

A large, stylized sun graphic is positioned on the left side of the slide. It features a central white circle with rays extending outwards, rendered in a light gray color. The rays are composed of various geometric shapes, including triangles and trapezoids, creating a fan-like effect.

**Illinois Commerce Commission**  
***2015 Summer Preparedness Policy Session***

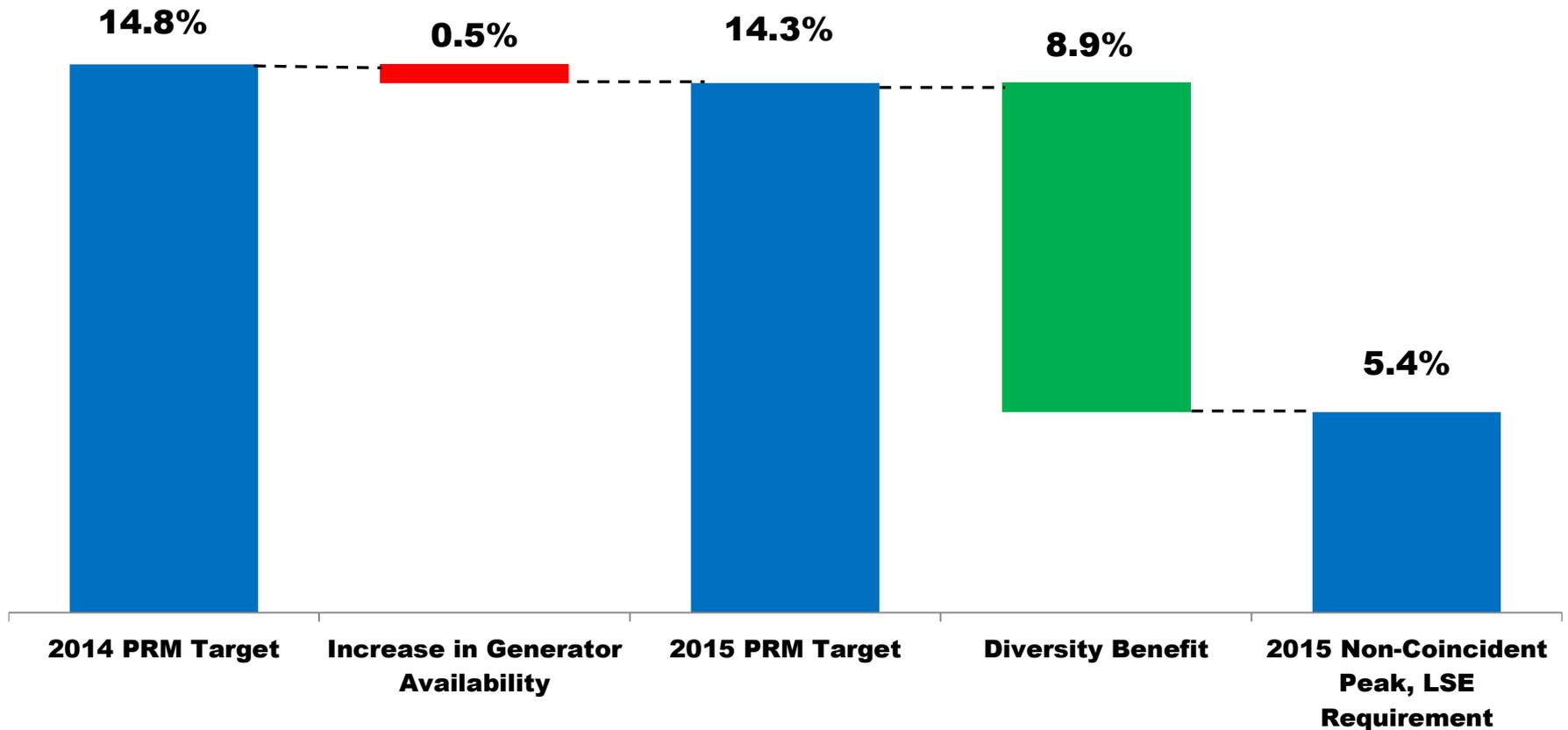
**Melissa Seymour**  
**Regional Executive, Central Region**

**May 19th, 2015**

# Executive Summary

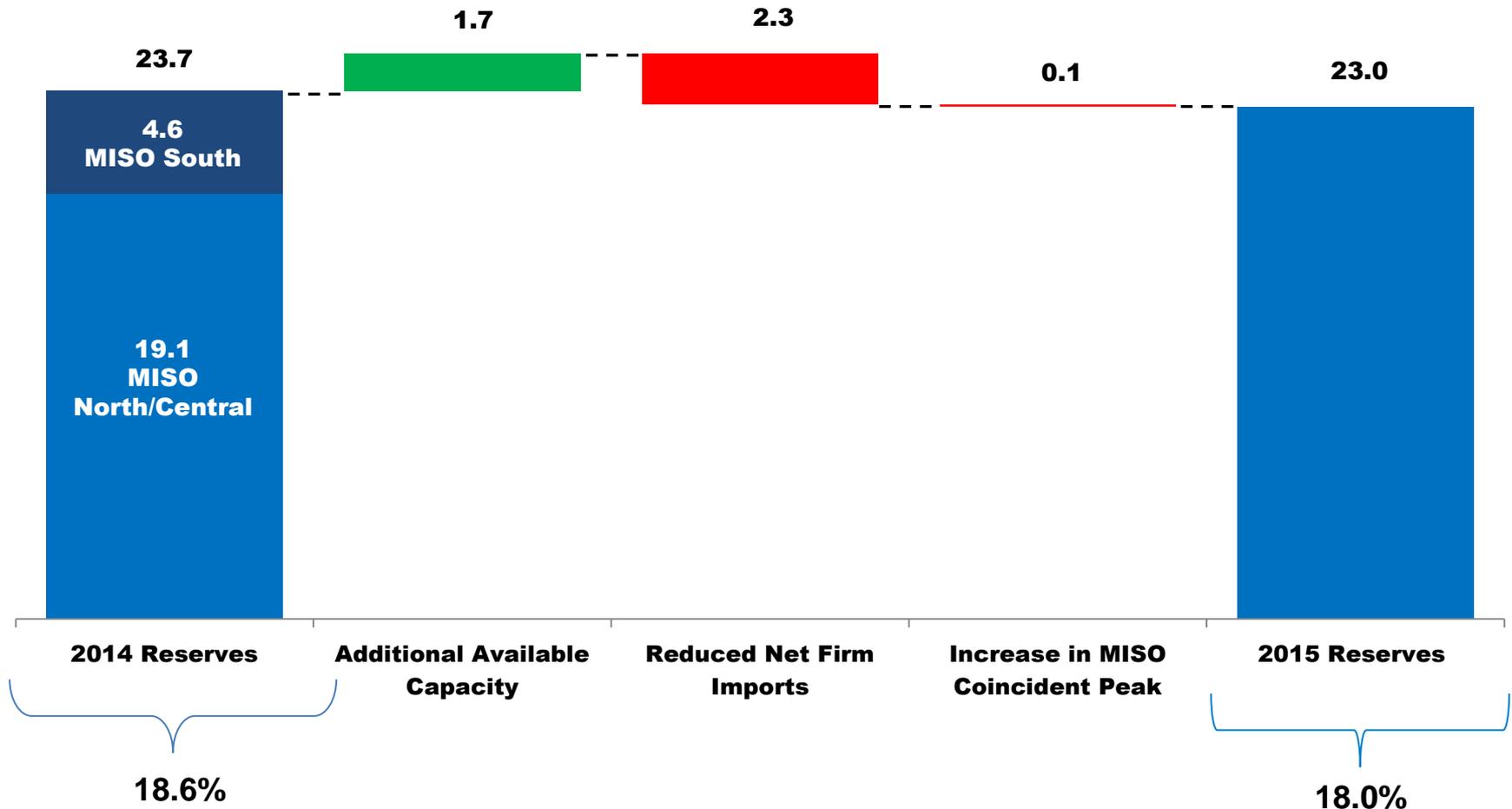
- MISO projects adequate footprint-wide reserves to meet 2015 Summer Peak demand based on an expected (50/50) forecast.
  - The Planning Reserve Margin Requirement is 14.3%
  - The 2015 projected Reserve Margin is 18.0%
  - This is consistent with the OMS-MISO survey which projected margin in 2015/2016 of 17.0%
- Individual utilities need a reserve margin of 5.4% - reflecting a diversity benefit of 9% versus what they would need as stand-alone entities.
- Reliability risk associated with lower reserve margins is increasing with Mercury and Air Toxics implementation in 2016 and the Clean Power Plan in 2020.
- MISO continues to work with stakeholders to develop and implement a broad response to the footprint's changing energy landscape. We remain focused on ensuring reliability and maintaining least-cost energy delivery for consumers.

# MISO's footprint diversity continues to provide substantial benefit to members and their customers



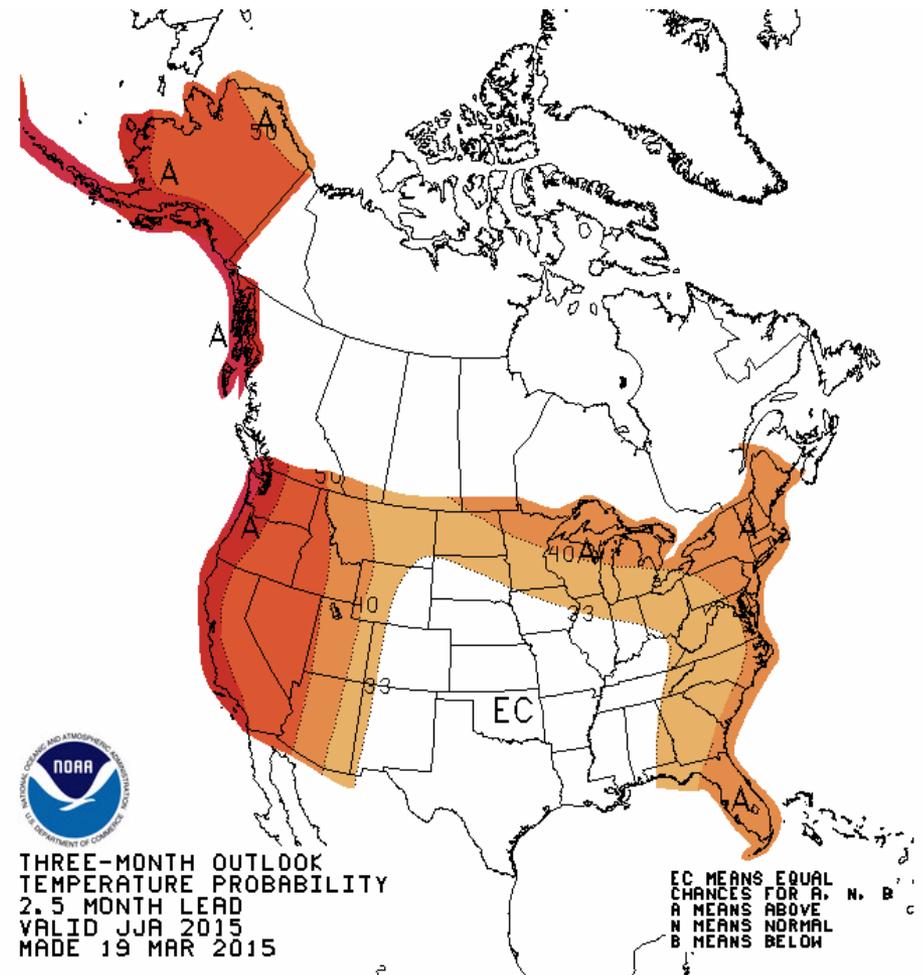
# MISO's 2015 reserves are slightly lower than 2014 levels

Reserve Margin Projections In GWs

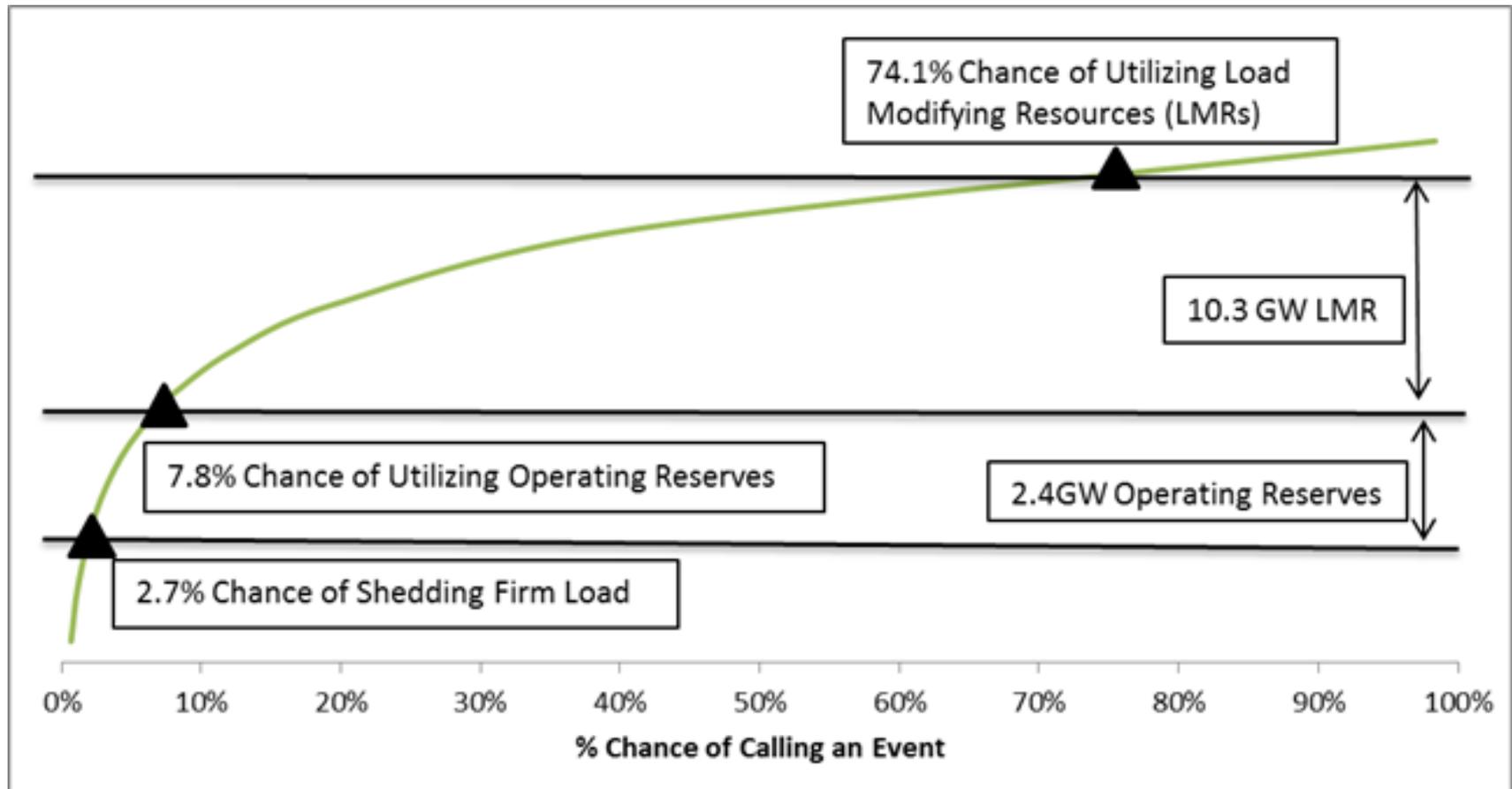


# The 2015 Summer Weather Outlook

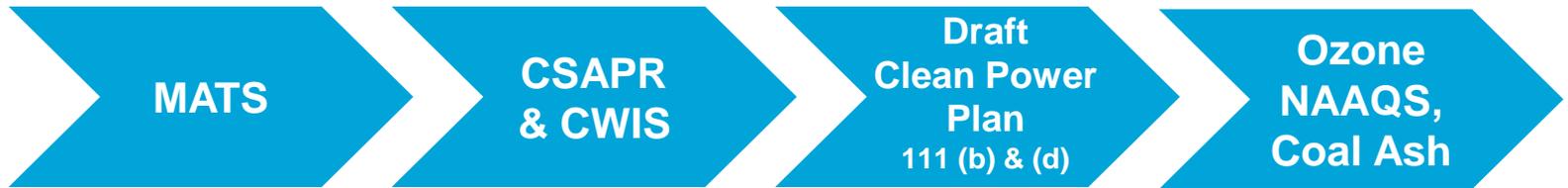
- Summer 2015 is forecasted to be hotter than normal, with near-normal precipitation.
- The hottest periods are forecasted to be in early June, mid- to late July, and mid- to late August for the Great Lakes region with increased hurricane risks to the Gulf Coast region.



# Probabilistic Risk Profile



# The generation fleet in MISO is being affected by fuel prices and energy policies



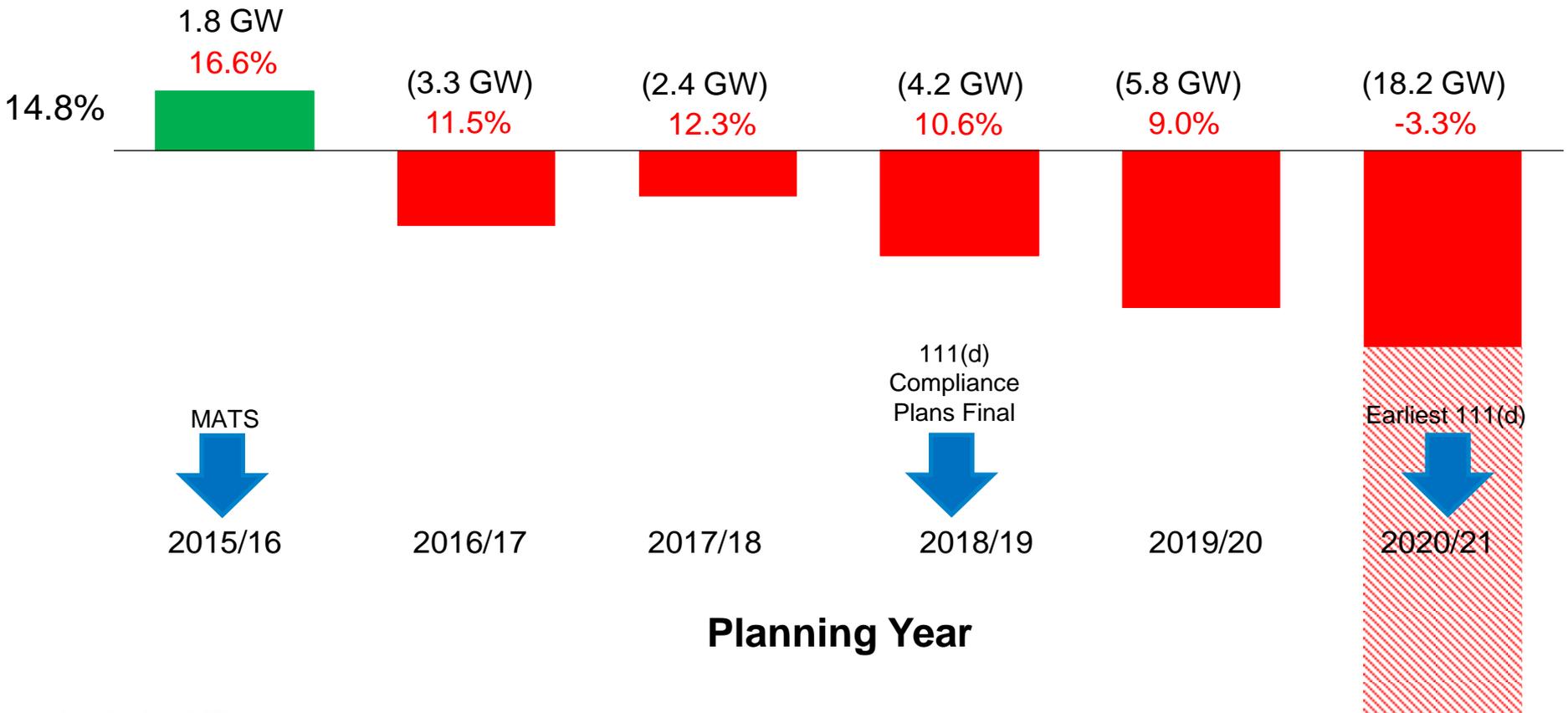
| Regulation       | Mercury and Air Toxics Standards   | Cross State Air Pollution Rule and Cooling Water Regulations (316(b))   | CO <sub>2</sub> from existing and new power plants  | New air quality standards/<br>Coal ash storage   |
|------------------|--|---|---|--|
| Compliance Dates | 2015 / 2016  | As early as 2015  | 2015/16 (New)<br>Beginning in 2020 (Existing)   | 2015 and beyond  |
| Impacts          | <ul style="list-style-type: none"> <li>• Significant coal retirements</li> <li>• Outage coordination challenges</li> <li>• Shrinking reserve margins around MISO</li> <li>• Growing dependence on natural gas</li> </ul> | <ul style="list-style-type: none"> <li>• NO<sub>x</sub> requirements tightened</li> <li>• Higher plant compliance costs influence retirement decisions</li> </ul> | <ul style="list-style-type: none"> <li>• New coal requires CCS; base load capacity options reduced</li> <li>• Significant coal retirements</li> <li>• Increased dependence on gas and CO<sub>2</sub> neutral resources</li> </ul> | <ul style="list-style-type: none"> <li>• Increased costs</li> <li>• Other potential impacts depend on regulations</li> </ul> |

# The region is showing a need for additional resources to meet projected load growth (0.8%)

## Capacity Surplus / Shortfall North / Central Regions in GW

Reserve Margin %

 111(d) compliance strategy with interim compliance



# A broad response to the nation's changing energy landscape is necessary

- **Environmental Regulations** – managing transition to Mercury and Air Toxics Standards (MATS) and preparing for carbon regulations
- **Resource Adequacy** – efforts being taken to ensure adequacy through the year and accommodate changing generation portfolios
- **MISO Processes & Procedures** – review/revise to re-align as the industry continues to evolve
- **Natural Gas/Electric Coordination** - MISO is actively working with stakeholders to enhance its electric/gas coordination initiatives as the footprint transitions to greater reliance on natural gas
- **Seams Management & Optimization** – enhancing reliable movement of resources to minimize costs to end user

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**For additional questions:**  
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