Americans for a Clean Energy Grid

The ACEG Vision of the Grid

Americans for a Clean Energy Grid (ACEG), a highly diverse coalition of stakeholders, has worked since 2008 to encourage modernization, expansion, and integration of the Nation's backbone electric system. A more robust electric transmission grid enables development, distribution, and dispatch of new clean energy resources, integration of distributed generation and digital technologies, and promotion of broader, more efficient bulk power markets. These outcomes support cleaner, lower-cost, low carbon electric generation and a more efficient electric system. Robust transmission infrastructure, once thought of as an investment option of last resort, is instead a prerequisite to an efficient grid relying on emerging sources and uses of clean electric power throughout North America.

ACEG urges reassessing and, if necessary, revisiting our century-old regulatory framework, to ensure that it does not undervalue and hinder important upgrades to our transmission system. Both our federal and state regulatory systems are based on an early 20th century model of self-sufficient or lightly interconnected local distribution utility systems. That model no longer describes the existing grid, much less the grid of the future. Clean, competitive generation is being added to the system within two years; a new transmission line still takes ten. Multi-state, multi-level regulation is expensive and slow: it deters capital investment. The grid is becoming more integrated, serving distant markets, and providing a range of economic, environmental, public policy, and reliability benefits to society as a whole that are seldom acknowledged by planners or regulators. An expanded, modernized, and integrated grid will link all markets, lower consumer prices and lessen risky technology investment. Improving the grid is vital to our electrified economy and America's further progress.

ACEG's Policy Objectives

1. **Defend and Enhance Effective Regional Transmission Development** policies by the Federal Energy Regulatory Commission (FERC) which have successfully driven substantial transmission investment but have not gone far enough, including:
    - **Regional transmission planning.** FERC should maintain and improve orderly and robust regional transmission planning processes in every planning region. These processes have yielded beneficial transmission expansions and upgrades that have in turn reduced electricity prices for consumers and businesses, improved system reliability and security, and integrated new clean energy resources at net savings. Regional planning has also engaged diverse stakeholders, prompted collaborative modeling, and identified the most-needed transmission capacity.
    - **Cost allocation.** FERC should embrace a broad and inclusive understanding of the primary as well as ancillary benefits of high voltage transmission upgrades that accrue within and outside Order 1000 regions, and allocate costs accordingly. Today, transmission planners use tools that "only provide estimates of the short-term dispatch-cost savings under a singular set of generally simplified system conditions" (WIRES Brattle Group Study, 2013). These estimates undervalue transmission investments, because they miss a significant portion of transmission's total production cost savings and an even larger portion of its overall economy-wide benefits. As identified in a study by the Brattle Group, FERC should require a full accounting of transmissions benefits, including:
        - Additional production cost savings from reduced line losses, mitigation of extreme weather, system contingencies, and reduced cycling of plants.
        - Improved reliability and resource adequacy benefits, such as avoided/deferred reliability projects, reduced loss of load probability and reduced reserve margins.
        - Generation capacity savings, including reduced peak energy losses, deferred generation capacity investments, and access to lower-cost generation resources.
        - Market benefits, such as increased competition or market liquidity.

- Environmental benefits, such as reduced emissions and improved use of transmission corridors.
- The benefits of meeting adopted public policy goals.
- Economic development benefits, such as jobs, ripple effects, and tax revenues.
- Project-specific benefits, such as storm hardening, increased load serving capability, synergies with future transmission projects, increased fuel diversity and resource planning flexibility, increased wheeling revenues, increased transmission rights and customer congestion hedging value, and HVDC operational benefits.

2. **Seek Further FERC Policies to Accelerate Transmission Development**:
   - **Inter-regional transmission planning**. A major missing piece in a rational transmission planning policy is the absence of planning across RTOs and other regional planning authorities to ensure efficient inter-regional transmission. The U.S. has only three large interconnections—and could have one—but transmission planning is performed in more fragmented sub-regions. FERC should remove barriers to consumer access to low-cost resources by integrating inter-regional planning on as large a scale as can be justified by net benefits. Huge amounts of potential wind and solar energy are lost every day in America's heartland for lack of interregional transmission capacity to deliver them—at cost and emissions savings—to markets in the East and West.
   - **Recognize today's realities:** FERC should take steps to:
     - **Count all the benefits,** noted above.
     - **Define a broad scope and timeframe of the benefits and address uncertainties.** FERC should direct planners to:
       - Examine the public interests and benefits from transmission projects across broader regions up to and including the nation as a whole.
       - Require economic planning based on sound cost-benefit analysis, over a time period that approaches the useful life of the physical assets. (e.g. 30-40 years)
       - Evaluate long-term uncertainties through scenario-based analyses.
     - **Connect transmission planning to generator interconnection queues.** Project-by-project interconnection requirements are often too costly, and efficiencies of coordinating many projects in a sub-region are missed.
     - **Recognize that transmission lead times (often 10 years) are multiple those of new gas, wind, or solar generation (perhaps 2 years)**, so the regulatory construct should encourage anticipatory transmission investment to regions with significant unserved generation potential.
3. **Encourage State Regulators to Cooperate on Beneficial Multi-State Transmission Projects.** State regulators have and will unquestionably retain the jurisdiction to site and approve construction of transmission projects within their boundaries. In light of the land-use, aesthetic, environmental, and other impacts of a new transmission corridor, ACEG does not dispute the vital role of state and local officials in key routing and siting decisions. The entire history of the electricity industry, however, underlines the economic, security, reliability, and system benefits of larger areas sharing resources and achieving economies of scale and scope. Interconnection and integration with neighboring states have delivered access to cheaper energy, improved reliability, and operational economies to customers and utilities. Our fragmented regulatory jurisdictions typically ignore the benefits of regional and interregional projects and operations. ACEG will encourage all states benefiting from or bearing impacts of a proposed project to collaborate effectively, without a preemptive Federal role, to recognize and share both costs and benefits so that the broader public interest can be served.
4. **Embrace New Transmission Technologies.** A technological revolution, largely driven by digital computing, monitoring, control, and analysis, is sweeping the electricity sector, including the high-voltage grid. The improvements to transmission promise to increase capacity, control power flows, reduce visual and land-use impacts, improve reliability, enhance security, and all while lowering net costs. ACEG will promote all such technologies without picking favorites, confident that a vigorous marketplace will select the best of them.