Wild Prices Out West: What Can

The problems stem from a lack of incentives for long-term, fixed-price contracts. By Shmuel Oren and Pablo T. Spiller

THE END OF SUMMER FOUND ENERGY

regulators working overtime in California to appease an angry public that had seen electric bills double and triple in some parts of the state.

Gov. Gray Davis had asked for federal support for poor families. President Clinton obliged with funds in late August, and asked Congress to focus on federal restructuring legislation. The California Republicans had asked for a special session of the state Legislature, but Gov. Davis was not giving in. The California PUC had introduced rate caps for some users, but the interest groups were not yet satisfied. Then, on Sept. 12, the commissioners from the Federal Energy Regulatory Commission traveled to San Diego to investigate whether the rules of the California Independent System Operator (ISO) actually facilitate price manipulation.

With so much political heat, chances are that any quick fix to the California power market—one that attempts to ease the pain without diag-nosing or treating the illness—will only make matters worse. Indeed, at the core of this mess is the politically motivated interference with markets that was embedded in California’s electric restructuring program before the state’s 1998 launch of retail choice.

Californians are well advised not to repeat those mistakes. Instead, regulators must forge ahead with further market liberalization if they ever hope to achieve the lower prices and attractive options sought from the beginning for California consumers.

To its credit, California’s restructuring plan was premised on a more equitable distribution of risks between stockholders and “ratepayers” (a euphemism for “consumers”).

Previously, consumers enjoyed stable prices, but shouldered the risk of bad investment decisions—whether made by the utilities or regulators.

To reallocate risk, California deregulated the generating sector to attract new players and stimulate efficient investment. In the long run that was expected to push prices lower, but the promise has yet to be fulfilled. Yes, investors have responded to the incentives created by competitive markets. And since deregulation, after nearly 10 years of virtually no new generation, projects totaling almost 20,000 megawatts of capacity are on the drawing boards. The size of that investment can be appreciated more fully when considered against the backdrop of California’s total generation capacity of 45,000 MW. Unfortunately, however, because of the state’s
lengthy and cumbersome approval process, only a small percentage of these projects have come online to date.

In fact, the high prices being experienced in San Diego and elsewhere,—in California and the West in general,—stem not from a lack of regulation, but rather from steps taken by regulators at the opening of the market. Regulators imposed two key restrictions on the operation of wholesale markets. In California, these restrictions create two key shortcomings, embedded from the start in the restructuring plan:

- No incentive for distribution utilities to lock in long-term purchased power contracts at lower prices.
- No incentive (during the transition period) for competitive energy retailers to offer service contracts with stable prices for consumers.

And now regulators would propose to mitigate the damage from these mistakes by committing a third error—price caps.

**Misstep No. 1 — No Incentive for Long-term Contracts**

Under California’s restructuring plan, investor-owned distribution utilities, like San Diego Gas & Electric Co., were required to buy all their supplies in the newly formed California Power Exchange (PX), where most transactions are for the next day and prices vary hourly. The utilities were not allowed to buy long-term contracts outside the Power Exchange that could have locked in prices for longer periods.

Only recently has the California Public Utilities Commission relaxed this restriction on long-term contracts outside the PX. But this relaxation does not fix the situation. Given that utilities are allowed to pass through to consumers the entire cost of PX prices, regardless of how high they are, they have little incentive to enter into long-term contracts. Such contracts will expose them to risk of disallowed overpayment, should Power Exchange prices fall, whereas any savings are passed on to the ratepayers. The net effect is that utilities until now had not been able to enter into long-term contracts that could stabilize retail prices, and now that they can, they have no incentive to do so.

For consumers, the impact from this lack of long-term contracts is analogous to

**California not only limited consumer choice, but also impeded growth of new generation.**
forcing homebuyers into taking adjustable rather than fixed-rate mortgages. While fixed-rate mortgages may have higher interest rates on average, most homebuyers still prefer them as an alternative to the risk of volatility in short-term rates that comes with an adjustable mortgage. Retail customers in San Diego, and soon, in other parts of California, however, have no such choice for meeting their electricity needs.

Misstep No. 2 — No Incentive for Stable Rate Plans
The original intent of regulators in deregulating electric markets was to leave it to the competitive energy service providers, or ESPs, to offer service contracts with stable prices for consumers who switched from the utility in favor of a competitive retailer.

Nevertheless, that option was effectively muted by the decision of regulators to fix artificially the retail price offered by the utilities during the so-called "transition period." (The transition period allowed utilities to recover their costs for stranded investment, but only out of any revenues available after recovery of costs, and with rates frozen at a level 10 percent below the historical price.)

This approach was politically expedient, because it gave consumers a quick and visible benefit from restructuring. Unfortunately, however, by artificially shielding consumers from price fluctuations during the transition period, regulators in effect preempted the ESPs from attracting retail customers by offering service contracts with stable prices. Hence, retail competition was virtually killed, forcing competitive retailers such as Enron out of the California electricity retail market and leaving retail consumers with the exclusive option of purchasing their power from the regulated utilities. Now that the transition period in San Diego is over and the artificial retail price cap is removed, San Diego retail customers have been thrown into a volatile price world with no options for cover.

Customers in the rest of the state are soon to follow.

Power plant investors prefer long-term contracts. These reduce their cost of capital. Discouraging long-term contracts increases financing costs, translating into less investment and higher energy prices. So CPUC policy not only limited consumer choice, but also impeded growth of new and inexpensive generation capacity, both of which have resulted in higher electricity prices.

Misstep No. 3 — Price Caps
The recently imposed price caps on spot electricity transactions amount to following a series of bad decisions with a worse one. Though such price caps may ease the pain temporarily, they will make the patient sicker by the end of the day.

Price caps on wholesale transactions will create short-term shortages and discourage imports. Price caps also reduce the incentives to invest in generating plants. A low price cap also discourages demand-side participation in the mitigation of shortages through demand-side management (e.g., by reducing cooling to commercial buildings). Such arrangements require investments in specialized equipment, and lower price caps reduce the incentives to invest in such equipment, limiting conservation. Overall, it's not a very successful policy. Similarly, imposing price reductions in the middle of an energy crisis only makes matters worse. First, it reduces the incentives to conserve by the residential users. But also, these price reductions will have to be paid in the future.

The Way Out — Stay the Course
The way out of this mess is not via more regulatory market interference, but rather by further market liberalization. Now is the time for energy service providers to reenter the California retail electricity market. High short-term prices represent an opportunity for them to sign up customers with offers of stabilized, lower prices.

In the meantime, utilities should be encouraged to offer consumers the option of stable rates, backed up with long-term wholesale energy contracts. Because energy costs are expected to fall in the winter, the utilities then can offer an annual stabilized contract at lower energy prices than current wholesale prices. They can cover the risk of such contracts either by building individual portfolios of supply contracts or by underwriting those risks themselves. In the latter case, however, they should be allowed to collect a commercial risk premium, in the same way that in the competitive mortgage market, fixed-rate mortgages have a built-in premium above the expected variable-rate average.

The Feds, Californians, and public representatives should resist the temptation of quick fixes that will make matters
worse in the long run. The California PUC already has taken an important step to prevent the repeat of San Diego's plight in other areas by allowing utilities to buy power outside the Power Exchange. The next step must be a regulatory reform introducing performance-based regulation that will provide utilities incentives to enter into long-term supply contracts and buffer some of the inherent volatility of the wholesale spot market. Meanwhile, regulators must work to expedite the construction of new generation that is knocking on California doors.

Shmuel Oren is professor of industrial engineering and operations research, University of California, at Berkeley, and Berkeley site director of the Power Systems Engineering Research Center. Pablo Spiller is the Joe Shoong Professor of International Business and Public Policy, Haas School of Business, and director, Berkeley Center for Strategic Management, University of California, at Berkeley.