Community Wildfire Safety Program EL DORADO BOARD OF SUPERVISORS

October 16, 2018





Community Wildfire Safety Program

Nothing is more important to us than keeping our customers and communities safe. Extreme weather events driven by climate change are causing unprecedented and unanticipated wildfires. Our Community Wildfire Safety Program will help reduce wildfire threats and strengthen our communities for the future.





WHAT'S HAPPENING. We are bolstering wildfire prevention and emergency response efforts, putting in place new and enhanced safety measures, and doing more over the long term to harden our electric system to help reduce wildfire risks and keep our customers safe.



WHY IT'S HAPPENING. Years of drought, extreme heat and 129 million dead trees have created a "new normal" for our state, and we must continue to adapt to meet these challenges.



WHAT IT MEANS FOR CUSTOMERS. We want to work together to share information, provide resources and help our customers and communities prepare for and stay safe during extreme weather events.



We Are Taking Action

Bolstering wildfire prevention and emergency response efforts

- Monitoring wildfire risks in real time from our new
 Wildfire Safety Operations
 Center
- Expanding our network of PG&E weather stations to enhance weather forecasting and modeling

Working with our communities on new and enhanced safety measures

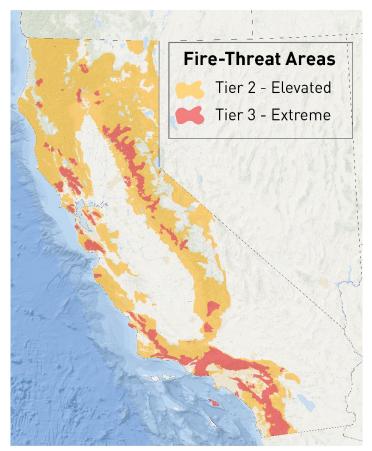
- Executing enhanced vegetation management in high fire-threat areas
- Disabling automatic reclosing of circuit breakers and reclosers
- Refining and executing protocols to proactively turn off electric power for safety when extreme fire danger conditions are occurring

Longer term, hardening our electric system and integrating new technologies

- Investing in stronger, coated power lines
- Replacing some wood poles with non-wood poles in the coming years
- Working with communities to develop resilience zones



CPUC High Fire-Threat District (HFTD) Map

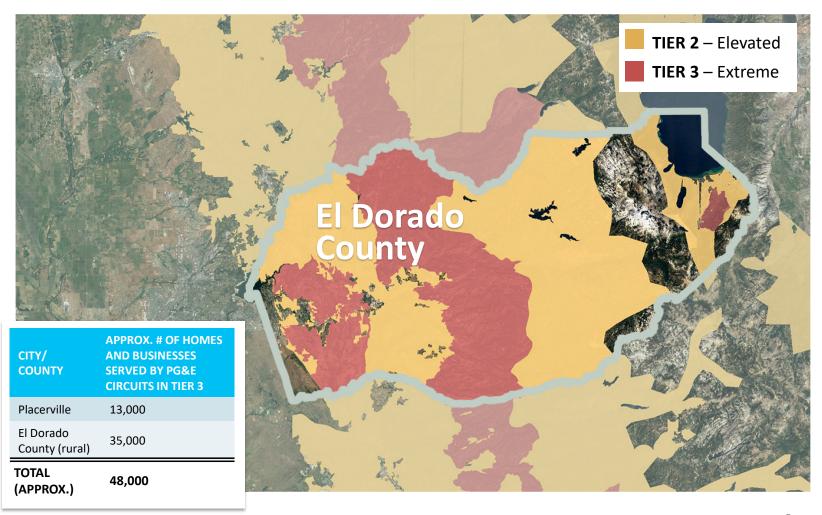


Source: California Public Utilities Commission

- In January 2018, the California Public
 Utilities Commission (CPUC) adopted a
 map designating the areas that are most at
 risk for wildfire.
 - Tier 3 areas are at extreme risk
 - Tier 2 areas are at elevated risk
- This map was developed in coordination with CAL FIRE and based on input from electric utilities, communications infrastructure providers, and local public safety agencies.
- The map can be accessed at cpuc.ca.gov/FireThreatMaps



CPUC High Fire-Threat District Map El Dorado County



 $After the \ 2017 \ wild fires, some \ changes \ are \ additional \ precautionary \ measures \ to \ further \ address \ wild fire \ risk.$



Real-Time Monitoring of Wildfire Risks

- Established a dedicated Wildfire
 Safety Operations Center to monitor
 wildfire risks in real time and
 coordinate prevention and response
 efforts
- Installing additional weather stations to improve weather forecasting abilities; approximately 200 new weather stations planned for 2018
- Capturing additional temperature, wind speeds and humidity data to help us better predict when and where extreme wildfire danger could occur
- Data streamed in real time and publicly available online at the National Weather Service and MesoWest







Public Safety Power Shutoff



MONITOR

PG&E continually monitors for extreme weather threats and high fire danger.



INFORM

If we need to turn off power, we will attempt to contact customers in advance to give time to prepare.



SHUT OFF / RESTORE

We know how much people rely on electric service and would only temporarily turn off power for safety as a last resort.

We will consider several factors before shutting off power.



WEATHER FORECAST

Periods of increased risk are identified by wind speed, humidity and temperature.



FUEL CONDITIONS

Conditions such as dry vegetation are factored in.



OBSERVATIONS

On-the-ground, real-time observations are made.



NOTICE

Inform CAL FIRE, Cal OES* and local agencies of conditions and potential Public Safety Power Shutoff.

We will use a multi-faceted effort to inform communities.



AUTOMATED OUTREACH

PG&E will provide automated outreach through calls, texts and emails.



DIRECT OUTREACH

We will take additional steps to reach customers who are enrolled in our Medical Baseline program, as needed.



COORDINATION

Coordination will take place with first responders and local officials.

We will take steps to keep you informed and get power restored as quickly as possible.



INSPECTIONS

PG&E crews will be in the field conducting safety inspections and determining when power can be safely restored.



UPDATES

Customers will receive updates until power is restored.



SAFELY RESTORE POWER

Power will be restored as soon as extreme weather conditions have passed and safety inspections are complete.

^{*}California Governor's Office of Emergency Services



Public Safety Power Shutoff



FREQUENCY

We anticipate that a Public Safety Power Shutoff could occur 1 to 2 times a year in our service area, although it is impossible to predict future weather conditions in this "new normal."



DURATION

After the extreme weather has passed, in most cases, we would expect to be able to restore power within 24 hours.

However, depending on conditions or if any repairs are needed, outages (weather event + restoration time) could last between 2 to 5 days.



NOTIFICATIONS

Extreme weather threats can change quickly. When and where possible, we would provide notice between 1 hour to 48 hours in advance through automated phone calls, texts and emails.

We are also conducting direct outreach to medical baseline/life support customers.



Helping Our Customers Prepare

- PG&E has a plan to deal with the growing threat of extreme weather and wildfires.
 We want our customers to have plans, too.
- We are asking our customers to:



Update their contact info

By visiting pge.com/mywildfirealerts so we can keep them informed.



Prepare and practice a plan

Make sure everyone in their home knows what to do by practicing an emergency plan.



Evaluate their home

Know how to manually open garage doors, install and replace batteries in smoke alarms, and locate and operate fire extinguishers.



Create an emergency supply kit

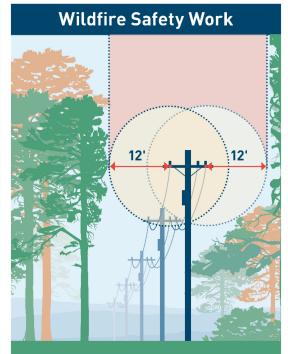
Stock supplies to last a week in waterproof containers that are easy to reach. Refresh emergency kits yearly.

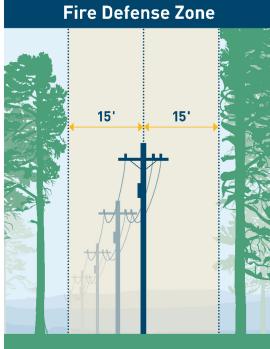




Enhanced Vegetation Management

Routine Vegetation Work





Meeting new state vegetation and fire safety standards that require minimum clearances between trees and power lines Taking immediate action to address overhanging branches and hazardous trees that have the potential to come into contact with power lines

Partnering with customers to create fire defense zones around power lines in the highest fire-threat areas



Wildfire Safety Vegetation Work

- In response to last year's wildfires and this year's wildfire threat, we are expanding and accelerating our vegetation and safety work in extreme firethreat areas.
- To maximize the safety of our customers, their neighborhoods and the surrounding community, we will:
 - **Establish safety clearances** of 12 feet or more between trees, limbs and power lines
 - Address overhanging branches or limbs, which have the potential to come into contact with power lines
 - Trim or remove hazardous, dead or dying trees to better protect our customers and reduce the threat of wildfire
 - Remove wood debris and conduct work at no direct cost to the customer





Working With Our Customers

- We want our customers to be completely informed about our wildfire vegetation safety work
- We will work together to review any necessary safety work and answer questions
- Our outreach includes:
 - Automated phone calls, letters, and emails
 - Personal visits and doorhangers
 - Dedicated phone number (1-877-295-4949)
 and email address (wildfiresafety@pge.com)
 - Website (pge.com/enhancedveg)





Recloser Procedures

- We are disabling automatic reclosing of circuit breakers and reclosers on lines in high fire-threat areas during fire season and during periods of high fire-risk.
- Reclosers help maintain the safety of our system by avoiding sustained power outages.
- Disabling of reclosing technology may reduce the probability of fire ignition associated with a power line.
 - Where reclosers and circuit breakers do not have remote control capability (SCADA), we have disabled reclosing for the 2018 fire season.
 - Where we have remote control capability, we will disable reclosing based on a daily decision-making process during times of elevated risk as determined by our Wildfire Safety Operations Center.





Electric System Hardening

- PG&E has made capital investments for its electric transmission and distribution system of about \$15 billion over the last five years.
- Over the longer term, PG&E is working to strengthen the overall construction of our electric system to reflect the changing environmental conditions of our service area and improve system resiliency. We are:
 - Installing stronger, coated power lines
 - Replacing wood poles with nonwood material in some areas in the coming years





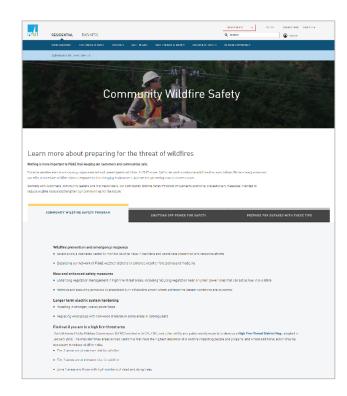
Learn More

For questions regarding PG&E's Community Wildfire Safety Program, please contact:

- Brandon Sanders
 - 0 916-472-2241
 - Brandon.Sanders@pge.com

Customers with questions can:

- o Call us at 1-866-743-6589
- Email us at wildfiresafety@pge.com
- Visit pge.com/wildfiresafety



Thank you

