Community Wildfire Safety Program City of Yuba City

June 18, 2019





Community Wildfire Safety Program



REAL-TIME MONITORING AND INTELLIGENCE

- Coordinating prevention and response efforts by monitoring wildfire risks in real time from our Wildfire Safety Operations Center
- Expanding our network of PG&E weather stations to enhance weather forecasting and modeling
- Supporting the installation of new high-definition cameras in high fire-threat areas



NEW AND ENHANCED SAFETY MEASURES

- Further enhancing vegetation management efforts to increase focus on vegetation that poses a higher potential for wildfire risk
- Conducting accelerated safety inspections of electric infrastructure in high fire-threat areas
- Disabling automatic reclosing of circuit breakers and reclosers in high fire-risk areas during wildfire season
- Proactively turning off electric power for safety (Public Safety Power Shutoff) when extreme weather and fire danger conditions are forecasted



SYSTEM HARDENING AND RESILIENCY

- Installing stronger and more resilient poles and covered power lines, along with targeted undergrounding
- Upgrading and replacing electric equipment and infrastructure to further reduce wildfire risks
- Working with communities to develop new resilience zones to provide electricity to central community resources during a Public Safety Power Shutoff event



Real-Time Monitoring and Intelligence

MONITORING wildfire risks in real time from our

Wildfire Safety Operations Center

and coordinating prevention and response efforts

INSTALLING

~1,300 new weather stations by 2022

Data available at mesowest.utah.edu

SUPPORTING the installation of

~600 high-definition cameras by 2022

Images available at alertwildfire.org



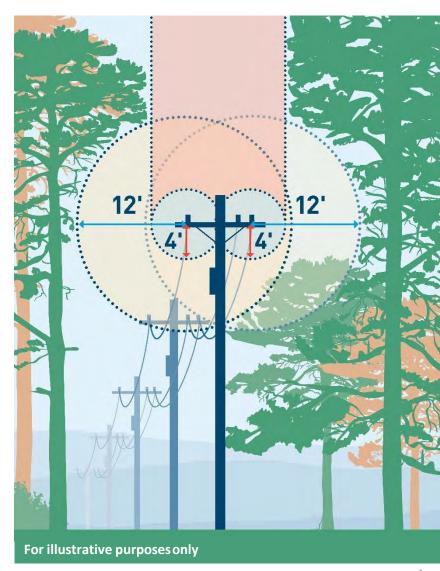




Enhanced Vegetation Management

We are **expanding and enhancing our Vegetation Management program** to further reduce wildfire risk

- Our enhanced vegetation management work includes the following:
 - Meeting and exceeding state standards for minimum clearances around the power line
 - Addressing overhanging limbs and branches directly above and around the lines
 - Removing dead and dying trees as well as specific tree species that have more frequently fallen into PG&E lines and caused an ignition
- We are working to complete this important safety work in high fire-threat areas over the next several years





Wildfire Safety Inspections

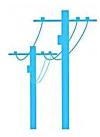


As part of our enhanced wildfire safety efforts, implemented following the 2017 and 2018 wildfires as additional precautionary measures intended to further reduce wildfire risks, we are conducting accelerated safety inspections of electric infrastructure in areas of higher wildfire risk (Tier 2 and Tier 3).

- We are conducting comprehensive inspections of electric towers and poles through visual and aerial inspections.
- This work is being done as part of our Community Wildfire Safety Program, and is in addition to our routine inspections and maintenance programs.
- We are inspecting substations and transmission and distribution lines in high fire-threat areas.



Inspections Overview



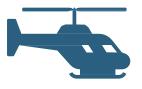
Accelerated inspections of transmission and distribution poles and towers as well as substations in high fire-threat areas



Visual inspections
(ground and/or
climbing) performed
by crews of up to
four people



Aerial inspections by drones to complement and further enhance inspections



Helicopters for inspections and to deliver crews to remote locations

We are taking action right away to address any immediate risk to public safety found during the accelerated inspections



Electric System Maintenance and Repairs

We will evaluate inspection results to determine repair needs and associated timing. If any issues are found during the accelerated inspections that pose an immediate risk to public safety, we are taking action right away to address the issue.



- When inspections
 determine that repairs are
 needed, but there is not an
 immediate safety risk, we
 will follow our preventative
 maintenance procedures,
 consistent with state
 guidelines for high fire threat areas.
- Repairs will depend on what we observe in the field but could range from installing new signs or electrical components to replacing poles or towers.
- Where possible, we will bundle work to minimize customer impact, particularly if we need to de-energize the line to safely complete the repairs.



System Hardening and Resiliency

Installing stronger and more resilient poles and covered power lines across approximately 7,100 line miles of highest fire-risk areas

Replacing equipment to further reduce risk to our system and tailoring upgrades based on terrain and weather conditions using more granular analysis of fire-prone regions

Piloting new resilience zones to allow PG&E to provide electricity to central community resources serving local customers during a Public Safety Power Shutoff (PSPS) event







Additional Safety Measures

To further reduce the risk of wildfires, we are disabling automatic reclosing of circuit breakers and reclosers on lines in high fire-risk areas during wildfire season.

Where we have remote control capability, we disable reclosing based on a daily decision-making process during times of elevated risk.

ENABLED

450 reclosing devices with remote capabilities in 2018

WORKING to enable nearly

300 additional reclosing devices with remote capabilities

in advance of the 2019 wildfire season





Public Safety Power Shutoff (PSPS)

We monitor conditions across our system and evaluate whether to proactively turn off electric lines for safety when extreme weather and fire danger conditions are forecasted.

While no single factor will drive a Public Safety Power Shutoff, some factors include:



A RED FLAG WARNING

declared by the National Weather Service



LOW HUMIDITY LEVELS

generally 20% and below



FORECASTED SUSTAINED WINDS GENERALLY ABOVE 25 MPH AND WIND GUSTS IN EXCESS OF APPROXIMATELY 45 MPH, depending on

location and site-specific conditions such as temperature, terrain and local climate



CONDITION OF DRY FUEL

on the ground and live vegetation (moisture content)

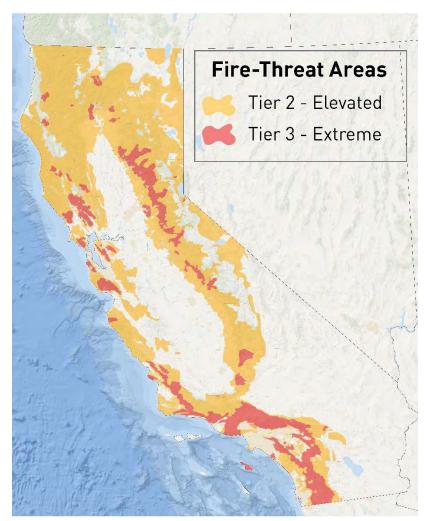


ON-THE-GROUND, REAL-TIME OBSERVATIONS

from PG&E's Wildfire Safety
Operations Center and field
observations from PG&E crews



Public Safety Power Shutoff (PSPS)



Source: California Public Utilities Commission

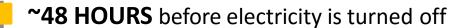
- Beginning with the 2019 wildfire season, we are expanding our Public Safety Power Shutoff program to include all electric lines that pass through high fire-threat areas – both distribution and transmission.
- The most likely electric lines to be considered for shutting off for safety will be those that pass through areas that have been designated by the CPUC as at elevated (Tier 2) or extreme (Tier 3) risk for wildfire.
- Because the energy system relies on power lines working together to provide electricity, any of PG&E's more than 5 million electric customers could have their power shut off.



PSPS Event Notifications

Extreme weather threats can change quickly. **Our goal, dependent on weather, is** to provide customers with advance notice prior to turning off power. We will also provide updates until power is restored.

Timing of Notifications (when possible)



~24 HOURS before electricity is turned off

JUST BEFORE electricity is turned off

DURING THE PUBLIC SAFETY OUTAGE

ONCE POWER HAS BEEN RESTORED

City/County/Agency Notifications



We will make every attempt to provide notice in advance of notifying customers through:

- Phone calls/emails to primary contacts
- Automated notifications to send alerts through multiple channels
- Provide customer alerts to share via channels, such as city or county website, Nixle, Nextdoor and Reverse 911

Customer Notifications

We will attempt to reach customers through calls, texts and emails. We will also use social media and keep local news and radio outlets informed and updated.



Working to Restore Power

We will only restore power when we are certain it is safe to do so. We expect to be able to visually inspect the system for damage and restore power to most of our customers within 24 to 48 hours after extreme weather has passed.











After the extreme weather has passed and it's safe to do so, our crews begin patrols and inspections.

Crews visually inspect our electric system to look for potential weather-related damage to the lines, poles and towers. This is done by vehicle, foot and air during daylight hours.

Where damage is found, crews work to isolate the area so other parts of the system can be restored. Crews work safely and as quickly as possible to make repairs.

Once it is safe to energize, a call is made to the PG&E Control Center to complete the energization process. Power is then restored to customers.

Customers are notified that power has been restored.

Because extreme weather can last several hours or days, for planning purposes, we suggest customers prepare for outages that could last longer than 48 hours.



Working With Our Customers to Prepare



Reaching out to approximately 5 million customers and asking them to update their contact info at pge.com/mywildfirealerts



Holding answer centers and open houses (as needed) in advance of and during wildfire season



Mailing postcards to customers that do not have contact information on file



Providing tenant education kits to Master Meter customers



Conducting additional outreach to customers in high fire-threat areas through direct mail, preparedness checklist and email campaign



Placing calls and doing additional outreach to Medical Baseline and Medical Baselineeligible customers in high fire-threat areas



Launching broad public safety advertising campaign



Continuing to share information through pge.com/wildfiresafety



Partnering with community leaders, first responders and public safety authorities around PSPS preparedness and coordination



Engaging with organizations for our customers who have specific needs to explore ways we can partner



Learn More

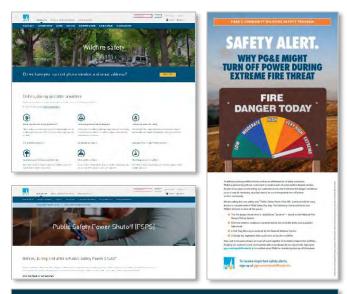
We welcome your feedback and input

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

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

Please direct customers with questions to:

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





As a critical partner in emergency response, we want to notify you about a potential Public Safety Power Shutoff in your area, when possible. Please provide the best phone numbers and email addresses for your organization.