



SECTOR PROFILE

Affiliate Sector

Sector Overview

Please provide a brief description of the sector including: the approximate number of participants, the different types for entities within the sector (if applicable), and the role(s) the entities play within the MISO region as well as in the broader electricity/energy industry.

Affiliate Sector membership is made up of a variety of organizations that value resilient, reliable, fuel-secure, diverse, and affordable electricity supplies for the MISO market. There are currently 21 members of the Affiliate Sector who value the resilience and reliability attributes that coal provides to the MISO grid. These members represent coal producers, electricity generators that own coal-fired power plants, railroads, barge operators, and contractors/suppliers to the coal industry, along with major industrial users and chambers of commerce. The sector also has a strong interest in carbon capture technology.

The Affiliate Sector is currently focused on providing a voice for coal in the MISO stakeholder process and for reliable baseload power in the marketplace. Coal is the second largest source of electric generating capacity in MISO's footprint, totaling some 57,000 megawatts (MW) which represented 29 percent of MISO's total generating capacity last year and slightly more than one-third of MISO's electricity supply. We want to ensure the attributes of the coal fleet and coal supply chain are valued properly in light of their contribution to reliability, resilience, and affordable electricity prices.

Objectives and Interests

What are the top three issues that your sector would like to see moved forward by MISO in the next 2 years?

We respectfully urge MISO to pursue the following. Please note that these are closely interrelated.

- (1) **Resilience** — Place more emphasis on ensuring the MISO grid is resilient, especially in light of extreme operating conditions such as those experienced by CAISO (last August) and ERCOT (February), as well as other infrequent but highly disruptive disturbances.
- (2) **Coal Retirements** — Analyze the potential reliability and resilience impacts of greater-than-announced coal retirements.

(3) Renewables — Continue evaluating the implications of high penetration levels (30 percent and greater) of renewable energy. This is especially important in light of federal proposals aimed at increasing the penetration of renewables.

If you were MISO how would you move these priorities forward?

(1) Regarding resilience, we want to commend MISO for undertaking its Regional Resource Assessment (RRA). The RRA initiative should identify specific attributes that are essential to maintaining both reliability and resilience, which are often conflated but are not the same. Reliability means keeping the lights on during normal challenges; resilience means keeping the lights on (or restoring electricity as quickly as possible) during extreme operating conditions. While there are objective criteria for determining grid reliability (e.g., loss of load expectation), there are no criteria for determining whether the grid is resilient. (It is worth noting that ERCOT asserted to FERC in 2018 that its grid was resilient, when it clearly was not. Resilience criteria might have led to a different outcome during February’s winter storm.) Therefore, we urge MISO to establish criteria (or metrics) to gauge whether the region’s grid is resilient now and in the future, especially as the grid transitions to a lower-carbon resource mix.

In short, if we were MISO, we would ask ourselves four objective questions:

- Is the MISO grid resilient now and will it be resilient in the future?**
- How do we know?**
- What attributes enable the MISO grid to be resilient?**
- How should MISO value those attributes?**

We believe the coal fleet has a critical role to play in keeping the grid resilient, but MISO needs to determine the attributes and the resource mix that are necessary to ensure grid resilience.

(2) Regarding coal retirements, MISO has the largest coal fleet – some 57,000 megawatts (MW) – of any grid operator. This takes into account more than 17,000 MW of coal retirements, so far. We estimate that another 12,000-18,000 MW of coal within MISO’s footprint is at risk of retirement by the end of 2023. MISO should be concerned about the loss of so much coal-fired generation because of its potential impact on reliability and resilience. If we were MISO, we would analyze the reliability and resilience impacts of a plausibly large number of coal retirements within the near future. This analysis should be an integral part of the RRA initiative.

(3) Regarding renewables, MISO recently completed an important study, the Renewable Integration Impact Assessment (RIIA), to assess the reliability implications of growing amounts of renewables. However, America’s Power provided comments to MISO and to the President of OMS pointing out that the study did not assume any specific time frames for adding more renewables. (Obviously, a high penetration of renewables

within a few years is likely have different implications than the same high level of renewables farther into the future.)

As part of the RRA (#1 above), our understanding is that MISO plans to model extreme weather, the risks associated with natural gas, and different carbon prices that would accelerate coal retirements. We support modeling these scenarios. The RRA should also look at the risk to reliability based on actual renewable integration plans and specific timeframes. In addition, if we were MISO, we would be concerned about the less-than-ideal information sharing among the states and utilities about future resource plans. To illustrate why robust information sharing is critical, assume that State A and State B both intend to achieve a high level of renewables penetration. Lacking information, State A assumes that State B will retain non-renewable resources that are needed for grid reliability and resilience, while State B makes the same assumption about State A. However, neither state would have sufficient non-renewable resources in this illustration. Information sharing could help prevent problems like this.

(4) The Affiliate Sector considers the recommendations above to be much higher priority than the energy and capacity market reforms that MISO is currently considering because these reforms will not necessarily promote resilience (some could even undermine grid resilience) and could cause more coal retirements. The following are MISO's major market reform efforts:

- Improving generator interconnection queue efficiency. Transmission approval and construction delays, including massive upgrades being required by SPP for MISO interconnections, have already held up some projects for nearly 5 years, and none of MISO's (internal) queue reform efforts will address those problems.
- Moving from an annual to a seasonal capacity construct, with seasonal reserve requirements and supply accreditation. Potentially burdensome accreditation and auction eligibility restrictions on thermal generators due to regular maintenance outages would reduce revenues and profits (especially if replacement capacity is required) for thermal resource owners. This would hasten retirements of thermal resources that are critical for grid support.
- Tightening capacity accreditation requirements for all resources with a focus on conventional thermal resources. Significantly reducing capacity values of thermal generators that take normal maintenance outages would reduce revenues and profits for thermal resource owners and hasten retirements.
- Strengthening energy pricing when and where supply is tight or uncertain. Raising energy price caps would not ensure that energy prices are sufficient to cover the total costs of resources that are critical for reliability.

The Affiliate Sector appreciates the opportunity to submit this information for the Board's consideration.

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