

PG&E is about to cut power for some Californians again. The preemptive outages show how dire the wildfire crisis has gotten.

[Aylin Woodward](#) Oct 22, 2019, 2:14 PM



Firefighter Jose Corona sprays water as flames from the Camp Fire consume a home in Magalia, California, November 9, 2018. Noah Berger/AP

- California utility company Pacific Gas and Electric (PG&E) plans to preemptively shut off power to at least 200,000 Californians for as long as 48 hours starting Wednesday.
- The shut-off is meant to reduce wildfire risk amid warm, dry, windy conditions.
- Earlier this month, PG&E cut power to more than [1 million California residents](#) ahead of a similar weather forecast.
- As the climate warms, California's wildfire season is getting longer, and weather conditions that bring a high risk of wildfires are becoming more common.

- PG&E says blackouts are the company's new strategy to minimize fire risk, but some scientists say other fire-prevention strategies would work better in the long term.
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At least 200,000 Californians may be in the dark for at least two days starting on Wednesday.

On Monday afternoon, utility company Pacific Gas and Electric (PG&E) [announced](#) that it will once again shut off power to parts of its electrical grid in order to minimize the risk that sparking wires could start fires amid hot and windy weather conditions.

The blackout will affect customers in 15 northern California counties, including the northern part of the San Francisco Bay area and the Sierra Foothills.

The plan follows a similar move the company made earlier this month, when a forecast of intense wind and dry heat led the company to preemptively cut power to more than 800,000 customers. PG&E shut down nearly 100 transmission lines that stretched across 2,500 miles, the California Public Utilities Commission reported. The outages wound up impacting more than 1 million northern California residents.

By shutting off parts of the power grid, PG&E hoped to prevent live wires from sparking; that was the cause of last year's record-breaking Camp Fire, which razed more than 18,800 structures and killed 86 people in November.



Homes leveled by the Camp Fire line the Ridgewood Mobile Home Park retirement

community in Paradise, California, December 3, 2018. AP Photo/Noah Berger

The state's estimated economic losses during that last round of blackouts totaled close to \$2.5 billion, [according to CNBC](#).

As the world continues to warm, wildfires are expected to keep getting bigger and more frequent. PG&E chief executive Bill Johnson has indicated that blackouts might be the company's go-to strategy when risk is high.

"We'll likely have to make this kind of decision again in the future," he said at a news conference on October 10. Less than two weeks later, that situation is already playing out.

But many scientists think there are other, perhaps better, fire-prevention strategies that the state of California and PG&E should pursue.

"The PG&E shutdown seems to be a sledgehammer instead of a scalpel," Marti Witter, a fire ecologist with the National Park Service in Thousand Oaks, California, told Business Insider.

Why PG&E keeps cutting power

After investigators determined that the Camp Fire — the deadliest and most destructive in California history — originated from PG&E power lines, the utility company was to pay out damages to home- and business-owners impacted by the disaster. PG&E, which is not state-owned or -affiliated, reached an [\\$11 billion settlement](#) last month, amid bankruptcy proceedings.

Lenya Quinn-Davidson, a fire adviser for Humboldt County, told Business Insider that the weather in Northern California this month has mirrored the situation that preceded that 2018 blaze.

"Basically the Camp Fire happened last year during similar conditions," she said, adding, "PG&E lost so much through those fires that they don't want to take those risks again."

However, she also noted that because California got much more rain this year than the last two, the risk levels aren't identical.

"I don't think it's the same situation we had these last two years when vegetation was drier," she said. "I was a little surprised that they did what they did based on the conditions we had."



A lineman works to repair a power line in fire-ravaged Paradise, California, November 26, 2018. AP Photo/Rich Pedroncelli

Quinn-Davidson lives in Humboldt County and said she lost power herself on October 9.

"It was a really strange post-apocalyptic feeling. People were backed up in traffic jams, filling up on gas, food, and water," she said of her town, adding, "we can't shut down the entire state of California every time we have strong winds."

The connection between climate change and wildfires

When greenhouse gases from the burning of fossil fuels enter the atmosphere, they trap more heat on the planet, causing Earth's temperature to rise. July was the [hottest month ever recorded](#), and 2019 overall is on pace to be the third-hottest on record globally, [according to Climate Central](#).

Last year was the fourth warmest, [behind 2016 \(the warmest\), 2015, and 2017](#).

Individual wildfires can't be directly attributed to climate change, but accelerated warming [increases their likelihood](#).

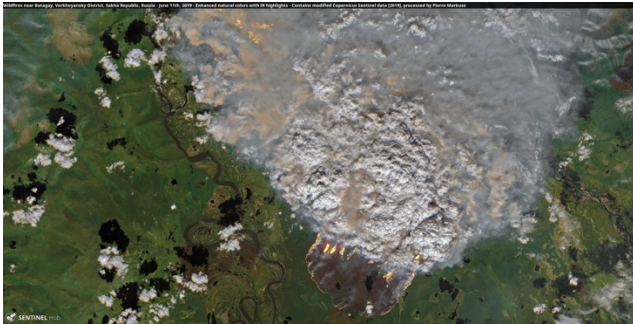


A Cal Fire firefighter races to move a truck before it's overrun by the Rocky Fire in Lake County, California, in 2015. Max Whittaker/AP

"Climate change, with rising temperatures and shifts in precipitation patterns, is amplifying the risk of wildfires and prolonging the season," the World Meteorological Organization (WMO) said in a July [release](#).

Exceptionally hot and dry conditions, the organization added, create ideal conditions for wildfires across North America. That's because warming leads winter snow to melt sooner, and hotter air sucks away the moisture from trees and soil, leading to dryer land. Decreased rainfall also makes for parched forests that are prone to burning.

"It's not just California — we are having more large, high-intensity fires in many parts of the world," Keith Gillespie, a professor in the forestry program at the University of California, Berkeley, told Business Insider. These increases in size and intensity are at least partially due to climate change, he added.



Wildfires rage near Batagay, in Russia's Sakha Republic district, on June 11, 2019. Pierre Markuse/Flickr

This summer, swaths of the Arctic from Siberia to Greenland burned so intensely that the blazes could be seen from space. The European Union's [Copernicus Atmosphere Monitoring Service](#) said

its team observed more than 100 intense and long-lasting fires in the Arctic Circle since the start of June.

Read More: [At least 20 people have died from Europe's extreme heat. The Arctic caught on fire. This is what climate change looks like.](#)

California fires are getting bigger

Large wildfires in the US now burn more than twice the area they did in 1970. [A recent study](#) found that the portion of California that burns from wildfires every year has increased more than five-fold since 1972.

Nine of the 10 biggest fires in the state's history have occurred since the year 2003.

The biggest fires in California history

| FIRE NAME | YEAR | DEATHS | ACREAGE |
|-------------------------|------|--------|---------|
| Mendocino Complex | 2018 | 1 | 459K |
| Thomas | 2017 | 2 | 282K |
| Cedar | 2003 | 15 | 273K |
| Rush | 2012 | 0 | 272K |
| Rim | 2013 | 0 | 257K |
| Zaca | 2007 | 0 | 240K |
| Carr | 2018 | 8 | 230K |
| Matilija | 1932 | 0 | 220K |
| Witch | 2007 | 2 | 198K |
| Klamath Theater Complex | 2008 | 2 | 192K |
| Marble Cone | 1977 | 0 | 178K |
| Laguna | 1970 | 5 | 175K |
| Day | 2006 | 0 | 163K |
| Basin Complex | 2008 | 0 | 163K |
| Station | 2009 | 2 | 161K |

Source: Cal Fire

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"No matter how hard we try, the fires are going to keep getting bigger, and the reason is really clear," climatologist Park Williams [told](#)

[Columbia University's Center for Climate and Life](#). "Climate is really running the show in terms of what burns."

According to Witter, the Woolsey fire was a prime example of that. The blaze burned more than 1,600 acres in Los Angeles and Ventura counties in November 2018 (while the Camp Fire was raging in the north). The drought that hit California from 2011 to 2017 contributed to that fire, she said, because dry conditions killed ground vegetation in the area, and that dry material provided fuel for the blaze.

California is seeing longer wildfire seasons

To make matter worse, wildfire season in the western US getting longer, Quinn-Davidson said. That too, is related to climate change, because dying trees and vegetation are drying out (and becoming more available to burn) sooner than they used to.

"Fire season in the west has increased by up to two months in the last 100 years," she said.



The Camp Fire burns along a ridge top near Big Bend, California, on November 10, 2018. Noah Berger/AP

In the western US, the average wildfire season is 78 days longer than it was 50 years ago, and that's likely because of climate change, the [Center for Climate and Energy Solutions](#) reported.

What's more, California's fires also destroying more buildings and infrastructure than they did in the past. All but one of the state's 10 most destructive fires have occurred since 2003.

The most destructive fires in California history

| FIRE NAME | YEAR | DEATHS | STRUCTURES BURNED |
|----------------------|------|--------|-------------------|
| Camp Fire | 2018 | 86 | 18.8K |
| Tubbs | 2017 | 22 | 5.6K |
| Cedar | 2003 | 15 | 2.8K |
| Tunnel-Oakland Hills | 1991 | 25 | 2.6K |
| Valley | 2015 | 4 | 2K |
| Witch | 2007 | 2 | 1.7K |
| Woolsey | 2018 | 3 | 1.6K |
| Carr | 2018 | 8 | 1.6K |
| Nuns | 2017 | 3 | 1.4K |
| Thomas | 2017 | 2 | 1K |
| Old | 2003 | 6 | 1K |
| Jones | 1999 | 1 | 954 |
| Butte | 2015 | 2 | 921 |
| Atlas | 2017 | 6 | 783 |
| Paint | 1990 | 1 | 641 |

Source: Cal Fire

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How to decrease wildfire risk in California

Witter, Gilless, and Quinn-Davidson all said that shutting off power lines during times of high fire risk isn't the right, or even the only, solution that should be on the table.

"To me it's like putting all your attention on this one small piece of the puzzle," Quinn-Davidson said. "Yes, utilities were responsible for the Camp Fire and Wine County Fire, but there's a whole host of reasons why fires start and continue burning."

It's all about managing the fuel, she added. That means clearing out dead trees and vegetation from under power lines and in dense, old-growth forests. This could be done by hand or via controlled, prescribed burns.



Land managers in California use prescribed burns to reduce potential fire fuel and make forests more resilient to wildfire. Lenya Quinn-Davidson

Other risk mitigation measures, Witter said, include improving homes in at-risk zones by "hardening" them — making the structures more

resilient to fire by using non-flammable building materials, for example. Better land-use planning to limit housing development in fire-prone locations could help, too.

"We're not going to have a silver bullet that solves the fire problem," Quinn-Davidson said.

SEE ALSO: [More than 800,000 people in Northern California will have their power shut off Tuesday night as the fear of wildfires grows](#)