



Planning Reserve Margin Requirement (PRMR) Allocation (RASC-2020-4 and 2019-2)

Resource Adequacy Subcommittee (RASC)

January 15, 2026

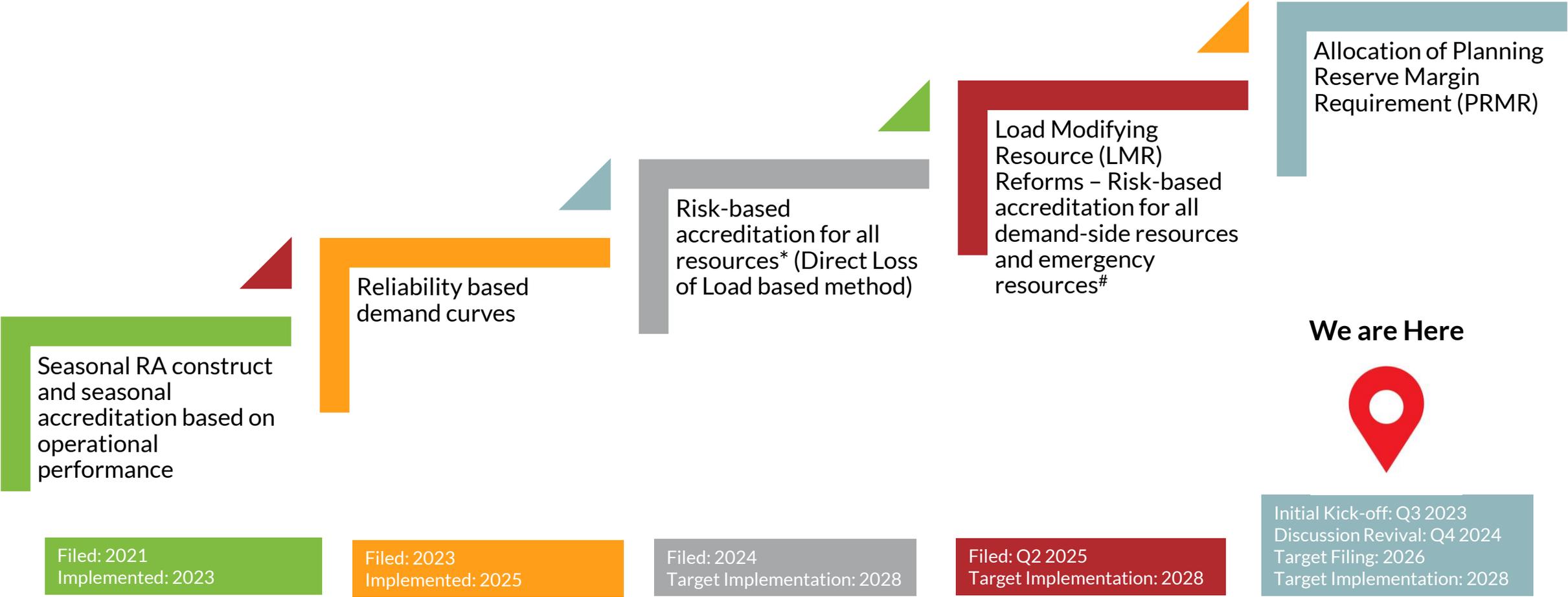
Purpose

Review progress on methodology for allocation of the Planning Reserve Margin Requirement (PRMR)

Key Takeaways

- MISO continues to evaluate the methodology to allocate the PRMR based on Load Serving Entities (LSEs) contribution to system risk and in alignment with MISO's upcoming implementation of Resource accreditation reform
- MISO's goal is to develop a methodology that is relatively simple to implement, provides stability and is dynamic as risk shifts
- Feedback is requested on (1) LSE forecasting capabilities, (2) MISO's proposed bookend approach to provide indicative PRMR allocation shares based on settled load, and (3) Trade-off considerations for PRMR Allocation methodologies using a settled load lookback vs. requesting new LSE forecasts

MISO continues to evolve its Resource Adequacy construct



*Excludes LMRs and External resources

#Excludes External resources

Problem Statement and Design Objectives for PRMR Allocation

Problem Statement

The current Load Serving Entity (LSE) obligation for regional resource adequacy is based on LSE coincident peak load at MISO's peak load multiplied by the regional Planning Reserve Margin. This may not align with the adequacy risks MISO is experiencing in its current operating environment, the adequacy risks that are predicted to occur in the future, nor the proposed DLOL methodology. LSE PRMR allocation should be examined in order to align the LSE and retail choice LSE obligations with the risks the system is experiencing during times of highest need, consistent with the DLOL methodology and other proposed and pending Resource Adequacy reforms.

Design Objectives

- LSE obligation (PRMR) based on load during times of highest need
- Alignment between resource accreditation and PRMR allocation

MISO is considering additional design criteria in the development of a proposal on PRMR allocation

Simplicity

Stability

LSE obligation (PRMR) based on load during times of highest need

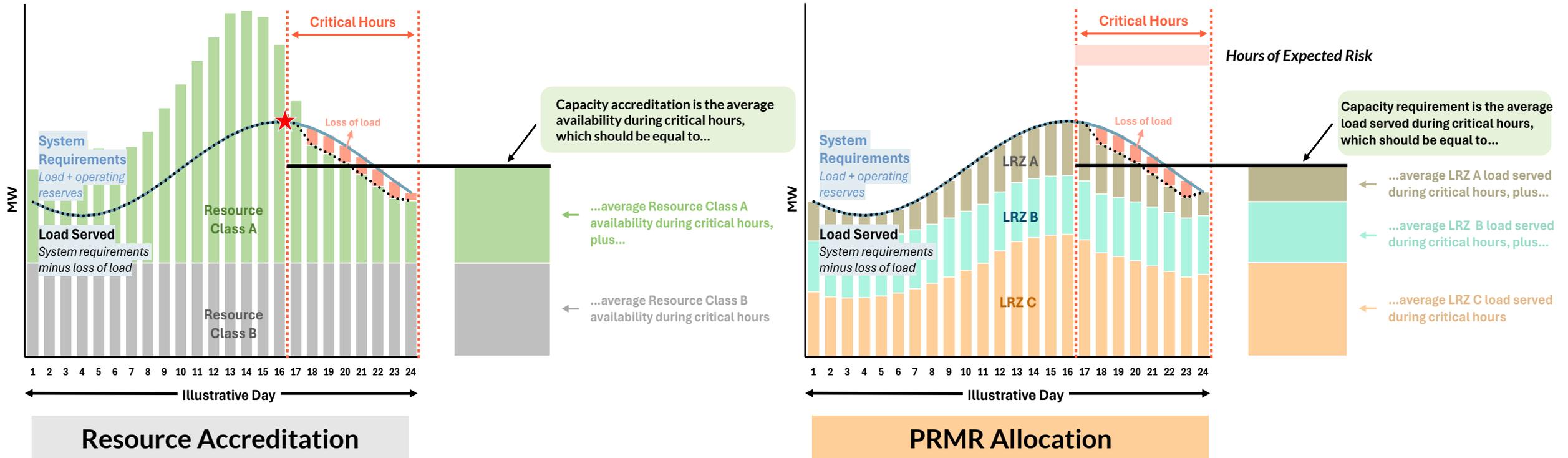
Dynamic as risk shifts

Alignment between resource accreditation and PRMR allocation

PRMR Allocation based on peak load does not align with accreditation reforms that accredit Resources during times of risk

Load measured at peak may not align with expected risk

Load measured during expected times of risk allows PRMR allocation to shift as risk changes



Graphics courtesy of Energy + Environmental Economics (E3)
account for adjustment to LOLE criteria

★ Coincident Peak Demand

PRMR Allocation: Current Process

MISO determines the PRMR through completion of the seasonal Loss of Load Expectation (LOLE) study. The PRMR is equal to the total capacity needed to meet a LOLE of 1 day in ten years.

PRM % is calculated by subtracting the modeled MISO-system coincident peak demand from the PRMR and then dividing by the modeled MISO-system coincident peak demand.

LSE Coincident Peak Forecast multiplied by Transmission Loss % and the PRM %.

Identified Issues

LOLE demand \neq PRA demand

Probabilistic model observes risks at load levels that are much higher than 50/50 co-incident peak load

System risk in operations is also shifting from peak load conditions to times during unavailability of weather-dependent resources

LSE obligation (reliability requirement) is only based on their 50/50 load forecast for MISO's co-incident peak

Review of MISO's prior proposals for PRMR Allocation

- MISO proposed looking back at settled load during RA hours
 - Includes contribution of BTMG and DR that are getting credit
 - Would need to add back BTMG and DR to provide indicative allocations
- MISO then revised its proposal to look at settled load during Expected RA Hours^{*}
 - Still has BTMG/DR problem
 - Large loads additions could also have impact

^{*} See slide 17

End-Use Sector alternative recommended approach maintains LSE weather-normalized forecast using centerline Expected RA Hour demand*

- End-Use Sector alternative recommended approach would have LSEs and EDCs continue to provide a weather-normalized forecast
- Instead of providing forecasted demand at the time of MISO System peak, LSEs and EDCs would provide forecasted demand at the centerline Expected RA Hour on the day of MISO system peak
 - The centerline Expected RA Hour would be the hour closest to the frequency-weighted center of the Expected RA Hours (determined as [MISO proposed](#) at the July 9, 2025 RASC)
- Since the current coincident peak forecasts are still necessary for the overall LOLE model, MISO has considered requesting an *additional* forecast for the purpose of PRMR allocation

* See [presentation](#) from the August 20, 2025 RASC

MISO consideration of requesting a new MP forecast methodology

- MISO has considered requesting a new MP forecast during a specified time of risk
 - First need is to identify a set of conditions that drive the time of risk
 - Expected RA Hours
 - Examination of critical hours in the LOLE model for conditions that drive risk (day of year, day of week, high temperature, etc.)
 - Those conditions would be provided to the MP who would be asked to provide the new forecast
- Considerations
 - Would LSEs have the capability to forecast hourly load for non-gross peak hours?
 - How could the forecasts be checked for accuracy and what mechanisms could help ensure more accurate forecasts?

Proposed bookend approach to provide indicative PRMR allocation values before deciding on a final approach

- Providing precise indicative PRMR allocations is not possible without accurate historical BTMG and LMR performance
- Instead of gathering exact BTMG and LMR performance, MISO is looking to approach the problem from bookends and provide LSEs with three indicative views
 - PRMR allocation set based on MP level settled load as a share of all MP level settled load for the season (LMR and BTMG not added back)
 - PRMR allocation set based on MP level settled load as a share of all MP level settled load for the season (50% of accredited LMR and BTMG are added back to each MP)
 - And; PRMR allocation set based on MP level settled load as a share of all MP level settled load for the season (100% of accredited LMR and BTMG are added back to each MP)

PRMR Allocation methods based on settled load or a time-of-risk forecast have trade-off considerations

- Method 1: A lookback based on settled load can provide a transparent measure of load behavior when the system is at risk, but accredited MW should be added back
 - Settled load includes embedded LMR behind the meter generator (BTMG) and Demand Response (DR) MW that would need to be added back to provide a proper allocation across loads
 - This data is not currently available to MISO, but is proposed to be collected and provided to MISO as a part of the upcoming Demand Response and Emergency Resource Reform; without this data, accurate indicative allocation by LSE is not possible
- Method 2: Asking for a forecast at a new time of risk requires identification of forecast conditions that may include multiple hours (i.e., Expected RA Hours) and all Market Participants would be required to develop these new forecasts
 - Forecasts provided by Market Participants would still be grossed up by LMR behind the meter generator (BTMG) and Demand Response (DR) MW

Next Steps

- Request stakeholder feedback on the January 2026 RASC presentation
- Revise PRMR allocation proposal based on stakeholder feedback
 - Including the development of an approach for Retail States and EDC obligations
 - Process to handle large load additions/reductions
- Request additional LSE data if needed
- Draft Tariff language and FERC Filing (Q4 2026)

Stakeholder Feedback Request

- MISO requests feedback on MISO's **PRMR Allocation Presentation (RASC2019-2, RASC2020-4)** by January 28, 2026
 - Please provide feedback on the following:
 - LSEs capability to forecast hourly load for non-gross peak hours
 - How could the forecasts be checked for accuracy and what mechanisms could help ensure more accurate forecasts?
 - Proposed bookend approach to provide indicative PRMR allocation based on historic settled load data
 - Trade-off considerations for PRMR Allocation methodologies using a settled load lookback vs. requesting new LSE forecasts during specified risk conditions
- Feedback requests and responses are managed through the Feedback Tool on the MISO website: <https://www.misoenergy.org/engage/stakeholder-feedback/>

Contact

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Seasonal Expected RA Hours

- For each hour of the day, measure frequency of RA Hour occurrence for last 3 years
- Seasonal Expected RA hours occur at least 5% of total hours
- Set of Seasonal Expected RA Hours remain fixed for 3 years with the potential to update for substantial changes (criteria to be developed)

