the reserve margin provisions contained in Module E, establishing a reserve margin with an enforcement mechanism will clearly result in LSEs seeking to acquire capacity to meet their Module E obligation.¹

In our May 7, 2007 Resource Adequacy Principles, the OMS Board stated that it "remained skeptical that price signals alone are not sufficient to incent adequate and timely long-term capacity and demand response additions."² The OMS, at this time does not endorse a

¹ The OMS Board vote on an administratively-based settlement mechanism showed nine states in favor, two abstentions, and four absent. (One of the absent states subsequently joined those in favor).

² In economic theory, pricing approaches have an intuitive elegance. But, for such approaches to work, the market must be adequately policed against market power abuse. Such approaches must also pass the political economy test of no undue transfers of wealth away from ratepayers, which may be occurring in other RTOs. Price-only

forward-based capacity market operated by the Midwest ISO (OMS Principle 2). States, such as Wisconsin, have demonstrated that reserve margins, properly set, have resulted in maintaining sufficient capacity to meet peak load plus minimum planning reserve requirements in order that deficiencies will be infrequent³

The OMS Board has voted to support a properly set administrative charge based on some multiple of the cost of new entry to provide a significant incentive for LSE's and generators to enter into bilateral contracts to address resource needs. In fact, if set properly, such a charge may not have to be imposed at all as it would act as an incentive ahead of time to put the appropriate amount of capacity resources under contract.

The OMS Principles require that there be "non-discriminatory opportunities for all resources, including renewable and demand resources and a mix of firm contracts when meeting annual forecast load adjusted by dispatchable and verifiable price-responsive demand reductions" (OMS Principle 3). This is an issue that should receive more scrutiny. The Midwest ISO's recent commitment to examining recognition of price responsive demand is encouraging as such demand resources can contribute to meeting reliability requirements. Load forecasting techniques need to be updated to reflect retail restructuring and the substantial changes made in the last few years (and changes expected in the future) with regard to retail rate design. Due to technological advancements and new pricing policies, loads have more direct information regarding real-time wholesale energy prices than ever before. These realities must be taken into account in MISO's consideration of the load forecasting process. The Midwest ISO's resource adequacy policy should be designed so as to not undermine these new market-based methods for ensuring resource adequacy which many state legislatures and state regulators have initiated.

The Module E resource adequacy design proposed by MISO hinges on accurate load forecasting. If LSEs over-forecast, they risk having to pay for surplus resources, if they under-forecast, they risk paying penalties. Therefore the description of the allowable range of load forecasting techniques is critical. Continued discussion with the OMS States regarding the potential for "under-forecasting" of the large commercial or industrial customer loads in retail choice states such as Pennsylvania, Michigan, Ohio, and Illinois may be appropriate to helping to resolve these concerns. The States with retail choice comprise over 33% of the Midwest ISO load, The additional membership in the Midwest ISO of Pennsylvania company Duquesne Power and Light in October 2008 will add to that total.

2. Are you confident that the determination of deliverability is sufficient? What enforcement mechanisms would you recommend?

approaches also have a mixed record at present, as debate continues on whether capacity markets and LMPs have really provided the appropriate signals to bring forth adequate resources. This is not to say that price signals have no place; rather, their use must be tempered by the results of actual practice to date

³ Between 1975 and 1998, the State of Wisconsin used an integrated resource planning model which led to the proper amount of generation construction. In the face of changing electric industry policy, especially at the federal level, Wisconsin adopted an 18 percent planning reserve construct in 1997 to ensure adequate resources would be developed for Wisconsin consumers. This has led to at least \$5 billion in new gas-fired, coal-fired, and wind-driven generation resources in the state. In fact, due to the lumpiness of generation construction, Wisconsin generation resources may actually help other states in dealing with long-term resource adequacy issues.

The deliverability tests in Module E appear to be focused on aggregate, or network deliverability. Such an approach may be overly simplistic and fails to take into account factors such as transmission constraints and congestion on a location or sub-regional basis. Given that transmission constraints and congestion exist on the Midwest ISO transmission system, it would be more realistic to approach deliverability from this more focused perspective. Market design must be based on physical operating system realities and economics. Disregarding the reality that generation is not universally deliverable throughout the Midwest ISO region lays a foundation for market failure. .

There does not appear to be a direct relationship between deliverability determinations and deliverability policy and enforcement mechanisms as posited in Question #2. That said, MISO's use of a zonal LOLE construct for the calculation of appropriate planning reserves is a solid start; but too much granularity could complicate matters.

3. What should the role of the Independent Market Monitor (IMM) be on Resource Adequacy?

Historically, capacity ownership in the Midwest has been highly concentrated. Given that Module E imposes a reserve margin that requires LSEs to acquire capacity or face a financial penalty, there is concern regarding the potential for exercise of market power by monopoly generation owners. Prior to the enforcement of a reserve margin, in more unbundled retail markets, an LSE could walk away from an unreasonable offer for capacity. However, Module E effectively removes this option from the LSE and gives resource owners a clear advantage in negotiating strength. In its March 26, 2008 Order (hereinafter "FERC Order"), FERC required "the Midwest ISO and Independent Market Monitor to evaluate the potential exercise of market power in its long-term resource adequacy plan and to address to what extent, if any, the mitigation scheme should be revised." FERC Order at ¶390.

4. What are the primary seams issues that should be addressed?

The Midwest ISO market is not an island. In particular, capacity resources, both inside and outside of the Midwest ISO footprint, have the option to participate in numerous markets. These capacity resources will also face varying levels of physical, financial, and regulatory constraints in exercising their market participation options. Module E, as filed, has taken into account the potential for recognizing external capacity resources. The addition of new non-Midwest ISO companies into the Midwest ISO market under certain condition may also add complexity to this issue.

5. Will the Midwest ISO's approach (excluding any discussion of financial settlement/enforcement provisions) provide a stimulus for bilateral long-term contracts? Are there any other specific recommendations you would have that the Midwest ISO could implement to encourage bilateral trading?

Long-term forward bilateral contracting will be the foundation of any wholesale resource

adequacy construct, whether that construct is an “energy-only” market, a forward capacity market, or a bilateral contract-based construct such as that proposed by MISO in Module E. Module E includes the use of an existing Midwest ISO electronic bulletin board with tested auction capability already in place that can be utilized voluntarily by buyers and sellers in Module E. The OMS endorsed the use of this Bulletin Board in its consideration of the Midwest ISO Module E that was filed December 28, 2007. In its March 26 Order, FERC accepted the Midwest ISO’s proposal to maintain an electronic bulletin board for bilateral Capacity transactions (FERC Order at ¶364)

6. How should the Midwest ISO incorporate resource adequacy information into future Midwest ISO Transmission Expansion Plans (MTEP)?

The OMS Principle 4 regarding “capacity certification/accreditation test procedures and deliverability verification applied periodically to establish capacity ratings for resources” adds a critical feature of integration of resource adequacy information into future Midwest ISO Transmission Expansion Plans. The OMS understand a Power GADS [generation attributes data system] is included in compliance with Section 69.2.1.2 of Module E and is being developed as an implementation project in the Midwest ISO Resource Adequacy Business practices Manual (BPM).

In addition, the OMS Resource Adequacy Principle 11 supports “regional planning, conducted in accordance with NERC standards for coordinated planning to include consideration of the deliverability, security and coordination of generating capacity resources and their alternatives as well as the capacity needs of all load serving entities, including those who are transmission dependent, on a nondiscriminatory basis.” As the Midwest ISO continues on a path for “coordinated planning” with all market participants, data provided by designation of capacity resources, improved forecasting techniques, the collection GADS data and the availability and effectiveness of demand response resources of all types should enhance the Midwest ISO Transmission Expansion Plans in the near future and for the long term.

7. What should be the relationship between the Midwest ISO resource adequacy tariff provisions and state jurisdiction over adequacy of supply to jurisdictional load?

The Midwest ISO states do not all share the same policies or legal authorities regarding resource adequacy. In particular, many OMS states rely on traditional regulation to ensure resource adequacy for their customers, while other states have pursued greater degrees of restructuring and may rely on market mechanisms to ensure resource adequacy. Exposure by load to the real-time or day ahead spot price, by definition means that retail customers will not purchase electricity when its price exceeds its value. Decisions on how price signals are transmitted to retail customers is a policy decision reserved to state legislatures. Accordingly, the Midwest ISO’s policies must be able to work in concert with the policies of the states served by the Midwest ISO; and not inadvertently undermine policy choices made by state legislatures and state regulatory authorities.