

Electric competition and the Federal Energy Regulatory Commission

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Introduction

The pricing of electric power is not only an issue at the state level, it also gathers the attention of the Federal Energy Regulatory Commission. A major pricing issue now facing FERC involves electric transmission. This reflects increased competition in the electric generation business and is of particular concern in the wholesale electricity market, which is regulated by FERC. As FERC Commissioner Donald F. Santa makes clear in the following article, access to transmission lines and the price to be paid for that access are extremely important issues to independent power producers. This article is based on Commissioner Santa's keynote speech to the PURE '94 Conference earlier this year. Federal Energy Regulatory Commission (FERC) this year is engaged in its most sweeping inquiry into electric transmission pricing in history. Along with others at the Commission, I will spend a lot of time this year on how public utility services should be priced to achieve the goals of regulation in the 1990s.

These issues will be at the heart of current proceedings on the pricing of electric transmission services. The FERC document initiating the Transmission Pricing Inquiry bears the innocuous title: "Notice of Technical Conference." The proceeding is a generic one, which should culminate in rulemaking or in a policy statement of industry-wide applicability. For purposes of the pricing inquiry, FERC has wiped the slate clean. The notice seeks public comment on the appropriateness of different transmission pricing models. It also seeks comment on the way various price signals regarding transmission affect bulk power markets.

The response to the notice was over whelming, and clearly demonstrates the importance of the issue of electric transmission pricing. FERC has received a total of 158 comments. Copies of the comments are stacked up in my legal advisor's office. When put in a pile (and carefully balanced) the comments just about come up to my waist. And, we have not received the reply comments yet.

Why price is important

Before getting into the details of the Commission's pricing inquiry, I would like to address the more general question: Why is price important? After all, in the public utility context, we are regulating monopolies. Isn't it enough simply to set rates that prevent the collection of monopoly rents?

The answer, simply put, is that price is communication; it sends a signal. The price of a good or service communicates something about its worth, its quality, and its relative scarcity or

abundance. This is true whether we are talking about a free market or a market subject to economic regulation. In a free market, price is set at the point where supply and demand intersect. In the context of economic regulation, price is set by the regulator.

While the rate generally has some relation to cost, it can vary substantially depending on what cost the regulator chooses to use as the basis for the rate. For example, there can be a significant difference between the rate for a service priced on the basis of marginal or incremental cost compared to that same service priced on the basis of average embedded cost.

And, of course, how the regulator prices the service determines the message that is sent about that service. It is a message that is sent both to the potential consumers of the service and to the regulated company that is the provider of the service.

Why electric transmission pricing is important

Until fairly recently, electric transmission pricing was viewed as a pretty arcane topic, that was followed only by dull regulators and policy wonks. Today, anyone who has anything to do with the electric utility industry is focused on transmission. Why?

The answer is the emergence of competition in the electric power industry, particularly in the wholesale electricity market. The wholesale market, which also is referred to as the bulk power market, is regulated by the Federal Energy Regulatory Commission under the Federal Power Act. This market consists of sales of power generated by an electric utility, or by an independent power producer, to another utility for ultimate resale to retail consumers. Access to transmission service and the price charged for transmission service are critical to competition in the bulk power market.

At the state level, regulators, especially those in regions with high-priced power and excess generating capacity (such as New England), are under pressure to permit what is called "retail wheeling." This involves retail customers who want to purchase power from someone other than their local utility and then use the local utility's transmission and distribution lines to deliver that power.

In either case, transmission lines are the highway that is necessary to get purchased power from the seller to the buyer: Wheeling service is the moving van that gets it there. But moving purchased power is not as simple as calling up United Van Lines. Generally, electric utilities own the highways within their service territories and they are the only ones with a license to drive the van on that stretch of highway.

The importance of transmission pricing has been heightened by recent changes in federal law. In 1992, Congress enacted the Energy Policy Act (or "EP Act" as it is known), one of the most sweeping pieces of energy legislation ever. In Title VII of EP Act, Congress amended the Federal Power Act to provide that customers and others can request FERC to order a public utility to provide access to its transmission system. So, while some hurdles still remain, open access electric transmission is increasingly a reality.

Traditionally, FERC set transmission prices as part of a bundled service. Transmission was a component part of the price for delivered wholesale power. In this environment, legal constraints made third party access to transmission the rare exception to the norm. Now that the Congress has provided statutory authority for mandating transmission service, the question is not one of access but rather one of price.

With open access, there will be increasing emphasis on the distinction between the electric utility as a generator of electric power and the electric utility as a transmitter of electric power. In its regulation of the natural gas industry, the Commission ultimately found that the only way to ensure true non-discriminatory open access was to mandate that interstate pipelines unbundle their gas sales services from their transportation service. The purpose of this mandated unbundling was to prevent pipelines from favoring their own bundled sales over the third party sales of their competitors. On the electric side, some have argued that vertically integrated utilities also should be required to unbundle their generation services and their transmission services for the same reason.

Theoretically, mandatory access should bring the price of transmission down. A transmission customer will no longer be left with the choice between paying monopoly rents or else foregoing access to transmission service. But will this be the case in practice? Electric utilities contend that complete unbundling will lead to higher prices. They claim that decreased reliability will result from the obligation to carry third party transactions. They also claim that many economies and synergies associated with vertical integration will be lost. Thus, they contend, the aggregate of the unbundled services should be priced higher than the formerly bundled service.

So that is the backdrop against which the Commission is addressing transmission pricing issues. Recurrent themes in this policy debate include: What constitutes truly non-discriminatory transmission access; and what price should be established for that access.

Current transmission pricing policy and pricing capacity additions

Historically, the Commission priced transmission on the basis of the rolled-in embedded cost of the transmission grid. There was no effort to distinguish between new and old customers, and no effort to assign particular customers with cost responsibility for new facilities. This pricing model was administratively efficient; setting rates was relatively easy. Single-system pricing supported the commission's interest in the concept of an integrated grid. The Commission's more recent pricing model is based on the historic model, but with a variant to account for increasing capacity constraints in the transmission grid. In FERC-speak, the catch-phrase to describe the current model is "OR" pricing. Constrained transmission capacity raises an important question. When the transmission system is constrained, who pays for new capacity becomes critical. Should all system customers pay? Would this be equitable for the utility's historic customers, also known as its "native load," who have paid for the existing transmission infrastructure? Should only the party "causing" the need pay for the upgrade? But, is it really fair to say that one particular customer caused the need for the upgrade?

Also, there are public policy reasons to eliminate bottlenecks in the transmission system. There is a relationship between competition, transmission access, and capacity constraints. Obviously,

FERC wants to avoid a situation where a transmission-owning utility can frustrate competition in the bulk power market simply by refusing to build new facilities. Adequate transmission capacity is important for reliability.

Under the traditional bundled pricing of transmission and power, when a utility builds to relieve a constraint, the rates for native load customers are likely to go up, because they pay for all allocable investment in the transmission system (including the upgrade). Under an incremental pricing system, costs for relieving constraint may be assessed solely to the third-party wheeling customer (whose additional load or transaction needs it was that caused the constraint). This choice between rolled-in and incremental pricing is a choice both with respect to what is the price and who pays that price.

The Commission's "OR" pricing model is an attempt to address these competing interests. The "OR" pricing model was intended to achieve three goals: To hold native load customers harmless; to provide the lowest reasonable cost-based price to third party transmission customers; and to prevent the collection of monopoly rents by transmission owners and to promote efficient transmission decisions.

The "OR" pricing model has been articulated as follows: When the system is constrained, and the utility chooses to expand the system, the utility may charge its third party wheeling customer the higher of: (1) A rate based on the rolled-in embedded cost of the system; or (2) the incremental price of expansion. In addition, when the system is constrained and the utility chooses not to expand its system, the Commission has permitted the utility to charge its third party wheeling customer the higher of: (1) a rate based on the rolled-in embedded cost of the system; or (2) legitimate and verifiable "opportunity costs," capped at the incremental cost of expansion. The Commission has defined opportunity costs as costs incurred to relieve the grid constraint. These costs might include, for example, the costs of running uneconomical generating units.

While the Commission believed that "OR" pricing achieved the three goals just mentioned, "OR" pricing has been unpopular with both transmission-owning utilities and with third-party transmitters, albeit for different reasons. On the one hand, transmission-owning utilities and some state commissions, contend that the "OR" policy is less than fully compensatory. They believe that third party wheeling customers should compensate utilities both for use of the existing system and for transmission expansions or opportunity costs. On the other hand, wheeling customers believe that "OR" pricing is a "lose-lose" proposition for them, because the utility always gets the "higher of" embedded costs or incremental costs, even when incremental costs are less (which they argue is most of the time). Wheeling customers also strongly disagree with transmitting utilities' arguments that they need incentives for adding transmission capacity. These incentives customers contend, would be nothing more than monopoly rents.

So what is the Commission to do? One option would be to conclude that with everyone just about equally unhappy with "OR" pricing, the commission must have struck the perfect balance. That would be too easy. The answer was the transmission pricing inquiry, which could be viewed as the Commission saying to the world: "Okay, you do better."

With new commissioners who had no real pride of authorship with respect to "OR" pricing, and given the importance of pricing to the competitive evolution of the power industry, the Commission decided to initiate a generic proceeding rather than continue the transmission pricing battle on a case-by-case basis.

Network service: Pricing to reflect the quality of service

The transmission inquiry seeks comment on the concept of so-called "network service." The idea here is a flexible service that more closely resembles the way that a transmission-owning utility uses its own system. Some argue that the true benefits of open access cannot be achieved unless the transmission customer has the same flexibility of access to the system enjoyed by the host transmitter. For purposes of the transmission inquiry, the Commission staff defined network service to be "Electric competition and the Federal Energy Regulatory Commission" transmission service that allows the user to vary its schedule and points of delivery and receipt on the grid without paying an additional charge for each change."

In the recent Florida Power and Light order, which was the first case in which the Commission proposed to order transmission access under EP Act, the Commission also proposed the guidance that the Commission gave to the parties in the proposed order is instructive. The proposed order recognized "that the cost of providing network service may exceed the cost of point to point service because the transmitting utility may incur additional transmission capacity cost to accommodate the increased flexibility of network usage of the system. "The Commission also found in the proposed order that Florida Power and Light's rate for network service: (1) must be cost justified; and, perhaps most importantly, (2) "must not be unduly discriminatory when compared to rates, charges, terms and conditions of transmission used to serve Florida Power's other customers."

Most investor owned utilities believe that the Commission staff's definition of network service is too broad. They are concerned that unlimited flexibility for network service will be unworkable, because they believe such service could cause constraints and possibly compel unnecessary upgrades. They add that network service with unlimited flexibility would make long-term planning very difficult. Some utilities have also expressed other reliability concerns about unbundled, network transmission service. In addition, they believe that some reservation of receipt and delivery points should be made in advance, so that the utility can plan its system effectively. On the price of network service, some utilities believe that the only case in which network service should be provided at no additional charge is where it imposes no additional transmission constraints. Others believe that, in all cases, the flexibility built into network service makes it a "premium" service which requires added transmission capacity margins and therefore a higher price.

On the other side, wheeling customers want access to transmission system on an "as owned" basis, that is, as if they owned a share of the network in proportion to their load ratios. These commenters have argued that network service should be priced on an average embedded cost basis. They argue that point-to-point service is inferior to network service, so point-to-point service should be discounted from average embedded costs.

Stranded cost: Pricing the transition

Another of the issues facing FERC in the electric industry's competitive evolution is the cost of the transition. How will the Commission account for the fact that this regulatory reform is changing the rules of the game and that this has direct economic consequences for regulated entities? Transmission access creates the potential for stranded costs. Based on long term planning horizons, many utilities planned their vertically integrated delivery systems with the legitimate expectation that certain customers would remain their customers. With transmission access, those once-captive customers may now shop for alternative power suppliers, and, if successful, leave the system. This shopping for power may strand costs incurred by the original host utility to serve the departed customer. Although not a transmission pricing issue per se, stranded costs might in some instances be recovered through transmission rates to the shopping customer. Hence, it is relevant to transmission pricing.

The Commission is now considering whether and how to issue generic guidelines for the recovery of stranded costs. The stranded cost issues revolve around the questions of who should shoulder such costs, and how should they be collected. One could argue that all stranded costs should be borne by the customer leaving the system. Thus, if stranded costs are not provided for contractually, the costs should probably be assessed to the customer through a transmission adder. But to what extent do utilities have an obligation to mitigate stranded investment costs? And what if customers can demonstrate that a utility did not adequately mitigate or that the utility did not have a legitimate expectation that the customer would remain on its system? Should shareholders be the ones that pay, or should native load pay? These are very interesting questions as we move through the transition period.

Regional transmission groups: A consensual approach

One of the Commission's best hopes for managing the electric industry's competitive transition is "regional transmission groups (RTG's)." The Commission recently issued a policy statement laying out broad criteria for parties that may file RTG proposals with the Commission for approval. The idea is to provide a framework for utilities and customer groups to plan jointly the regional transmission system. Under the guidelines in the Commission policy statement, customer groups, utilities and independent generators all would have an equal voice. The Commission has made a condition of its acceptance of an RTG the way the group is constituted and fair voting arrangements. This modus operandi would signal a major sea change for the electric industry. Historically, utilities have retained near absolute control over their systems.

The Commission envisions that, within the RTG structure, all participating utilities will provide open access to the regional grid. In addition, the pricing of both transmission service and wholesale power would be a matter for negotiation within the group. The Commission has stated that it will defer to reasonable pricing arrangements which RTGs come up with.

There appears to be widespread support for the concept of RTGs. Still, the devil is in the details, and I think it will take some time.

Conclusion

These are very exciting times to be involved with the regulation of the electric industry. Hopefully, the Commission will be able to achieve its statutory mandate of setting rates at a reasonable level, while managing a workable transition to a new way of doing business. Setting the right price for electric transmission is an essential element of moving to a more competitive environment. Still, as services become disaggregated, the true cost of certain services may be revealed and prices may increase. While this may cause some problems, in the long run, more accurate price signals and a more competitive electric power industry should benefit consumers and the economy.



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