



Tempest^onews

MENU

Posted by Weatherflow • July, 2020

TEMPEST NEWS | JULY 2020

[DOWNLOAD .PDF](#)

Today in Tempest News: A talk with PG&E spokesperson Deanna Contreras about the the utility company's wildfire risk mitigation efforts, which includes new grid technology, enhanced vegetation management and the installation of high definition fire cameras to mountain tops, in addition to a network of weather stations. PLUS a look at two lightning bolts that have broken world records, and what tree rings are telling researchers about climate change.

BIG LIGHTNING BREAKS RECORDS

The WMS used satellite imagery to confirm **two record-breaking lightning strikes**, one stretching 440 miles across the sky in Brazil, and the other lighting the sky above Argentina for 16.73 seconds. The images of the events are unreal!

WHAT THE TREES ARE TELLING US

A new analysis of tree-ring records reveals that South America has experienced a dramatic increase in extreme weather events over the past century. The findings could help scientists better understand the impacts of human activity on extreme hydroclimate events.

let's talk about the weather



.....Deanna Contreras, Spokesperson for PG&E

Last year CAL FIRE investigators determined that the Kincade Fire that burned thousands of acres and destroyed hundreds of homes in October 2019 was caused by electrical transmission lines owned and operated by Pacific Gas and Electricity (PG&E). PG&E runs Northern California's power grid servicing Central and Northern California.

With peak wildfire season upon us, we asked PG&E spokesperson Deanna Contreras about the measures PG&E have put in place— including investing in weather stations —to reduce wildfire risk.



[PG&E employee installs a weather station as part of the utility company's wildfire risk mitigation efforts.]

Q: Is it possible to put measures in place to avoid another Kincade Fire?

A: Events driven by climate change are causing unanticipated wildfires. 120 million dead and dying trees, drought, high temperatures, extreme dry conditions and record-high winds have created conditions in our state where any spark at the wrong time and place can lead to a major wildfire. If severe weather threatens a portion of the electric system, it may be necessary for PG&E to turn off electricity in the interest of public safety. This is known as a Public Safety Power Shutoff (PSPS).

We are learning from past events. A Public Safety Power Shutoff is one tool in our toolbox to keep customers safe. This year, PG&E is improving our PSPS program by making shut off events smaller in size, shorter in length and smarter for our customers.

Q: What do you mean by smarter?

A: By smarter we mean improving weather monitoring technology overall to precisely predict the need for and timing of a PSPS event. As part of our Wildfire Mitigation Program, we are installing new grid technology, enhancing vegetation management and we added high definition fire cameras to mountain tops, in addition to weather stations and a team of meteorologists to better predict whether or not a power shutoff is necessary.

Q: What happens during a PSPS?

A: We shut off the transmission power lines to reduce fire ignition potential or chance of a spark in order to prevent catastrophic wildfire - produces fire ignition potential. These weather stations cameras are adding to situational awareness and are part of our fire detection system. Our meteorologists look at all the data 24/7 to understand the most precise location of the fire risk.

Q: Can you tell me more about the weather stations and how many you have added?

A: We are adding 400 new weather stations this year. So far, we have a total of 765 installed and our goal is to have 1300 total by the end of 2020. Weather stations are mostly on PG&E power poles in High-Fire Threat areas, according to the state's high fire district map, tier 1, 2 & 3. Tiers 2 & 3 mean elevated extreme high fire threat areas based on California Public Utilities Commission.

Q: Have the addition of the weather stations been shown to help prevent any

wildfires?



A: **Weather stations** don't help predict fire. But they do help us determine extreme weather threats including humidity levels, wind speeds, and wind gusts. We want to better predict risk. We don't take shutting off power lightly. It impacts customers and businesses. We want to predict where that extreme weather is more precisely and weather stations are allowing us to do tha

For example, we now identified several criteria that go into whether or not we decide to shut off power. These are: low humidity (levels 20% and below), forecasted sustained winds of 25 mph, wind gusts in excess of 45mph, and whether or not the location is in a High-Fire-Threat area. We also look at condition of dry fuel - vegetation and moisture content. Weather stations measure a lot of this and now we have real-time observations to help guide our mitigation strategy. You can see all of the data coming in at pge.com/weather.

PG&E CWSP Vice President Sumeet Singh said, "The enhanced meteorological data we are receiving from these weather stations is bolstering our ability to forecast high fire-risk weather conditions with further granularity so that we can take swift action to protect public safety."

Interview by Ann Marie Gardner. Find her on Instagram [@thenewweather](https://www.instagram.com/thenewweather)



Back to: [Newsletter](#)

Share



Tempest^onews

© 2020 WeatherFlow