Transmission Companies: A Summary of the Issues

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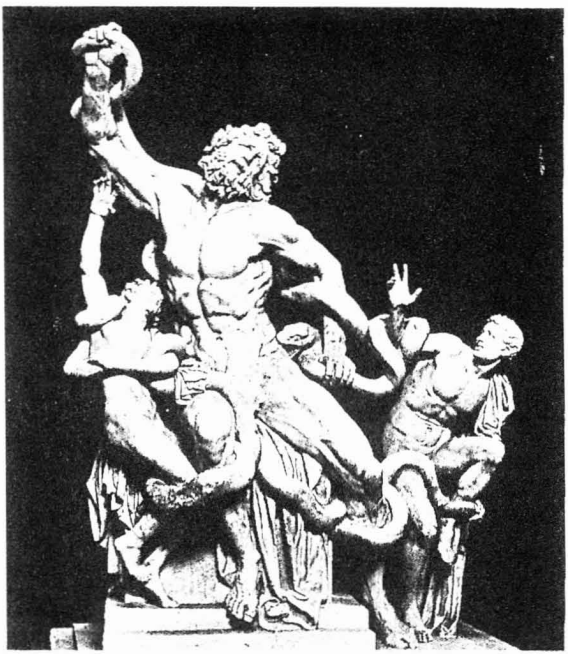
You may not realize it, from the discussions, but people in other countries use electricity. They, too, have transmission systems. They have set up different means of owning, regulating or operating these networks. Yet the light bulbs continue to shine.



Laocoön. Stone. Rhodian, 1st century B.C. *Vatican Museum*

"Transmission Ensnared in the Coils of the ISO"
Polydorus of Rhodes
First Century A.D.

Americans, however, tend to suffer from the NIH (not invented here) syndrome, so they often struggle through the process of reinventing the wheel. When the government enters the picture, and all the stakeholders get into the act to make sure that nobody gores their oxen, the reform effort turns convoluted, and the resulting product does not follow the dictates of the medieval philosopher William of Occam, which was *keep it simple, stupid**, but rather Rube Goldberg, the designer of convoluted contraptions, such as the ISO. So, let's try to simplify the issues.

INDEPENDENCE

First of all, the Federal Energy Regulatory Commission, the Federal Trade Commission and a host of system users agree that generation owners should not own and operate the transmission network, because they might operate it in a fashion that disadvantages generators that compete with them. Of course, generation owners who also own transmission might argue that they will provide open access to all and treat everyone equally, but that does seem like putting the fox in charge of the chicken coop. Therefore the guiding principle of transmission reform is:

- The creation of a competitive electricity market requires the separation of control of transmission from control of generation.

THE ISO SOLUTION

The Feds had a problem. They did not have the power or, possibly, the guts to force electric utilities to divest themselves of either generation or transmission assets. The utilities, in turn, did not or could not make strategic decisions about their lines of business, and wanted to hold onto all assets.

The Feds pushed the independent system operator (ISO) as a solution. The utilities would continue to own, maintain, and earn a regulated return on the transmission assets, but they would cede control of those assets to a regional non-profit transmission monopolist operator, the

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**Entia non sunt multiplicanda praeter necessitatem*, in the original Latin.

ISO, whose board of directors and management would not report to the owners of the assets. (In some cases, ISO boards seem to report to nobody.)

THE TRANSCO SOLUTION

Several American utilities have balked at handing corporate assets over to a non-profit body that they could not control, because doing so gave them no assurance that the new entity would run those assets in a way to afford shareholders the greatest profit commensurate with risk taken. Some public policy wonks, economists, and even engineers, have asserted that the ISO lacks the financial incentive to operate the system most efficiently and, possibly, lacks the financial wherewithal to expand the network when required to do so.

Therefore, perhaps a profit-making entity, not owned or controlled by generators, could operate the system more efficiently, in a manner satisfactory to its customers and, in the process, not only drive down the cost of transmission but also provide greater value to investors. Transmission companies do operate elsewhere in the world.

REGULATION

Despite many hints to the contrary, the Feds regulate transmission on the old fashioned rate of return basis, although some transmission owners have found ways to earn more than the normal return. That form of regulation has several flaws:

- it has no explicit incentives to run the system more efficiently
- it discourages capital investment when the regulated return is unattractive compared what can be earned elsewhere
- it discourages software solutions to transmission problems because software is an expense that produces no return

Transmission has to move to a regulatory system that encourages efficient operation (which really means accommodating more traffic,

safely, on existing lines) and also sends the right signals to encourage network expansion.

Transmission is the bottleneck that inhibits vigorous competition between regions, and prevents customers from accessing low cost power. Yet transmission only takes 6-7¢ of every dollar spent on electricity and the extra penny or two that could open the transmission network is dwarfed by the 10¢-40¢ savings that competition could produce for electricity consumers.

BUSINESS AND FINANCIAL STRUCTURE

Organizations that design structure to suit commercial objectives can choose a variety of structures, in order to optimize operating efficiency, reduce taxes, or maximize shareholders' value. Any of those business organizations chosen, however, must operate the network efficiently and safely. Thus, the transmission entity, in order to encompass a wide enough region, might operate as a joint venture, or through partnership-type arrangements, or it may acquire surrounding properties outright.

If regulators choose to concentrate on price of service, rather than on rate of return, the transmission entity could employ means of financing that might lower some financial costs, broaden the market for its shares, enhance shareholder value and even lower costs for consumers.

RELIABILITY

Every politician and regulator says the same thing: we want lower prices but no decrease in reliability. Reliability, however, has commercial and economic as well as engineering aspects.

Those controlling the network can achieve reliability in several ways:

- setting arbitrary standards for all users, whether cost effective or not, in order to prevent the system from ever approaching reliability limits

- managing the operation of the system to prevent problems as it approaches reliability limits

- setting prices that move up or down in ways to encourage users to act in a way that protects reliability

The first approach is the most risk averse, and, possibly, the most expensive, but the easiest to understand. The efficient market, however, requires market-oriented means of achieving reliability, and the transmission operator should seek to provide reliability in the most efficient manner, should reap a reward for doing so, and should pay commercial penalties for failure.

Reliability, however, provides the excuse to maintain regulation at previous levels, or to extend it, or to prevent profit-making entities from operating, because lightly regulated or profit-making entities supposedly lack the altruistic, public-spirited, quasi-religious, right-minded attitude needed to maintain reliability. Proponents of transmission companies, therefore, must face this prejudice head-on, and demonstrate that profit-making entities have the motivation and the financial wherewithal to maintain or improve reliability, and still do so in a cost effective manner.

PANCAKING

The Feds want big transmission entities. Why? They say that bigger is more efficient. Then they say that a bigger area covered means less pancaking. Reduce pancaking. That's the mantra. Presumably, separate transmission entities could put together through-put pricing that eliminates pancaking, too. The regulators will impose the solution, the regulators want to reduce pancaking, and transmission entities that do not service large markets must have a solution for pancaking.

REGULATED MONOPOLY

Finally, understand that those in charge of reorganizing the electric utility industry in order to bring consumers the fruits of competition have decided to do so by creating bigger, regulated monopolies. The irony of that stance seems to have escaped both the regulator and the utility managements.

OPPORTUNITY

It is difficult to top the immortal words of Lawrence Peter Berra, who said, "When you come to a fork m the road, take it." Utilities have a choice. They can put their transmission assets into a ISO, get tied up in red tape, lose control, or they can try to turn their transmission assets into something of value to shareholders. However, do not get too comfortable with the first choice, on the theory that you will earn your regulated return, so why worry, especially since the ISO is only a temporary—if inconvenient—way-station on the road to the transmission company.

Consider these scenarios. First, the regulated profit may decline. Second, the regulated industry, tied up in bureaucratic knots, may lose out to outside energy purveyors, because the regulated entities, under control of non-profit bureaucracies, will not respond effectively to competitive pressures, even before the ISO dissolves into a transco. Third, the ISO may not wither away any more than did the dictatorship of the proletariat, and utilities will discover that once in the ISO they can't get out, and they can't make it go away.

Electric utilities should not be as undiscriminating as Yogi. Hopefully, they will choose the correct fork.

ABOUT THE AUTHOR

Leonard S. Hyman, CFA, is a senior industry advisor to Smith Barney. Previously he was managing director of Fulcrum International Ltd., as well as an independent consultant specializing in the economics and finances of energy and telecommunications utilities.

From 1978 to 1994, as head of the Utility Research Group and first vice president at Merrill Lynch, he supervised and maintained equity research on foreign and domestic energy and telecommunication utilities. He was a member of privatization teams for offerings of British, Spanish, Mexican, Argentine and Brazilian utilities and consultant for other restructuring studies. Prior to joining Merrill Lynch, he was a partner at a New York Stock Exchange member firm and an officer at Chase Manhattan Bank.

Author of *America's Electric Utilities. Past, Present and Future,* author of *The New Telecommunications Industry: Evolution and Organization* and editor of *The Privatization of Public Utilities,* he has contributed to other

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For more than a decade, Mr. Hyman was cited by *Institutional Investor* as one of the leading research analysts in his field. He is a Chartered Financial Analyst (CFA). He holds a BA from New York University, where he was elected to Phi Beta Kappa, and an MA in economics from Cornell University, where he majored in industrial organization and minored in Latin American studies.

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