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.



Miles of transmission built and planned

7.5%

Transmission capacity available for new resources



Congestion





SCORE DETAILS: PLAINS

OVERALL SCORE: 4 / 10 77.5% RANKING:

Who plans transmission in the Plains? The Southwest Power Pool (SPP), a regional transmission organization, conducts regional planning through its Integrated Transmission Planning (ITP) process, while the states and utilities within its borders also plan and develop transmission.

PLANNING METHODS

- **GRADE: C+**
- SPP models future generation and load in its transmission plans, but it has acknowledged that past forecasts were underestimating new wind additions, and it is working to improve its processes.
- In its economic planning SPP uses scenarios to evaluate transmission projects. Its 2021 plan included a reference case and an emerging technologies case that included EV electrification.
- SPP does local and regional planning simultaneously to find the most efficient solutions, which is more effective than many regions that use local planning as baseline inputs in their regional process.

MILES BUILT & PLANNED

• From 2019-2021, the Plains region built 62% of the new high-capacity transmission compared to the best recent period of high-capacity transmission build-out.

GRADE: C

• The Plains has more than 700 miles of new transmission planned. SPP and MISO are also working on collaborative studies to reduce the congestion impact of new resources. This Joint Targeted Interconnection Queue (JTIQ) process may not reflect all best practices for interregional planning, but it has produced a plan for 400 miles of transmission within each region and one line between regions.

CAPACITY AVAILABLE FOR NEW RESOURCES **GRADE: C-**

• The Plains has seen a large spike in the number of interconnection requests, plus lower project completion rates and some of the longest times spent in the queue. This can't all be attributed to transmission capacity, but if SPP more proactively develops transmission plans, it would likely alleviate challenges for new resources coming onto the system. SPP is also working on interconnection queue reforms.

GRADE: C CONGESTION

 Congestion in the Plains almost quadrupled between 2016 and 2021. Increased congestion has led to significant wind curtailments.