

Why separate utilities? distribution functions from their generation and energy service functions in a competitive retail electricity market?

One of the most basic requirements for a competitive retail market for electricity is participants' access to the wires, transmission and distribution, that move electricity from generating plants to consumers. Physical connection to the wires is not enough -- the terms and conditions of access cannot discriminate between competitors if full and open competition is to develop. Some of the more difficult issues that have been raised in debates about restructuring the industry have been questions about how best to assure nondiscriminatory access to the wires.

One such issue has been the notion that it is important to separate, at least in a functional sense, the distribution part of the utility -- the wires and equipment that connect the utility to its retail customers -- from the generation and energy services parts of the utility. In general, distribution is expected to remain a monopoly function because it would be impractical and wasteful to have several sets of wires delivering electricity to the same areas. Because it is likely to remain a monopoly, it will probably continue to be regulated.

In contrast, generation and energy services -- the businesses of producing, acquiring and selling the electricity commodity -- are the parts of the utility business that *are* becoming competitive. It is no longer impractical for different generators or marketers to compete to provide the electricity itself to retail customers. Generators are already competing in the wholesale market. The provision of energy services (which include the consolidation of customers into groups, packaging of energy with various levels of reliability and other services) is expected to develop into a competitive activity as competition is allowed at the retail level.

The case of generation and transmission

Transmission can be defined as the wire and equipment that is used to move electricity between utilities and over long distances. Transmission is similar to distribution in that it is likely to remain a monopoly function. Transmission owners are now required to provide transmission access to other generators, but simple access is not sufficient to ensure effective competition among generators. As competition has developed in the wholesale market for power, it has been widely appreciated that transmission needs to be separated from generation to prevent "self-dealing". For example, if a company is allowed to mix its generation and transmission costs, it can raise the price of

transmission to cover some of its generation costs. This enables the company to charge less than its full cost to generate the electricity commodity.

The practice has four effects: First, transmission is overpriced, so the transmission system may be underutilized. Second, generation is underpriced, leading to greater use of the company's generators than is economically efficient. Third, competition is stifled by allowing the company to compete unfairly against generators who must cover all their generation costs from their generation revenues. Fourth, there may be temptations for the utility to cut its transmission system maintenance costs to the bone to compensate for higher generation costs. This can result in reduced reliability of the power system.

The Federal Energy Regulatory Commission recognized the importance of separating the costs of transmission and generation. To encourage a competitive wholesale generation market, the Commission established regulations that require such separation. How these functions might ultimately be separated has not been determined. One alternative would be divestiture into separate companies. Utilities in the Northwest and elsewhere are exploring another arrangement in which control of transmission equipment is turned over to an independent grid operator (IndeGO is the Northwest example).

The case of energy services and distribution

While the desirability of separating generation and transmission has been widely discussed, the similar relationship between energy services and distribution wires has received less attention. Mixing these two activities? costs in a single company would create the same opportunity for price distortions and unfair competition as described for generation and transmission above. The company could charge expenses incurred in the energy services activity to customers of the distribution wires, with the result that energy services are underpriced, distribution is overpriced, and competition with other energy services businesses is unfair. In a world moving toward retail competition, the pressure to subsidize the competitive activity with revenue from the monopoly activity becomes more intense. Separation of the two activities removes the pressure and prevents the potential unfair and inefficient results.

There are other concerns about retail competition's potential impact on retail customers. One is a concern about quality of service. For example, suppose customers select an energy service provider other than their current utility. If there is a power outage, would the utility that controls their distribution wires -- the utility they left for the new provider -- place the same priority on restoring their power as for customers whose energy services are still provided by the distribution utility? A similar concern is whether, under competitive pressures in its competitive activities, a utility would sacrifice the maintenance of the distribution system and thus affect system reliability.

These are valid concerns if the distribution system is run by the same company that is selling the energy services. Separation of the distribution and energy services activities solves this problem.

Forms of separation ? functional vs. divestiture

Separation can be accomplished in a variety of ways, but the possibilities generally fall into two categories: functional separation or divestiture. Functional separation ordinarily requires separate accounting and employee organization for the separated activities, but allows ownership of both activities by the same owner(s). Divestiture requires that ownership be separated.

Functional separation has the advantage of being relatively easy to accomplish -- the utility can set up separate divisions within the company, with the activities under separate management, with costs and revenues kept in separated activity accounts. The main disadvantage of functional separation is that even with regulatory scrutiny it is difficult or impossible to be certain that costs are not being mixed, or that the monopoly activity is not being managed to advantage the competitive activity in some way. As long as ownership is common to both activities, there will be incentive to manage the monopoly activity to favor the competitive activity.

Divestiture has the advantage of a complete separation of activities. With separate ownership, incentive for the monopoly business to favor the competitive business is gone. The main disadvantage of divestiture is the difficulty and complication of carrying it out. There may be tax consequences for investor owned utilities. Regulatory concerns will arise in assigning the assets and liabilities of the current company to the separated businesses, especially if collection of stranded costs is an issue. If one of the businesses is to be sold, there will be concern about whether the pool of interested buyers is large enough to ensure a reasonable price for the business.

Since each approach has its advantages and disadvantages, utilities and regulators have been slow to settle on a preferred alternative. The general approach has been to attempt functional separation while monitoring results to see whether functionally separated companies can participate in competitive markets on equal terms. If not, full divestiture is likely to be necessary for fair and efficient competition in the deregulated activities.

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