



# LMR Testing

RASC-2019-9  
Resource Adequacy Subcommittee  
May 21, 2025

# Purpose and Key Takeaways



**Purpose:** Review details of the upcoming LMR filings that will change rules for participation in the 2026 – 2027 Planning Year.

## Key Takeaways

- MISO will be making two Tariff filings related to LMRs and Demand Resources in coming months
  - LMR/DRR testing rule enhancements
- The Demand Resource testing rule enhancements focuses on requirements to perform a real power test and the criteria to request a waiver said tests
- The Demand Resource testing rule enhancements filing will be made in May for effective date of June 1, 2025

# First Tariff Filing

These changes are planned to be made effective June 1, 2025

# Testing is necessary to ensure all resources are capable of providing demand reduction they are being compensated for

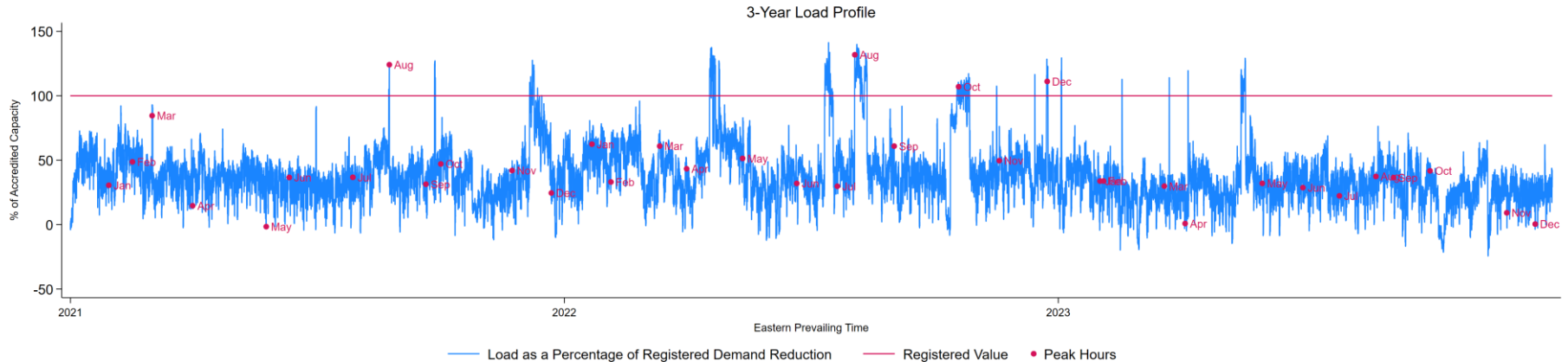
- MISO cleared ~3,700 MWs of demand resources\* that waived the requirement to perform a real power test
  - The IMM has previously identified resources that attempted a real power test, failed, and so submitted a waiver
- Increasing ACP is expected to result in more demand resources participating
  - MISO currently has the largest amount of Demand participation in any ISO by both MW and as a percent of the total fleet
- At the summer ACP, a 10 MW Demand Resource will be compensated \$613,180 for the Season
  - The same resource clearing all four Seasons would receive \$791,000
  - The total amount of auction revenue received by DR that have waived the real power test is approximately \$282M this Planning Year
  - Failure to perform results in relatively small penalties – a 10 MW resource experiencing 3x penalties will be charged ~\$108k when providing 1 MW of demand reduction
- Requiring a real power test decreases the likelihood of a resource fraudulently registering into the PRA
  - The lack of a real power test was specifically cited in several recent FERC Orders and Stipulations as helping to perpetuate the fraud

4 \*Demand Resources is a tariff defined term meaning: Interruptible Load or Direct Control Load Management and other resources that can reduce Demand during Emergencies. To prevent a resource from participating as a DRR and avoiding the requirements described in this presentation, all programs that would be classified as Demand Resources if participating as an LMR are included. This necessitates the lowercase usage of demand resources throughout this presentation.

# Real Power Test Changes BPM Language Changes

- General BPM language clean-up for clarity
- MISO recognizes two fundamental types of demand response – Targeted Demand Reduction and Firm Service Level
- Each individual underlying asset for a DRR or an LMR using the Calculated Baseline must provide a separate test and these tests must be performed simultaneously
- For individual asset level tests, the Load profile from the entire Year must be provided
  - Resources that have not been operating for at least a Year must submit the data they do have and an attestation that the load represents standard operations
- Resources using the Direct Load Control or a MISO approved custom baseline using a statistical methodology must test the aggregation as a single resource
- BPM 26 is being updated to reflect the upcoming firm service level baselines
  - This is to provide certainty to MPs regarding how FSL will be measured and matches the Tariff changes that will be filed
  - Aggregations will not be permitted to use the FSL baseline

# An example of why FSL cannot be used by aggregated resources



- This resource is an aggregation of just two assets
- Based on how the LSE submitted these resources, it is accredited at a value of 100%
- In only 2.9% of hours do the combined resources operate above the registered level
- By lowering the accredited value of the aggregation, this resource could receive accreditation that pays out millions of dollars while meeting its performance obligation without doing anything 90% of the time
- The calculated baseline cannot be manipulated in this manner and is the most appropriate baseline for these types of resources

# Real Power Test Changes Tariff Provisions

- Waiver only permitted for the following reasons:
  - A real power test is precluded by applicable regulatory restrictions
    - Evidence may include provisions in a contract that recognize a statute, rule, order, or other administrative clause established by a RERRA.
    - No resources currently use this provision
  - A MP may request to waive the requirement to perform a real power test provided both of the following are true for the three full calendar Years prior to the Planning Year being registered for\*:
    - No penalty has been applied to the resource;
    - The resource has not changed its registered value; and
    - The resource has provided demand response of at least 80% of the maximum accredited value that is being requested for the upcoming Planning Year
  - A contract between a Market Participant and the Asset is not sufficient grounds to receive a waiver
- The three times penalty applied to resources obtaining the waiver has been removed
- Accreditation has been moved from the BPM to the Tariff to reflect the testing changes
- A normal plant shut-down may be used as the real power test, provided the plant shut-down occurs within the registered notification time and the amount of the shut-down provides the necessary test amount

# Resources should provide a test reduction under the following conditions

- For a demand resource not using a FSL baseline, the Demand reduction must be tested to the full registered amount
  - A demand resource will be permitted to gross up the test results for weather per the Calculated Baseline methodology regardless of which methodology is used
  - The gross up shall not exceed 125%
  - Only a resource providing documentation detailing how the gross-up was calculated and why it is justified will be permitted – in no case will a resource that is not temperature dependent be grossed-up
  - Accreditation of these resources in PY 26/27 and 27/28 will be the tested amount – LSEs must explicitly account for all resources registered in the Capacity Market in the Load Forecast, any resource that is not accounted for will be added back into the Load Forecast
- For a Demand Resource using the FSL baseline, the Demand reduction must be tested starting from a point at least equal to 80% of the peak seasonal Demand
  - Accreditation for these resources will be equal to the resource's contribution to the Coincident Peak Demand Forecast, regardless of what the test value demonstrates
  - A resource that does not provide demand reduction from a starting point of at least 80% of its peak seasonal Demand will not be permitted to register in the PRA as an FSL resource
  - Any resource using a FSL must be explicitly accounted for in the Load Obligation – any resource using the FSL baseline that is not explicitly modeled in the LSE forecast will be added on top of the submitted load forecasts by an amount equal to the registered value of the resource plus its FSL

# Real Power Test Changes BPM Language Changes Continued

- MISO has defined the time of day when the real power test must be performed
  - A test will only be considered valid if the demand is reduced within these windows
  - A plant shut down performed within the registered time may be used
  - The shut down may begin prior to these hours, but must be completed within these hours
  - These hours reflect the average occurrence of Resource Adequacy Hours by Season

Season	Start	Stop
Summer	HE 13	HE 20
Fall	HE 13	HE 20
Winter	HE 8/HE 19 <sup>1</sup>	HE 13/HE 22
Spring	HE 14	HE 21

- If a resource has already performed a test using data prior to June 1, 2025, any time of day is acceptable

# Some Clarifications

- At a Market Participant requests, MISO verify a real power test prior to registration
- The appropriate Measurement and Verification procedure should be used to validate the Demand reduction
  - Each resource, and all components of the resource, must use the same M&V methodology across all participation options
- A normal plant shut-down may count towards the real power test, provided the plant shut-down occurs within the registered notification time and during the required test windows
- A test performed in one Season may satisfy the requirements in all Seasons provided it meets the criteria described above in each Season

# Tariff Filing and Next Steps

- MISO plans to make a Tariff filing no later than May 30, 2025 and request an effective date of June 1, 2025
  - The rapid effective date ensures all resources have the entire summer Season to perform testing for PY 26/27
- Resources will have the ability to use the Demand Response Test Deferral to test in the Spring ensuring a full 12-month window for testing prior to the 2026 – 2027 Planning Resource Auction
- Market Participants should reach out to MISO with questions regarding whether a contractual relationship exists that permits a test waiver, with questions regarding if a test will be considered a valid demonstration, and any other questions early so that any concerns may be addressed and re-tests, if necessary, may be performed



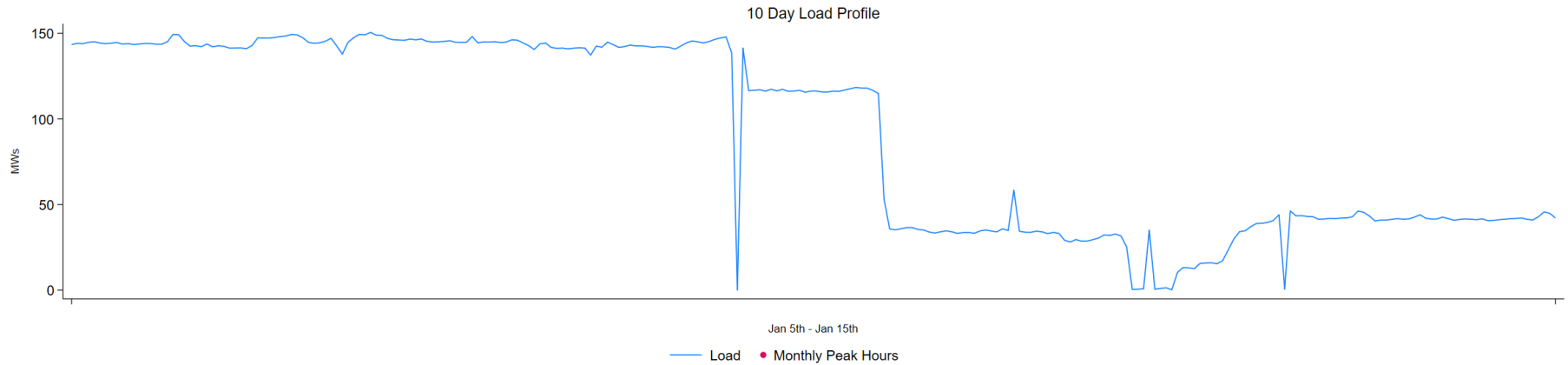
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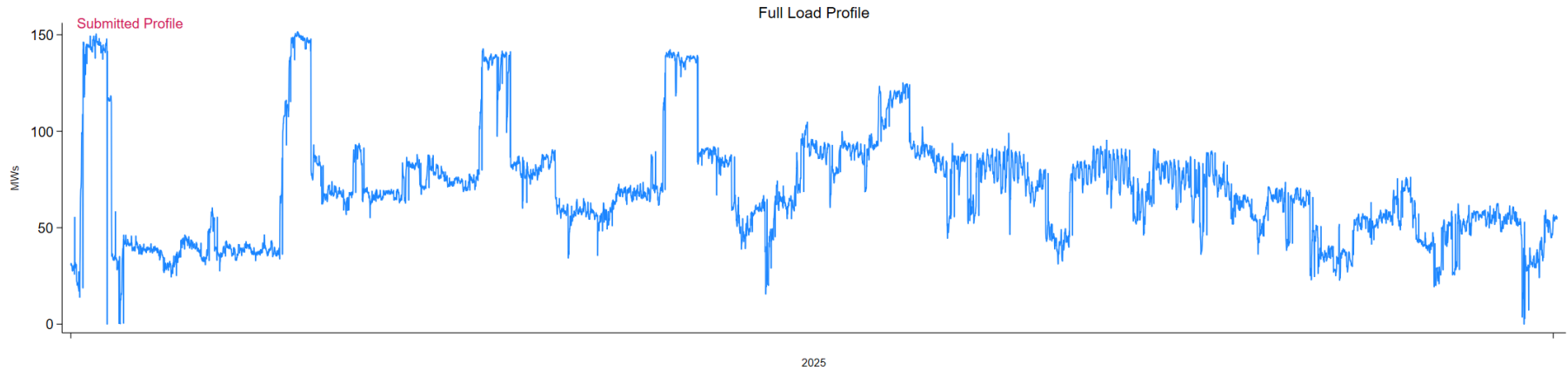
# Appendix

# Example of why resources must submit Load Data for the entire Season



- By submitting a 10-day load profile around the day of the test, this resource appears to be capable of supplying ~150 MW of demand reduction

# Example of why resources must submit Load Data for the entire Season



- When the entire year is visible it is clear something different was occurring.
- This resource was artificially inflating its Load profile
- By having a full years' worth of data, MISO can investigate whether load was artificially inflated or if something else was occurring and make a determination of the appropriate accreditation values of the resource