

Community Wildfire Safety Program

Alameda, Contra Costa and Marin Counties

June 10, 2020



Safety



We know that everyone is currently focused on the response to COVID-19.

We appreciate your participation during this challenging time and hope the following information is helpful in understanding how PG&E is working to reduce wildfire risk.





Introductions

- | | |
|----------------------|---|
| Vanessa Bryan | Manager, Local Customer Experience |
| Laura Wetmore | Senior Manager, East Bay and Mission Division |
| Vic Baker | Senior Manager, Diablo Division |
| Jim Wickham | Public Safety Specialist |
| John Walsh | Public Safety Specialist |
| Les Putnam | Public Safety Specialist |
| Matt Pender | Director, Community Wildfire Safety Program |



-  **Your Local Electric System**
-  **What Is Public Safety Power Shutoff?**
-  **Lessons Learned and 2020 Improvements**
-  **Local Progress to Help Prevent Wildfires**
-  **Preparing for Public Safety Power Shutoffs**
-  **Open Discussion**

Your Electric System In Alameda, Contra Costa and Marin





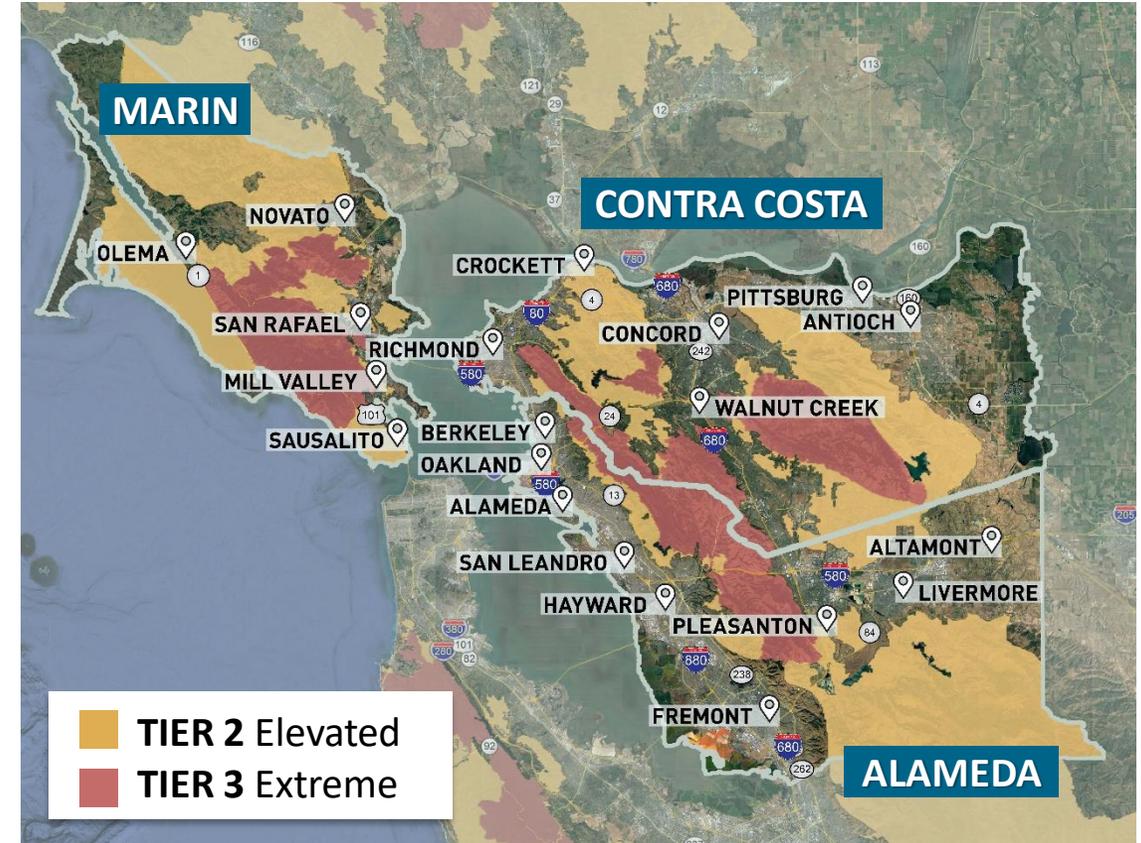
Local CPUC High Fire-Threat District (HFTD) Map

The California Public Utilities Commission (CPUC) has a map that designates areas that are most at risk for wildfire.

- Tier 3 areas are at extreme risk
- Tier 2 areas are at elevated risk

This map helps PG&E to plan and prioritize wildfire prevention efforts.

~50 percent of PG&E's service area is in high fire threat districts



	TOTAL OVERHEAD DISTRIBUTION LINE MILES	DISTRIBUTION LINE MILES IN HFTD	TOTAL OVERHEAD TRANSMISSION LINE MILES	TRANSMISSION LINE MILES IN HFTD
--	--	---------------------------------	--	---------------------------------

ALAMEDA COUNTY	2,188	347	744	169
CONTRA COSTA COUNTY	2,236	442	907	430
MARIN COUNTY	1,024	528	155	64

The map can be accessed at:

cpuc.ca.gov/FireThreatMaps



All data is preliminary and based on early 2020 work planning. Data as of May 2020.

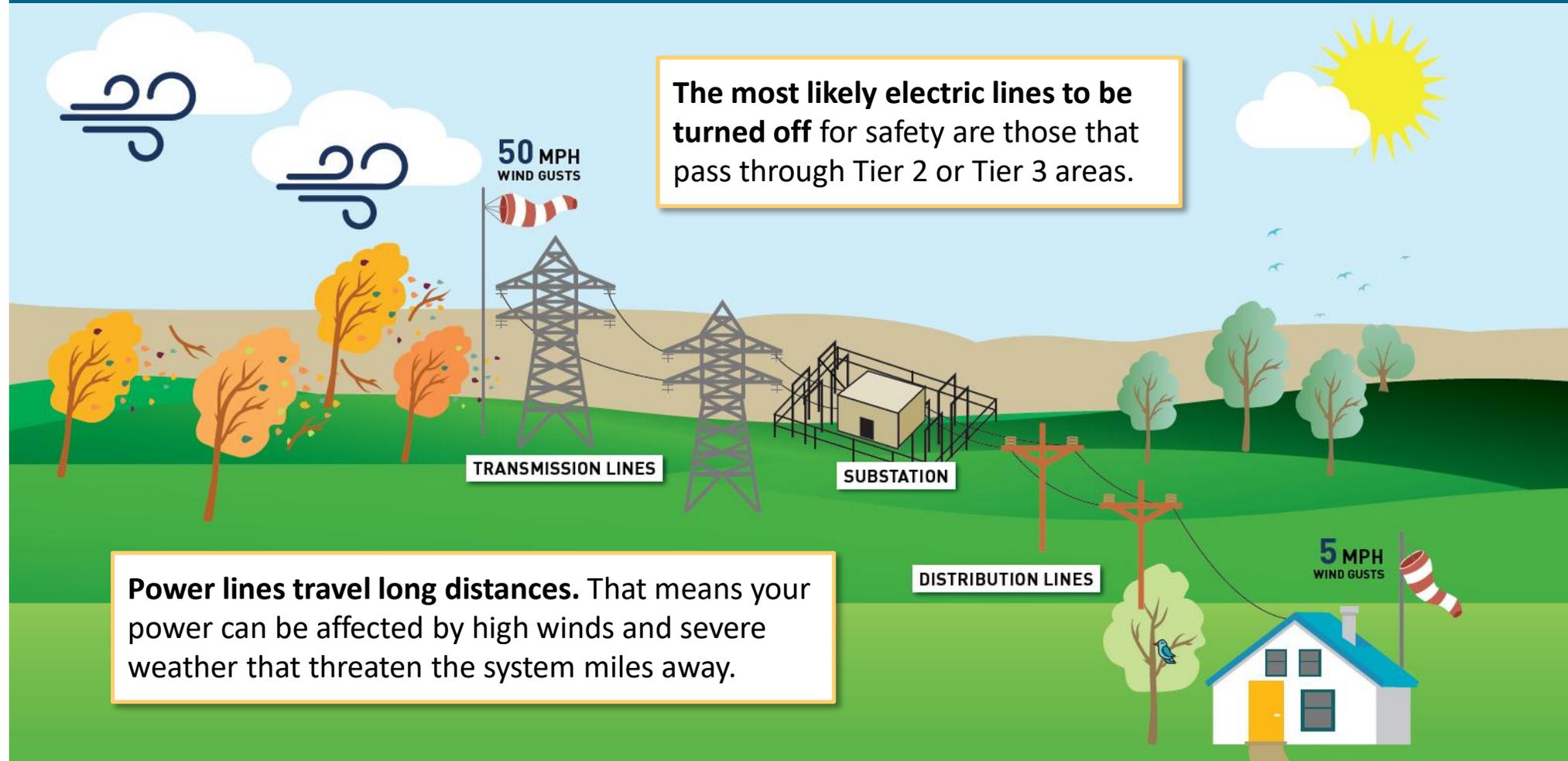
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

What Is A Public Safety Power Shutoff?



What Is A Public Safety Power Shutoff?

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.



Power lines travel long distances. That means your power can be affected by high winds and severe weather that threaten the system miles away.

What Weather Could Lead To A PSPS?

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



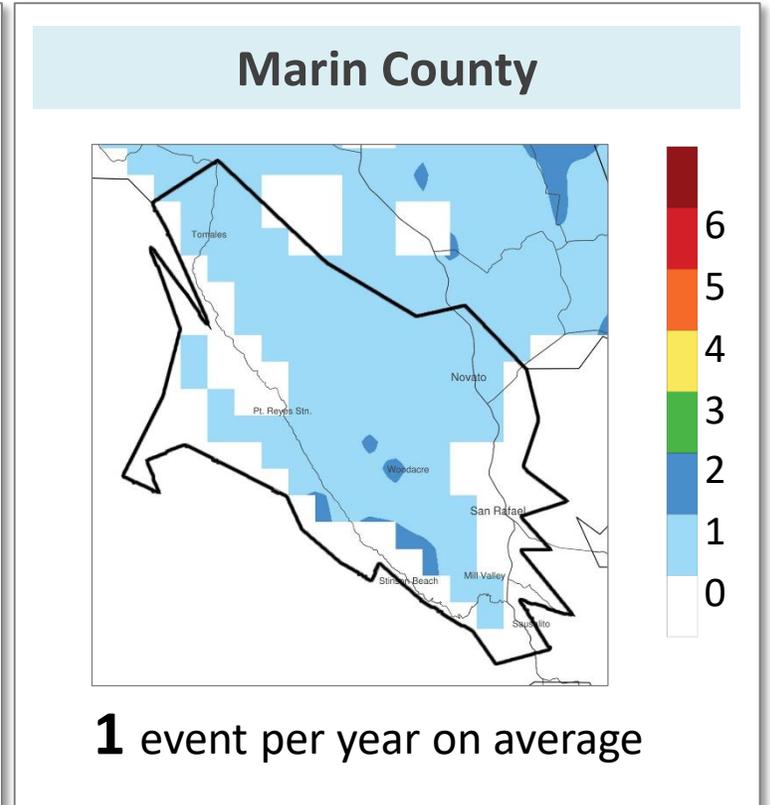
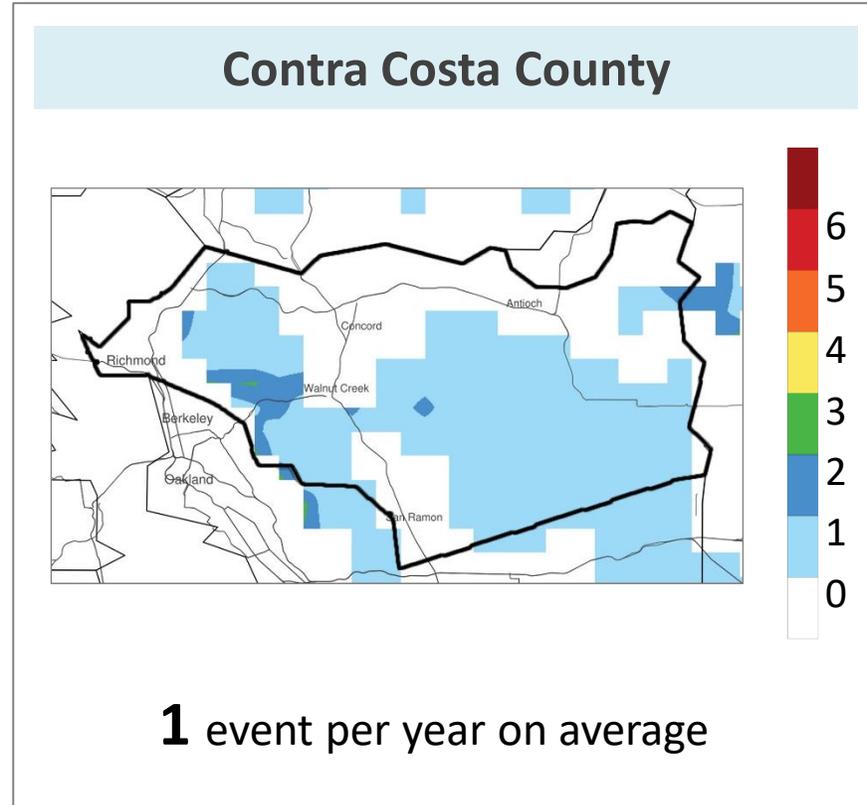
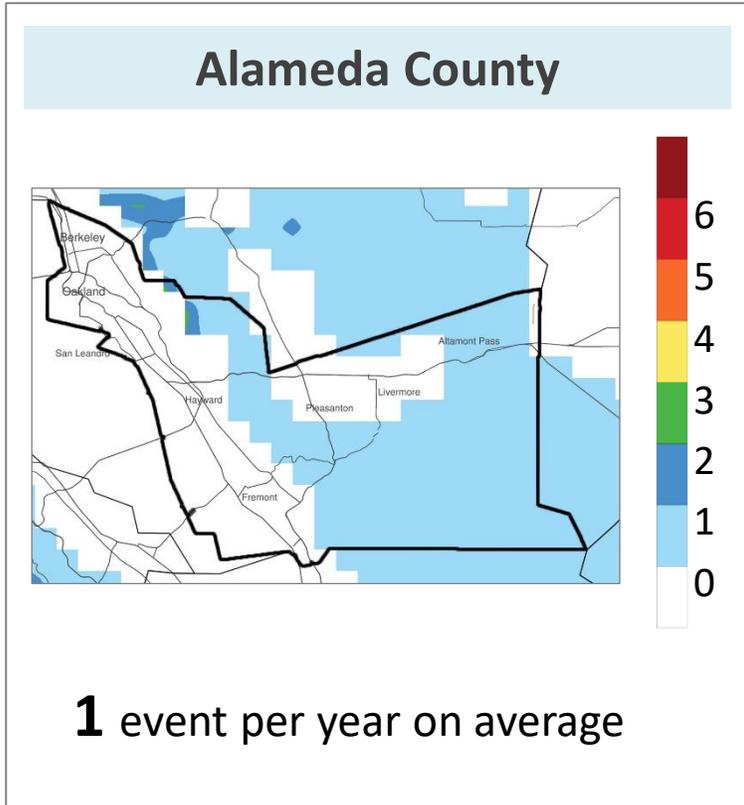
CONDITION OF DRY FUEL
on the ground and live vegetation
moisture content



ON-THE-GROUND, REAL-TIME OBSERVATIONS from
PG&E's Wildfire Safety Operations
Center and field observations from
PG&E crews

How Often Will A PSPS Event Occur?

Below is an estimate of potential PSPS events in your communities based on a review of 30 years of weather data.



The number of events in any particular year will be exclusively driven by the weather pattern experienced and the above historical weather analysis may not be representative of the experience in a particular year.

All data is preliminary and based on early 2020 work planning. Data as of May 2020.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

How Are We Improving For This Year?



SMALLER IN SIZE

Reduce the number of customers impacted by PSPS events by one-third compared to 2019



SHORTER IN DURATION

Restore customers twice as fast after severe weather has passed



SMARTER FOR CUSTOMERS

Provide **more accurate/timely communications** and additional resources

Deliver **more assistance for customers** before, during and after a PSPS event



SMALLER IN SIZE

GOAL:

Reduce the number of customers impacted by PSPS events by one-third compared to 2019

WHAT WE'RE DOING:

- Installing **sectionalizing devices** on the transmission and distribution systems capable of re-directing power and limiting the size of outages
- Developing **microgrids** that use generators to keep the lights on
- Conducting **targeted undergrounding** as part of system hardening



SHORTER IN DURATION

GOAL:

Restore customers twice as fast after severe weather has passed

WHAT WE'RE DOING:

- **Adding more field crews** to speed inspection of lines
- **Expanding helicopter fleet from 35 to 65** for aerial line inspections
- Commissioning **two new airplanes** for aerial line inspections
- Utilizing **infrared equipment** to inspect at night

How Are We Improving For This Year?



SMARTER FOR CUSTOMERS

GOALS:

Provide **more accurate/timely communications** and additional resources

- **AND** -

Deliver more assistance before, during and after a PSPS event

WHAT WE'RE DOING:

- Enhancing **meteorology technology** to pinpoint location and timing of severe weather
 - Bolstering **website capacity**
 - Improving **customer alerts** and notifications
 - Upgrading **Community Resource Centers**
 - **Improving coordination** with local agencies and critical service providers
-
- Working with the **California Foundation for Independent Living Centers (CFILC)** and other **Community Based Organizations** to support vulnerable customers
 - Making it **easier for eligible customers to join and stay in the Medical Baseline program**
 - Expanding **in-language communications**

Local Progress To Help Prevent Wildfires





Advanced Weather Station Network

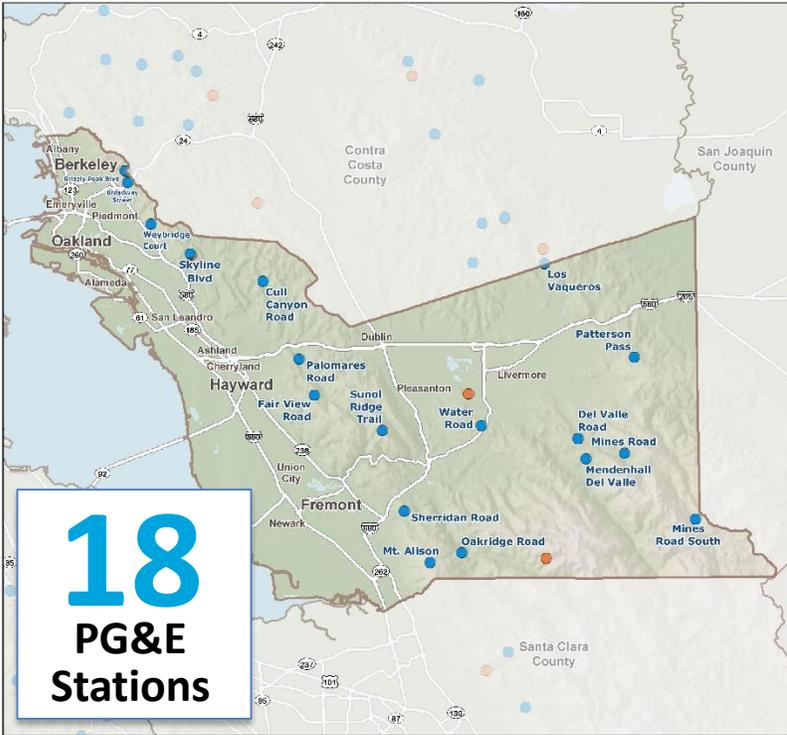
We're adding advanced weather stations to better understand how severe weather can impact our system and proactively respond to potential threats.

Data is publicly available at

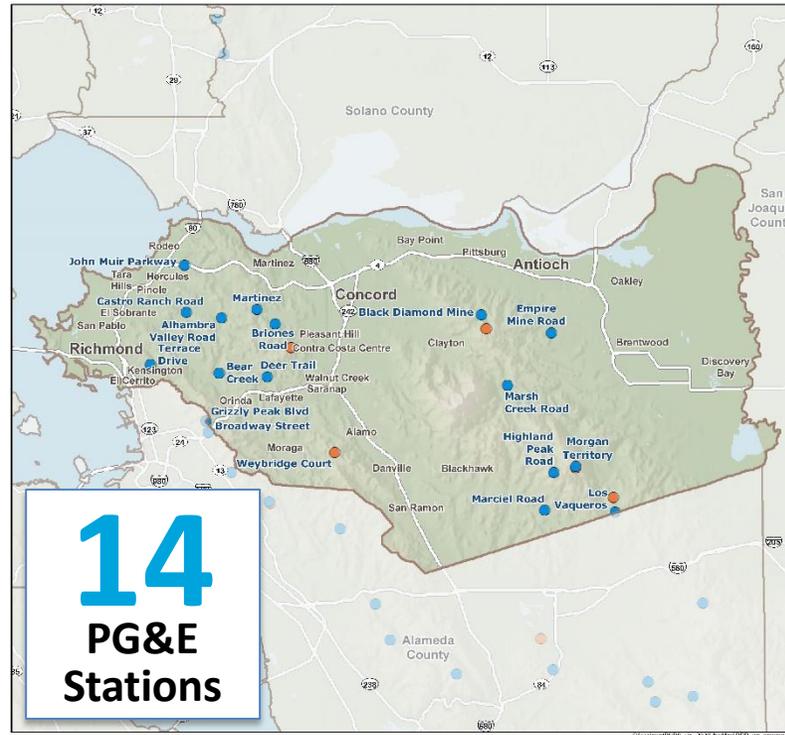
mesowest.utah.edu

pge.com/weather

ALAMEDA COUNTY



CONTRA COSTA COUNTY



MARIN COUNTY



● PG&E Weather Station

● Remote Automated Weather Stations (RAWs) within PG&E's service area

All data is preliminary and based on early 2020 work planning. Data as of May 2020.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

We're installing new sectionalizing devices that separate the grid into smaller parts to limit the number of customers impacted during a PSPS event.



We are installing **600** new sectionalizing devices this year:

- **45** devices planned for **Alameda County**
- **35** devices planned for **Contra Costa County**
- **45** devices planned for **Marin County**



We are also **working to add remote and/or automated capabilities** to many of the devices in order to further reduce the number of customers who are impacted by a public safety power shutoff.

Preparing For Public Safety Power Shutoffs





Advance PSPS Alerts For Customers

We provide advance notice prior to turning off power and updates until power is restored. This year, notifications will include more details about when the power will be shutoff and restored.

Timing of Notifications (when possible)



Notifications will provide an estimated window of time when the power will be shutoff and restored.



Direct Customer Notifications

We will attempt to reach customers through calls, texts and emails.



Additional Updates

We will also use social media and keep local news and radio outlets informed and updated.

Community Resource Centers (CRCs)

CRCs provide customers and residents with a safe, energized, ADA accessible location with basic resources, as well as up-to-date information. The following resources may be available:

				
Heating and cooling	Power strips to charge devices	Bottled water	Non-perishable snacks/fruit	Wi-Fi service
				
Coffee/tea	Blankets	ADA-compliant toilets and hand washing stations	Security personnel	Chairs and tables

During a PSPS event, the locations will be made available on [pge.com/pspsupdates](https://www.pge.com/pspsupdates) and via social media, local news and radio.

If social distancing measures remain in place due to COVID-19, we will be incorporating alternative solutions like mobile, popup or reconfigured CRCs.



Additional Support for People with Disabilities and Older Adults

PG&E is working with the California Foundation for Independent Living Centers (CFILC) to fund resources to help prepare for disasters and extended power outages.



PSPS event specific AFN resources will be posted at pge.com/afn. Press releases, radio advertisements and leveraging our network of CBOs will also be used to communicate with customers who depend on power for medical and independent living needs when possible during events.



Application Process: The CFILC will determine who qualifies for resources. Medical needs and income will be taken into account.

Applications are available online or at Interdependent Living Centers (ILCs) and will be accepted at regional ILC locations. **More information is available through these ILC locations:**

Community Resources for Independent Living (CRIL)

510-881-5743
439 A Street, Hayward, CA 94541

Independent Living Resources of Solano and Contra Costa Counties (IRL)

925-363-7293
1850 Gateway Blvd #12, Concord, CA 94520

Marin Center for Independent Living (MCIL)

415-459-6245
710 Fourth Street, San Rafael, CA 94901

Coordination of resources takes time. Individuals are encouraged to engage with their local ILC and plan before a PSPS event is imminent.

Resources include:



Portable backup power



Emergency preparedness assistance



Accessible transportation



Hotel vouchers and food stipends



Medical Baseline application assistance

cfilc.org

disabilitydisasteraccess.org

All data is preliminary and based on early 2020 work planning. Data as of May 2020.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.



Where To Go For Additional Information



DO WE HAVE YOUR CURRENT CONTACT INFORMATION?

pge.com/mywildfirealerts



WEATHER AND PSPS FORECASTING

Live weather information, a 7-day PSPS potential lookahead and images from PG&E's high-definition cameras deployed in high fire-threat areas.

pge.com/weather



BACKUP POWER

Information on backup power options, safety tips, financing options, a marketplace to search major backup power retailers and more.

pge.com/backuppowers



SAFETY ACTION CENTER

Information about wildfire risks and what customers can do before, during and after an emergency to keep their home, family or business safe.

safetyactioncenter.pge.com



MEDICAL BASELINE

Learn more about PG&E's Medical Baseline program for those who rely on power for medical devices.

pge.com/medicalbaseline



KEEP UP TO DATE DURING A PSPS EVENT

pge.com/PSPSupdates

For more information about our Community Wildfire Safety Program, please: Call **1-866-743-6589** Email wildfiresafety@pge.com Visit pge.com/wildfiresafety

All data is preliminary and based on early 2020 work planning. Data as of May 2020.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

Appendix





2019 PSPS Overview

EVENT DETAILS		OCT 9 - 12	OCT 26 - NOV 1
ALAMEDA	CUSTOMERS IMPACTED	~28,500	~55,300
	PEAK WIND GUSTS	48	75
	DAMAGE/HAZARDS	4	4
	MAX. OUTAGE LENGTH (HRS)	40	61
CONTRA COSTA	CUSTOMERS IMPACTED	~38,900	~46,400
	PEAK WIND GUSTS	40	59
	DAMAGE/HAZARDS	0	15
	MAX. OUTAGE LENGTH (HRS)	64	92
MARIN	CUSTOMERS IMPACTED	~9,800	~120,700
	PEAK WIND GUSTS	70	61
	DAMAGE/HAZARDS	16	12
	MAX. OUTAGE LENGTH (HRS)	94	121

Note: All data is subject to change based on ongoing data reconciliation.

All data is preliminary and based on early 2020 work planning. Data as of May 2020.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.



How Is PG&E Improving Restoration Times?

We expect to be able to restore power to most customers **within 12 daylight hours after extreme weather has passed**, a **50 percent improvement** from 2019.



**WEATHER
ALL CLEAR**

After severe weather has passed, crews begin inspections



**PATROL &
INSPECT**

Crews visually inspect for damage by **vehicle, foot and air**



**ISOLATE &
REPAIR DAMAGE**

Crews **isolate and fix damage**



**RESTORE
POWER**

The **PG&E Control Center** restores power to customers



**NOTIFY
CUSTOMERS**

Customers are notified that **power has been restored**

Note: Because extreme weather can last several hours or days, for planning purposes, we suggest customers prepare for outages that could last multiple days.



Monitoring For Wildfires

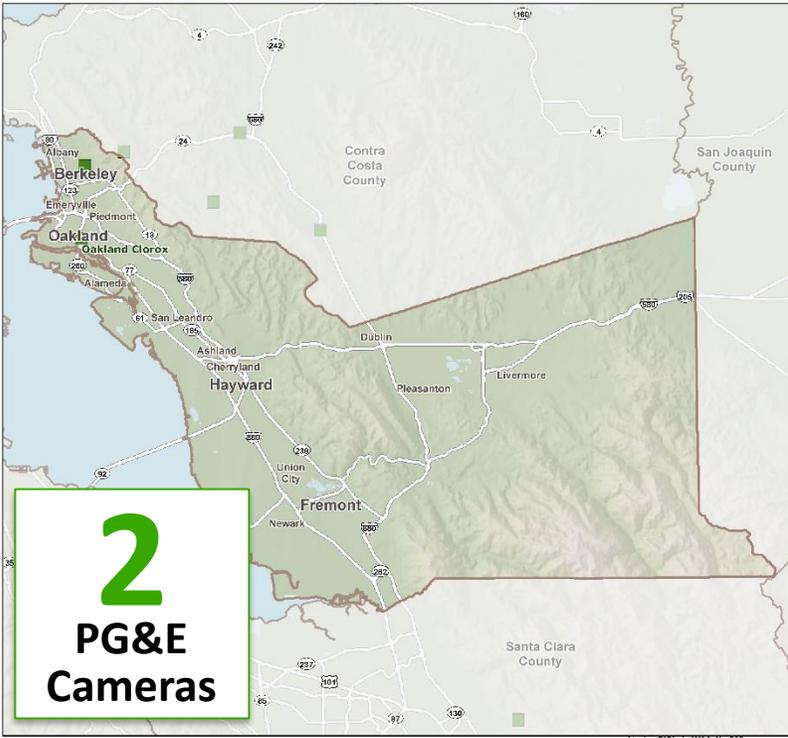
We're supporting the installation of new HD cameras in high fire-threat areas, which allow PG&E and first responders to monitor potential wildfire threats in real time.

Images publicly available at

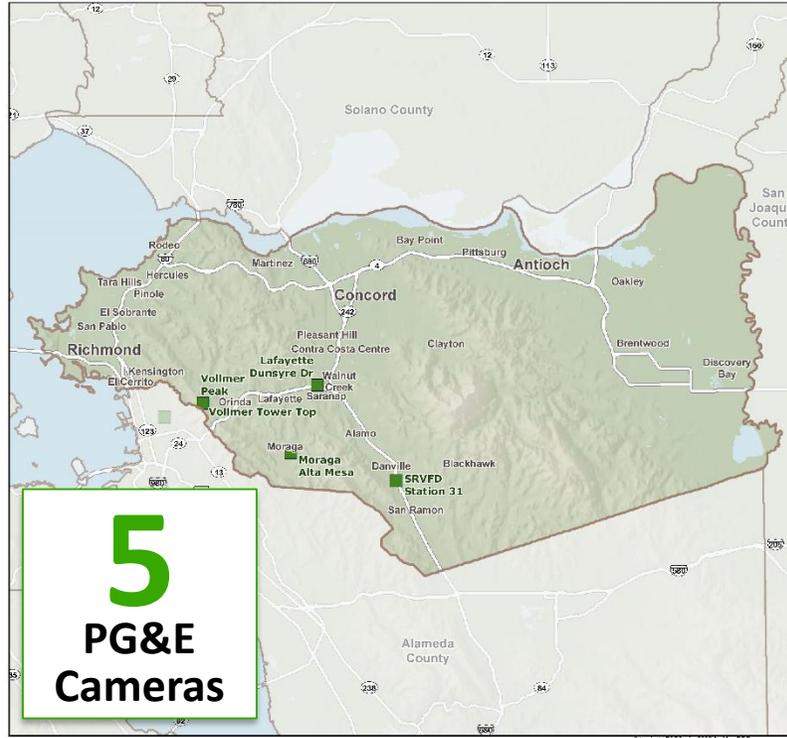
alertwildfire.org

pge.com/weather

ALAMEDA COUNTY



CONTRA COSTA COUNTY



MARIN COUNTY



■ PG&E HD Camera ■ Non-PG&E Camera that looks into PG&E's service area

All data is preliminary and based on early 2020 work planning. Data as of May 2020. Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.