

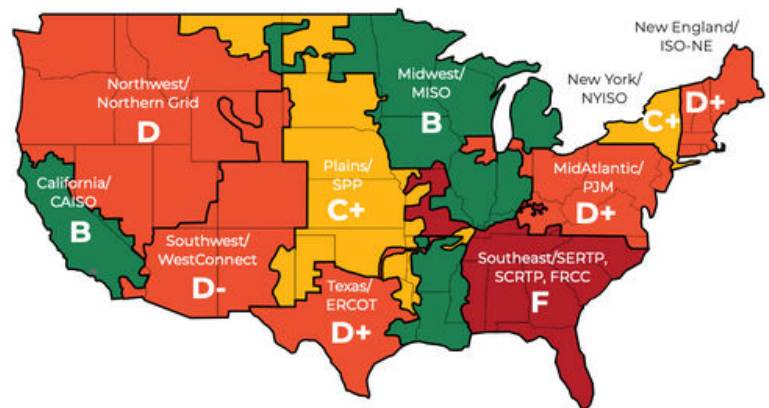
TRANSMISSION PLANNING & DEVELOPMENT REGIONAL REPORT CARD

Americans for a Clean Energy Grid evaluated transmission planning and development efforts across the country. While no region earned an A – and many have a long way to go – there is growing recognition of the need to proactively and holistically plan new transmission that will facilitate America’s energy transition, safeguard the grid against extreme weather, and lower electricity costs for consumers.

Building transmission incrementally is inefficient and expensive. By contrast, an analysis within the Midcontinent Independent System Operator (MISO) found its long-term, comprehensive transmission plan would result in benefits more than twice as large as costs.

The Federal Energy Regulatory Commission (FERC) is now considering a rule that would improve regional transmission planning, but it has been pending since April 2022. All regions—and the transmission owners and operators within them—can act immediately to improve their planning methods. In fact, every region in this report has adopted innovative practices in at least one category that others can replicate to make progress.

REGIONAL GRADES



METHODOLOGY

65% Use of best practices for proactive transmission planning

- Proactively plan for future generation and load.
- Use a holistic Multi-Value Planning process.
- Address high-stress grid conditions through Scenario-Based Planning.
- Assess projects as a portfolio, not line-by-line.
- Jointly plan interregional transmission across neighboring systems.
- Conduct robust stakeholder engagement.
- Consider all transmission business models.
- Allow for balanced governance of the regional planning process.

20% Miles of transmission built and planned

7.5% Transmission capacity available for new resources

7.5% Congestion



SCORE DETAILS: MIDWEST

OVERALL SCORE : **86.0%**

RANKING : **1 / 10**

Who plans transmission in the Midwest? The Midcontinent Independent System Operator (MISO) conducts regional planning through its MISO Transmission Expansion Plan (MTEP), while the states and utilities within its borders also plan and develop transmission.

PLANNING METHODS

GRADE: A-

- MISO is a leader in proactive, multi-value transmission planning. Its long-term planning takes into account the impacts of electrification, clean energy goals driven by public policy and private industry, more frequent extreme weather, and other factors.
- MISO's Long Range Transmission Planning (LRTP) process identified lines as a portfolio and conducted a detailed cost benefit analysis. The plan includes four tranches of projects to upgrade capacity for anticipated load.
- MISO gets some credit for recent joint studies with the Plains (SPP) that identified regional upgrades and an interregional transmission project to connect 28 GW of new generation. It has conducted some limited interregional planning with the Mid-Atlantic (PJM).
- The Midwest's overall grade, however, is held back by MISO South where there has been little transmission planning.

MILES BUILT & PLANNED

GRADE: B-

- From 2019-2021, the Midwest built 53% of the new high-capacity transmission compared to the best recent period of high-capacity transmission build-out.
- The Midwest has one of the biggest transmission expansions currently planned in the U.S – its LRTP Tranche 1, which calls for \$10 billion of investment in 18 transmission lines.

CAPACITY AVAILABLE FOR NEW RESOURCES

GRADE: C+

- Interconnection costs in the Midwest have almost quadrupled since 2016, primarily in the Western and Southern subregions. Not all of this can be attributed to transmission capacity, but if the Midwest is able to develop its planned Tranches of transmission, this score will likely improve.

CONGESTION

GRADE: C

- Congestion doubled in the Midwest between 2016 and 2021, resulting in significant wind curtailments.