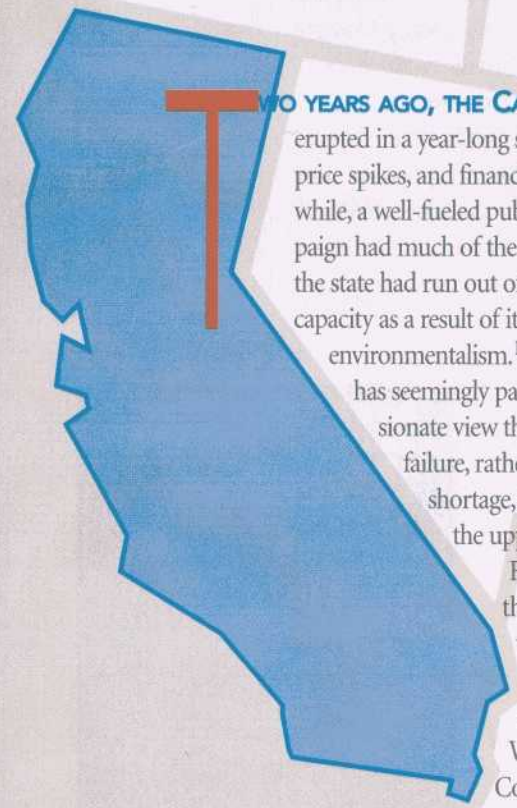
Revisiting

Market power after two years.

By Robert McCullough



TWO YEARS AGO, THE CALIFORNIA MARKET erupted in a year-long series of emergencies, price spikes, and financial crises. For a short while, a well-fueled public relations campaign had much of the world convinced that the state had run out of electric generating capacity as a result of its own unrealistic environmentalism.[1] Now that the storm has seemingly passed, the more dispassionate view that this was market failure, rather than resource shortage, is gradually gaining the upper hand.

From the beginning, the electric industry was poorly prepared to handle a major market failure. The Western Systems Coordinating Council (WSCC)—the body tasked with the electric reliability of the West Coast of Canada, the United States, and Northern Mexico—never took an effective role in the crisis. Indeed, most of the debaters never even noticed that the West Coast had a reliability council that had been studying electric reliability issues since 1967. The WSCC, itself unfamiliar with a role that would bring it in conflict with its member systems, has never directly commented on the origin of California's problems.

The crisis in California ended with a whimper, not a bang. Although predictions for the summer of 2001 were catastrophic, the last California emergency took place soon after the implementation of a regional price cap. Simply stated, the crisis turned out to be a problem in institutions and not resources.

California's restructuring was characterized by six words—"bad design, bad incentives, bad results."

AB1890, the law that launched California on this path, was complex and difficult to understand. Its unanimous passage was evidence that every interest group had gotten its every desire. When every party to a negotiation leaves the table happy, there is a strong implication that they have been promised far more than can be delivered.

The basic design involved turning all power decisions over to an hourly market. This decision was so audacious and so misinformed that years after the design failed, regional utilities and industries are still having to explain to FERC that the hourly market has little to do with the industry. Further, reliability, the historical strength of the North American supply system, was only considered as an afterthought.

The design flaws were so extensive that the fundamental relationship of the state's Independent System Operator (ISO) to the WSCC had never even been considered.[2] Reporting relationships were fragmentary and staffing and training was minimal. The ISO's motto, "Better Reliability Through Markets," was emblazoned above the attractive receptionists who manned the welcome desk at its Folsome, Calif. headquarters, in spite of the fact that the ISO's reliability principles were far less stringent than the system they had replaced.[3]

The crisis started with the announcement of a Stage 1 and Stage 2 emergency on May 22, 2000,[4] and ended on July 3, 2001, with the final emergency declarations. The summer of 2001 actually saw declining prices and increased thermal generation. Every warning that price controls would reduce generation and contribute to the crisis turned out to be wrong.

California

Politically, the response to the onset of the crisis was like a scene from a frontier bar in an old western. Once the first punch was thrown, every interest group leaped into the fray with its own two-fisted agenda. Generators launched preemptive attacks on air pollution agencies, the California governor accused marketers and generators of price fixing, Secretary Richardson moved to seize scarce Pacific Northwest reservoirs, and municipals like L.A. and federal agencies like the Bonneville Power Administration were accused of profiteering. Within minutes, the bar was a roiling mass of special interest punching, kicking, and screaming. Policy responses were especially hopeless. The ISO spent months tinkering with price controls that always contained fatal loopholes.[5] FERC dithered in appalling indecision for seven months, only to gun down one of the victims of the crisis—the California Power Exchange (PX)—on Dec. 15. Governor Davis's contribution was to negotiate deals with the marketers and generators that effectively fixed the unfair prices for years to come, while simultaneously assailing them for price fixing. Only after the composition of FERC was changed, were substantive steps taken—the adoption of a must-offer rule and WSCC-wide price caps.

If FERC had intervened in May 2000, the entire crisis might well have been avoided. FERC should have imposed a WSCC wide price cap in May 2000 along with the "must offer" rule on California generation at the beginning of the crisis.

Had the West Coast Run Out of Electric Capacity?

While pundits from San Diego to Maine opined daily on this issue during the crisis, the truth is that under the California ISO's rules, no one was certain exactly where the region stood. The WSCC had published, as they had done for the preceding 33 years, a summer load/resource appreciation indicating that while California supplies for the summer might be tight, that there was no immediate cause for alarm if 1,642 megawatts were available for import during June.[6] In May, for example, they projected a reserve margin of 29.2 percent for California.

When the California ISO announced its first emergency on May 22, 2000, the industry was completely taken off guard. I can remember the exact moment of the first emergency. I was at a conference in Quebec when calls began arriving from utility and industrial clients as well as other industry experts. Every call started with the same question: "How can we be having an emergency in May, when loads are low and resources are high?"[7]

Under the complex structure of the California system, an emergency did not require a true shortage. The definition of an emergency is when the capacity offered the previous day in the computerized markets of the Power Exchange and ISO was less than 107 percent of forecasted demand. At the time, the ISO had no mechanism in place to determine if it was actually facing an emergency, or if the phone had just stopped ringing.[8,9]

McCullough Research's response to the crisis was typical of the electric industry. We asked a group of our clients—industries and utilities—to fund an investigation of the problem. Our initial estimate of the completion of the study was July 1. Little did we know that the task of accumulating data would require the intervention of every state regulatory body in the WSCC and would take months to complete.