



On the Way to Retail Competition

by Amy W. Ando and Karen L. Palmer

The transition to retail competition in electricity is far from complete. It is encouraging (and perhaps not surprising) that the states that have decided to adopt competition thus far may be the ones that can benefit the most from having done so.

The \$210 billion U.S. electric power industry has traditionally operated as hundreds of regulated monopolies, but it is now opening up to competition. Just as households and businesses select their carriers for long-distance telephone calls, soon they may be able to select their suppliers of electricity as well. However, unlike interstate long-distance telephone service (which was regulated by the federal government), retail electric service is regulated at the state level, generally by a state public utility commission (PUC). As a consequence, the transition from regulated to competitive electricity markets is moving at different speeds across the different states.

What accounts for the different rates at which states have moved to consider and then commit to creating competitive retail markets for electricity? We conducted the research described here to investigate whether and how certain features of the markets—as well as the decisionmakers and interest groups—influence how long a given state will take to decide to open its retail market for electricity to competition.

Why Competition?

The movement toward more competitive electricity markets is being driven largely by two factors. First, as

a result of recent developments in generation technology, small natural-gas-fired generators can produce power less expensively than large-scale generators, making competition in generation economically feasible. Second, the prevailing perception among industry observers is that the existing regulatory system has failed to keep prices as low as possible. This perception is fueled by substantial differences in electricity prices across states, and even among utilities within a state. In 1993, when discussions about retail competition began to take off, average electricity prices ranged from a low of 3.7 cents per kWh in Washington State to a high of 10.8 cents per kWh in New York and New Hampshire.

Further evidence that regulation has not performed well in keeping electricity costs and prices low are the estimates of the so-called “stranded costs” of doing business that utilities have incurred but would be unable to recover if electricity were priced competitively. Under competition, electricity prices will be set in the market; due in part to the entry of low-cost suppliers, market-determined prices are expected to be lower than current regulated prices charged by many high-cost utilities. While regulated prices are set high enough to provide sufficient revenue to cover “sunk”

costs—expenditures that utilities have already made or agreed to make—competitive prices may well be too low to cover these costs. Shareholders of the affected utilities could thus see the value of their stocks fall. The most oft-cited estimates of industry-wide stranded costs are in the \$100 to \$200 billion range.

Motivation for Analysis

Several reasons make it worth understanding why some states are moving quickly toward full retail competition while others are not. The industry's reformation may well have some significant impacts on the nation's economy and environment. Yet without knowing how rapid or widespread the reformation will be, scholars and policymakers are hard-pressed to predict the nature and size of those impacts. Taking a close look at some of the factors that influence decisions to permit retail competition may help us to anticipate the shape of the industry to come.

Research may also inform the current debate as to whether the country needs a federal retail competition policy. Our model of the state policymaking process affords a glimpse of how the process might continue to unfold, absent any federal mandates. Furthermore, insights as to which interest groups have the greatest influence on the rate of progress toward a retail competition plan should help clarify the politics surrounding such decisionmaking and perhaps help policymakers assess how realistic the implementation deadlines in a given plan might be.

Decisionmakers and Stages of Progress

In almost every state, the regulator (usually in the form of a public utility commission) and the legislature can take separate action to push forward retail competition. Thus in the analysis reported here, we looked separately at the progress toward retail competition of the two decisionmaking bodies.

We broke the decisionmaking process down into three transitional stages that regulators and legislators each might pass through on their way to implementing retail competition. These stages of progress are defined as follows: having taken no action on the issue at all; having begun formal consideration of the possibility; or having made a final decision to implement competition.

To perform our analysis, we collected monthly data on the stages of progress reached by individual state

utility commissions and state legislatures between January 1993 and December 1997. Our source of data was the "Retail Wheeling and Restructuring Report," a state-by-state accounting of government and utility activities related to retail competition published quarterly by the Edison Electric Institute. We developed indicators of regulatory progress for the District of Columbia and all fifty states except Nebraska, where the electric utilities are all publicly owned. We also formed indicators of legislative progress for all fifty states except the District of Columbia, which has no legislative body with authority analogous to that of a state legislature. (For a complete description of our analytical process, see RFF Discussion Paper 98-19REV; ordering information is described at the end of this article.)

Factors Affecting Legislative Decisions

Our analysis indicates that legislators in different types of states are responding to different interest groups. All else equal, legislators in states with high electricity prices, for example, are moving more quickly than those in other states toward consideration of retail competition. These legislators appear to be responding to pressure from electricity consumers, particularly industrial consumers, who stand to gain from lower electricity prices expected to result from retail competition. New and potential market entrants, including low-price, independent power producers and power marketers, may also be pushing for competition in high-price states. Our results show that, if electricity prices had been 20 percent lower in 1993 across all states—as a result, for example, of more effective regulation—state legislatures would have taken over seven months longer on average to consider restructuring. In other words, they would have been slower to consider competition.

At the same time, and perhaps counterintuitively, legislators in states where the price of power is lower than in neighboring states are also moving quickly toward consideration of retail competition. In such states, utilities are the ones that stand to gain from greater competition, as it will enable them to profit by exporting their power to customers in neighboring high-price markets. Consumers in the low-price states might rightfully fear that their own low rates would rise as out-of-state customers bid against them for local low-cost electricity. However, our analysis implies that utility pressure in support of opening up markets

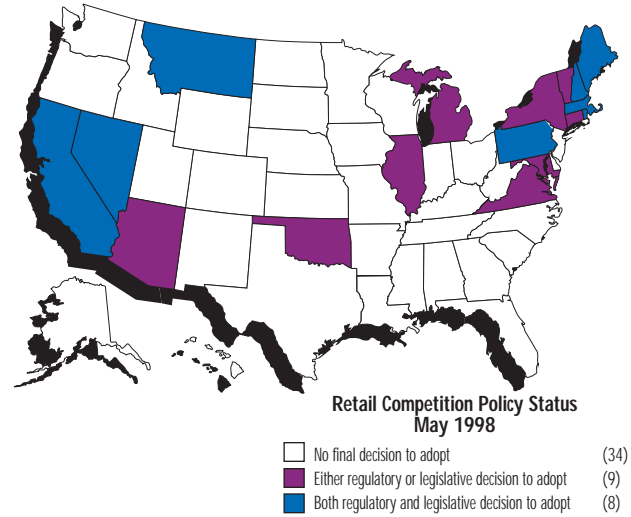
seems to overwhelm any opposition. This interest-group pressure may help explain early decisions to adopt retail competition in states where electricity is inexpensive, such as Montana and Oklahoma.

A third factor that seems to influence state legislators to consider retail competition more quickly is the presence of a high stranded-cost burden. However, it is unclear whether this represents a triumph for consumers or utilities, since it is hard to say which group will benefit more in the long run from moving to competition in states where stranded costs are high. In the early stages of the restructuring debate it was uncertain whether legislators and utility regulators were going to allow utilities to recover stranded costs. As a result, utilities with high stranded-cost burdens resisted moving toward competition. As it has turned out, however, most states that have adopted competition have decided to allow virtually complete recovery of stranded costs. Thus, affected utilities will not be greatly harmed by competition, and may even benefit if they recover their costs more quickly or more completely than they would have under traditional regulation. On the other hand, such recovery provisions will erode much of the benefit of competition to consumers—at least in the short run—since prices will be artificially elevated during the period of stranded-cost recovery.

Legislators seem to be responsive to some consumer pressures once retail competition has received serious consideration. In particular, legislators in states whose electricity prices are higher than in surrounding states tend to move more quickly than they otherwise would toward a commitment to competition, since customers in those states stand to save by importing power. However, legislators in states with powerful environmental constituencies seem to work slowly to turn retail competition bills into laws. Under competition, the generation sector will be subject to less regulatory oversight and utilities may be less willing to invest in renewable generation technologies and energy conservation programs designed to reduce pollution. Hence, environmental advocates want to make sure that final retail competition laws include provisions for further environmental protection; these concerns seem to have slowed final legislative action in some areas.

Factors Affecting Regulatory Decisions

In our analysis of regulatory decisions, we found that many of the same factors influence regulators as legis-



By now, every state in the union could have passed legislation and/or set out regulations opening retail electricity markets to competing suppliers and requiring local distribution companies to transmit and deliver electricity to all market comers. However, as the map indicates, most states have yet to decide whether to implement retail competition.

lators. Like their legislative counterparts, regulators move more quickly to consider retail competition in states with higher prices than their neighbors, responding to pressure from consumers for lower electricity prices. Similarly, regulators are quick to consider retail competition in states where prices are particularly low compared with neighboring states; like legislators, regulators appear to be responsive to pressures from low-cost utilities to take steps that may increase their opportunities to export electricity profitably. Regulators are also likely to have progressed further toward retail competition in states where stranded costs are high.

Unlike legislators, however, regulators are sensitive to differences in average electricity prices among the different utilities within a state, according to our findings. Electricity consumers may have a difficult time accepting high electricity prices when utilities in other regions of their own state charge substantially lower prices. Thus regulators, keenly aware of these differences in prices that, for the most part, they endorsed, appear more eager to move toward competition when price differences across utilities within the state are large. Our analysis suggests that if the price variation within each state were cut by half, regulators would delay considering retail competition by more than six months on average.

Regulators move more slowly toward retail competition in states where municipal and rural-cooperative utilities provide a large portion of the electricity. This slowness may be attributable in part to the fact that, in most states, public utility commissions do not regulate these publicly owned utilities. Thus, unlike a legislative decision that can cover a state's entire electricity market, a regulatory decision to proceed with retail competition will have a more limited impact in a state with a heavy concentration of publicly owned—rather than investor-owned—utilities.

Industrial customers may have more influence over regulators than residential; PUCs appear to commit sooner to retail competition in states where industry is a big part of the customer base. Our analysis also suggests that regulators that are elected rather than appointed are more likely to make concrete plans to replace the current regulatory system. This finding may reflect the fact that, unlike appointees, elected officials must answer directly to a public filled with electricity consumers.

Who Wins the Political Battles?

Under what circumstances does retail competition for electricity have the greatest potential to be socially beneficial? High prices and costs are often signs of technical and/or managerial inefficiency that could be driven out of the market by the pressures of competition. Also, price variation in a reasonably small geographic area tends to mean that the market is not divided efficiently among suppliers. If price variation exists, social welfare could be improved by shifting more consumers to suppliers that currently charge low prices. Eventually, the redistribution of sales would reduce the gaps among the prices.

In the political battle over whether to institute retail competition, there are often potential winners and losers. One interesting feature of our findings is that no particular interest group always wins the battle. Instead, the victor tends to be whichever group is on the side of a change that will produce a net improvement in the well-being of society. For example, a state whose prices are either much lower or much higher than its neighbors seems to move relatively quickly toward retail competition. In either case, the move is likely to increase the society's well-being overall. When a state stands to become an exporter of electricity, however, investor-owned utilities will bene-

fit at the expense of in-state customers who may eventually pay higher prices; on the other hand, when the state is likely to import electricity, its consumers will have prevailed over the local high-priced utility.

Conclusions

Because so few states have reached the final decision stage, our analyses of the processes by which public utility commissions and legislatures reach final decisions regarding retail competition are tentative. However, these early results suggest that, in the absence of a federal policy mandating retail competition in all states, we may expect to see PUCs in states with high prices, large price differentials with neighboring states, or large industrial customer shares move more quickly toward a final decision to adopt retail competition than states with the opposite characteristics. Appointed PUCs are likely to move less quickly toward competition than elected PUCs, and legislatures may drag their heels in states with powerful environmental constituencies.

The state-level transition from regulated to competitive retail electricity markets is far from complete. As the deregulatory process continues to unfold and more states adopt final retail competition plans, additional data will become available. This information will make possible more detailed and robust analyses of these decisionmaking processes. Nonetheless, even our current results based on intermediate snapshots of the process provide useful and encouraging evidence that the states that have committed to make the change to retail competition may be the ones that can benefit the most from it.

Amy W. Ando and Karen L. Palmer are fellows in RFF's Quality of the Environment Division.



To download a copy of their related paper, "Getting on the Map: The Political Economy of State-Level Electricity Restructuring," (RFF Discussion Paper 98-19REV) access http://www.rff.org/disc_papers/PDF_files/9819rev.pdf. Copies may also be ordered by mail; see page 22.