

# 2005 Energy Act: The Impacts on Electric Transmission

As one of a series of such materials, this brief issue paper summarizes the key provisions, impacts, and implications that ICF International sees as the result of the provisions relating to electric transmission in the Energy Policy Act of 2005.

## Key Provisions

- Beginning within one year and every three years thereafter, the U.S. Department of Energy (DOE) will conduct a study (in *consultation* with the states) to identify 'national interest electric transmission corridors' that should be upgraded or have added transmission for reliability or economic purposes (e.g., to relieve congestion).
- The Federal Energy Regulation Commission (FERC) is given 'backstop' authority to order the acquisition and permitting of the right-of-way for siting and development of transmission within these corridors for numerous reasons, including lack of state approval within one year of application. States also may form interstate compacts to jointly consider transmission projects.
- There will be nationwide, common standards established for system reliability to which all utilities must conform.
- There will be a national authority set up to monitor and provide real-time data on the status of the grid throughout the Eastern and Western Interconnections.
- Qualified transmission facilities are afforded accelerated depreciation, with a reduction from 20 years to 15 years.
- FERC is required to assess and set rates to encourage electric power transmission, including higher returns on equity and incentives to reduce congestion.
- DOE is granted over \$750 million in research and development (R&D) for new transmission technologies to enhance reliability, efficiency, and environmental performance of power systems.
- While not part of the Act, an incentive for the sale of transmission was in the Jobs Bill of 2004, which contained a provision that mitigated tax impacts when utilities choose to sell transmission assets to third parties.



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## Anticipated Impacts

- The legislation shines a bright spotlight on the issue of transmission siting. In specific, DOE's designation of a transmission corridor as one of 'national interest' will have strong implications for FERC authority, since the federal government could stimulate actions for which approval was previously required from the states. This also will make it harder for public interest and environmental groups to delay approval of power lines.
- Such designation will put strong pressure on states to expeditiously consider and approve applications for transmission additions and upgrades in those areas. Also, the recent creation of multi-state organizations of regulators (e.g., in both MISO and PJM) could form the foundation for the state compacts that the legislation allows to jointly consider transmission projects. These compacts could retain control of siting at the regional level.
- Incentives to reduce congestion have had encouraged transmission builds elsewhere (e.g., the United Kingdom), that eventually reduced congestion and could effectively reduce congestion here. But critics claim such policies encouraged "gold plating" the transmission system and saddling rate payers with a system whose costs outweigh the benefits of reduced congestion.
- Higher returns alone may not lead to more transmission, but in combination with other sections of the Act, they may raise the profile of transmission enough to facilitate its development.
- The nationwide monitoring of the status of the grid is unprecedented (such information has been only available at the utility and perhaps state and regional transmission organizations (RTO) levels). This will require a major expansion of an existing organization (e.g., North American Electric Reliability Council (NERC)), or a new national entity, and the development of considerable systems and methods for comparison across existing control areas and network.
- 'Reliability' standards will be met through more than just new transmission lines, through approaches that may include new and 'hardened' substations, new computer software and hardware, more operator training, greater vegetation management, etc. It also will be important to watch the emergence and level of penalties for non-compliance, and to determine which entities will be responsible for the standards' implementation (i.e., the RTOs or the utilities).

## Industry Implications

- The cumulative effect of increased FERC and DOE responsibilities, authority, information, and resources specified in the Act will increase the already considerable power of the federal government over the interconnected grid. This will lead to more active federal involvement in the power industry.
- Determining the criteria for and designation of 'national interest' corridors will be a key DOE activity in the coming months.
- Where RTOs exist, the expansion plans they develop could be a precursor for designating transmission corridors as ones of national interest. Thus, the process of developing these plans could become much more important.

- The coming months likely will see a major debate emerge on appropriate reliability standards. Once set, the implementation of these standards will be a catalyst for billions in new transmission investment, particularly in areas where the grid is currently weak or has seen under-investment.
- Though the legislation enables (and even encourages) new transmission for economic reasons (i.e., to lower the cost of power), this use of transmission would be a sea-change in the utility industry, which has heretofore been built primarily for reliability purposes, while leaving economic transmission to those who would benefit from the resulting transaction. This legislation may herald a new wave of economic transmission investment, though some may resist that trend.
- The requirements for enhanced reliability and national grid monitoring could well be a catalyst for further consolidation of the utility industry. It will become harder for smaller utilities to retain their own 'control areas,' in light of the substantial investments that may be required. Thus, smaller utilities may join forces, rely on control area services from larger or financially stronger utilities or RTOs, or sell the utility or grid assets outright. Regulators may compel smaller utilities to make such economic investment choices, even if they prefer to remain autonomous. The examples of Texas, New York, and the PJM, all which are single control areas, demonstrate the benefits of critical mass in providing transmission services.
- FERC incentives for transmission will have an impact on wholesale rates, and thus on retail rates. While the dollar amount may be small, states may object to such increases. The number of rate cases and tariff changes for transmission will increase.
- The research and development funds could lead to a detailed cost-benefit assessment of alternative technologies and their commercial potential. It will be important for both equipment manufacturers and utilities to understand the tradeoffs of different techniques (e.g., for reducing congestion).
- All of these trends will lead to a major expansion of DOE's Office of Electric Transmission and Distribution, as well as FERC.

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