POWER OUTAGE: High Winds and the 2019 Public Safety Power Shutoffs

High winds and fear of wildfire caused power companies to turn electricity off to 800,000 customers affecting 2.7 million people.

Summary

In the fall of 2019, Public Safety Power Shutoffs (*PSPS*) were started because of threatening high wind events that occurred in areas with very dry conditions throughout California. These *involuntary* electricity shutoffs were done to prevent wind driven wildfires from starting. Power companies across the state of California temporarily shut off power to many areas of California, impacting millions of citizens. The *PSPS* occurrences in October and November of 2019 saw significant impacts to homes, businesses, schools, and communities. PSPS still occur throughout California.

Why Shut Down Power?

Many people felt that power companies were to blame for recent wildfires, like the Camp Fire in Paradise, California. In this fire, high winds had knocked down a power line in an area that was very dry from lack of rain. With so many power lines throughout Northern California, and widespread drought conditions, power companies wanted to find a safe solution when high winds were forecasted. Preventing power lines from starting fires was a high priority for local power companies. More than one third of California's homes are in a combination of urban



San Francisco Chronicle (September 19, 2019). <u>https://www.sfchronicle.com/business/article/PG-E-to-judge-Tree-trimmers-doing-more-than-14447105.php</u> (accessed March 6, 2020).

and woodland environments. If these mixed environments catch fire, the results are more catastrophic due to how quickly fire can spread from tree to tree and from home to home.

Fall 2019 Planned Power Shutoff

The loss from the Camp Fire—totaling over 3 billion dollars and 85 deaths—*influenced* decision makers for weeks on how to handle high wind events.On October 9, 2019, a decision was made by a local power company to cut electricity to communities for a forecasted high wind event. With the flip of some switches, the *PSPS* event began and resulted in thousands

of miles of power lines being turned off, making them safe if they came in contact with dry plants and trees. With the environment now more safe from fire, the 800,000 customers that were served with electricity from the power companies now had to quickly learn to live without it. The number of people without power during this shutoff totalled 2.7 million.

Impacts were felt throughout communities, including schools, homes, and businesses. Individuals dependent on electric power were also seriously affected by power outages. These individuals include people dependent on electric power for battery-contingent medical support devices such as wheelchairs or breathing equipment. Some areas had the power restored in a matter of days; yet other, more rural areas, were without power for multiple days, if not weeks. Before power was turned back on, workers needed to check the thousands of miles of power lines to make sure they were safe to receive electricity again.



Power Outage Map. <u>https://media.npr.org/assets/img/2019/10/09/new-out-age-map-kqed-5cfdb7c5941d43a7922b430ab7064de459db2a0a-s800-c85.jpg</u> (accessed March 6, 2020)

Help and Community Supports

To help support the affected communities, utility companies opened over 50 community resource centers. The centers were equipped to provide water, phone charging stations, air-conditioned seating for people, and restrooms. In addition, people were encouraged to keep emergency kits with flashlights, fresh batteries, first aid supplies, cash, and have backup charging methods for phones.

Homes and businesses with electric generators were able to keep their refrigerators working, preventing their food from spoiling. If a home or business didn't have a generator, owners would attempt to buy ice at a market or gas station to put in their refrigerators to preserve food. During the power shutoff, many neighbors who owned generators helped those who didn't so they would have a fresh food supply.

Many schools attempted to reopen even if they didn't have electricity. They brought in *generators*, fresh drinking water, emergency lighting, and port-a-potties. This was a big help for families under stressful conditions; children needed to learn, and parents needed to go back to work.

Power Disruption Hazard Risk in California

Power disruptions can affect every person in the state, including those across state lines, depending on where their power originates. Power disruptions, planned or unplanned, can affect many facets of life including public safety, utilities, medical and health services, and other critical lifelines we all depend on. The risk for power



disruptions varies depending on the situation. Unplanned instances of natural disasters, such as severe storms or earthquakes, pose extreme risks to power distribution networks and cause customers to be without power for extended periods of time. Planned power disruptions such as Public Safety Power Shutoffs are used to deter disasters such as wildfires and are often temporary, causing minor inconveniences to customers.