

Transmission benefits: filling a critical gap in Order 1000, part 1

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In his first Illinois Commerce Commission decision four years ago [Illinois Commerce Commission v. FERC, 576 F.3d 470, 476 (7th Cir., 2009)], Judge Posner of the Seventh Circuit did something that had not been done before. In reversing a PJM cost allocation approved by the Federal Energy Regulatory Commission (“FERC”), the court required the agency to identify and monetize the benefits to each utility on the grid derived from a new transmission investment. If a transmission provider seeks to allocate high-voltage transmission costs broadly, it must somehow quantify the benefits of new transmission projects and thus identify the beneficiaries of those investments.

On one hand, the court acknowledged that the grid is no longer a collection of discreet principalities and, for that reason, “backbone” transmission operating at the higher voltages on this integrated network could serve reliability needs across the system. On the other hand, while conceding that cost causation and benefits received in such circumstances are not always susceptible to precise measurement, Judge Posner also concluded that transmission providers could not just assume transmission benefits are widely shared, without showing something more. At a minimum, the Federal Power Act requires FERC to ensure that transmission benefits in particular cases are roughly commensurate with the costs that consumers might have to bear.

After that decision, the Energy and Natural Resources Committee of the U.S. Senate and the FERC itself struggled with how to make this “beneficiaries pay” approach to cost allocation work equitably and efficiently. In Order No. 1000, the FERC spelled out an approach that mimicked Judge Posner’s formulation, intending not to appear too prescriptive about how regions should implement that approach. Moreover, since Order No. 1000 is also designed (at least implicitly) to encourage the best transmission projects, identifying and measuring multiple transmission benefits is doubly important.

However, intentionally or otherwise, FERC failed to define ‘benefit’ for planning or cost allocation purposes. What were the effects of this critical gap in Order No. 1000? It became both an opportunity for creative (and often inconsistent) exercise of state and regional planning and rate approaches and a source of considerable uncertainty and risk in the regional – and especially interregional – planning and cost allocation processes undertaken pursuant to Order No. 1000.

Earlier this year, WIRES retained The Brattle Group, a well-regarded economic consulting firm, to collect and analyze the experiences of transmission planners in identifying and measuring the benefits of individual transmission projects and groups of projects around the country. Despite the recent changes in grid operations and expansion as a result of FERC's open access transmission rules and the advent of organized regional markets, it had become clear that planners and policy makers often ignored or failed to grasp the full range of potential benefits that expanded or upgraded transmission facilities could provide, over and above the primary reliability, economic, or other purpose for which they are typically proposed.

Reliability benefits were always hard to quantify. Beyond calculating congestion relief or doing a production cost simulation, economic benefits were often elusive, remote in time, or speculative. The obvious benefit of delivering remote renewable resources to market could overlap with other system benefits, but how and when? Whose public policies should serve as justification for an interstate project? Moreover, during a project's long life, it would conceivably deliver several kinds of benefits to different groups of customers.

[This is part one of a two-part series from Hoecker.](#)