

MISO Advisory Committee
February 26, 2014
Hot Topic: Demand Response
Organization of MISO States (OMS) Response¹
for the State Regulatory Authorities Sector

The Organization of MISO States (OMS) appreciates this opportunity to provide the MISO Board of Directors, MISO staff and other stakeholders with the State Regulatory Authorities sector perspective on several demand response subjects.

The MISO demand response (DR) hot topic questions were grouped into three broad areas:

1. appropriateness of MISO's objective to enable reliable delivery of lowest-cost energy to customers, with full DR participation in a non-discriminatory manner;
2. expansion of DR resources as a means to increase system reliability and lower electric costs; and
3. any MISO actions with respect to DR resources that are not registered in the MISO markets.

In addition to responding to these specific questions OMS offers comments on several related recommendations made by the Independent Market Monitor (IMM) in the 2012 State of the Market Report.

Introduction

State commissions and Load Serving Entities (LSEs) have extensive experience with demand response programs and have utilized them as a resource for many years. Most typically, these programs include large commercial and industrial interruptible load programs, residential water heater and air conditioner direct load control programs, commercial HVAC direct load control programs and behind-the-customer meter generation. Some LSEs also have experimented with or implemented rate-based demand response programs such as real time pricing, critical peak pricing and peak time rebates.

Since the beginning of market operations, MISO has accommodated demand response programs in the energy and ancillary services markets. Further, MISO provided qualifying demand response programs with capacity credit under the provisions of Module E. MISO has also worked with stakeholders to eliminate barriers to the participation of demand response resources.

¹ Illinois abstained from participating in these comments.

Due to the projected reduced capacity surplus in MISO and the potential for relatively volatile energy prices, demand response and other solutions that can be implemented relatively quickly will likely receive increasing attention during the next several years. In addition, new communication and control technologies and advanced metering have the potential to deliver needed resources much more quickly, at lower cost and provide an opportunity for greater participation by residential and commercial customers.

States have supported and continue to support demand response programs for a variety of reasons. DR programs can allow LSEs to achieve reliability targets at a lower cost than other conventional options (such as new generation) to meet peak loads. They can also mitigate fuel costs when energy prices spike and allow LSEs to balance needs among their entire customer base. In addition, many of these DR programs typically provide financial benefits in the form of rate discounts to participating customers, which can be especially important for large industrial customers.

OMS is supportive of MISO efforts to identify and eliminate barriers to the participation of demand response resources in MISO markets. That said, state commission jurisdiction over demand response programs must be recognized, as well as each state's decisions regarding participation in MISO markets by DR resource providers.

OMS also notes that the Advisory Committee's (AC) discussion of demand response issues lacks any direct input from third-party demand response providers. OMS observes that third-party demand response providers are not recognized in MISO's AC Sector structure, and therefore their perspectives may not be adequately represented by any of the Advisory Committee sectors today. As MISO works to modify market rules to integrate demand response resources, MISO should, as many states already do, actively seek input from all stakeholders who would play a large role in bringing demand response to the MISO market.

The state commissions recognize that jurisdiction over demand response programs requires the states to work closely with MISO and other stakeholders to ensure that the regional markets and retail customers continue to benefit from existing and new demand response programs. The states, LSEs, and their customers are prepared to consider examining existing programs as needed, and to think creatively to most efficiently address both local and regional needs.

1. Is MISO's objective of enabling reliable delivery of lowest-cost energy to consumers while ensuring that DR can fully participate in a fair, efficient non-discriminatory manner the proper objective with respect to DR resources?

MISO's stated objective with regard to demand response appears reasonable; the key to this question comes in how the objective is carried out in practice. OMS believes MISO can appropriately pursue this objective so long as MISO continues to recognize state regulatory

authority in the area of demand response and adhere to OMS's previously adopted Demand Response Principles.²

Since FERC Order 719 in 2008, MISO has conducted an open and transparent stakeholder process in the Demand Response Working Group to identify and eliminate barriers to the participation of demand response resources in MISO markets. This process has been successful. OMS encourages MISO to continue this effort.

It is not clear at this time if it is necessary for MISO to take explicit actions to encourage the use of demand response resources by LSEs. OMS is interested in hearing the perspectives of other stakeholders in this regard. It would be helpful for MISO to continue to identify and develop characteristics and requirements for demand response to qualify as resources under Module E and participate fully in MISO markets. The design and implementation of new DR programs take time however, and with reference to legacy programs, any new market rules should be implemented only after a reasonable transition period with sufficient notice of DR requirements to participate in MISO markets. Any new market rules and applicable transition period should be determined with stakeholder input, allowing sufficient time for state regulatory review and program design and approval (where applicable), and customer enrollment.

Demand response is an area where creativity and variety should be encouraged, and we can all learn what demand response is capable of through innovation. New actions by MISO in the area of demand response should strive to accommodate the range of programs that create value, and take care not to exclude retail programs from the market in an effort to streamline processes. It will be important for MISO to examine the scope of state approved retail demand response programs in detail to ensure that participation of new, legacy, wholesale, and retail DR products and programs is not be limited in a manner that is discriminatory or favored differently than supply side resources.

2. Should MISO seek to expand the use of DR resources as a means to increase system reliability and lower electric costs?

When MISO was developing its proposals to comply with Order 719 and Order 745, state commissions were concerned that participation by aggregators of retail customers (ARCs) or Curtailment Service Providers (CSPs) in the MISO market could result in cost shifting from participating to non-participating customers (within a utility), between market participants and between states. Such cost shifting could result in unjust and unreasonable retail rates for non-participating customers. As a result of these concerns, some of the states have enacted policies or rules that prohibit third-party CSPs from doing business in their states. The market rules authorized by FERC that provide for CSPs to participate in the MISO energy and ancillary services market are complex. Given the tightening of the capacity situation in MISO, it is likely that CSPs will be more interested in participating in MISO's capacity auction under the

² The OMS Demand Response Principles, adopted November 8, 2007, are attached to these comments.

provisions of Module E. The states have not determined whether rules for CSP compensation for capacity and cost allocation will result in unreasonable cost shifting.

As long as it does not diminish reliability or result in cost shifting, OMS is not against authorized third party participation in the MISO energy and capacity constructs or via bilateral contracts. OMS believes that MISO should neither encourage nor discourage the participation of CSPs. Each state can then determine whether the retail customers in its state will benefit from participation by CSPs in their state.

OMS has concerns about some of the actions proposed for DR resources in MISO, and expands upon these concerns below with regard to the IMM's 2012 State of the Market recommendations for DR. For example, retail interruptible load programs allow for interruptions for both economic and reliability reasons. When MISO develops market provisions to allow non-dispatchable DR (including behind-the-meter generation) to set energy prices in the real time market, those provisions will need to recognize the material differences in the available types of demand response programs. It may be necessary and appropriate to scrutinize offer parameters so that different types of demand response can set energy prices and perhaps in some cases operating reserves prices using an appropriate price for the program.

Another example concerns suggested changes in market rules that would call on interruptible load when the system is constrained prior to MISO taking other emergency actions. Such changes may be in direct conflict with the provisions of some state retail interruptible tariffs. Many of these retail tariffs were written at a time when the use of DR in an emergency was as a last resort for emergencies only on the local utility's system. Where the emergency is now anywhere within MISO, it increases the probability that the DR will be called upon and used by MISO. This fundamentally changes the deal. Some customers will likely decide to discontinue participating under an existing tariff service if it is possible that interruptions will occur more often than what the customer considered economic when they signed up. OMS recommends that the concept of changing when DR is called in an emergency be closely analyzed before any changes are implemented. In the short run, it does not make sense to make this change if it results in an overall net reduction in DR participating in MISO due to disenrollment.

Demand Response market mechanisms in response to the IMM's 2012 State of the Market Report recommendations should recognize material differences in demand response programs.

In the 2012 State of the Market Report, the IMM made three recommendations relating to demand response. OMS offers the following brief comments on these recommendations.

Recommendation 1. Develop provisions that allow non-dispatchable DR (including interruptible load and BTMG) to set energy prices in the real time market.

While OMS supports this recommendation, in its implementation, it is important to recognize that there are several different types of interruptible load programs that would be setting prices.³

Economic interruptible load programs allow an LSE to call for an interruption when the price of energy in the day ahead or real time market exceeds a certain threshold level. These programs often allow the customer the option to “buy-through” an economic interruption at the real time price. Once the threshold price is exceeded, customers on such an interruptible rate are already facing the real time price and there is no need for MISO to take any action to administratively adjust the real time price.

Emergency interruptible programs allow for interruptions only in a system emergency. In these programs, typically the customer is provided with up-front rate credit and receives no additional payment from the LSE when an interruption occurs. When an emergency interruption is called, the customer must curtail their use – no buy through is allowed.

There are also hybrid interruptible programs which allow for interruptions for both economic and reliability reasons. If this recommendation is pursued, it will be important to design new market mechanisms with sufficient attention to material differences in the available types of demand response programs. It may not be appropriate to let all types of demand response set energy prices without additional steps to ensure the market participant would use an appropriate price for the program.

Recommendation 16. Re-order MISO’s emergency procedures to utilize demand response efficiently.

In this recommendation, the IMM calls for changing the order in which demand response resources are utilized when the system is constrained. In particular, the recommendation calls for utilizing interruptible load prior to the time that MISO takes other emergency actions. Such a change could be in conflict with the provisions of some interruptible tariffs. Some customers may decide not to continue to take interruptible service if it is possible that interruptions were more likely. Some resources have to be last in the dispatch order. OMS recommends that this recommendation be closely analyzed before any changes based on it are implemented.

Recommendation 20. Evaluate capacity credits provided to wind resources and LMR to increase their accuracy.

OMS is not opposed to an evaluation of the capacity credits provided to Load Modifying Resources. Such an evaluation should be conducted with the participation of all stakeholders.

³ OMS has supported using ELMP as a means to better set market prices. ELMP provides for allowing non-dispatchable DR to set real time energy prices.

3. Should MISO take any actions with respect to DR resources that are not registered in the MISO markets?

It is important to recognize that almost all demand response deals with retail load. Therefore almost all demand response programs are directly related to the provision of retail electric service by LSEs and are regulated by the state commissions. LSEs have historically designed demand response programs to meet their local needs. State commission authority over *retail* demand response programs which are utilized as resources in *wholesale* markets results in jurisdictional tension. This duality raises the question of who should adapt to whom. OMS believes it is possible to respect existing state-authorized demand response programs while encouraging the creation of new programs that are designed with a regional market structure in mind.

MISO and its stakeholders now have and recognize the need for more visibility of state-authorized demand response programs to allow and account for all available resources to meet regional needs. State commissions recognize it may be necessary to update “legacy” demand response programs in order to reflect changing circumstances, and to consider new demand response programs that reflect the economics of MISO wholesale markets and market rules.

However, current and future needs should not run roughshod over existing legacy demand response programs. OMS believes MISO should have a reasonable transition period to encourage demand response to be more visible to MISO and market participants, without forcing abandonment of existing programs. Legacy demand response programs should not be forced to become part of a market for which they were not designed. Customers and LSEs have made investments to participate in legacy demand response programs based on the current parameters, and those investments should not be stripped of their value. LSEs with legacy demand response programs should be allowed to continue to use those programs to the extent they bring value to the LSE and its customers. And LSEs should get capacity credit (i.e., in Module E) for the adequately demonstrated value that the legacy programs bring to the LSE and its customers.

Organization of MISO States Midwest Demand Resources Initiative Statement of Principles for Demand Resources

Introduction The Organization of MISO States supports a well-functioning wholesale power market in the MISO region, and agrees that engagement by customers, the demand side of the market, is vital to this objective. Its working group, the Midwest Demand Resources Initiative, is tasked to promote progress toward an active demand side throughout MISO.

In promoting this objective, the OMS recognizes that:

1. MISO tariffs should support the state commissions' responsibility in the setting of rules and conditions of service for retail demand response programs;
2. MISO tariffs should encourage flexibility to LSEs to offer retail demand response resources into the markets in a way that preserves both state and regional interests.

Values An active demand side can work in real time to signal that reduction of some electric use is more valuable than the dispatch of more expensive supply. OMS identifies some key values that flow from an active demand side:

1. Lower costs for safe and adequate electric service to all customers;
2. Customers who are more aware of the cost of electricity and what they can do about it, especially at times of peak demand and low reserves;
3. Reduced volatility in power prices;
4. More efficient signals for generation and transmission capacity as well as for demand side resources, including demand response, energy efficiency, and distributed generation;
5. Efficient maintenance of resource adequacy;
6. Efficient maintenance of system reliability;
7. Diminished potential for generators to exert market power;

8. A cleaner electric system impact; and
9. Delayed or avoided new electric generation.

Demand resources are everywhere since many customers from among all customer classes can offer a demand response if given a reasonable opportunity. Unfortunately, many of these demand resources are currently only prospective resources because of barriers to their active participation in the market. Demand resources represent a broad category of options potentially available to customers, including demand response, energy efficiency, distributed generation and dynamic or time-based rate options. The states also recognize that the system value of demand response may be enhanced for all participants if demand resources are developed and offered in all states. Analysis to test this premise should be developed with cooperation from MISO and OMS.

Principles The OMS accepts the following as principles to guide the work of MWDR and for use in other applicable venues, and OMS expects that these principles will evolve over time:

1. **Well-functioning wholesale electric markets and their associated benefits require an active and engaged demand side;**
2. **Markets should recognize and assure economic value** from real time load reduction actions, especially in congested areas, through material payments to market participants and customers, as appropriate, that enable the response to occur;
3. **MISO and state regulators should make transparent the value of investments in demand resources to reduce costs to consumers and increase reliability and environmental quality;**
4. **Regulators (and lawmakers, when necessary) should remove inefficient institutional barriers** to demand response and other demand resources, both at the state level and in all the markets that MISO operates, including ancillary services;
5. Market rules and tariffs should **maximize cost-effective demand response enrollment and participation;** all demand resource market participants should be subject to equivalent registration and technical requirements as any other resource in a MISO market.
6. **Legacy load control and interruptible tariffs,** largely designed in a pre-organized market framework for purposes defined by individual states, **will continue** and may be more valuable if they are consistent with a well-functioning wholesale electric market; Legacy programs shall not be required to participate in the MISO market;

7. **Regulation should enable and encourage those business structures and relationships** that facilitate and promote demand resources; such encouragement does not imply the subsidization of demand resources;
8. **The environmental effect** of demand response that involves behind the meter generation should not be unduly negative; and
9. **Education and dialogue** among stakeholders to achieve progress on these principles will be important for some time.

The OMS calls on MISO: 1) to maintain a commitment to improving its market design procedures that affect demand response, 2) to assess and reflect the value of demand resources in its transmission expansion process, (MTEP), and 3) to take what steps it can to enable OMS states to improve demand response programs under their jurisdiction. OMS expects that a well functioning demand side to the MISO wholesale electric market will make that market more beneficial to all market participants, including customers, and will address expectations for market performance by Federal energy regulators.

Strategies Following are state regulatory strategies that offer support for these principles:

1. Consider the value of **dynamic or time-sensitive retail prices** such as critical peak pricing and variations of real time pricing, **and supporting infrastructure**;
2. The **distribution of revenues** to demand resources should reflect the values contributed by customers, utilities and, where they operate, third parties;
3. Advocate that all MISO markets, tariffs, resource adequacy determinations and system planning should promote demand response as a resource, while recognizing distinctions between demand response resources and generation resources;
4. Ensure (with appropriate safeguards) necessary **access to and use of meter data** by retail customers and, where they operate, third parties market participants, for the purpose of valuing and improving the performance of demand resources;
5. Ensure **timely settlement** for compensation for demand response actions;
6. **Assess** legacy load control and interruptible rate tariffs for effectiveness;
7. **Monitor environmental effects** from increased demand response and any resulting increase in behind the meter generation and facilitate cooperation between utility and environmental regulatory agencies to evaluate these effects; and
8. Promote **continuing engagement and inquiry** among stakeholders in MISO committees and in OMS committees.