Americans for a Clean Energy Grid

STATE POLICIES TO ADVANCE TRANSMISSION: PLANNING

The U.S. transmission system needs expansion and modernization because the aging network is struggling to meet growing energy demands, to connect new power sources, and to access power during severe weather. Americans for a Clean Energy Grid's (ACEG) report explores state policies to advance cost-effective transmission. For the most cost-effective grid, state policies should encourage BOTH the development of new lines (expansion) AND implementation of technologies that maximize the existing grid's potential (modernization).

The most impactful policies and legislative discussions seek to:

- Support the principles of reliability, resilience, and affordability;
- Encourage collaboration within the state, and with neighboring states, other jurisdictions, regional planners, and interested parties;
- Promote comprehensive and coordinated regional and interregional planning to find the most-cost-effective solutions for customers;
- Acknowledge all the benefits of transmission and fairly distribute costs among those who benefit;
- Streamline the processes for siting transmission lines and include early and meaningful engagement with communities and landowners; and
- Provide state agencies with robust resources to execute their roles and responsibilities efficiently.

In much of the country, current planning processes are not resulting in the development of transmission needed to meet current and future electricity needs.

State policies could help manage transmission costs by:

1. Engaging proactively in cost allocation discussions to develop methodologies that consider all transmission benefits;
2. Providing public funding, or leveraging public or public-private financing opportunities, to lower project costs and reduce the financial burden on customers.

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Part 2: Impactful state policies
Appendix: Excerpts of state policies

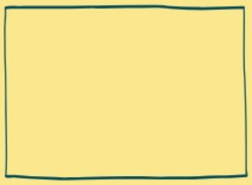
TRANSMISSION PLANNING WITH AN IRP: Some states require their utilities to file an integrated resource plan (IRP) to forecast future energy needs, but most of these plans do not address transmission. State policies should encourage the consideration of transmission in utility IRPs and require that transmission planning in the IRP be based on best practices.

A 2023 **Washington** law updated the state's IRP requirements, directing utilities to include in their IRPs an assessment and 20-year forecast of regional generation and transmission capacity and identify utilities' expected needs to develop new or upgrade existing transmission facilities.

Michigan law requires utilities to file IRPs with five-, ten-, and fifteen-year projections of their load obligations and their plans to meet those obligations, including an analysis of new or upgraded transmission options.

TRANSMISSION PLANNING WITHOUT AN IRP: Many states do not require IRPs, especially states that have moved to a retail choice model. They can help improve transmission planning processes by conducting statewide transmission studies that inform regional planning or by evaluating energy resource zones.

A 2023 **Colorado** law directed the Colorado Electric Transmission Authority to study the need for expanded transmission capacity across the state, including the ability to build new lines, improve existing lines, and connect to organized wholesale markets



What are best practices for planning transmission?

Strong transmission planning policies:

- Require consideration of multiple future scenarios over long-term planning timelines (20+ years);
- Require the use of best available data;
- Support the "right-sizing" of lines to meet both current and future needs; and
- Select transmission projects based on multiple metrics including capital costs, economic and reliability benefits, savings from reduced line losses and siting in existing rights-of-way.

Comprehensive planning inputs include:

1. Policy affecting resource mix and demand;
2. Policy on decarbonization and electrification;
3. State-approved IRPs and expected supply obligations for load-serving entities;
4. Trends in fuel costs and in the cost, performance, and availability of generation, electric storage resources, and building and transportation electrification technologies;
5. Announced and expected resource retirements;
6. Generator interconnection requests and withdrawals

Economic and reliability benefits should include:

1. Avoided or deferred reliability transmission facilities and aging infrastructure replacement;
2. Reduced loss of load probability or reduced planning reserve margin;
3. Production cost savings;
4. Reduced transmission energy losses;
5. Reduced congestion due to transmission outages;
6. Mitigation of extreme weather events and unexpected system conditions;
7. Capacity cost benefits from reduced peak energy losses.