

MISO Program Snapshot

- Load Modifying Resource (LMR)
- Demand Response Resource (DRR) --Spinning Reserves Market Participation

Updated 4-1-2025

Load Modifying Resources (LMR)

Location	Illinois MISO Zone 4 & Zone 3; Iowa Zone 3; Michigan MISO Zone 7; Wisconsin & Michigan MISO Zone 2; Missouri MISO Zone 5 , Louisiana MISO Zone 9
Minimum Size	Ameren IL: 100kW (grouping is allowed) MI: 100 kW for Retail Access Customers. 1MW for Bundled Service Customers (needs to be same entity) (Grouping is allowed).
Participation	Customer may participate in each Season. The Seasons are Summer (Jun-Aug), Fall (Sep-Nov), Winter (Dec-Feb), and Spring (Mar-May). Customers may elect different curtailment capabilities by Season.
Number & Duration of Events	In Summer and Winter, customers must be able to curtail up to five (5) times per Season, while in Fall and Spring, customers must be able to curtail up to three (3) times per Season. In total, customers participating in all Seasons must be available for up to sixteen (16) events per year. Each event may last up to four (4) hours.
Notification	Customer receives 2 hours notice prior to an LMR event.
Compensation	Program capacity payment incentives vary year-over-year, and pricing may vary from Season to Season within a given year.
Baseline	LMRs may use either a Firm Service Level (FSL) or Demand Reduction baseline option. FSL is a "drop to" measurement, with performance based upon the difference between the LMR's Seasonal Peak Load Contribution and the FSL. Several consumption-based baseline options exist for measuring Demand Reductions, including the option to develop a custom baseline methodology.
Settlements	Customers are paid annually their portion of the capacity payments.
Compliance	Customers are required to curtail at least their committed load during tests and events.
Consequences of Non-Performance	Penalties for failure to respond or to reach target. Penalty = LMP * Shortfall, plus potential to lose capacity payments for months remaining in the Planning Year. Multiple performance failures may result in being denied participation in future years.
Testing	1-hr test required if no events are called in calendar year prior to the program year.
Enrollment Deadline	February 1 for a June 1 start.
Metering	Each account must have a hourly interval meter either through their utility or CPower. Generation resources must be directly metered.

Demand Response Resource (DRR) Spinning Reserves Market Participation

Location	Illinois MISO Zone 4 & Zone 3; Iowa Zone 3; Michigan MISO Zone 7; Wisconsin & Michigan MISO Zone 2; Missouri MISO Zone 5 , Louisiana MISO Zone 9
Minimum Size	1 MW (Grouping is allowed).
Participation	Bids are submitted daily into the Day-Ahead market-on an hourly basis.
Number & Duration of Events	Must be available to curtail amount offered as available for the maximum number of hours indicated in daily offers.
Notification	Customers participating in the Day-Ahead market will receive hourly schedules based upon awarded offers once the Day-Ahead market clears. Customers must be available and able to reduce their load by the MW quantity within 10-min in each hour offered and awarded.
Compensation	Paid based the Day-Ahead Market Clearing Price (MCP) for the applicable ancillary services product offered x MW offered/awarded, plus energy payments for MWh delivered when dispatched.
Baseline	For Spinning Reserve Compliance: calculated as the difference in the metered load observed 10-min prior to the event start time and the metered load at the event start time. For Energy Payments during Spinning Reserve events: Consumption baseline calculated for each hour when scheduled to provide reserves, with optional adjustments for weather sensitivity or other anomalies (maximum of +/-20% Weekday baselines are based upon the average of the metered load from the ten (10), but no less than five (5), most recent eligible weekdays from the past 45 days. Weekend/Holiday baselines are based upon the average of the metered load from the four (4), but no less than two (2), most recent eligible weekend days or holidays from the past 45 days. Customers utilizing generation must have their generator separately metered, and the metered generator output will be subtracted from the Demand Reduction described above.
Settlements	Customers are paid annually their portion of the net ancillary service and energy payments for all hours in which the DRR has cleared offers in the ancillary services market.
Compliance	Customers are required to curtail at least their committed load (offered daily) during events.
Consequences of Non-Performance	Penalties are assessed for underperformance when dispatched for reserve products. Penalties are calculated hourly, with the formula (Scheduled MW - Delivered MW) x Real Time LMP, as well as buy out at the applicable RT MCP for Spinning Reserves for the remaining hours in the operating day during which the underperformance occurred and all hours in the following operating day.
Testing	DRR (Type 1) participating in Spinning Reserves must complete a pre-qualification test demonstrating ability to respond within the notice time applicable to the ancillary services product(s) for which it intends to qualify prior to entering the market, and are subject to annual testing requirements once participating.
Enrollment Deadline	Rolling deadline of 30-days prior to the MISO Commercial Model Update that falls on the first day of the first month of each calendar quarter
Metering	DRR Type 1 must have a 5-min interval meter either through their utility or CPower. Generation resources must be directly metered.