

## Californians asked to conserve power amid brutal heat wave

September 3 2022, by JOHN ANTCZAK and EUGENE GARCIA



Seth Salmond, of Alpine, Calif., cools off under an umbrella along Mission Bay, Friday, Sept. 2, 2022, in San Diego. Salmond and his family came west for the day to get away from the heat farther east in San Diego County. Californians sweltering in the West's lengthening heat wave have been asked to reduce air conditioning and cut other electricity use again to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Gregory Bull



Californians sweltering in the West's lengthening heat wave were asked to reduce air conditioning and cut other electricity use again during critical hours Friday and again Saturday to prevent stress on the state's electrical grid that could lead to rolling blackouts.

Saturday will be the fourth consecutive day of requests by the state's <u>electrical grid</u> operator for voluntary cutbacks during late afternoon and evening hours to balance supply and demand as millions of residents endured triple-digit temperatures.

The California Independent System Operator said multiple generators have been forced out of service because of the <u>extreme heat</u>, making <u>energy supplies</u> tighter.

Electricity demand on Thursday hit a peak of 47,357 megawatts, the highest since September 2017. Cal ISO credited conservation and reduced commercial use with keeping the grid stable.

"The major concern now is even higher temperatures forecast for Sunday, Monday, and Tuesday, with projected loads climbing to more than 49,000 megawatts on Tuesday," Cal ISO said in a statement.

In August 2020, a record heat wave caused a surge in power use for air conditioning that overtaxed the grid. That caused two consecutive nights of rolling blackouts, affecting hundreds of thousands of residential and <u>business customers</u>.





A woman cools off her dog along Mission Bay, Friday, Sept. 2, 2022, in San Diego. Californians sweltering in the West's lengthening heat wave have been asked to reduce air conditioning and cut other electricity use again to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Gregory Bull

Gov. Gavin Newsom on Wednesday declared an emergency to increase energy production and relaxed rules aimed at curbing air pollution and global warming gases. He emphasized the role climate change was playing in the heat wave.

"September is off to a searing start in the West with record breaking temperatures and fire weather expected to expand and settle over that part of the country this Labor Day weekend," the National Weather



Service said.

Author Stephanie Solomon, 33, brought her pet tortoise along with a portable baby pool with a miniature umbrella to keep it cool while selling her children's books at the Huntington Beach Pier.

"It is really hot out here today. Well, Penelope Joy is a desert tortoise, so I think she is the only one that's really enjoying this heat as hot as it is today," said Solomon, as surfers and swimmers sought refuge in the ocean below.



Alex Nowinski and his dog, Greta, join others floating down the cooling water of the American River in Rancho Cordova, Calif., Friday, Sept. 2, 2022. Californians sweltering in the West's lengthening wave have been asked to reduce air conditioning and cut other electricity use to prevent stress on the



state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Rich Pedroncelli

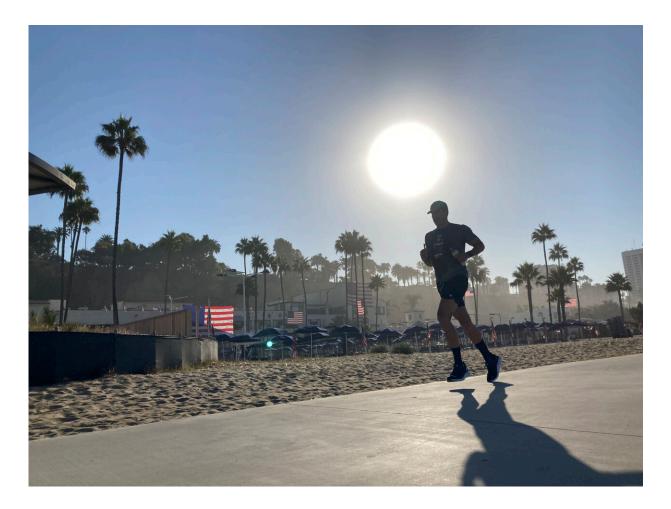
Solomon said she was mindful of the power situation and her air conditioning was off while she was away .But she planned to activate it by phone on her walk home to "make sure it's nice and cool in there."

That wasn't an option for some when temperatures climbed into the 90s on Tuesday in Colorado. About 22,000 Xcel Energy customers could not increase their <u>air conditioning</u> after getting messages saying thermostats were temporarily locked.

The customers had signed up for a program allowing the utility to adjust them to four degrees above the previous setting when demand for electricity is high, the company said.

Usually, customers can choose to override the adjustments, but the company said that was not allowed because of an emergency due to an unexpected loss of power generation and the heat.





A runner is silhouetted under the rising sun on a hot morning Friday, Sept. 2, 2022 in Santa Monica, Calif. Credit: AP Photo/Brian Melley

One customer, Christopher Empson, said his thermostat was locked at 81 degrees (27.2 Celsius). He said he had no memory of signing up for the program, and he wished there was more communication about what the company had the power to do.

"I was kind of blindsided," he said, and "there are some folks that, if their thermostat gets locked, that can be life or death."

California's "Flex Alerts" urge conservation between 4 p.m. and 9 p.m.,



the hours when production of solar energy declines. The grid operator urges people to use major appliances, charge electric cars and cool down their homes earlier in the day, then turn up thermostats to 78 degrees (25.5 Celsius) or higher.

"The No. 1 most effective conservation measure is to set thermostats to 78 or higher" because air conditioners are the biggest users of electricity in the summer, Anne Gonzales, a spokeswoman for the grid operator, said in an email.



Emily Price floats in the cooling water of the American River in Rancho Cordova, Calif., Friday, Sept. 2, 2022. Californians sweltering in the West's lengthening wave have been asked to reduce air conditioning and cut other electricity use to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Rich Pedroncelli



"We have traditionally asked for 78 degrees, because it has a good effect on our demand, and is still comfortable to allow consumers to easily participate," she said. "We always ask consumers to set it higher, if they can, and if health permits."

Keeping temperatures too low can cause <u>air conditioners</u> to run constantly, added Jay Apt, professor at the Carnegie Mellon University College of Engineering.

"If you set that puppy too low, it's going to run all the time," said Apt. "That's going to do two things, the first is that it is going to use an awful lot of energy and the second is that it's not going to give recovery time."

The goal is to allow units to cycle on and off, said Apt, and 78 degrees is a rough estimate for the sweet spot that can vary depending on a building's insulation.

In California, customers of Pacific Gas & Electric, the nation's largest utility, can volunteer to let the company control their internet-connected thermostats during heat waves. The program automatically adjusts the thermostat schedule so it uses less energy during times of peak demand.





Ana Marie Gonzalez, of El Cajon, Calif., holds a melting Popsicle as she sits in shade along Mission Bay, Friday, Sept. 2, 2022, in San Diego. Gonzalez and a friend came west for the day to get away from the heat farther east in San Diego County. Californians sweltering in the West's lengthening heat wave have been asked to reduce air conditioning and cut other electricity use again to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Gregory Bull





Rafters float down the cooling water of the American River in Rancho Cordova, Calif., Friday, Sept. 2, 2022. Californians sweltering in the West's lengthening wave have been asked to reduce air conditioning and cut other electricity use to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Rich Pedroncelli





A jogger runs over an overpass near Pacific Coast Highway on a hot morning Friday, Sept. 2, 2022 in Santa Monica, Calif. Credit: AP Photo/Brian Melley





Alex Nowinski and his dog, Greta, float down the cooling water of the American River in Rancho Cordova, Calif., Friday, Sept. 2, 2022. Californians sweltering in the West's lengthening wave have been asked to reduce air conditioning and cut other electricity use to prevent stress on the state's electrical grid that could lead to rolling blackouts. Credit: AP Photo/Rich Pedroncelli





A person is silhouetted under the rising sun on a hot morning Friday, Sept. 2, 2022 in Santa Monica, Calif. Credit: AP Photo/Brian Melley

Customers can get \$75 for participating and can opt out of it by simply changing their thermostat to a different temperature. The company does not lock thermostats, PG&E spokesperson Katie Allen said.

California cities and counties, meanwhile, were opening cooling centers.

"We have opened cooling centers in the past, but this <u>heat wave</u> looks like it's the real thing," said Dr. Ori Tzvieli, health officer in Contra Costa County east of San Francisco.



Some of the cooling centers will be specifically for <u>homeless people</u>, and an outreach team will also go out to hand out water to the homeless and inform them of available resources, Tzvieli said.

Officials also said the heat would compound the effects of smog. The Bay Area Air Quality Management District issued an alert for unhealthy levels of ozone pollution, especially for children, seniors and those with respiratory and heart conditions.

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Californians asked to conserve power amid brutal heat wave (2022, September 3) retrieved 2 May 2024 from <u>https://phys.org/news/2022-09-californians-power-brutal.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.