

Sweating Through Hot Summer In California

By Fereidoon P. Sioshansi*

Wednesday, 14 June, was an unusually hot day in Northern California. New temperature records were set in San Francisco and beyond. As previously reported, there was not enough generation, nor transmission, capacity to meet the load. Prices at the California Power Exchange (Cal PX) soared. Pacific Gas & Electric Company (PG&E) had to invoke rolling blackouts affecting some 100,000 customers—including some in the heart of Silicon Valley.

Worse yet, June 14 was not even a summer day. The *really* hot summer days in California usually occur much later, in August to October. Embarrassed officials at the PX and the ISO, the regulators, the independent generators, and distribution companies, are all doing their best to explain why getting through the summer months is going to be, shall we say, *difficult*.

The public doesn't understand how something like this can happen in a supposedly advanced economy state like California. Many hi tech companies in Silicon Valley, like Sun Microsystems, have decided that they can no longer rely on their traditional suppliers for reliable service. Those who need reliable power—and who doesn't—are building their own back-up generators. No price is too high to pay when you, and your customers, rely on 24/7 operations. This includes companies with routers, servers, remotely accessible databases, and APS (application service providers). The same goes for many dot.coms whose only means of livelihood is through the Web.

The capacity shortfall and high energy prices have resulted in unexpected developments in California and elsewhere. Many energy-intensive industries have learned that they can make a lot more money by shifting, reducing, or entirely shutting down their operations. Firms can earn more money by supplying *negative* load than producing widgets because the price of energy is so high during tight capacity periods. Aluminum smelters as far away as the state of Washington have shut down because it makes a lot more sense to transmit power to energy hungry California than to produce aluminum. Guess what? With over 6% of the world aluminum smelter capacity affected, aluminum prices are rising.

Officials at the California Energy Commission, the agency responsible for long-term adequacy of energy supply in the Golden State, are in an awkward position. They went to great lengths to explain that 26 new power plants with 16,000 MW of additional capacity have been approved, or are under review for approval. That would add a comfortable safety margin to the current non-existent reserve margin. But none of this is expected to come on line until next summer—at the earliest. Three plants already approved and under construction are expected to be completed next year, with another two in 2002. But the 3,700 MW capacity of these five units will not help the tight capacity situation this summer, nor next.

Meanwhile, California continues to attract some 600,000 new residents each year. Its peak demand is expected to exceed 50,000 by 2003. As is usually the case, things are likely to get a lot worse before they get any better.

*Fereidoon P. Sioshansi is the President of Menlo Energy Economics in Menlo Park, CA. He is also the editor and publisher of EEnergy Informer, a monthly newsletter. This is an edited version of an article which appeared in the April 2000 issue. For further information, contact EEInformer@aol.com.

Scenes from Sydney

Peter Davies helps Tony Owen and his wife celebrate their wedding anniversary.

On the dinner cruise: Paul Tempest and Michelle Foss.

Past Presidents Dennis O'Brien and Hoesung Lee with Carol Dahl.