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: CALIFORNIA

OVERALL SCORE: 85.8% RANKING: 2/10

Who plans transmission in California? The California Independent System Operator (CAISO) is largely responsible for planning transmission in collaboration with the California Public Utilities Commission (CPUC).

PLANNING METHODS

GRADE: A-

- CAISO plans transmission to help meet California's emissions reduction target by 2032, which
 includes use of a high-electrification scenario in its planning.
- To meet these scenarios, CAISO and CPUC model expected growth in renewables and older generation retirements to identify least-cost resource and transmission needs. In 2022, CAISO also produced a 20-year transmission plan that identified significant future transmission needs.
- CAISO employs an innovative approach to interregional transmission to extend lines being built in neighboring regions into California.

MILES BUILT & PLANNED

GRADE: C

- From 2019-2021, California built 3% of the new high-capacity transmission compared to the best recent period of high-capacity transmission build-out.
- California's 2022-23 transmission plan includes 45 new projects that could accommodate 40+ GW of renewables. CAISO's 20-year outlook also calls for \$30 billion in transmission upgrades, but that proposal did not include specific projects or cost-allocation policies.

INTERCONNECTION

GRADE: B-

 California has seen some of the biggest jumps in the number of interconnection requests and some of the longest time spent in queue for projects. Not all of this can be attributed to transmission capacity, but if California is able to develop its planned transmission projects, this score will likely improve.

CONGESTION GRADE: C

• California's congestion is about average among the 10 regions evaluated.