

MISO Advisory Committee

February 15, 2012

Hot Topic: The EPA Rules Impact on the MISO Markets

Organization of MISO States (OMS) response for the State Regulatory Authorities Sector

Introduction: The OMS appreciates this opportunity to comment on EPA Rules Impacts on the MISO Markets. Reflected in some of the questions is the interaction between markets and reliability, and we appreciate the chance to comment on resource adequacy issues as well as market issues.

Markets: The OMS is concerned about two overall effects of the EPA rules that affect MISO markets and could distort market prices. First, during the transition to full implementation, there is the potential for significant uplifts due to a reliability-based need to keep uneconomical generation units running. While such uplifts may be temporary, the effect may be to distort markets and frustrate MISO's significant efforts to minimize uplifts and improve market prices in projects such as enhanced locational marginal pricing ("ELMP") and look-ahead dispatch ("LAD").

Second, in the area of emission allowances, the IMM should already have conduct and impact criteria for the evaluation of market power regarding emission allowances to the extent that they directly affect offers into MISO's markets. OMS urges MISO to work with the IMM on added responsibilities in this area as well as determining, through the MISO stakeholder process, how to best determine offer mitigation thresholds and methods.

Reliability: The OMS is concerned about the potential for generation retirements and simultaneous outages without adequate notification of compliance actions to relevant entities by generators and transmission owners. The OMS understands the need for MISO to perform this large optimization, and believes it will be very important to share potential problems with the generation owners and their regulatory authorities, so that amended outage schedules can be put in place to assure continued reliability. We also understand that there could be a need for the current retirement process to change to allow for more timely requests, and different levels of studies as generation owners make their decisions on retrofit vs. retirement. The challenge is for all parties to work together quickly while not being discriminatory, and yet balance considerations of reliability and the ultimate costs. OMS is not sure who should be responsible in this process for assessing the supply chain adequacy (engineering design firms, material fabrication, construction management, craft labor, etc.), but that discussion should begin immediately to determine the feasibility of retrofitting MISO units and those relevant units in

adjacent regions by 2015. The OMS is willing to work closely with MISO to ensure an effective and fair process is developed for analyzing retirements and outage scheduling.

On the state level, several states are investigating these issues in their jurisdictions. Some have opened formal investigations while others are using data requests or gathering information in existing docketed cases.

Responses to Questions:

1. What is your sector's overall reaction to MISO's EPA Impact Study? In answering this question, please consider the study scope, assumptions, methodology and results. Also, consider whether potential market and reliability impacts were completely and sufficiently addressed.

In its original assessment, MISO appropriately managed a great deal of uncertainty to the final rules and prepared some of the likely boundary conditions and outcomes. Simple diagrams communicate, but sometimes the complexity of the multiple, related issues is missed. OMS recommends that in the next iteration of the MISO Study, the diagrams displaying potential impacts (i.e. reserves) should contain as reference descriptions of the conditions assumed for the purpose of risk analysis. OMS also recommends that a clearer explanation of the CO₂ price assumptions be included, such as why the level is being assumed, and what is the MISO belief about the potential or probability of future CO₂ prices.

MISO's first survey of generation owners has proven valuable. OMS understands that MISO is conducting a new survey soon and OMS supports this effort to better address potential market and reliability impacts. While some details may need to be protected among market participants for market sensitivity and CEII issues, OMS believes that the pertinent information can and should be shared widely. The OMS recalls that MISO suggested a quarterly update, and that seems reasonable. As mentioned in the January Planning Advisory Committee, allowing generation owners to update changes on a monthly basis would be a helpful option. To the extent a specific state regulatory body has authority to receive, and confidentiality provisions to protect, generation owner submissions from its regulated entities, it should receive that information from MISO. Finally, to improve communications it will be helpful if MISO seeks stakeholder input via its stakeholder process prior to moving up any reports to the Advisory Committee and MISO Board of Directors.

2. Compliance with the EPA Cross-State Air Pollution Rule is dependent upon allowance market liquidity. Should MISO track and report allowance usage? Why or why not? What challenges does your sector see?

The OMS does not see a need for MISO to track allowance usage, but does see an important role for the MISO Independent Market Monitor (IMM).

As OMS understands, emission allowance usage and compliance is reported by a generation owner to the EPA. The EPA publishes information on the use and disposition of the allowances on its website. However, the generation owner typically does not have to surrender allowances to cover emissions until the end of a reporting period, such as a season or year. A generation owner may be operating a unit without owning allowances at the time, planning to buy allowances later to cover its operation. Thus, the OMS does not see a value to having MISO spend its resources tracking the use of allowances; nor do we see value in creating a secondary requirement for generation owners in MISO to report on allowance usage to MISO. This does raise the issue, however, of exactly how a generation Market Participant will determine values for Day Ahead and Real Time offers into MISO's Energy and Operating Reserves markets.

Since emission allowances have existed for many years, the IMM should already have some expertise in monitoring those values and how they are entered into a market offer. Therefore, the IMM should already have conduct and impact criteria for the evaluation of market power regarding emission allowances to the extent that they directly affect offers into MISO's markets. OMS urges MISO to work with the IMM on added responsibilities in this area as well as determining, through the MISO stakeholder process, how to best determine offer mitigation thresholds and methods. OMS is concerned that the exercise of market power will be one of the new opportunities provided by emissions markets that market participants could take advantage of at the expense of ratepayers, and therefore urges MISO and the IMM to get out in front of this issue. If we wait for this to happen before we act, it will be too late.

3. Attachment Y of the MISO tariff was designed to manage the study of an occasional potential generation unit outage or retirement. How should Attachment Y and its implementing business rules be changed to address the current situation brought about by the EPA regulations that would require a dramatic, time critical modification of the generation fleet in the region?

The EPA rules implementation creates the likelihood of simultaneous and overlapping outage and retirement requests that would be beyond what the existing Attachment Y construct was designed to address. What is needed is a more comprehensive Attachment Y that addresses this transitional EPA compliance period for long-term outages and retirements. This is in addition to the need, in the next question, to manage short-term outages via an outage scheduler. The challenge here is for all stakeholders to step up and work together to allow the generation owners, MISO, other market participants, and the state regulatory authorities to assess and process decisions in a more timely, simultaneous, cost effective manner to balance reliability risks and ratepayer costs. For example, there could be a sliding scale of notification requirement time periods, size/type of unit, area/plant collection of MW, outage intentions, and other factors. Instead of an individual review of individual proposed retirements with study following study, allow batch processing and studies of groups of retirement requests. A generation owner could,

and likely will seek an exploratory level of information such as simple thermal and voltage screenings. A plant could seek temporary mothballing by season or months for managing emissions in the interim years.

Where MISO coordinates the generator outages, MISO should investigate paying a generator to take its outage at a time other than that which the generator requested. Because a change in outage timing may result in increased costs to the generator, MISO should also consider allowing the generator to recover some or all of the extra cost in the same way out-of-market costs are recovered for plants that are committed and dispatched for reliability reasons. If MISO considers developing tariff language to allow payment to reimburse a generator's extra costs that it incurs to reschedule a planned outage if that is directed by MISO to preserve reliability, it should do so through the stakeholder process, including OMS input.

4. Provided MISO can determine the quantity of MWs for each month that can be on outage for each of the 7 resource zones using a methodology consistent with the LOLE analysis, what criteria should be used to allocate those MWs to requests for outages to comply with EPA rules?

When considering the significant amount of retrofits in the near future, OMS recommends that MISO use many factors when considering requests for outages. For example, the use of a first-come, first-served basis is still a fair means to reward those who plan ahead and to incent adequate lead time for information to ensure reliability and resource adequacy, especially when considering that those who wait may be subject to less risk as they learn from those who go first. Also important is the size, location, and reliability impact of an outage where the more significant outage should be given more weight. Because the process is likely to be complicated, it should be thoroughly vetted through MISO's stakeholder process and should be clearly specified in the Tariff and Business Practice Manual. The Load Serving Entities under the jurisdiction of state regulatory authorities will be looking for clear requirements and guidance where they seek approval of including the cost impacts in retail rates.

There is a need for the generation owners to, as a whole, provide their outage information to MISO well in advance. Once that is done, MISO can then perform the necessary batch studies to determine if the requested outages are locally and regionally feasible for each outage season. If there are potential problems then MISO can work with the owners, and the owners can work with their regulatory authorities, to reschedule the outages as necessary. The outages could be approved in a non-discriminatory manner similar to how MISO handled a large number of simultaneous requests for generation interconnections. Perhaps there would be a deadline a certain number of months before each year or outage season for units to submit outage requests. If MISO can determine the number of MWs for each month that can be on outage in each resource zone, that is valuable, and the information should be provided to MISO stakeholders as the analysis is completed.

If MISO can develop assessments that determine not only how many MWs can be on outage, but also determine how many outages have been requested by zone by month, then, subject to confidentiality provisions, it can inform the state regulatory authorities about potential reliability problems in their resource zones. While MISO has an important role in coordinating the scheduling of outages and sharing of information with the states, to the extent legally possible, it is important for each party to be able to ensure reliability and resource adequacy.

The supply chain for the new control systems needed to achieve compliance, i.e., design firms, component fabrication, project management construction, skilled crafts, state construction permit approval processes, etc., is expected to be challenged by rule implementation. The potential dates and shifting of locations may make it difficult for feasible solutions to meet both reliability criteria and the EPA deadline. Continued reports by the generator owners that assess the supply chain issues will be helpful to those who are responsible for system reliability at a reasonable cost.

5. With respect to EPA rule compliance, are there energy, ancillary services, ARR/FTR or capacity market rules that need to be modified to address the altered availability of the generation? How will such changes impact reliability and system operations?

The OMS understands this question to ask about what changes are needed over the next three to four years to implement the EPA rules. One change that may be needed to market rules is the determination of who pays for uplifts that may be required to keep uneconomic units running. These are units that may be required to continue to operate for a limited period of time before another solution can be put in place so that the unit can retire without causing a local reliability issue. Where based on allocations to cost causers and beneficiaries, such uplifts may be allocated to the local load, or, a broader allocation (perhaps using the planning resource zones) may be appropriate. This raises the question of whether a unit should be able to operate “normally” as it always has and be paid out-of-market costs even for times when it is not needed for reliability, or be dispatched only under certain peak or emergency conditions under which it is required. Each mode of operation could cause different amounts of uplift charges.

6. What role should the states play in coordination of outages and/ or to assure resource adequacy with regard to EPA rules?

As discussed in the response to Question #4, the states and MISO both have responsibility to ensure that resource adequacy is maintained. While MISO should coordinate the scheduling of transmission and generation outages and retirements, the states have the resource adequacy and cost impact responsibility over the outcome of outages and retirements. As the OMS consistently pointed out during last year’s Module E discussions, the states ultimately have

authority over the construction and acquisition of new resources that are necessary to maintain resource adequacy.¹ Many states have integrated resource planning requirements that help all parties to plan for the future. Environmental retrofits, unit retirements and the addition of new resources therefore fall under most states commissions' jurisdiction. Also, most states have the retail ratemaking authority to approve or deny recovery of the cost impact of actions taken, so a state denial of retail rate recovery of increased costs of a rescheduled or poorly planned outage can be thought of as indirect authority over when outages occur.

MISO has an important outage and retirement coordination role. States are very appreciative of the information that MISO can provide to them. The OMS urges MISO to share with each interested state the status of their survey and details regarding expected retirements and outages regarding the EPA rules. This, of course, should be managed under the appropriate protective orders and/or non-disclosure agreements.

Many states are gathering information regarding their jurisdictional utilities and the EPA rules. Some are obtaining information within the context of existing dockets before the commissions, while others have a separate process.

The Missouri Public Service Commission initiated an investigation on August 30, 2011 (EW-2012-0065), and held one of two technical workshops on October 26, 2011. The Commission directed its staff to file a final report by May 2012.

The Iowa Utilities Board issued an order opening a notice of inquiry (NOI) on utility coal plant planning and the EPA rules on September 2, 2011. This inquiry requests regulated utilities to prepare several scenarios describing how they could comply with the new regulations (such as upgrade all coal, convert some to natural gas, etc.), what the rate and other impacts are of each scenario, and "sensitivity" studies exploring the impact on these projections if the price of natural gas or the interest rate, demand, cost of construction, etc. is lower or higher than anticipated.

Several Minnesota state agencies (i.e., led by the Pollution Control Agency, with participation by the Department of Commerce and the Public Utilities Commission) are collaborating with the EPA and a cross-section of industry and public interest stakeholders to gather necessary tools and information to help the State develop and plan strategies to achieve compliance with EPA proposed electric utility sector rules in a coordinated and cost-effective way. Outcomes expected from the project include: (a) recommendations for a process or plan that will lead covered sources to a responsible compliance strategy that meets all regulations,

¹ See OMS comments on Resource Adequacy to MISO at AC meetings December 2009, December 2010, February, 2011 at OMS Hot Topics web page at <http://www.misostates.org/>

ensures reliability, mitigates costs and incorporates energy efficiency, renewable energy, and combined heat and power; and (b) estimates of how compliance strategies will affect air quality, greenhouse gas emissions, and economic conditions in Minnesota.

The Michigan Public Service Commission is an ongoing participant in an ad-hoc group organized by the Michigan Department of Environmental Quality along with the affected utilities in the state with the objective of sharing information and developing a path to compliance while maintaining reliability.

The Indiana Utility Regulatory Commission expects to issue a data request to its utilities in February 2012.

The Illinois Commerce Commission held a Joint Electricity/Gas Policy meeting on November 8, 2011 at which testimony from experts was taken.

7. Looking forward, what other actions should MISO take, if any, to help maintain local, regional and inter-regional reliability during the implementation period for the MATS, CSAPR and other EPA rules?

OMS urges MISO to continue to work towards resolving inefficient seams issues, including transfer capacity movements across the market seams between MISO and non-MISO markets (particularly with PJM). Such resolution is even more important and urgent during and after the implementation of the EPA rules. OMS would like MISO to investigate the possibility of some type of limited, temporary, reserve pool, emergency capacity exchange that could help MISO and its RTO neighbors. Instead of the traditional firm permanent transmission service requirement, a limited “slice of system” pool from each system could be allowed to be called on in reserve the Day-Ahead and then dispatched in Real-Time as the NERC Energy Emergency Alert events progress.

The OMS agrees that there is definitely a need for sub-seasonal assessments and possibly monthly model checks by MISO that are coordinated in development with the neighboring RTOs. The OMS also suggests that it is worthwhile to investigate interregional coordination of outages during this EPA compliance period. Interregional coordination includes looking at outage schedules of MISO and its RTO and non-RTO neighbors, so that reliability is better ensured along and across the seams.²

² The ICC cannot sign on to the recommendations in this section because it is not clear what the recommendations are or how they could be implemented.