## California Orders Grid Emergency, Power Shortfalls Loom

## David R. Baker, Will Wade and Mark Chediak

Fri, July 9, 2021, 7:12 PM Bloomberg

https://www.yahoo.com/finance/news/california-orders-grid-emergency-power-021212640.html

(Bloomberg) -- California ordered a stage-2 power-grid emergency -- one step away from rolling blackouts -- as a searing heat wave drives temperatures into triple-digits and sends demand for electricity soaring.

The state's grid operator called for the measure as wildfires -- including the Bootleg Fire in south-central Oregon -- threaten transmission lines bringing power into California. It comes as a historic drought grips the Western U.S. and temperatures reach record levels in parts of the region.

The threat of blackouts underscore the power grid's increasing vulnerability as climate change disrupts weather patterns and signal that shortfalls may continue this summer. Last August, California suffered its first rolling outages in almost two decades after hot weather sent electricity demand soaring beyond supplies. Parts of Washington and Idaho recently lost power as all-time high temperatures battered the electricity system.

Excessive heat warnings cover most of California and parts of Nevada, Oregon, Idaho, Utah and Arizona. The California Independent System Operator, the state's power grid manager, on Friday issued a statewide alert asking consumers to voluntarily cut back on power use. The state on Thursday asked businesses, farms and residents to voluntarily cut water use by 15% as drought emergency declarations cover 50 of 58 counties.

Power imports to the state, meanwhile, have been squeezed. The Oregon-based Bonneville Power Administration said it had to reduce capacity on a key transmission line, the Northwest AC Intertie, by 90% because of the Bootleg fire, a spokesman said.

Temperatures hit 107 degrees Fahrenheit (42 Celsius) Friday in Sacramento and 112 Saturday, according to the National Weather Service.

California has pushed hard to switch to solar and wind power while closing older gas-burning plants, but that's left it vulnerable in evenings when solar production fades. California Independent System Operator Chief Executive Officer Elliot Mainzer said Friday that consumer conservation to avoid outages may be needed for years.

"We recognize these are transitional days and months and years for the California grid," he said on a conference call with reporters.

Heat waves across the U.S. this year have put utilities on notice that their grids may not be adequate. California had to urge people to conserve power last month to avoid a repeat of last year's outages, and New York City averted widespread blackouts last week after issuing its own rare emergency call for conservation. Texas also avoided a similar fate in June as unexpected plant outages cut capacity as temperatures spiked.

Read More: A Hotter World Means Keeping the Lights On Is Harder Than Ever

California officials are bracing for a difficult summer. The usual winter rains that water supplies depend on were largely absent. The drought stretching from West Texas to the California coast and north to the Canadian border is already testing power grids as hydro generation dries up just as homes blast air conditioners.

The grid manager has delayed planned retirements of several old, gas-fired power plants along the coast and tweaked electricity market rules to encourage more imports during peak-demand periods. In addition, power companies are installing large-scale batteries to store solar power during the day and supply the grid at night.

The state estimates that doing so will boost capacity by about 2,000 megawatts -- roughly the output of two nuclear reactors -- by August, and some are already running. Officials forecast demand Friday will peak at about 43,000 megawatts. Demand load typically peaks hours after solar output reaches its maximum.

Also See: California Summer of Heat, Power and Fire Woes Arrives Early

However, while the state can often avoid power shortages by importing power from neighbors, capacity across the west has been unusually stretched amid waves of extreme heat.

The re-opening of offices and other facilities has also added to elevated power use. Electricity generation nationwide increased by 5.9% in April from a year earlier as a result of the country returning to normal levels of electricity demand following pandemic-related shutdowns, according to a June 24 report from the U.S. Energy Information Administration that gives the most recent data available.

(Adds tweet, details of fire in fifth paragraph.)

More stories like this are available on bloomberg.com

Subscribe now to stay ahead with the most trusted business news source.

©2021 Bloomberg L.P.