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.

**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

To learn more, visit https://cleanenergygrid.org/report-card
Who plans transmission in Texas? The Electric Reliability Council of Texas (ERCOT) largely conducts transmission planning, with influence from the state of Texas.

PLANNING METHODS

- ERCOT does limited proactive planning. It does develop a long term transmission study, but that product has very little influence on the overall transmission planning process.

- ERCOT plans lines with reliability benefits separately from lines with economic benefits, rather than looking for the most-efficient lines that provide multiple benefits. This process has led to only two economic lines being approved in the past decade, though Texas has recently taken steps that may improve this process.

- The Texas interconnection is isolated from the rest of the country and does not conduct interregional planning. ERCOT, the Public Utility Commission of Texas, and the state legislature have considered strengthening ties to neighboring regions, but so far have not.

MILES BUILT & PLANNED

- Texas built a significant amount of transmission between 2012 and 2017, but the average construction rate fell by half in the subsequent period from 2019 to 2021.

- Texas’ 2022 regional transmission plan only identified new transmission lines required for reliability upgrades, despite the fact that Texas also faces record levels of congestion.

CAPACITY AVAILABLE FOR NEW RESOURCES

- Texas uses a relatively efficient process for interconnection where new generators only pay for their connection to the grid rather than broader upgrades (which generators in other regions often have to pay for). However, such resources can be curtailed if there is a lack of transmission capacity.

CONGESTION

- Congestion has almost doubled in Texas between 2020 and 2021 and reached record levels in 2022. Despite the relatively strong interconnection process, a lack of proactive planning can lead to congestion and significant resource curtailments.