

Regulators Will Need to Be Mindful of Which Transmission Institutions They Want

I. Where Will the Leaders Come from?

The new transmission projects that the Federal Energy Regulatory Commission (via 888 and subsequent Orders) and Congress (via EPACT 2005) desire can be built either by existing integrated utilities, by independent transcos, or by a combination of the two. In the utility category, most projects will tend to be in the company's backyard (although with the repeal of PUHCA, some utilities' backyard may grow to encompass multiple states¹). In the independent category, projects

Edward N. Krapels is the CEO of Anbaric LLC, an independent transmission development entity formed in 2004. He was one of the developers of the Neptune HVDC independent project, which is under construction and is scheduled to enter service in 2007. He is an expert on a wide variety of energy markets and the author of many studies and reports on natural gas and electricity market dynamics. Dr. Krapels holds a Ph.D. from the Paul H. Nitze School of Advanced International Studies.

tend to be developed across utility and state and control area boundaries. Looking ahead, assuming the Federal Energy Regulatory Commission's recent Transmission Incentives Order results in the emergence of a revitalized transmission business, expect to see more trans-utility, trans-control area projects.

What is most intriguing about the current state of transmission development is the institutional question. Thirty years from now, if there has indeed been a substantial expansion of transmission superhighways, who will have been the leaders? If New York City were no longer to be an electrical island, how will this have been accomplished? If California were to import 10,000 MW of clean coal from Wyoming, what business and governmental leaders will get the credit (or the blame) for getting such a massive thing done?

If we look to other countries for instruction on this question, the first apparent answer would be that a **national transmission "champion"** was somehow squeezed out of the traditional vertically integrated industry, a la

National Grid in the United Kingdom. Clearly, that was the vision that drove National Grid into the United States, and motivated it to seek to become the independent transmission company of whatever area would have it. The American market has so far not turned out to be fertile ground for that vision.

While the Grid model has not succeeded, a second **much smaller regional version of that model** is emerging. A few utilities like Northeast Utilities and NStar are honing their transmission-building expertise. In time, companies where the "T" part of T&D becomes the engine of growth of the company as a whole may proliferate. The development of transmission as the engine of growth, however, may be impeded by the desire to position the utility for acquisitions. Large transmission projects are not a welcome distraction for executives talking to investment bankers about mergers.

A third response is clearly for large utilities to grow larger by **acquiring other integrated utilities**, but the effects on transmission development are unclear. We see Exelon pursuing PSEG,

Grid pursuing Keyspan, Duke pursuing Cinergy, FPL pursuing Constellation, and so forth. These mergers undeniably have an economic logic to them, but they have an unresolved issue: what is the role of generation in these companies? If they are to be generation-rich entities, then they will have the same internal conflicts – that building transmission often causes the value of generation to decline – that hampered utility transmission investment for decades, which in turn is what motivated the federal government to embark on restructuring to begin with. The proponents of such mergers are using the “back to basics” motto as if it were a good thing: what if the majority of regulators, politicians, and investors regard it as a bad thing? Even assuming most of these mergers do take place, what evidence is there that the larger company would have any interest in transmission given the internal conflicts?

A fourth vision of transmission development has been pioneered by American Electric Power, which proposes that a **utility-owned transco** – of which it would be the majority owner – be empowered to develop its visionary Interstate Transmission Project between PJM far-West and PJM East. FERC indicated such an ownership structure could constitute a “stand-alone” transco. With that, we would expect these institutions to become a prominent part of the transmission development landscape.

A fifth vision is an extension of today’s existing ITCs, the few companies like the American Transmission Company (ATC) and the International Transmission Company (ITC) to which FERC commissioners often refer when they need a model of active transmission development. Even in this small cohort, however, there is room for question as far as transmission development is concerned: how well do the

There are a half-dozen independent developers, who most clearly have the Darwinian impulse (develop or die) conducive to getting things built.

ITCs develop new transmission versus acquiring new transmission? ITCs are too recent an innovation to answer this question just yet. Time will tell.

That brings us to the last category: **the independent transmission developers**. There are half a dozen of these entities, who most clearly have the Darwinian impulse (develop or die) conducive to getting things built, and which are responsible for many of the more interesting transmission projects in the country. But they are small and tend to develop projects serially – a far cry from being the “AES of transmission development.”

II. Healthy Institutional Competition in Transmission

Each of these transmission institutions is pursuing primarily rate-based opportunities. Early in the restructuring effort, some believed that significant “merchant” transmission investments would be made to exploit locational energy pricing differences. It is now widely and properly believed that with both mitigated energy prices and unstable capacity payment regimes, purely merchant transmission investment (like purely merchant generation investment) will not emerge anytime soon.

But competition is coming to transmission in other ways. Independent transcos are pursuing contract-based and rate-based project opportunities in a number of markets, and regulators and quasi-regulators (a.k.a., the RTOs and ISOs) increasingly appreciate that their rules determine which of the six types of transmission institutions they will see, and therefore whether they will have any competition in transmission development in their market.

In some market areas, the effect of evolving market rules on transmission competition is becoming clearer. In California, for example, the California Public Utilities Commission recently promulgated rules strengthening the transmission development franchises of the incumbent utilities.² The intentional result of this policy is to facilitate the connection of renewables to the

grid; the unintended result is to prolong and consolidate the transmission franchise of the utilities. But if those same utilities already own generation in a given transmission area, how much confidence can competing renewable generation projects have that their transmission needs will be met in a timely way?

In contrast, the hotbeds of independent transmission development will be those states that often are at the forefront of regulatory innovation: Michigan, Wisconsin, and New York. Michigan and Wisconsin have spawned the two most independent regulated transcos (ATC and ITC, respectively), while in New York, the Long Island Power Authority has given contracts for new projects to two independent trans-

mission projects (Cross Sound and Neptune).

The moral of the story for regulators and quasi-regulators is to be mindful of which transmission institutions they want. Over the last decade or so, FERC has provided extra incentives for the development of self-standing transcos. FERC carried this practice over in its Transmission Incentives Order, so more of these entities will emerge. But, as in all other aspects of our still-fragmented electric market, there will be huge differences in where these entities will be able to compete.

We believe there is a good chance that FERC's Transmission Incentives Order will be – at least in principle – the transmission equivalent of the Orders allowing non-utility generators (NUGs) and

exempt wholesale generators (EWGs) to open up the generation business. The effects of this “transmission restructuring” Order in practice, however, will depend both on the effectiveness of the new transcos (for example, will an “AES of transmission development” emerge?) and on the willingness of state regulatory commissions to reinforce the more competitive direction in which FERC is still trying to push the electricity industry. ■

Endnotes:

1. American Electric Power's buildout of its transmission system was an exceptional achievement in the pre-PUHCA era, as it integrated transmission systems across multiple states.
2. CPUC Decision 06-06-034.



There are half a dozen of these entities, who most clearly have the Darwinian impulse (develop or die) to getting things built.