Interesting times

Bang! That is the sound of an irresistible force (growing electricity demand in California) hitting an immovable object (inadequate baseload capacity). The time has finally arrived when the issue of energy has the attention of the American public, because the electricity shortage in California threatens the quality of life and jobs of its residents.

In California, the causes of the troubles are plain to see: a so-called “deregulation” process that was only partial, and which more closely resembles strangulation. Electricity deregulation there meant establishing (1) a 10 percent cut in retail rates for residential customers during a transition period; (2) retail price caps for utilities; (3) no caps in wholesale rates that utilities pay when buying electricity from other producers; (4) compelling utilities to sell much of their non-nuclear generation; (5) requiring utilities to buy all purchased electricity in a single spot market, the California Power Exchange (CalPX), and to sell via CalPX all electricity produced from their own generation; and (6) banning utilities from arranging separately negotiated contracts with producers, including long-term agreements at lower prices.

The overall energy picture, dramatized by the California experience, and in light of other recent events, actually presents an opportunity for nuclear power.

California utilities have been paying sky-high wholesale costs and are not able to pass them on via adequately higher retail rates. The result of that crisis—at this writing—is that Southern California Edison Company and Pacific Gas & Electric Company have accumulated a total debt of some $12 billion and are near bankruptcy. Some power producers now are leery of selling output to SCE and PG&E because of concerns that the utilities will not be able to pay. Also, the credit rating of both companies is at risk on Wall Street, threatening their ability to buy power and increasing their cost of financing.

There is a saying (allegedly an ancient Chinese curse) elegant in its irony: “May you live in interesting times.” We are there now. But the double irony is that the overall energy picture, dramatized by the California experience, and in light of other recent events, actually presents an opportunity for nuclear power.

For one thing, there is very good news on nuclear’s economic side. In 1999, for the first time since the mid-1980s, the production cost (fuel, operations, and maintenance) of nuclear power averaged 1.83 ¢/kWh, *less* than coal’s 2.07 ¢/kWh, according to the Utility Data Institute. In 1998, the figures were 2.13 ¢/kWh for nuclear and 2.07 ¢/kWh for coal. The 1999 and 1998 figures for oil-fired plants were 3.18 ¢/kWh and 3.24 ¢/kWh, respectively, and those for natural gas plants were 3.52 ¢/kWh and 3.3 ¢/kWh.

On the technology side, the suite of future power reactor designs is growing. The pebble bed modular reactor (PBMR), a high-temperature gas-cooled design, is under development by Eskom in South Africa, with international partners such as Exelon Corporation and BNFL. In this issue of *Nuclear News* is a Q&A interview of Corbin McNeill, chairman and co-chief executive officer of Exelon, by *NN* Senior Associate Editor Rick Michal, along with a sidebar article on how the Nuclear Regulatory Commission might conduct a design certification review of that technology.

On the political front, the trend looks good. Peggy Noonan, writing in her December 22 column in the on-line WSJ.com *OpinionJournal*, described a meeting of then President-elect Bush with the Senate Republican leadership: “Mr. Bush went on to say . . . according to [a] participant, ‘There are two things that I think we need to deal with right up front—the first, the energy crisis, both short term and long term. And the other is the state of our national defenses.’ He said [it] may be time to take another look at nuclear power.”

“Interesting times,” indeed.—*Gregg M. Taylor, Editor-in-Chief*