

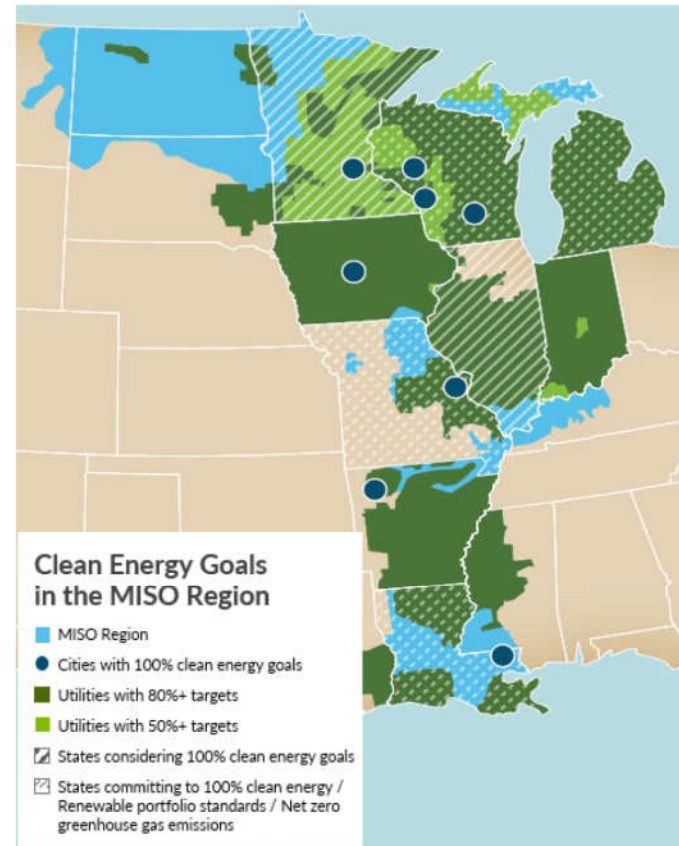


Public Service Commission

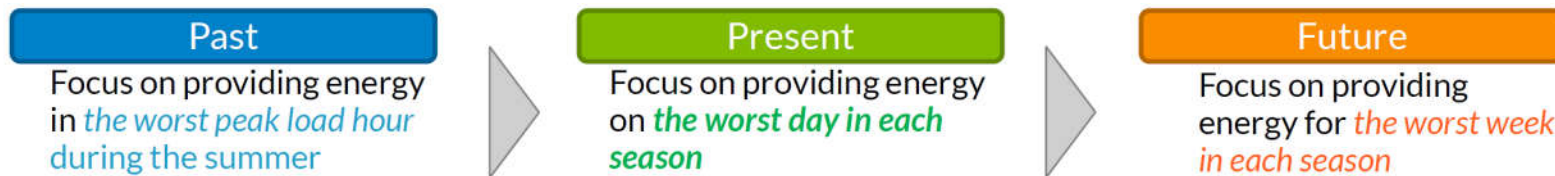
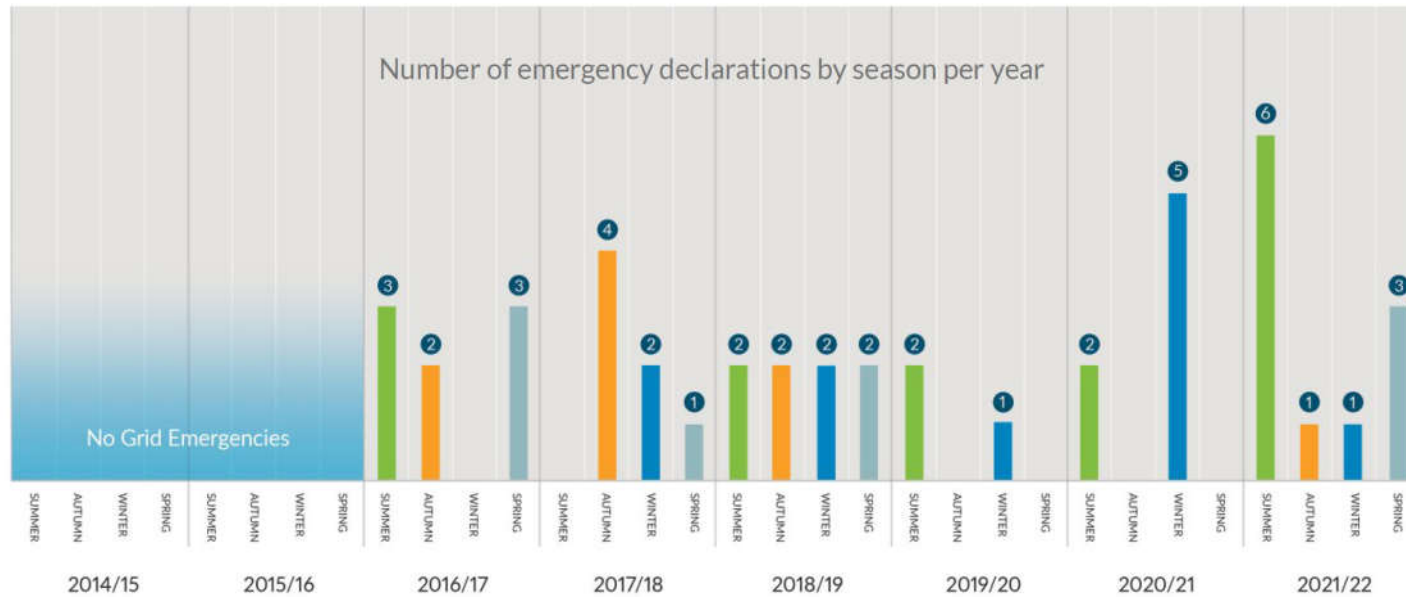
Julie Fedorchak, Commissioner
HCR 3014
March 17, 2023

MISO's resource adequacy construct is evolving to ensure continued reliability under a changing risk profile driven by the resource fleet transition

- Aggressive decarbonization strategies are driving rapid change across our region
- Pace of change highlights the need for improved visibility & coordination between MISO and stakeholders
- MISO is advancing initiatives to reliably navigate from the present to the future
 - Seasonal resource adequacy construct
 - Reliability-based demand curve
 - Non-thermal resource accreditation & attributes

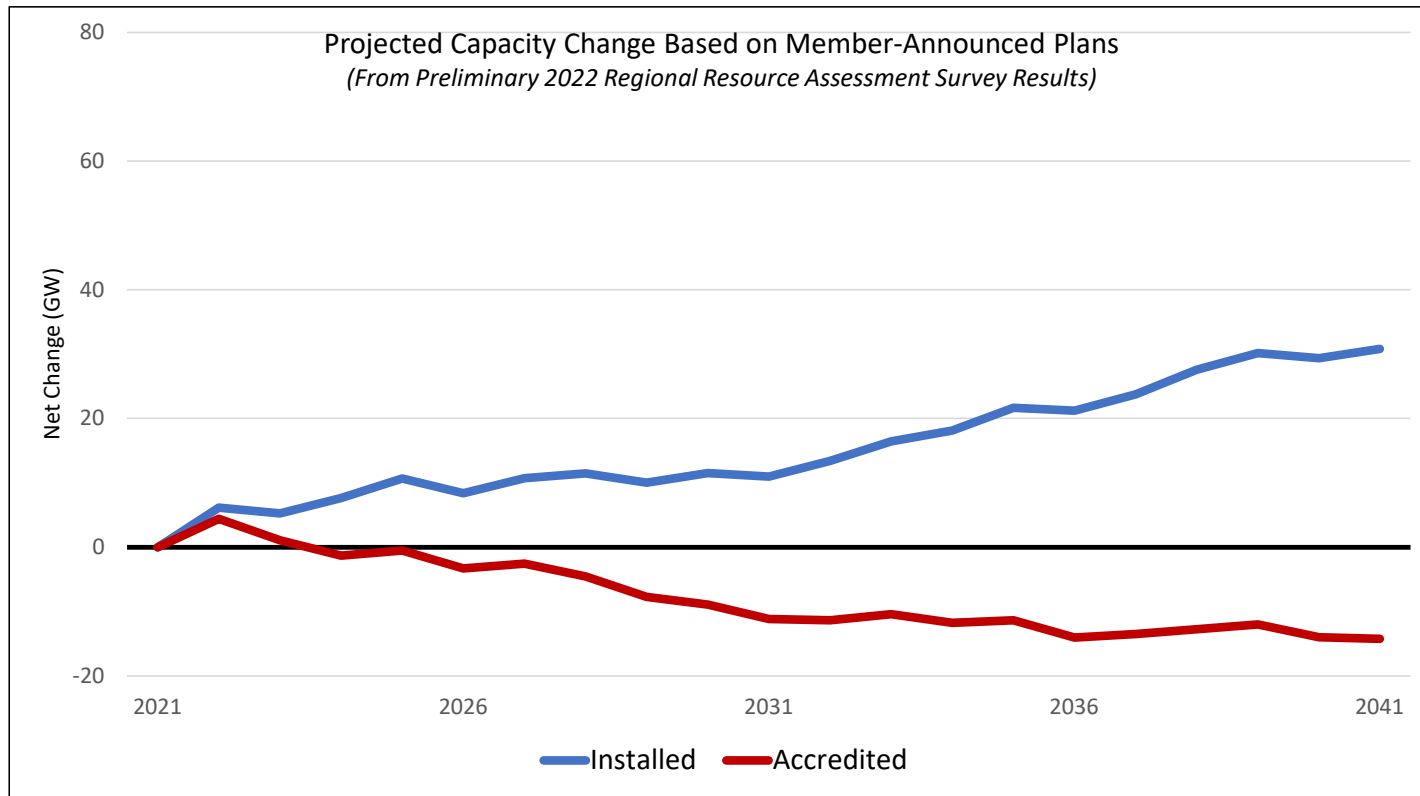


The region's energy landscape is transitioning toward a more complex, less predictable future



Policy drivers such as EPA regulations, ESG criteria, State Energy Policy, and the Inflation Reduction Act are accelerating the fleet transition and associated risks

...accredited capacity is declining due to the rapid pace of retirements of controllable resources



*Future projections calculated as change from Future 1 2022 load assumption
Estimated accredited capacity: 16.6% for wind; 35% for solar, 87.5% for battery, 90% for coal, 90% for gas, and 95% for nuclear

MISO Resource Adequacy Reforms

Seasonal Construct

- Requiring utilities to commit resources for four distinct seasonal peaks to cover their projected demand plus a planning reserve.
- First year of implementation 2023-24.

Generator Accreditation

- Assigning appropriate capacity credit for thermal (coal, gas, nuclear) and non-thermal (wind, solar, hydro, battery) generators based on their proven contribution to reliability.

Capacity Auction Changes

- Improving price signals for dispatchable generators to better align with their reliability contribution.

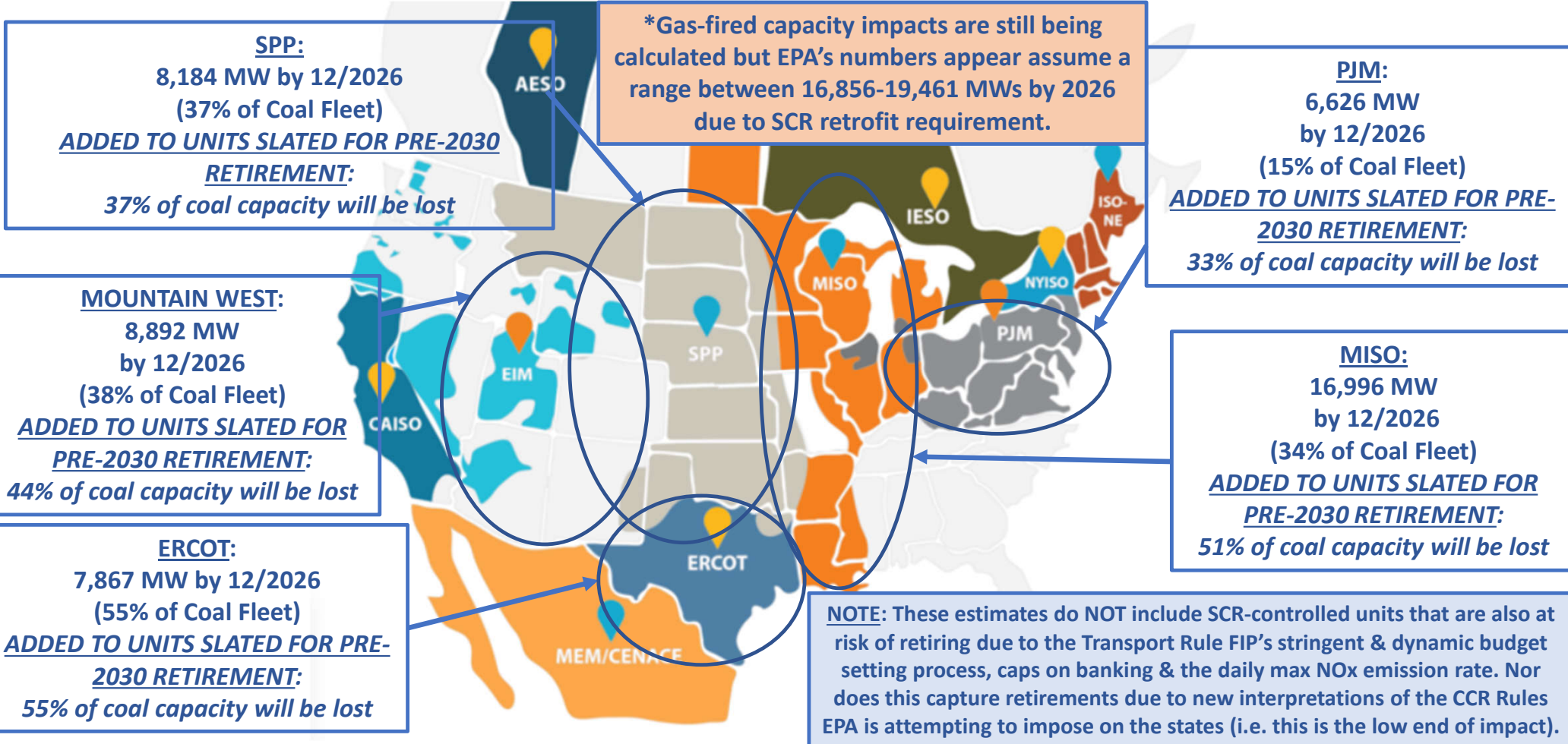
Scarcity pricing

- Improving the price signal for generators when supply is scarce to incentivized dispatchable resources.

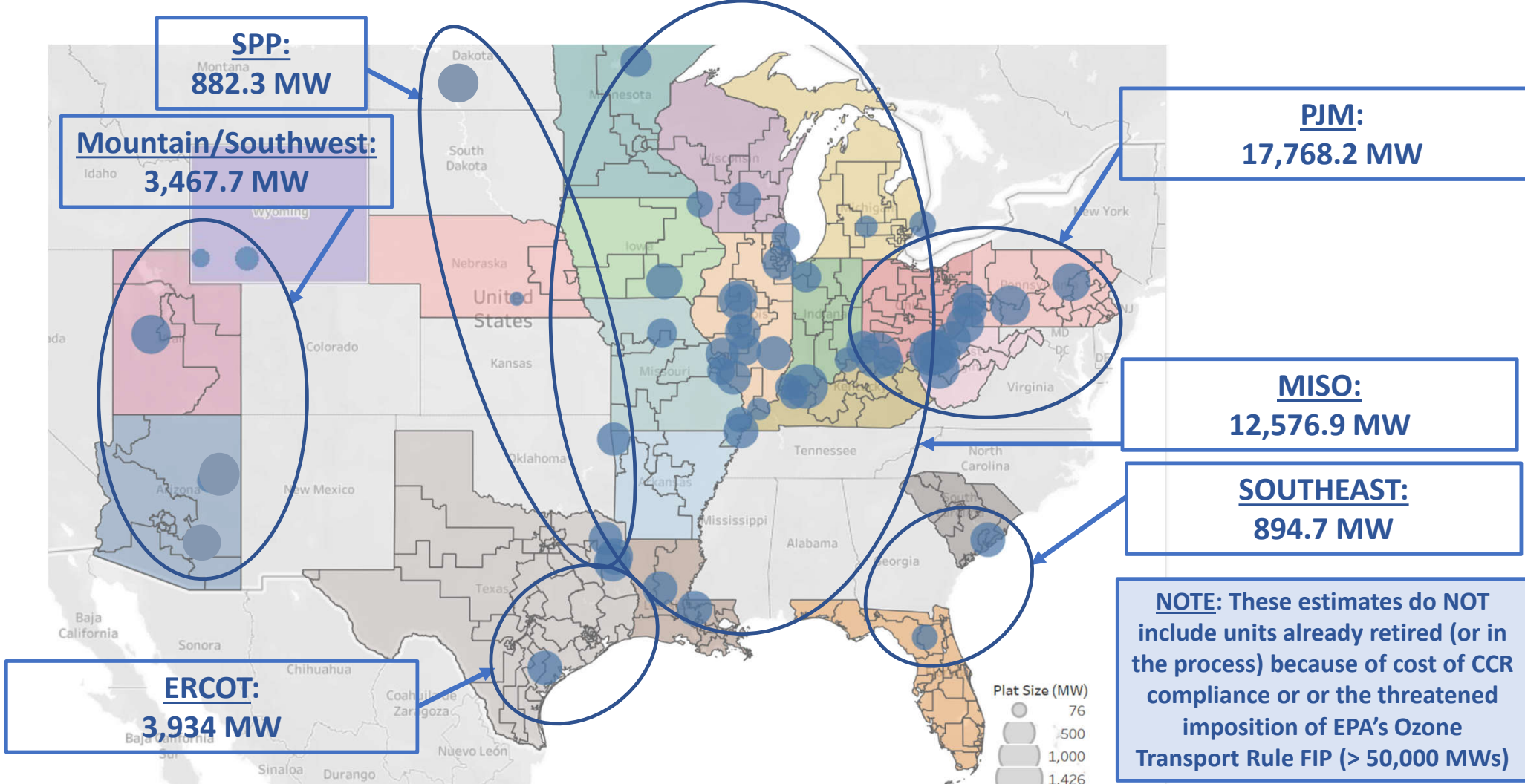
Demand Response reforms

- Using demand response programs more deliberately to manage supply/demand.

Potential OTR Retirements



Potential CCR Retirements



Total potential impact from possible EPA regulations:

(Ozone Transport Rule and Coal Combustion Residuals)

110 GW

> peak load **of the entire MISO region** during
Storm Uri (103 GW) or Storm Elliot (107 GW)