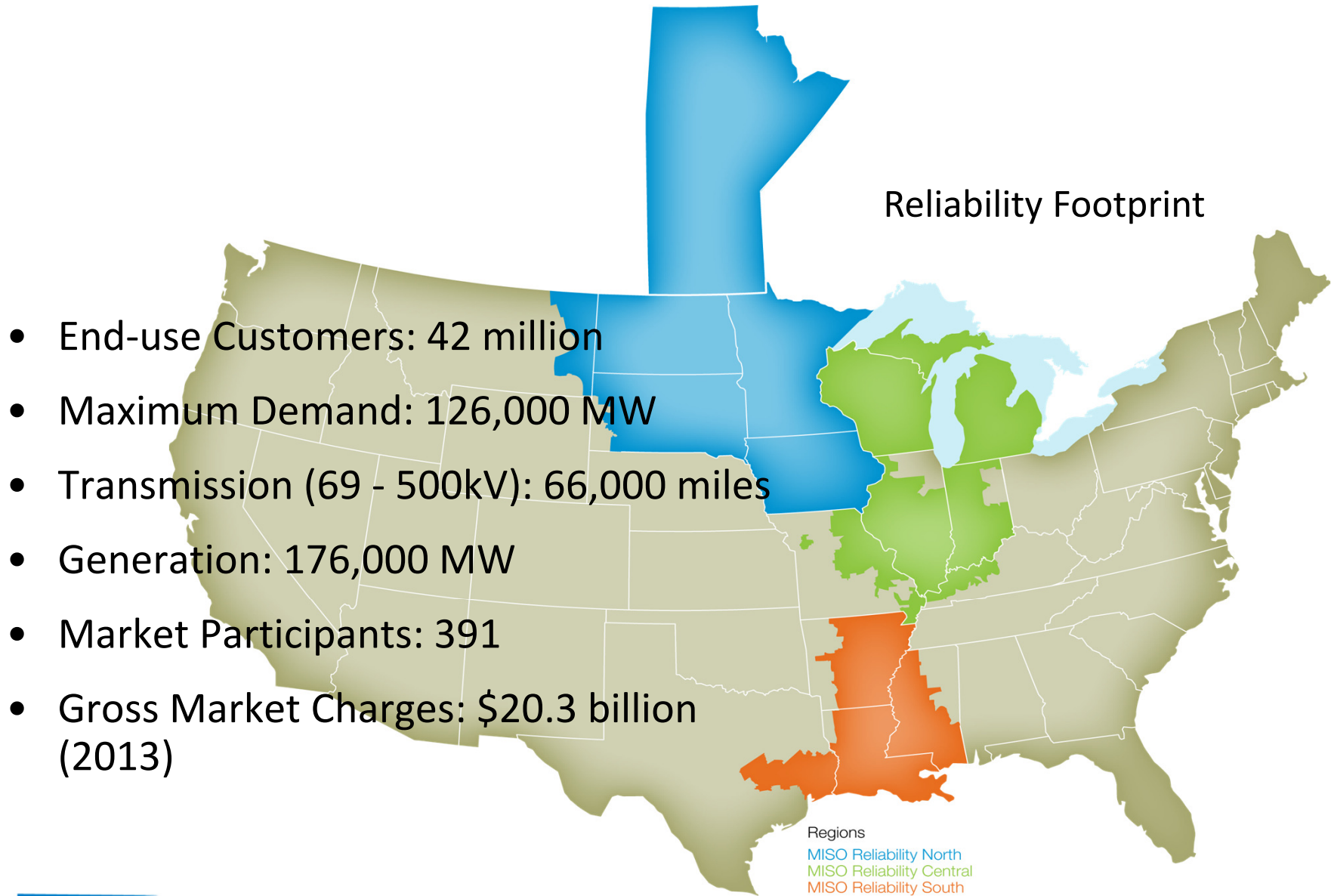


Clean Power Plan Activity in MISO

International Energy Agency
September 28, 2015



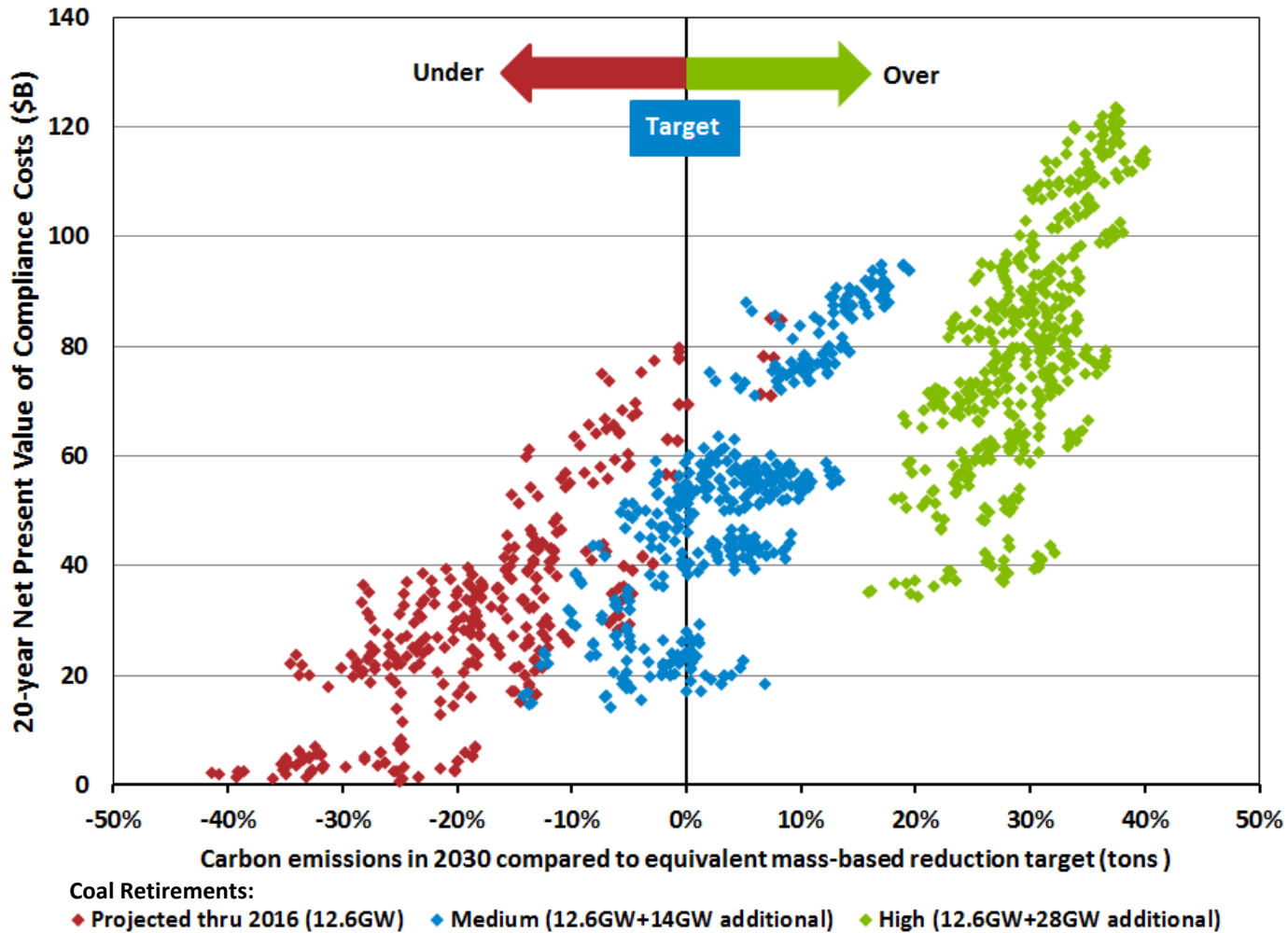
Midcontinent Independent System Operator (MISO)



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Draft Rule Analysis

Draft Rule - Lower cost compliance strategies put an additional 13GW of coal capacity at-risk for retirement



Key takeaways from draft CPP analysis

- Regional compliance produces cost savings versus state and sub-regional approaches.
- Multi-billion dollar transmission build-out would be necessary for compliance in the scenarios studied.
- Renewables build-out furthers this need as renewable generation is usually sited in locations with better renewable resources but weaker transmission ties.
- Transmission expansion will be needed to mitigate reliability impacts of compliance, largely driven by coal retirements.
- CPP constraints significantly increase congestion regardless of compliance approach.
- Generation dispatch would change dramatically from current practices, requiring additional study to fully understand the ramifications.

A large, light gray sunburst graphic is positioned on the left side of the slide. It consists of numerous triangular segments of varying lengths radiating from a central point, creating a semi-circular shape. The segments are separated by thin white gaps.

Final Rule Analysis

Three futures are proposed to represent a broad view of potential outcomes of the final CPP

Clean Power Plan (CPP)

- CO₂ emissions reduction targets are modeled.

Accelerated CPP Future (ACF)

- Accelerated economic maturity of renewables and demand-side resources driven by technological advancements and public policy, along with sustained competitive gas prices
- CO₂ emissions reduction targets are far exceeded.

Partial CPP Future (PCF)

- Legal challenges to the rule slow or halt compliance, resulting in partial CPP implementation.
- Early CO₂ emissions reduction targets are achieved but further reduction is not pursued.

The final CPP is a complex regulation that requires significant collaboration

- The Clean Power Plan provides many options for compliance whose impacts must be examined:
 - Regional, sub-regional, and state-level compliance
 - Rate and mass compliance
 - Emissions standards and state measures plans
- Transmission needs for electric and gas will be identified and solutions developed for cost effective compliance based on three futures
- Use the same optimized electric and gas production cost model as used for the Draft Rule analysis.

Contact info

- **EPA regulations webpage**

[https://www.misoenergy.org/WhatWeDo/EPARegulations/Pages/111\(d\).aspx](https://www.misoenergy.org/WhatWeDo/EPARegulations/Pages/111(d).aspx)

- **Additional questions? Please contact:**

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