California's Electricity Market: Are Customers Necessary? Why competitive energy suppliers see retail consumers as a burden under the current rules.

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A FREQUENTLY ASKED QUESTION UNDER CALIFORNIA's NEW electricity framework is, "Where have all the suppliers gone?" At a recent industry symposium, one large customer noted during negotiations with competitive energy suppliers that all five finalists had disappeared. The experience at my firm has been so draconian, but I have found that it is not unusual for half of the finalists to disappear in the bargaining. And when I say "disappear," I'm talking about something more extreme than simply reaching an irreconcilable difference. I'm talking about a telephone call bluntly informing the customer that the seller is leaving the bidding unilaterally.

What explains this peculiar behavior? A careful review shows that the California Public Utilities Commission, guided by the torturous language of Assembly Bill 1890, the state's electric restructuring law, has created a situation where customers are not necessarily a part of a competitive market. While that may sound peculiar, not to say counterproductive, it simply reflects the PUC's preoccupation with theoretical market issues and its lack of interest in short-term customer welfare. As the PUC has stated many times, its major interest was in achieving a transparent pricing and market structure. It may well have succeeded but at the cost of giving up market access for the customers themselves.

Part of the explanation behind the PUC's "success" lies in the fundamental policy decisions made in AB 1890, which required California's investor-owned electric utilities to allow customers to choose their own energy supplier beginning in 1998. AB 1890 created the Power Exchange and the Independent System Operator, the structures designed to handle pricing and delivery of power in the competitive market. Until March 31, 2002 %n1%n, the IOUs will have an opportunity to recover stranded costs for investments in generation with costs above market. The stranded cost charge is identified on each customer's bill as a "competitive transition charge."

More importantly, however, AB 1890 also set rules governing the interplay of energy prices, ratemaking and stranded cost collection. Customers cannot bypass the CTC simply by obtaining energy from a competitive supplier. Instead, CTC revenue will be collected through retail rates, but those rates will capped at June 1996 levels above the cost of providing service where they will remain frozen for the entire transition period. It

is these rules, which allow the CTC to float with variations in energy prices, that have proven so discouraging to competitive suppliers and that have made customers less than enthusiastic about their competitive choices.

Structure: Tariffs, Rate Caps and the CTC

The collection of stranded costs through the CTC is not, in and of itself, a disincentive to offer or seek competitive energy supplies. So long as a customer sees the identical CTC whether he stays with the UDC (the "Utility Distribution Company," the poles and wires business of the IOU) or goes to a new supplier, the playing field is level and all should be able to fairly compete on the commodity price.

The problem stems from the way the CTC is calculated. It is not a fixed, predictable amount. Rather, the CTC is derived from the amount left over after the total bill is reduced by some fixed level of distribution charges and the rolling average monthly price of energy out of the PX. If this average PX price comes in low, the CTC becomes a greater percentage of the bill. If the average PX price remains high, a smaller CTC is imposed. The CTC whatever its size must not exceed the "headroom" that exists between the rate cap and the energy and distribution costs. In theory, if PX prices climb so high that the combination of fixed distribution level charges and PX energy exceeds the rate cap, the customer will still see only the capped rate; the CTC will be nonexistent for that billing period.

Mechanics: Bidding Through the

Power Exchange

Under AB 1890, the UDCs must bid all generation into the PX and purchase all energy needs out of the PX. By contrast, other suppliers may choose; they have the option whether to bid into and buy out of the PX. The utilities have been encouraged to sell non-nuclear generation to increase the likelihood of fair bidding and open market pricing in the PX. The PX price will be used, in retrospect, as a benchmark by regulators for determining the amount of utility generation costs that were truly stranded in the market for that period.

As this model is described, customers staying with the UDC don't care about the price of energy out of the PX; the total rate has been capped, and the relative portions assigned to energy and CTC only serve to make the bill longer and harder to read, but no different on the bottom line.

Customers who elect to take service with another provider see a different bill. For example, consider Southern California Edison Company's rate TOU-8. This tariff one of the standard tariffs for larger users states:

Direct Access Customers purchase energy from an Energy Service Provider and continue receiving supply and delivery services from Edison. The Averaged PX Energy Charge is

determined as specified for a Bundled Service Customer. The customer's bill will be calculated as for a Bundled Service Customer, but the Customer will receive a credit for the Averaged PX Energy Charge %n2%n.

That means that the bill received by the customer equals their old bill minus the PX cost for the proceeding month.

The Customer's Perspective:

What Do Buyers Want?

What does a customer want who seeks direct access to electric energy? He wants a lower total bill. He wants to be in a better position than if he stayed with the standard rate. Accordingly, because of the mechanics described above, to attract customers a supplier must promise to beat the power exchange price over time. In addition, for those times when the exchange price exceeds the total 'headroom' under the rate cap, the supplier must be prepared to discount even more to keep the total bill under the rate cap.

What does this mean to customers?

First, the sheer complexity of the structure acts as a powerful disincentive for customers to contract for direct energy supplies. At a recent industry meeting I was amused to hear one of the largest federal government energy managers (and a very sophisticated purchaser) remark that the operations of the ISO and PX were a complete mystery. He only wanted to be assured of a rate reduction and would not sign any contract that left him in the position of guessing whether one would occur.

Second, suppliers have in the past year learned to simply give the customers what they demand. Almost all recent contracts have been signed on a discount to tariff or a discount to PX basis. In either case the supplier agrees to bear the risk and uncertainty of the complex California process.

Why would a supplier be willing to do this? Rational sellers in a truly competitive market will attempt to maximize their returns by selling to the highest bidders. The dilemma for suppliers in this market is: why should I sell energy to direct access customers at a discount off the power exchange when I can make more money selling into the exchange at the exchange clearing price, with no discount?

Most participants now believe that a powerful "press release" effect guides the California suppliers. They have been willing to face a high probability of loss in order to gain market acceptance. This explains why aggressive professional suppliers have prosecuted sales aggressively and then gradually lost interest when their order books are filled and their press releases released.

The Supplier's Perspective: Why Serve

Customers?

Although the consumer's mechanics are focused on the PX, the ISO is a risky place as well. The ISO has the ability to make significant surcharges to the supplier in two areas: 1) transmission congestion, and 2) imbalance charges.

As of the first six weeks the market was open, the ISO had yet to seriously disrupt the market with congestion charges, but the imbalance charges have already drawn some blood. The ISO determines whether ancillary services are sufficient to maintain the system and, if not, it will buy them from the lowest bidder. Some of these charges have been as high as 96 mills (9.6 cents) a high level considering the generally quiet nature of the West Coast power system since April 1.

These are charges that end users don't understand, aren't willing to bear, and are unlikely to accept in a final contract. They constitute risks created by AB 1890 and the PUC and assigned to suppliers by the market %n3%n.

To the degree a supplier is forced to speculate against the PX, serving actual end-use customers only adds additional costs. Bluntly put, the customer becomes an unnecessary burden. If the supplier's expertise and stomach for risk is great enough to create an opportunity to profit against the PX, the additional costs of customer relations, billing, and metering are a burden, not an advantage.

The only reason to deal with the customer is for the increased visibility and the hope that years in the future the customer will feel loyalty and stay with the supplier once the California market becomes truly deregulated.

A simple example explains how the current structure operates from the suppliers perspective. Assume that a 60-mill customer (one paying 6 cents per kilowatt-hour) makes a contract with a competitive energy supplier. After negotiations, the customer receives a 3-percent discount off its total tariff rate. The month of April 1998 would have looked like this (see Chart 1).

In order to make a profit, the supplier would have been required to pay the full CTC and the full distribution cost, and then "beat" the PX by 1.8 mills (3 percent of the total tariff of 60 mills.) In effect, the supplier is being "paid" the PX price minus 1.8 mills for the power required to meet the customer's load.

Whether the supplier can turn this deal into a profitable operation will depend on how efficient the regional markets are. Clearly, a supplier cannot buy at the PX price and then expect to make money selling at retail at a 1.8-mill discount to the PX price. However, a supplier that owns actual supplies faces a much simpler and more attractive calculation. This supplier also sells power at a the 1.8-mill discount to the PX price, but can also supply the PX with power from its own resources at the full PX price.

Did anyone make money in California over the first six weeks of the PX? The answer is almost certainly no. The following chart shows the comparison of on-peak PX prices to similar prices at the COB interface, the California-Oregon Border. Although some parties may have made accounting profits, the PX has had approximately the same price as the market since its inception. When a discount is added as well as the losses and wheeling tariffs necessary to provide power from COB to the PX, it is clear that it would cost more to supply a California load than simply selling the power at COB.

This result appears consistent with forecasts made before the start up of the PX that the PX prices would be pegged at a level just below surrounding markets %n4%n.

Off-peak prices show much more volatility south of the California border than north of the border.

This observation is also consistent with common sense. One would generally expect administered markets like the PX to be more volatile than open markets. Open markets have more freedom of entry and exit, are less easily manipulated, and do not suffer from problems of rule design or computer programming. One would also expect off-peak prices to reflect additional storage opportunities in the Pacific Northwest.

The bottom line is that life in the PX fast lane didn't confer additional profits or reduce risks. These are particularly discouraging results for suppliers seeking customers in California's "deregulated" market.

Market Anecdotes: Early Returns and Long-

Run Implications

The implications for the market are very clear. Competition for customer loads has fallen dramatically. The following chart is anecdotal comprised of data collected by McCullough Research from clients, personal interviews, and industry press releases but it reflects an honest sample of customer experience in the California market.

This chart highlights the declining interest in the California market. Moreover, it does not reflect the difference between bids (early data) and actual performance, which might provide additional evidence of failing interest, as some customers report that few if any of the bids actually evolve into serious offers. One large California public agency reported that eighteen out of twenty bidders left the process before completion leaving it with only two credible suppliers with which to commence negotiations.

The final data point reflects the press coverage of the Defense Energy Support Center's recent award on its request for proposals. Press coverage indicated that DESC had produced savings of \$1.73 million over a \$300 million contract. This figure would appear to represent savings of less than .6 percent off the existing tariff almost a factor of ten lower than announced savings to other customers earlier in the year.

In my company's most our most recent negotiations, three of the suppliers offered our client the opportunity to purchase more power than needed and to resell the surplus to back to the supplier. None of the parties who made this offer seriously pursued serving our customer's load.

Meanwhile, our negotiations have now moved to a third cycle of suppliers. Each cycle has been characterized by entry, substantial market activity, retreat and then exit. Logically, this process will continue until all of the major suppliers have realized that retail activity will not provide average market returns. When this happens we can expect an end to "supplier flight" (as California customers have come to call the phenomena of successful bidders disappearing from the negotiation) and the final round of RFPs will attract no bids at all.

California's experience is unique. The problems are clearly not endemic to competition. Recently, in one eastern state, opponents of competition seized uponm Enron's departure from the California residential market to argue that competition had failed. Their conclusion was wrong: Competition hadn't failed, it simply wasn't been given its chanceyet. In California, the framers of deregulation have managed to postpone the fateful day when customers have a true choice. That day must wait until the of the CTC recovery period.

Is there a ready analogy? Consider this question often asked in the church schools of our youth: "Can God make a stone too heavy for him to lift?" The answer is "yes," of course, but God is too wise to make that choice. Can California legislators and regulators create a market too ponderous to benefit consumers? That answer again is "yes," but legislators and regulators have only human wisdom and apparently did make that choice. To err is human, to forgive is divine.

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- 1 The period of collection will extend beyond 2002 for some specially designated costs.
- 2 Time-of-use, Real Time On-peak Demand Charge General Service Large, Sheet 13
- 3 There is some argument whether AB 1890 and the PUC created these areas of risk or simply has found a way of assigning already existing risk to suppliers. It should be kept in mind that both issues are real time issues and are an example of a situation where the implementers of the new rules are using computer models to "stand-in" for real time events. When suppliers are charged for costs that would not have otherwise been imposed, the PUC and the framers of AB 1890 deserve the charge that they have created new risk.

4 Pondering The Power eXchange, Energy Buyers Guide, January 1998, Robert McCullough.