Price Of Power In California Is Up. Wasn’t It Supposed To Go Down?

By Fereidoon P. Sioshansi*

With the introduction of competition in the California market in 1998, the expectation was that the price of electricity would go down. That is what economic theory predicted and what many experts were promising the regulators and the consumers. Now that a couple of years have gone by and some empirical evidence is becoming available, it turns out that the opposite has, in fact, happened.

Both Pacific Gas & Electric Company (PG&E) and Southern California Edison (SCE) report that the price of “competitive” energy that they purchased in 1999 from the California Power Exchange (Cal PX) for their customers was up compared with 1998. In the case of PG&E, energy costs for customers who have not switched suppliers rose $207 million in 1999 compared to 1998—not an astonishing amount but significant nevertheless. In the Southern half of the state—which continues to be dominated by SCE—the average PX price in 1998 was 2.54¢/kWh in 1998 compared to 2.68¢ in 1999. How could that be? Wasn’t competition supposed to reduce prices?

As is always the case, there are a number of factors contributing to this seemingly paradoxical result. Insiders attribute this to several things including higher demand in 1999 due to a strong economy that is growing at 2 - 2.5% per annum. This has led to gradually tightening reserve margins, exacerbated by transmission bottlenecks. But there are a number of other factors which undoubtedly contributed to higher prices—and will continue to influence them in 2000:

• First, California’s independent system operator (ISO) may be contributing to the problem by keeping too much capacity in reserve.

As a non-profit organization, the ISO does not make—or lose—any money based on how tightly it manages the system, particularly during high demand episodes. Hence, all else being equal, the Cal ISO has a disproportionate incentive to play it safe—perhaps too safe.

The explanation is simple. So long as the lights stay on, the ISO gets little or no criticism—and certainly no newspaper headlines—even if the prices are a tad higher than they should be. But should it run the system too tightly and the lights ever go out, it’ll get a huge outcry of negative publicity. It should, therefore, come as no surprise that the ISO would prefer to keep—and pay for—a comfortable safety margin at all times. In normal times, this extra reserve does not cost much. During high demand periods, it costs a bundle.

• Second, the new plant owners in California are under pressure to recoup their investments in the plants they bought at premium prices.

The generating plants divested in California—as those elsewhere in the United States—were sold at substantial premiums above book value. The new owners are now under pressure to recoup those inflated investments. They have every incentive to make as much money as they can.

In a perfectly competitive market, there will be limits to their ability to price gouge. However, the California market—like all other markets—is not a textbook example. These imperfections—particularly in the ancillary services market—allow the players to exercise market power. This should not come as a surprise either.

• Third, maintaining the PX and ISO adds to the costs—approximately $1/MWh (roughly 30¢/MWh for the PX; 70¢ for the ISO). Having two organizations instead of one, makes it worse.

More fundamentally, the California market—like those in the UK and Australia—is, in reality, only a half market.

Currently, there is a near complete disconnect between generation and demand. Customers, by and large, do not see the hourly price fluctuations in the PX and have little or no opportunity or incentive to respond. In the absence of demand-side bidding—the ability of customers to respond in real-time to price fluctuations—no market, no matter how well designed on the generation side, will function well. In the UK, new electricity trading arrangements (NETA) will attempt to address this issue starting in October. Others need to follow suit.

Conference Proceedings
22nd IAEE International Conference
Rome, Italy June 9-12, 1999

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