

California utilities: the S&L crisis revisited



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In the months leading up to the power crisis in California, pundits listed a number of factors contributing to the situation. Rolling blackouts and the potential bankruptcy of the two largest utilities in the state required an explanation.

Some focused on the demand picture. California had restructured its economy during the 1990s with high technology leading the way. According to *The Economist*¹, state-wide consumption of electricity grew by an astonishing 25% during the 1990s, mostly led by Silicon Valley. At current prices, the capacity increase needed to meet demand growth probably exceeds this figure.

Others have focused on the supply picture. There has been virtually no addition to generating capacity in the last decade. Some are eager to blame this on stringent environmental regulations. Current reserve margins are below recommended levels, and widespread interruptions indicate supply is now far short of demand. Political considerations, which led to regulators imposing a freeze on electricity prices to individual consumers, have also been offered as an explanation of limited supply growth.

Deregulation has also been cited as the culprit. We argue that *faulty deregulation* is the problem and a study of financial institutions reveals this. Experts say they see no pattern in the process that caused the problems and no historical precedent. That simply doesn't seem to be the case. The savings and loans (S&L) crisis of the 1980s is clearly analogous to the current power crisis. With the phasing out of Regulation Q, intended to allow S&Ls to raise interest payments to compete with money market funds for deposits, S&Ls found themselves subject to a

mismatch of liabilities and assets. In effect, their costs became variable and their revenues were fixed – a recipe for disaster.

In an article in *The Economist* in 1982² the S&L situation was succinctly summarised. Substituting the bracketed phrases would aptly describe the current situation for electric utilities in California: "Their plight has been induced by their need to pay higher rates of interest to their depositors [higher prices for natural gas and wholesale power] then they receive on their mortgages [retail electricity prices]. Forbidden by law to increase their rates of existing mortgages [prices of retail electricity]... their net worth has fallen and with it their ratio of net worth to liabilities."

The bottom line is that there is a lack of risk management: utilities sell at fixed prices but buy at variable wholesale prices. Various factors have discouraged hedging in the wholesale power market, exposing them to market risk. For example, tax and accounting considerations can cause profits from hedging to flow to consumers while losses are borne by equity holders. S&Ls welcomed the lifting of Regulation Q and assumed that risk management would not be an issue. Ironically, electric utilities in California also welcomed deregulation, under the assumption that wholesale electricity prices would be less than retail prices.

The S&L crisis resulted in a government bailout that cost the taxpayers over \$200 billion. How does this compare to the current situation in California? The holding companies of Southern California Edison and Pacific Gas and Electric have accumulated \$20 billion in outstanding debt that has just been downgraded to below investment grade (junk bonds). Some of

the unsecured paper traded as low as 50 cents on the dollar and secured paper traded at 80 cents on the dollar. Furthermore, there is another \$12 billion in short-term unsecured debt to banks and suppliers. In the middle of January, the Los Angeles County Economic Development Corporation announced that, in the third week of the month, the direct cost of the crisis on sales, wages etc. was \$1.7 billion. And there is no end in sight.

Temporary remedies are already being sought. Deteriorating credit is likely limiting the amount of available credit to purchase wholesale electricity and natural gas. The governor of the state has agreed to credit-enhance the utilities by buying power directly from marketers. The first tranche was \$400 million. This can't continue with the state and/or the utilities losing \$600,000 an hour at current wholesale prices for electricity. Price caps on wholesale power have been tried and/or are actively being considered. Municipalities, such as the city of San Francisco, are considering starting their own utilities. Some are even calling for a total return to a fully regulated market.

However, some players are already developing financial innovations that will move toward a market-based solution to the problem. EOG Resources, an independent oil and gas producer, recently agreed to sell natural gas to Calpine, a large independent power producer, based on the price it receives for electricity – as opposed to a fixed reference price.³ A block forward market is also taking shape. The further development of solutions should be guided by the experience with the S&L crisis. The lesson to be learned from the S&L crisis and the debacle in the California market is that utilities must actively manage risk and should be incentivised to do so. Their hedging strategies should also include environmental outputs that have negative values (ie emissions of sulphur dioxide, nitrogen oxides and carbon dioxide).

California has a case of the DDDs – dysfunctional deregulatory disorder. Deregulation must be designed so that utilities can segue into free markets. Many of the solutions to the S&L crisis came from California; let's hope that similar thinking is employed for the current power situation.

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Parallels between S&L crisis and the California energy crisis

Issue	S&L	California
Flaw in design	Regulated: Resolution Q mandated a ceiling on interest rates paid out (5.5%); S&Ls earn income from fixed-rate long-term mortgage loans Deregulated: Short-term interest rates were allowed to fluctuate; people could move money to higher-yielding money market funds but S&Ls kept long-term fixed investments	Regulated: Cost-based pricing; prices set at fixed levels approved by the regulator Deregulated: Utilities buy power from the spot market from wholesale electricity generators. Variable market prices sometimes rise to levels 10 times the regulated level of retail prices
Deregulation context	High inflation, high short-term interest rates; high oil prices	High natural gas and oil prices; stagnant electricity supply; high demand
Risk management approach	Exposure to floating short-term rates went unhedged; use of futures market, variable-rate mortgages emerged	Hedging wholesale electricity prices has been discouraged; block forward market is now emerging
Outcome	Costly bailout	Utility bankruptcy? Power outages?

- Lessons**
- Utilities must use modern risk management tools
 - Costs of their inputs must be tied to the price of their output if there is no hedging
 - Factor in environmental goods that carry negative values (ie, SO₂, NO_x, CO₂)

The utility of the future

Utility is an asset-liability manager ● Variable price input (ie, fuel) ● Variable price outputs – positive and negative (ie, power and emissions) ● Negative price outputs (ie, SO₂, CO₂, NO_x, Mercury, PM)

¹ "A State of Gloom", *The Economist*, January 19, 2001

² "In a Pinch", *The Economist*, April 24, 1982

³ "California Dreaming", *Barron's*, January 22, 2001