
Posted on Thu, Jul. 22, 2004

Hot days putting power to the test

DEMAND AT RECORD, BUT GRID CAN HANDLE IT, OFFICIALS SAY

By John Woolfolk
Mercury News

California used more electricity than ever Wednesday afternoon, setting a third straight daily power-consumption record that will likely be topped today.

The summer's first heat wave is driving up demand as residents of fast-growing communities in the sun-baked Central Valley and Southern California's Inland Empire crank up power-hungry air conditioners. California's technology industry is reviving from the recession, further fueling demand for electricity.

But while state officials urged conservation during peak late-afternoon hours, they still expected to avoid the rolling blackouts that swept California three years ago, thanks to new power plants, energy supply contracts, conservation measures and a crackdown on market gamblers.

"It's a whole different situation," said Stephanie McCorkle, spokeswoman for the California Independent System Operator, which runs the high-voltage grid for Pacific Gas & Electric and other major utilities in the state. "We're in a lot better shape than we were in."

Peak daily power consumption this week has topped 44,000 megawatts, hitting 44,360 megawatts Wednesday and shattering a previous record of 43,609 megawatts July 12, 1999. During the state's last rolling blackout, on May 8, 2001, the demand was about 35,000 megawatts. A megawatt is enough electricity to power about 750 average homes.

Southern California utility officials Tuesday did cut power to some commercial customers that had agreed to accept service interruptions in exchange for lower rates, but that was only because six power lines went down in wildfires.

This week's record power consumption is a wake-up call, state energy officials said. While California and its technology-driven economy continue to grow, proposals for new power plants are starting to dry up and needed transmission-line projects are stalling.

"The appetite's growing for electricity, and we've got to keep pace," McCorkle said. "Part of it is population and the economy. Our culture is becoming more and more dependent on electronics, and electronics for the most part depend on electricity. And, of course, the high-tech sector is coming back, and it requires a good steady electricity supply."

State officials early this year had predicted population and economic growth would result in a power consumption record this summer. Demand was projected to grow 3.5 percent this year, exceeding earlier estimates of 2.6 percent and the usual increase of 1 percent or 2 percent.

California has grown by more than half a million residents a year for the past five years, an increase of about 1.7 million people since 2001. The state's fastest-growing counties are all in inland regions that rely on air conditioning to stay cool in summer. Air conditioning accounts for a third of California's peak summer power demand.

"We're seeing incremental air-conditioner load growth for the state," said California Energy Commission spokeswoman Claudia Chandler. "More and more homes are being built in the Central Valley, where property prices are lower."

More power plants

Since 2000, California has added 24 power plants with capacity totaling 8,311 megawatts. Subtract 2,900 megawatts from old plants that were mothballed during that time, and the state has gained a net of about 5,400 megawatts. Eight plants totaling about 3,800 megawatts are under construction and seven more totaling about 2,900 megawatts are under review.

But eight approved plants totaling 5,000 megawatts are not being built. While demand grows by about 1,000 megawatts

a year, state officials expect to add just 366 megawatts to the grid in 2007, Chandler said.

``We kind of hit a cliff after 2006," Chandler said. ``As we look farther out, there are much fewer megawatts coming online."

Bottlenecks on the high-voltage grid continue to impede electricity flow within the state and across its borders, McCorkle said.

And energy from the long-term power-supply contracts the state signed in 2001 begins trailing off after this year, from covering 29 percent of peak demand in 2004 to 15 percent by 2010.

State officials asked consumers Wednesday to mind their power usage this week even though severe shortages aren't expected. ``We try not to sound the alarms too much until we really need it," McCorkle said. ``If you preach it too much, people will stop listening."

Consumer conservation has slipped from the average 8.4 percent reduction during the power crisis in 2001, because it's been more than three years since the last rolling blackouts.

Not an issue'

It was business as usual Wednesday at LC2 Engineering, a Hayward electronics repair company.

``I'm not doing anything different," said company owner Len Gasiorek, who had adjusted his operations during the power crisis to help the state avoid blackouts. ``If I don't hear of any difficulties, I assume it's not an issue."

Donald Kobayashi, 63, an unemployed computer technician from San Jose who also had cut back during the crisis, had three of the four computers in his home running Wednesday and was unaware of any need to save energy.

``We're just living normally," Kobayashi said.

But the state is benefiting from efficiency programs and conservation habits promoted during the power crisis.

Energy-efficient lighting and appliances have reduced the state's power consumption by 1,000 megawatts, Chandler said. And new energy-efficient building standards kicking in at the end of this year will save an additional 500 megawatts, she said.

``That's the equivalent of a power plant," Chandler said.

Adele Bauer, 71, a part-time window-covering saleswoman from San Jose, started setting her thermostat higher in the summer during the power crisis to avoid blackouts and higher bills, and never stopped.

``A lot of it is economic reasons," Bauer said. ``I can't afford to pay the high bills. We got used to it. I think that's initially what it takes, whether there's a shortage or not. You do get used to it, and you can accommodate the changes."

Contact John Woolfolk at jwoolfolk@mercurynews.com or (408) 278-3410.