Transmission Governance and Policy Opportunities

Background for State-Federal Policy Makers

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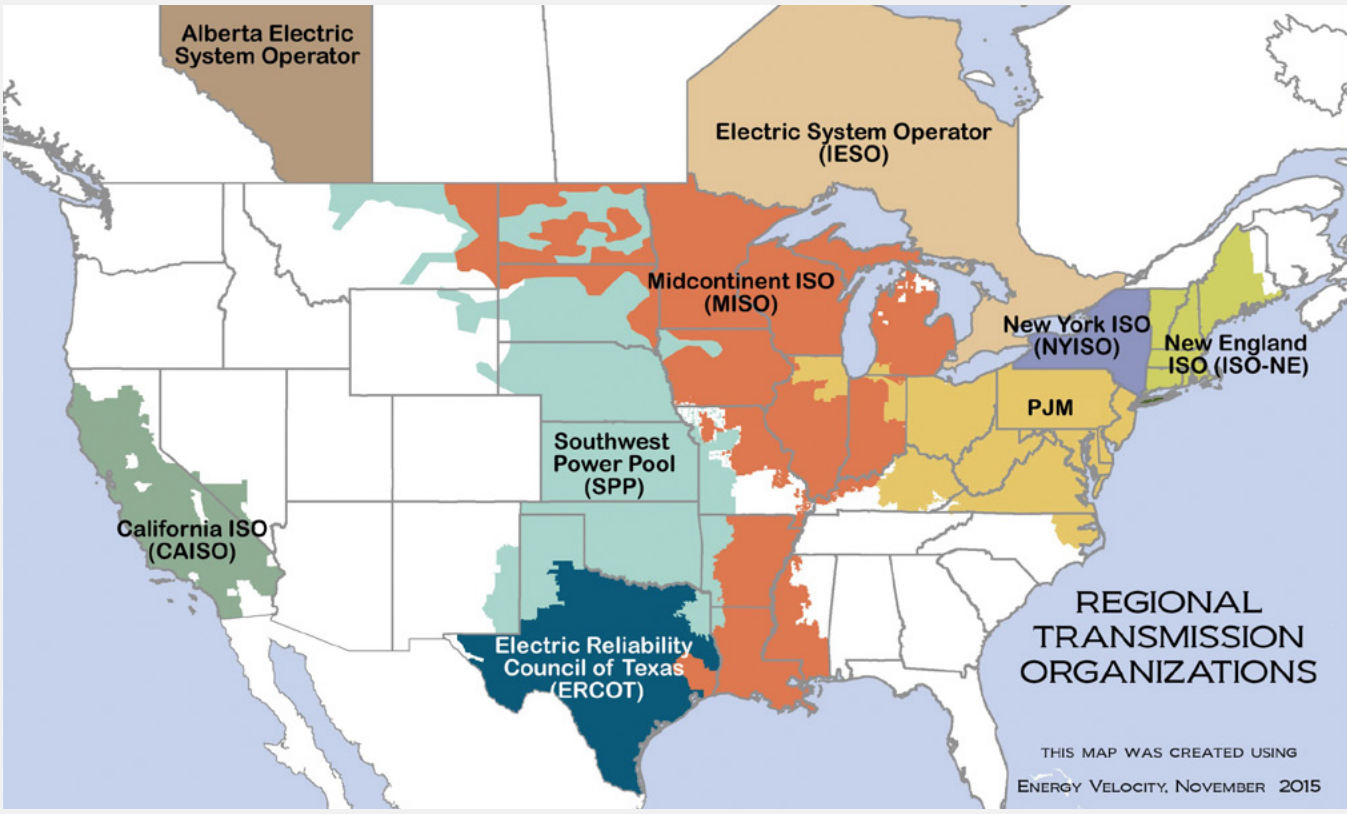
Why Transmission Matters

Our domestic power grid combines a vast web of transmission lines, energy generation sources, and locally operated infrastructure to distribute power to customers reliably and efficiently. The energy grid has a wide variety of actors that all require consistent and reliable communication streams and market mechanisms to ensure the successful delivery of power. Transmission governance is about meeting rising energy demand by expanding capacity increasing efficiency and reliability. Energy policy is in the spotlight as rapid development of data centers, domestic manufacturing trends, and consumer electricity usage push our grid infrastructure to its limits.

How policymakers create innovative ideas to plan, permit, and pay for transmission infrastructure will have profound impacts on whether the U.S. can meet reliability, affordability, and national security goals.



How the Grid is Governed

Historically, vertically integrated utilities handled generation, transmission, and distribution. Federal legislation in the late 20th century introduced wholesale competition and created Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) to coordinate multi-state electricity markets and grid operations. Today, seven RTOs/ISOs manage roughly two-thirds of U.S. electricity demand.

RTOs and ISOs operate the wholesale markets, conduct long-term reliability planning, and ensure the system runs smoothly day-to-day. In much of the Southeast, Southwest, and West, utilities remain vertically integrated under state regulation but are increasingly coordinating on regional grid expansion efforts.

The competitive structure modernized energy markets, but challenges remain in creating a more integrated grid that is equipped to meet the load growth that is on the horizon.

Why the Urgency?

National Security and AI Dominance

Data center development is critical to our national security and position in the global race for AI dominance. Our domestic ability to quickly deploy state-of-the-art data centers and generation facilities outpaces our ability to reliably fuel them with electricity.

Affordability

Consumer utility bills offer policymakers with an extremely difficult balancing act. Necessary grid upgrades will take significant investment but can return savings to customers through access to cheaper energy generation resources. Our ability to keep the ratepayer from bearing the brunt of the cost requires transparency and extensive grid planning.

Resilience

Our grid is extremely vulnerable to extreme weather events, international supply chain shortages, and cyber security attacks. A domestic grid connected with durable transmission can support strengthened resiliency goals.

Opportunities for Policy Makers

Modernize Transmission Planning

Establish interregional transmission planning authority, expand RTO governance, ensure long term evaluation transparency.

Implement Innovative Technology

Capitalize on grid-enhancing technologies, advanced conductoring solutions, and durable interregional transmission to maximize existing infrastructure and open access to cheaper generation across the country.

Reform Cost Allocation

Reform cost allocation structures to incentivize utility development of efficient transmission infrastructure and long-term solutions to maximize transfer capacity.

Permitting and Interconnection Conundrum

Facilitate Federal and State cooperation to combat convoluted permitting processes and lengthy interconnection queues.

Federal Levers

FERC direction on RTO governance and interregional transmission, congressional backstop for state decision making, streamlined permitting, opening electricity markets, utility rate reform.

State Levers

Incentivize GETs implementation, regional power sharing coordination, state-initiated collaboratives.

Key Terms

Regional Transmission

Lines planned and operated within a single planning region, sometimes spanning multiple states, subject to that region's cost allocation.

Interregional Transmission

Lines connecting two or more neighboring planning regions; require joint planning and cost-sharing between those regions.

Local/Merchant Transmission

Smaller, locally regulated lines not included in regional planning and not under regional governing structures.

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