

Pricing Energy Services in a Competitive Market

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Pricing frameworks used by regulated industries are based on the assumption that the value of the product or service is significantly greater than its incremental cost for virtually all customers. Traditional prices are thus based on costs and revenue requirements. If utilities are to become service-driven, customer-focused businesses—i.e., competitive businesses—they will have to think about pricing in a new way. Strategic pricing is based on market conditions and customer preference, as well as on cost. This paper describes the benefits of a market-oriented pricing framework, the basic steps in a strategic pricing process, the kinds of information required to develop strategic pricing, examples of current pricing initiatives by forward-looking utilities, and some of the implications of using a competitive pricing model.

Introduction

In a service-driven, customer-focused private-sector company, pricing plays a large role in defining the product and service options offered to customers. Pricing is used, for example, to segment markets into buyers of a Honda Civic, Accord, or Acura and to define products such as 21-day advance, coach, or first-class airline tickets.

If utilities are to become service-driven, customer-focused businesses—i.e., competitive businesses—they will have to think about pricing in a new way. In California, according to the CPUC's recent proposed order, utilities *must* find an alternative to setting rates according to the costs incurred in providing electric service. This order clearly calls for a turnaround in thinking. Not only will the method of setting rates change, but under the vision of the commission "all of California's consumers will ultimately be free to choose their own providers of electric services" from among many different suppliers.¹ One of the commission's goals is to reduce the electric rates that Californians currently pay. The commission expects that giving California customers direct access should increase competition to provide services and, as a result, lower prices.

Strategic Pricing Concept

Pricing frameworks used by regulated industries are based on the assumption that the value of the product or service is significantly greater than its cost for virtually all customers. Traditional prices are thus based on costs and

revenue requirements. Cost-based pricing is easy to calculate, easy to defend before regulators, and appears to be fair; however, it ignores competitive threats, ignores differences in customer value, and can result in higher average rates.

Commissioner Conlan of the CPUC says that "the principal benefit of a truly competitive generating market is to force electric generators to compete on the basis of price." I suggest that customers and suppliers can both benefit from a *strategic* pricing approach—which is commonly used by nonregulated, competitive industries.

Strategic pricing is based on market conditions and customer preference. The strategic pricing process differentiates among market segments based on both the value of a product or service to the customer and the cost of providing it. For instance, in retail business different types of stores price the same merchandise at very different prices. Airport stores, for example, charge high prices based on convenience. Customers who are willing to pay for convenience, or in other cases for atmosphere and services are distinguished from those who are not. Different prices reflect differences in perceived value. Electric utilities now usually segment markets by residential, commercial, and industrial customers, or by demand and voltage levels. A more market-oriented approach might segment them by climate, housing type, urban versus rural region, and the like, or by end uses such as HVAC system, lighting, or automation control. Public Service Company of New Mexico, for example, divided its customers

into 44 segments within 6 broad groups; it groups health care and communications together because it found that these businesses have similar reliability needs and characteristics.

Compared to traditional ratemaking, a market-oriented rate framework that considers both cost and value has a number of benefits to utilities. It allows them to:

- Reduce average costs (by offering customers incentives to improve load shape)
- Increase customer satisfaction (by providing a wider variety of service options and prices)
- Evaluate pricing options under different scenarios
- Ensure that the cost of service and its value are balanced
- Promote both economic and energy efficiency (by encouraging electricity use when it is least cost and discouraging it when it not the most efficient option)

These results are all assets in a competitive environment.

What are important considerations regarding customer value in this new context? Clearly the implication for any new services is that they must be focused on providing added value. Price and customer welfare can increase at the same time, as long as product or service quality improves to offset the price increase.

The implications of competition for utilities' existing customer programs are that they will have to be profitable: costly rebate-intensive programs with large cross-subsidies will become obsolete. Existing cost recovery and lost revenue problems will be mitigated by more flexible pricing.

Perceived hurdles to competitive pricing seem likely to fall fairly quickly. The assumptions that "prices must be based on revenue requirements" and that "commissions won't allow changes," for example, are starting to fall already. The perception that competition is "too scary" needs to be turned around: not being competitive is scary.

Strategic Pricing Process

How can pricing policies help utilities get from where they are today as a traditional regulated industry to become a flourishing competitive industry?

The basic steps in a strategic pricing process are to:

- Develop a market intelligence network and information system
- Identify alternative product/price positioning strategies
- Test the potential pricing strategies under various scenarios
- Select the most attractive price structures and product offerings, given corporate goals
- Develop implementation strategies and monitor them, feeding the information back into the market information system

Clearly it is necessary to continually cycle back through all of these steps. Furthermore, although this process is general enough to apply widely, any decision-making process or system will have to be customized for the utility using it.

Market Intelligence

Barakat & Chamberlain sees the market intelligence and information system as having five elements (the "five C's"): corporate goals, customers, costs, competition, and constraints.

Corporate Goals. Corporate goals—whether to grow, enter global markets, dominate a market niche, have a reputation for environmentally sensitive operations, or any other—have implications for pricing as well as product and service offerings. For example, if one of the goals is to be competitive, the utility—will very likely require flexible pricing, fast pricing response, and an effective internal process for pricing decisions. It may need to leave some markets and enter more valuable ones. It will surely need to have or to develop an organization and management structure and style that is responsive to customers and flexible enough to meet changes in the market.

Customers. Customers value electric services differently. Some customers are willing to accept interruptible rates, other are not; some desire backup generation, others do not; some want to participate in DSM programs, others opt out. Therefore successful competition requires offering different products and services, different price levels, and different pricing structures to different market segments. Defining those segments appropriately requires understanding customer wants and needs.

Customer research, therefore, should be the foundation of strategic pricing. Market research methods common in

other businesses—surveys, focus groups, and analyses of comparative data—can improve understanding of customer segments and customer value. Utilities already know a great deal about customer value through the past ten years of DSM work. Strategic pricing of services just requires looking at your DSM participation data in a different way.

Costs. Costs are treated differently in traditional ratemaking and competitive or strategic pricing—in part because there are more cost drivers in a competitive market than in a noncompetitive one. In competitive pricing, revenues do not directly depend on costs, and margins are likely to differ by customer segment. Given a good understanding of customer value, it may be possible to reconfigure prices to increase customer welfare without increasing costs; if the utility adds value-of-service to its cost-of-service ratemaking approach, it can design a pricing system that reduces average costs and increases customer welfare at the same time.

Competition. In California, the commission intends that electric customers have access to both utility and non-utility electric generators, and to energy marketers and brokers.² In the near term, large blocks of core customers will have no competitive alternatives; but in the long term, most or all customers will have such alternatives. Competitors may be ESCOs, independent power producers, cogenerators, renewable suppliers, other utilities from anywhere in this country or other countries, new entities or differently structured utilities that package end-use energy services and financing, and even telephone and cable companies.

To select its products and services and price them strategically, a company needs to understand its current and potential competitors. That means, for example, knowing the competitors' target market, available capacity, costs, prices, and strengths and weaknesses relative to the utility's own. In the not-so-distant competitive future it will be important not only to provide innovative services but to regard innovative rates as an integral part of pricing strategy, rather than as exceptions to the overall structure.

Constraints. Constraints include the corporate, regulatory, technological, and political factors that affect the implementation of a pricing policy.

Product Positioning

Product positioning builds upon an understanding of four of the five C's: costs, competitors' positions, customer wants and needs, and corporate goals or business strategies (e.g., build market share, maintain market share) for each customer segment. Determining product/service positioning means, first, evaluating your price/value offerings

relative to those of competitors, taking into account what you know about the customers you want to serve; and second, deciding whether value or price has to shift to meet your costs and satisfy the goals you've set. The analysis requires asking such questions as: Can the product's value to customers be enhanced? How price-sensitive is the segment? What price flexibility does the utility have?

Strategy Testing

The likely effects of potential pricing strategies on profitability can be tested by evaluating them under a variety of scenarios. Assuming the tentative product position and business strategy for each segment, what is likely to happen given one or more of these sets of conditions: business as usual, particular variations on existing regulatory requirements, limited retail wheeling, full retail wheeling?

Selection

Having assessed your possible strategies, the next step is to determine the desired price/value offerings, including specific rate structures and specific products.

Implementation

The last step—in each round—of a strategic pricing process is to define short-term actions, taking into consideration the current business environment and specific constraints, and longer term organizational actions to keep the process going.

Utility Pricing Initiatives

Now, what actually happens when an industry decides that there's more to be gained from a strategic pricing approach than from commodity pricing? We don't have to look too far to see what innovations have been made among gas producers, marketers, and distributors. Following FERC Order 636, competitors in the gas industry at first relied on low prices to get the maximum volume in sales. Then gas brokers began pricing strategically. For example, they offer a customer who is worried about fluctuating rates a price guarantee. For a customer whose own business fluctuates, they index the price of fuel to the price of the customer's product. One gas broker, for example, sells fuel to a potato grower through a contract indexed to the price of potatoes, and hedges the contract by buying potato futures.

Other examples: Enhanced oil recovery operations have purchased gas indexed to the price of oil. Cogenerators have purchased gas indexed to their avoided cost payments. Still other brokers offer prices indexed to

sector-specific inflation rates, and others link their prices to gas futures. Essentially these brokers are finding ways to take on more of their customers' risk and finding ways to manage that risk profitably.

Electricity producers have begun to adopt similar strategies. They are developing a greater understanding of customer requirements and finding creative ways to match customer needs and utility resources. Arizona Public Service, for example, is preparing cost-of-service studies by SIC code—grocery stores, hospitals, schools, etc.—to get a better handle on how each type of load affects its costs. A Canadian utility has compiled a market-intelligence database that identifies what its industrial customers would pay for electricity in other regions and what competitors of its local industries pay for power in other service territories. Utilities can use this kind of information to define new products and services, and many are doing so.

A U.S. electric generator in the Midwest indexes its prices for one customer to the regional price for electricity to ensure that its customer doesn't suffer a disadvantage relative to a regional competitor who buys from a low-cost energy supplier. Toledo Edison offers a 25% discount on demand charges for companies that invest in new capital and create at least five new jobs in its service territory. Potomac Electric Power Company sells and leases battery backups to small commercial customers and home businesses.

In the United Kingdom, brokers sell price "insurance" to those that want it. The broker pays if the price of electricity goes above an agreed upon price band; the customer pays the broker if it drops below. Bonneville Power Administration, the Big Rivers cooperative, and Hydro-Quebec all have rates tied to the price of aluminum and other relevant commodities. The rates are designed to accrue revenues over the long term that equal those that would have been collected under standard rates. Another utility ties the price of electricity for a rebar manufacturer to the price of concrete.

Indexing is only one of the market-oriented ways of implementing a strategic pricing policy. Long-distance phone companies, for instance, have taken the approach of defining a range of services or pricing options that gives a customer the possibility of paying low prices on some calls but not on others. A consumer electronics retailer offers a guaranteed lowest price on its goods. Customers can be confident that if they find a lower price the dealer will meet it; and the dealer can actually keep the regular price relatively high.

Some electric utilities are offering market-oriented services and prices within the existing regulatory frame-

work. Relatively common examples are firm versus interruptible power, power quality programs, and some DSM programs. Newer, less familiar ones are equipment maintenance contracts, risk management, providing new technologies, temporary discounts for distressed industries, cogeneration deferral rates, surge protection packages, and battery backups.

Other options involve assistance with building design, which might include information about energy-saving equipment; one-on-one advice; or financial incentives to developers, architects, contractors, and other trade allies. Still other options that some utilities are considering are outage insurance, alternative payment methods, rate forecasts, information hotlines, and dedicated service crews. What the service provider expects to gain from providing any of these services is more income, higher profits, good will, fewer customer service problems, and customer retention.

Implications

Will a competitive pricing model lead to lower rates overall? The answer is probably "yes" in the long run, as markets become more competitive, but perhaps not for "captive" customers. Will there be lower rates for noncaptive—i.e., industrial—customers? Yes, these customers are likely to benefit now. What new players will appear? Probably market brokers and direct sellers of energy services. Part of the process of evaluating competitors, mentioned earlier, is considering how existing competitors may respond to your actions and whether new competitors may jump in.

Finally, a question that should be of special interest to this organization: Can a competitive market, responded to with strategically determined prices, increase efficiency? Again the answer is both "yes" and "no." "Yes" to the extent that the market works. "No" to the extent that it doesn't. Some providers will emphasize energy efficiency services more than others and find it a competitive advantage—just as some customers will be more interested in this issue than others. The CPUC envisions Californians being able to choose, and pay for, the type of generating resource they want to use.³ They could, for example, choose to buy their power from "green" generators. Under the existing regulatory framework one California utility now offers residential customers the option to pay a 15% surcharge in exchange for the installation of grid-connected, utility-owned photovoltaic systems on their roofs. The customers receive "green power," a rate guarantee, and, after ten years, the option to buy the unit.

Pricing doesn't solve all problems. We may need a different type of regulation in the future, such as legislative guidelines to ensure a clean environment, or set efficiency

standards, or ensure that essential services are available at the very lowest end of the market. In general, however, energy service providers who choose to sell “packaged” services such as electricity, fixtures, and maintenance for a flat fee will see efficiency as a way to increase their profits. And suppliers who send the proper price signals to customers will make energy users more aware of how energy efficiency measures can reduce their energy costs.

Progressive utilities do not assume that customers are theirs simply by virtue of geography *or* that minimizing costs necessarily produces the greatest value for customers. Instead they are focusing on developing energy products, services, and pricing strategies that respond to customer needs and on positioning their physical and human assets to compete effectively in the new industry

environment. A strategic pricing policy, intelligently implemented, can result in higher value for both customers and providers of energy services. The key is to build on the value of electricity to customers, in addition to the cost of serving them.

Endnotes

1. P. G. Conlon (Commissioner), “Remarks: Electric Industry Restructuring.” To parties in R.94-04-031 and 1.94-04-032, April 28, 1994, page 1.
2. *Ibid.*, page 2.
3. *Ibid.*, page 3.