

Federal Permitting Reform for Transmission Lines and Natural Gas Pipelines

Lowering Energy Costs, Strengthening Reliability, and Reducing Emissions

August 2026

THE CHALLENGE: TWO CONSTRAINTS, ONE ROOT CAUSE

The United States is entering a period of electricity demand growth without modern precedent. Driven by AI data centers, electrification, and industrial reshoring, national electricity demand is projected to grow at roughly ten times its historical rate through 2035, requiring an estimated 800 gigawatts of additional installed generation capacity. Residential electricity prices have already risen 38 percent nationally between 2020 and 2025. In the Northeast, retail electricity prices are among the highest in the country and have climbed 35 percent over the last five years, with every New England state and New York ranking in the top ten most expensive markets.

The binding constraint is not the ability to produce energy. It is the ability to move it. Transmission lines that would carry low-cost power from generation zones to load centers take an average of eight years to permit. Natural gas pipelines that would connect the Appalachian Basin, the lowest-cost gas supply region in the country, to the highest-cost consuming markets a few hundred miles away have been delayed, litigated, or canceled outright. In both cases, the physical infrastructure gap is a direct product of a permitting regime that has become slower, less predictable, and more vulnerable to procedural challenge than in any comparable industrial economy.

10× Faster demand growth 2023-35 vs. historical	8 yrs Avg. permitting timeline transmission projects	17× NE winter gas premium vs. Appalachian supply	4+ Bcf/d Pipeline capacity stalled delayed or canceled
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WHY THE PERMITTING SYSTEM IS FAILING

The same structural defects obstruct both wires and pipe. They are legal and procedural in nature, not technical or economic:

- **Fragmented, multi-jurisdictional siting.** A single interstate corridor may require approvals from dozens of federal, state, and local authorities, each with independent timelines and independent exposure to litigation. A single state can veto a project that delivers benefits across an entire region. The Constitution Pipeline was canceled in 2020 after New York water-quality permit disputes despite holding a valid FERC certificate; PennEast was abandoned in 2021 despite a favorable Supreme Court ruling, because state permitting issues remained unresolved.
- **Litigation risk without finality.** NEPA review has expanded well beyond assessment of environmental impact into open-ended re-analysis, and courts routinely vacate permits on procedural grounds years into construction planning. The Atlantic Coast Pipeline's estimated cost rose from roughly \$5 billion to

\$8 billion before it was canceled in 2020. Capital cannot be committed against a permit that may not survive.

- **No durable interregional cost-allocation framework.** Transmission lines that benefit multiple regions face persistent uncertainty about who pays, suppressing private investment even where project economics are strongly positive. Interregional planning is not adequately mandated or incentivized under current regulatory structure.
- **Uncoordinated review of gas, power, and transmission.** Federal and state processes run sequentially rather than concurrently, and gas, generation, and grid projects are permitted in isolation from one another even when they must be co-developed to preserve reliability.

"The U.S. can't afford to take 12 years to create this type of solution given the growing need for more energy infrastructure."

— Hunter Armistead, CEO, Pattern Energy

THE ECONOMIC CASE: TRANSMISSION

The returns on transmission investment are well-documented and large. The U.S. Department of Energy's National Transmission Planning Study finds that accelerated transmission expansion can produce national electricity system cost savings of up to \$490 billion through 2050, with approximately \$1.60 to \$1.80 saved for every dollar invested — before counting GDP uplift from construction and operations employment, the economic value of avoided outages, or emissions reductions.

Project-level results confirm the modeling. ERCOT's Competitive Renewable Energy Zones program returned \$12.20 for every dollar spent. Southwest Power Pool's integrated transmission plans have delivered benefit-cost ratios between \$2.29 and \$6.50 to \$1. The proposed North Plains Connector, linking MISO, SPP, and Western markets, is projected at \$4.86 to \$1; Southern Spirit at \$3.64 to \$1; and NERC's identified prudent additions at \$4.30 to \$5.80 to \$1. Nationwide, average transmission portfolios return between \$2.41 and \$4.45 for every dollar invested.

THE ECONOMIC CASE: NATURAL GAS PIPELINES

Pipeline expansion delivers comparably compelling returns, and in constrained markets the consumer impact is immediate. Because gas-fired generation frequently sets the marginal price on the grid, pipeline constraints transmit directly into electricity bills. During Winter Storm Fern in January 2026, Northeast gas prices reached levels up to 17 times higher than in the Appalachian supply basin a few hundred miles upstream. During the July 2026 heat wave, on-peak power prices in NYISO Zones A and J surged 200 to 300 percent in two days. The persistent spread between constrained and unconstrained regional prices functions as a pipeline tax paid by households and businesses.

Constitution Pipeline — 650 MMcf/d

- \$8.5 billion in net consumer savings, net of lifetime cost
- \$5.8 billion in wholesale energy cost savings to load across New York and New England (2027–2046), per Daymark Energy Advisors
- S&P Global state-level analysis: \$4.7B savings and 1,000 jobs in NY; \$2.3B and 510 jobs in CT; \$1.1B and 310 jobs in MA; \$0.4B and 125 jobs in RI
- Supply equivalent to 3.7 million homes, or 3.6 GW of data center load

Northeast Supply Enhancement — 400,000 Dth/d

- Up to \$6 billion in lower electricity bills over 15 years
- \$3.9–\$4.4 billion in net social benefits over 15 years
- \$1 billion in direct project investment; ~2,000 direct and indirect jobs
- Increases firm gas supply by 13%, addressing winter electric reliability risk
- Under construction; target in-service 4Q 2027 after years of NY/NJ permit challenges

RELIABILITY AND EMISSIONS: THE COST OF CONSTRAINT

Constraining delivery infrastructure does not reduce energy demand — it redirects that demand to higher-emitting fuels. When pipeline capacity into New England is exhausted during peak cold, generators switch to fuel oil, which emits roughly 30 percent more carbon dioxide per unit of energy than natural gas, and to coal, which emits roughly 45 percent more. During Winter Storm Fern, oil accounted for 34 percent of ISO New England's output while gas accounted for 30 percent. Nationally, peak-day generation in January 2026 included 33 percent more coal and fuel oil than the monthly average, producing a 27 percent increase in power sector carbon dioxide emissions on that day.

The corollary is that delivery infrastructure is itself an emissions-reduction tool. Daymark estimates that Constitution would displace roughly 700 GWh of oil-fired generation in a severe winter scenario, avoiding approximately 163,000 tons of carbon dioxide — the equivalent of removing 34,000 cars from the road for a year — while generating an estimated \$260 million in incremental savings per severe winter. Increasing the natural gas share of residential and commercial demand by just one percent in the affected states would avoid roughly 300,000 tonnes of carbon dioxide annually, using just over five percent of the pipeline's capacity. Transmission expansion produces the parallel effect on the electric side, connecting low-emission generation to load centers that would otherwise be served by higher-emitting local resources.

A READY PIPELINE OF PROJECTS AWAITS REFORM

Permitting reform is not a long-horizon investment. The projects exist, the engineering is complete, and the capital is available. Eighteen transmission lines have been identified nationally as effectively shovel-ready — held up primarily by permitting delay, siting disputes, and cost-allocation uncertainty rather than by technical or financial obstacles. Together they represent more than \$180 billion in net consumer and economic benefits, concentrated in high-load-growth regions including Texas, Virginia, the Southeast, and the Northwest, and in interregional transfer corridors across the Southwest, Upper Midwest and Plains, and Intermountain West.

On the gas side, more than 4 Bcf/d of proposed Northeast pipeline capacity has been delayed, canceled, or contested despite persistent and worsening regional constraints. Northeast Energy Direct was withdrawn in 2016; the Atlantic Coast Pipeline and Constitution were canceled in 2020; PennEast was canceled in 2021. Constitution is now advancing again, with a FERC environmental assessment expected in August 2026 and federal decisions due in November 2026, but New York opposition continues. These are not speculative proposals — they are completed project designs shelved by process.

WHAT CONGRESS SHOULD DO

Reform must be predictable, timely, and durable. Legislation should address the near-term procedural failures while establishing a structural shift from case-by-case adjudication to programmatic approval:

- **Clarify NEPA's scope.** Focus environmental review on direct environmental impacts rather than open-ended re-analysis, establish binding timelines for review completion, create categorical exclusions for routine and low-impact projects and for lines within existing rights-of-way, and limit courts' ability to vacate issued permits on procedural NEPA grounds.
- **Reform Clean Water Act Section 401.** Limit state review to direct water-quality discharge effects and prevent procedural abuse of the certification process. Permit denials should be permitted only on clear-and-convincing evidence that no modification or condition could achieve compliance.
- **Establish federal backstop siting authority.** Authorize FERC or a designated federal entity to site and approve transmission projects of national or regional significance when state processes fail to produce

a timely decision, paralleling existing federal authority over interstate gas pipeline siting under the Natural Gas Act.

- **Direct FERC to finalize a durable interregional cost-allocation rule.** Ensure that transmission serving multiple regions receives appropriately shared funding from all benefiting parties, and mandate interregional planning with defined deliverables and timelines for all RTOs and ISOs.
- **Coordinate gas, power, and transmission permitting.** Run federal and state timelines concurrently rather than sequentially, eliminate duplicative reviews across jurisdictions, adopt standardized siting frameworks to reduce litigation risk, and expand DOE partnership and credit-support models to cover pipelines and grid upgrades alongside generation, lowering the cost of capital that flows through to delivered energy prices.

The case for permitting reform is bipartisan, evidence-based, and urgent.

Supermajorities of Republicans, Independents, and Democrats express concern about electricity affordability and support investment in energy delivery infrastructure. The economic returns are independently verified, the emissions case runs in the same direction as the affordability case, and the projects are ready to build. Every year of delay is paid for by American households and businesses in the form of higher bills, greater reliability risk, and higher marginal emissions. Congress has a straightforward legislative path to lower costs, a more reliable grid, and a stronger national competitive position.

Sources: DOE National Transmission Planning Study; U.S. Energy Information Administration; FERC; S&P Global Energy (©2026 S&P Global Inc.); Daymark Energy Advisors, Constitution Pipeline Benefits Report (June 2026); Williams Companies, The Need for U.S. Permitting Reform (August 2026); National Petroleum Council, Bottleneck to Breakthrough: A Permitting Blueprint to Build (2025); OpenMinds Network; Cygnal (August 2025); LBNL; WIRES; U.S. EPA.