

Community Wildfire Safety Program

SAN JUAN BAUTISTA CITY COUNCIL

August 18, 2020



Safety



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.

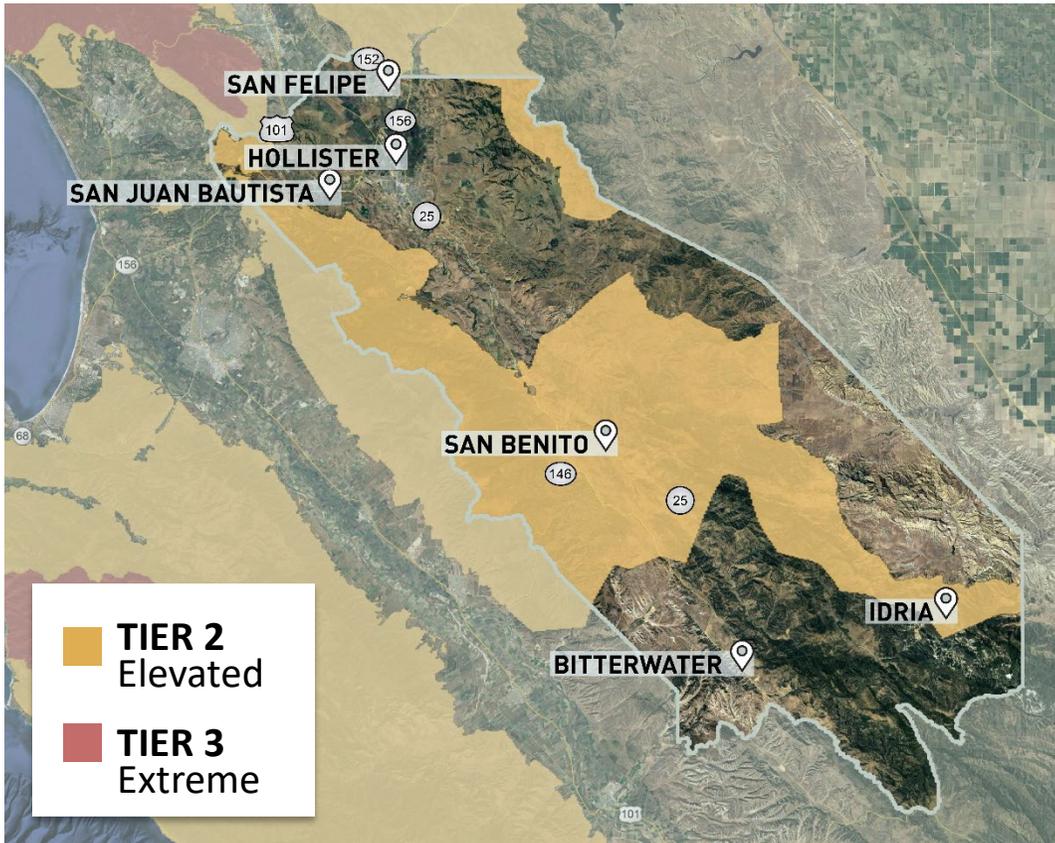


- ✓ **2020 PSPS IMPROVEMENTS**
- ✓ **LOCAL PROJECTS – PROGRESS UPDATES**
- ✓ **30-YEAR WEATHER ANALYSIS**
- ✓ **EVENT COORDINATION AND INFORMATION SHARING**
- ✓ **DISCUSSION**

2020 PSPS Improvements

	GOAL	INITIATIVES
 <p>SMALLER IN SIZE</p>	<p>Reduce the number of customers affected by a PSPS event by one-third compared to last year</p>	<ul style="list-style-type: none"> • Installing sectionalizing devices that limit the size of outages • Installing microgrids • Placing lines underground in targeted locations • Using better weather monitoring technology and installing new weather stations
 <p>SHORTER IN LENGTH</p>	<p>Restore customers twice as fast after severe weather has passed</p>	<ul style="list-style-type: none"> • Deploying more PG&E and contactor crews for inspection and restoration efforts • Expanding helicopter fleet and using two new airplanes for aerial line inspections • Utilizing infrared equipment to inspect at night
 <p>SMARTER FOR CUSTOMERS</p>	<p>Provide better information and additional resources</p>	<ul style="list-style-type: none"> • Improving PG&E's website bandwidth • Improving customer notifications • Opening Community Resource Centers • Working more collaboratively with local agencies and critical service providers
	<p>Provide more assistance before, during and after a PSPS event</p>	<ul style="list-style-type: none"> • Working with community-based organizations to support customers with medical needs • Making it easier for eligible customers to join and stay in the Medical Baseline Program • Providing emergency information in 13 languages

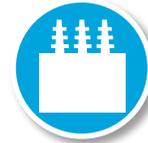
CPUC High Fire-Threat District (HFTD) Map San Benito County



775 total overhead distribution miles
179 in Tier 2 | 0 in Tier 3 | **23%** in HFTD



194 total overhead transmission miles
92 in Tier 2 | 0 in Tier 3 | **47%** in HFTD



5 total substations



23,700 total customers served
1,300 (**5%**) Customers in HFTD



700 total Medical Baseline Customers



100 total critical facilities

CPUC High Fire-Threat District Map – City of San Juan Bautista





Wildfire Safety Progress – San Benito County

WILDFIRE SAFETY AND CUSTOMER SUPPORT PROGRAM EFFORTS



**2019
COMPLETE**



**2020
TARGET**

Weather Stations Enhancing weather forecasting and modeling	8 STATIONS	2+ IN PROGRESS*
High-Definition Cameras Improving real-time monitoring of high-risk areas and conditions	2 CAMERAS	2+ IN PROGRESS*
Community Resource Centers Provide basic power needs and up-to-date information	1 EXECUTED	IN PROGRESS
Sectionalizing Devices Separating the grid into small sections for operational flexibility	4 DEVICES	6 DEVICES
Enhanced Vegetation Management Inspecting, pruning and removing vegetation	1 LINE MILE	1 LINE MILE

*Locations identified on a monthly basis



Advanced Weather Station Network



To sign up for daily email notifications regarding PSPS potential, visit cloud.em.pge.com/PSPS-7day-Signup.

We're using better weather monitoring technology and installing new weather stations to more precisely forecast weather that could lead to PSPS events.

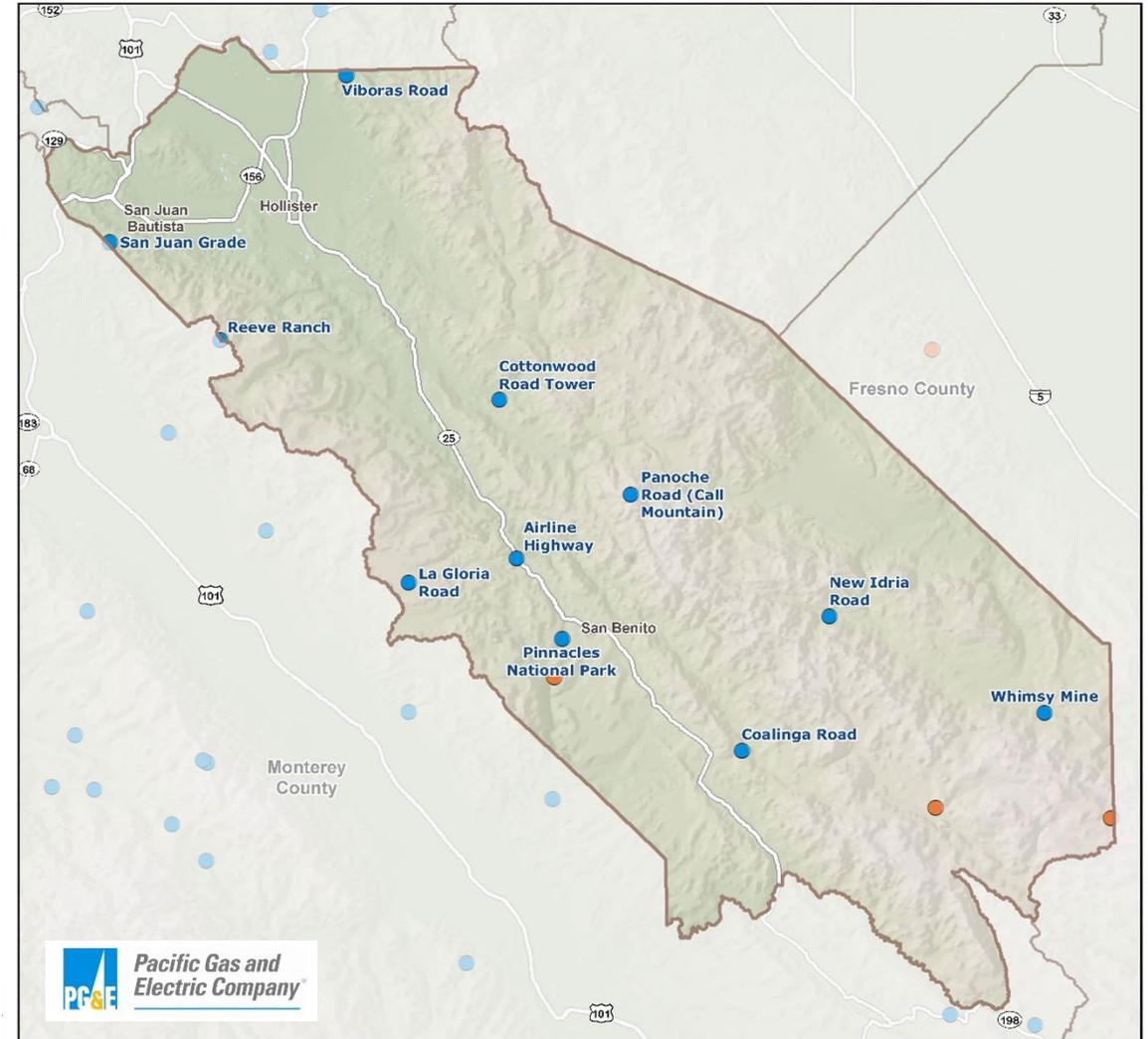
We're targeting about **one station every 20 miles of electric lines** in high fire-threat areas by 2021.



*Installed

MAP LEGEND:

- PG&E Weather Station installed
- Remote Automated Weather Stations (RAWS) within PG&E's service area



Data is publicly available at pge.com/weather and mesowest.utah.edu

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

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

Monitoring For Wildfires With High-Definition Cameras

We're supporting the installation of new high-definition cameras in high fire-threat areas, which allows PG&E and first responders to monitor wildfires in real time.

This will increase our coverage to more than 90% of our service area by 2022.

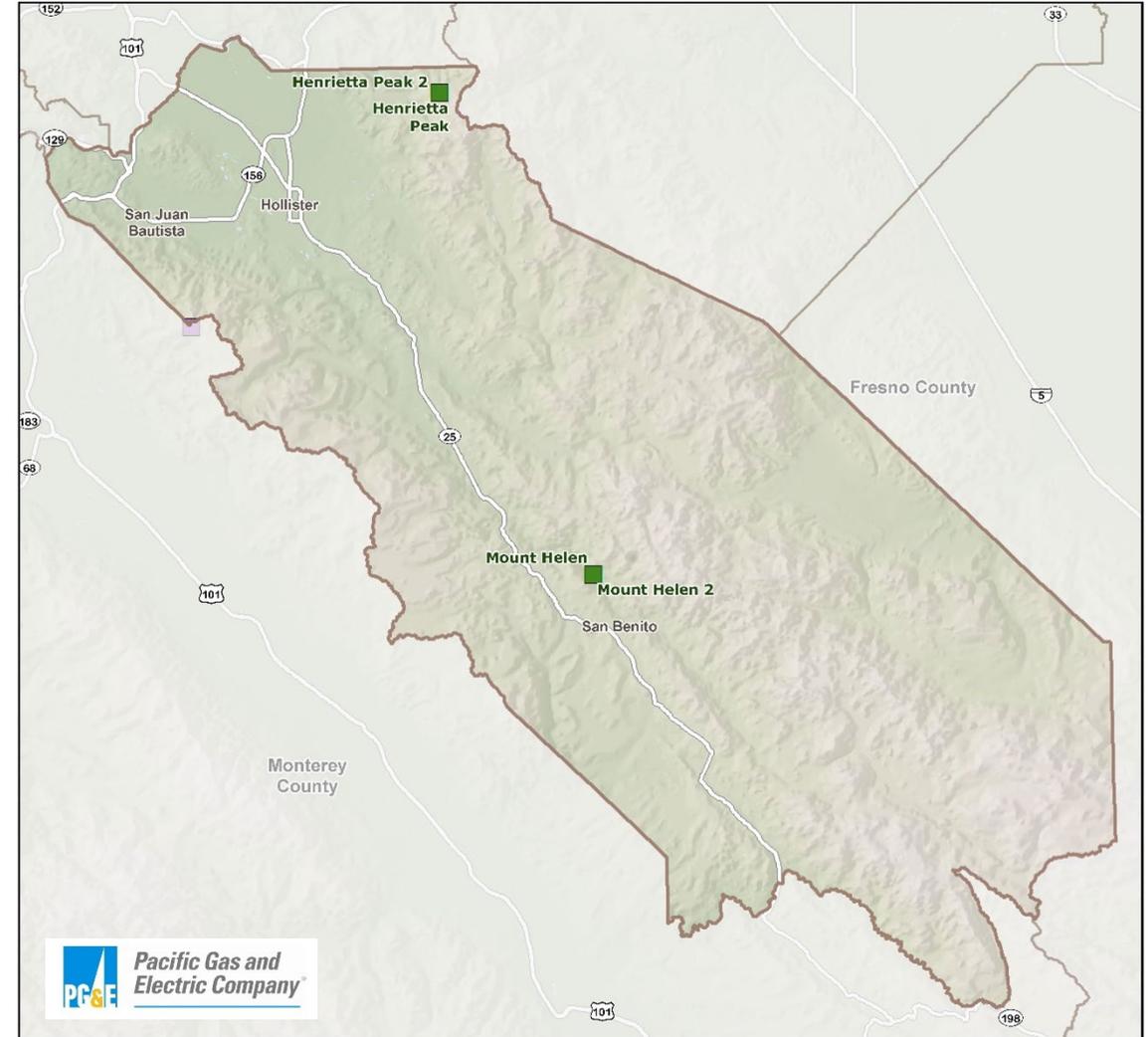
4
cameras installed to date

2020 PROGRESS 2 CAMERAS*

**Installed*

MAP LEGEND:

- PG&E high-definition camera installed
- Non-PG&E camera that looks into PG&E's service area



Images are publicly available at pge.com/weather and alertwildfire.org

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

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

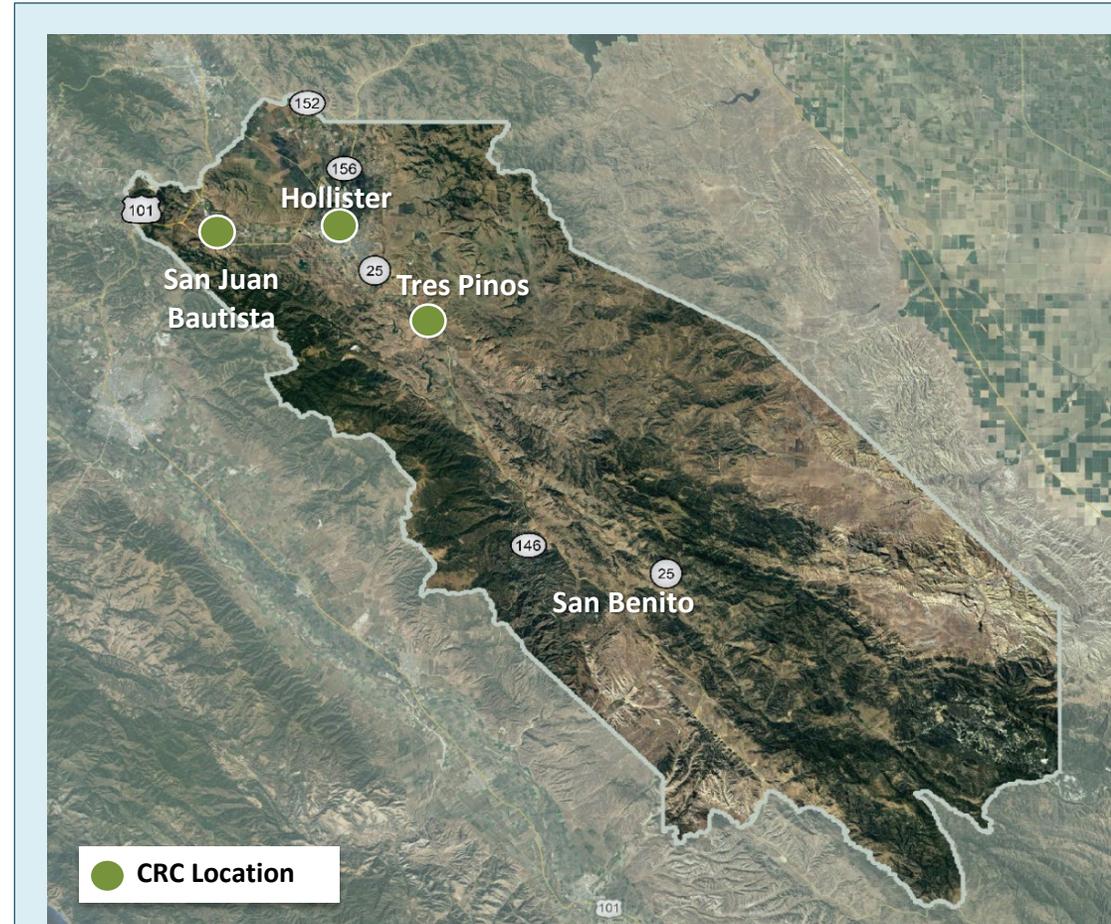
Community Resource Center (CRC) Locations – San Benito County

Our goal is to work together to identify and secure multiple CRC locations within each county/tribe in our service area.

	Proposed CRC Locations	Status/Notes
1	Windmill Market, San Juan Bautista	Active agreement
2	Bolado Park Event Center, Tres Pinos	In progress, initial review complete
3	Hollister Community Center	In consideration, pending owner signature

 Outdoor CRC Site

 PG&E is adapting our approach to CRCs to reflect appropriate COVID-19 public health considerations.



Locations will be activated as needed, depending on event scope and potential customer impacts. **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.

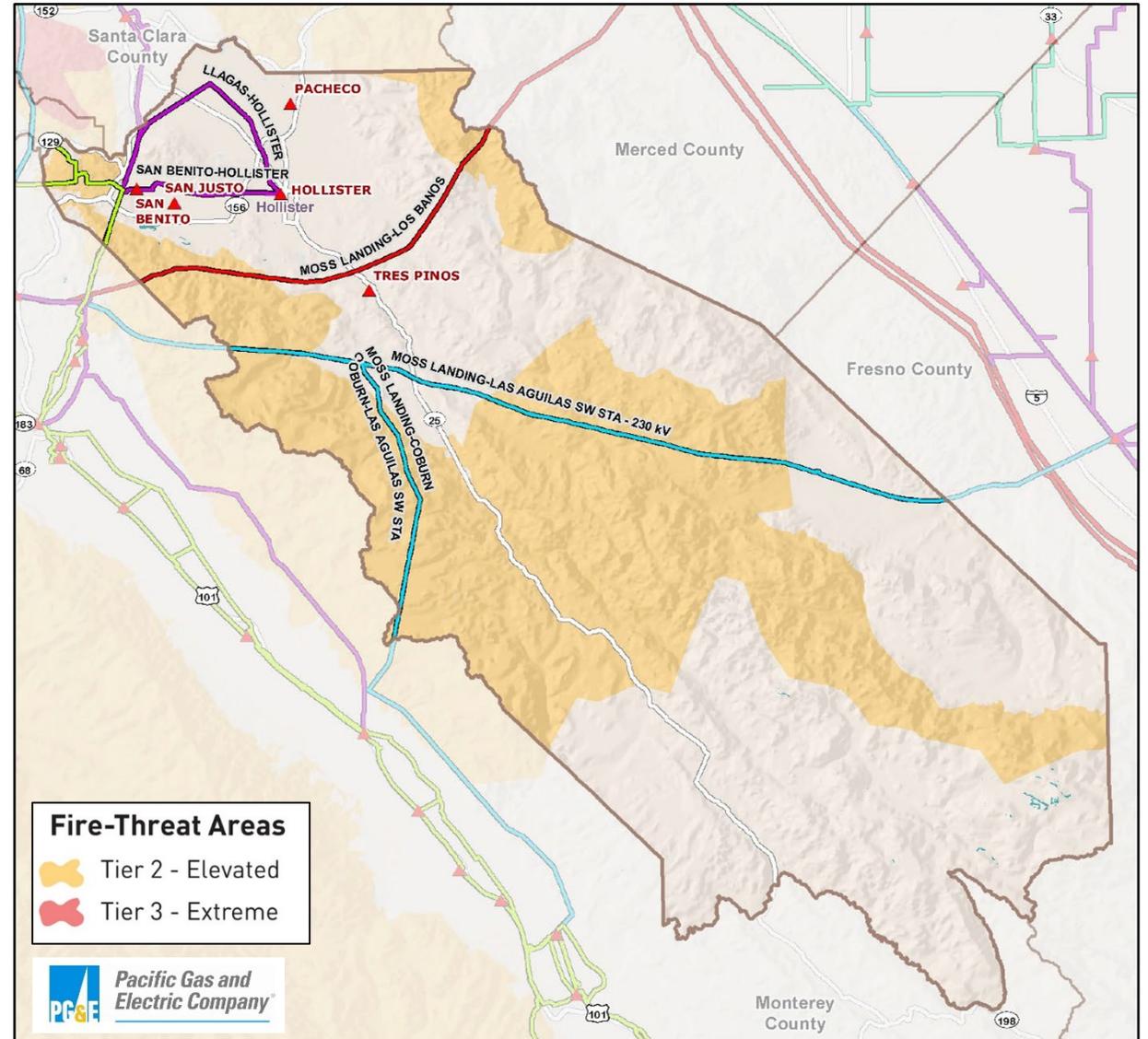
Electric Power Supply – San Benito County

Transmission lines carry high-voltage electricity over long distances, like the freeways of the electric system. The higher the voltage, the more power that line is carrying.

Electric Transmission Line	PG&E Facility
 60 kV	 Substation
 115 kV	2019 Peak Load: 82 MW
 230 kV	
 500 kV	

This data is also publicly available at:

- www.pge.com/wildfiremitigationplan
- County Energy Commission (CEC) website:
<https://cecgis-caenergy.opendata.arcgis.com/>



Sectionalizing The Electric Grid – San Benito County

We're installing new sectionalizing devices to reduce the number of customers affected during a PSPS event.

2020 TARGET 6 DEVICES

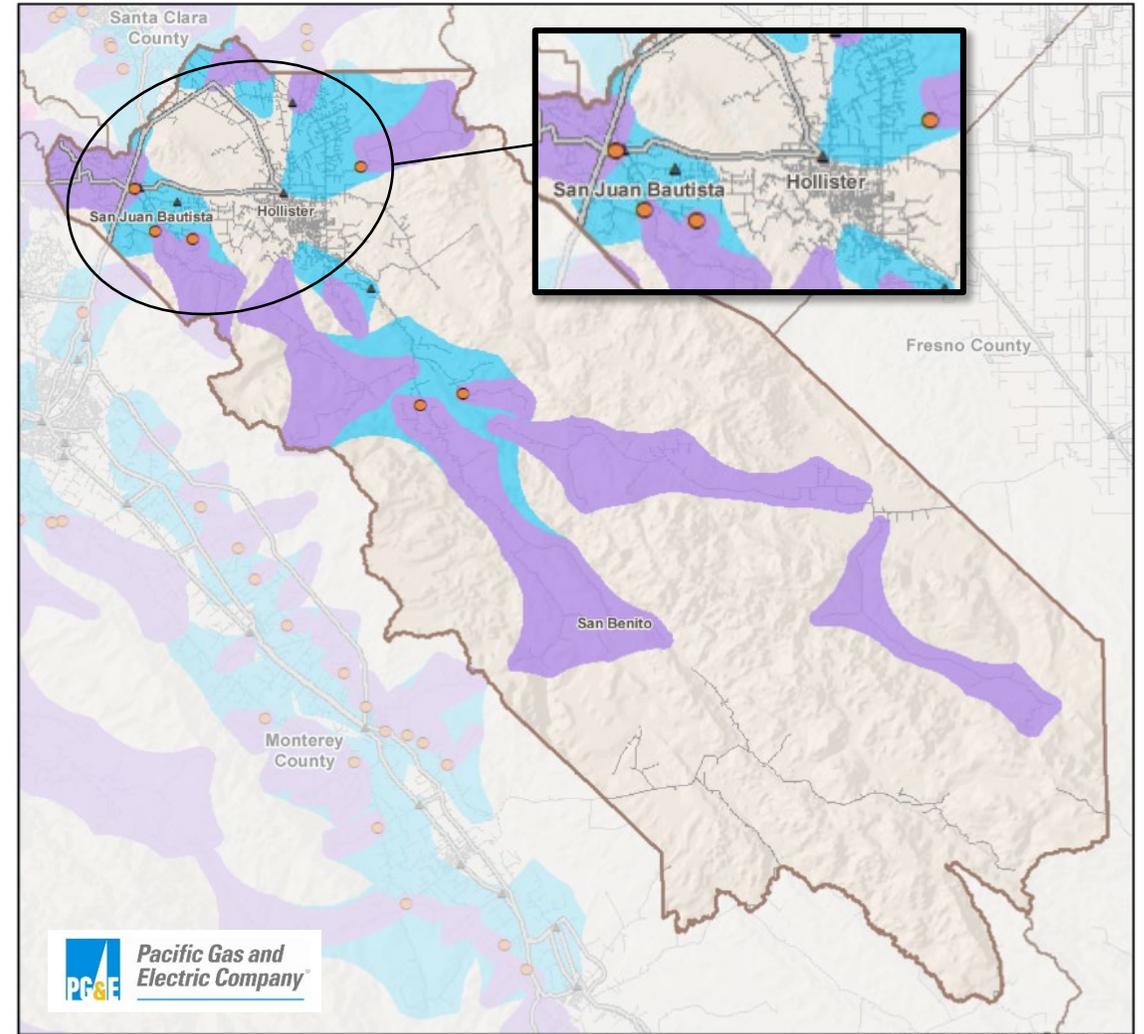
2020 PROGRESS 6 DEVICES*

**Installed*

MAP LEGEND:

- Distribution sectionalizing device planned
- Area potentially removed from scope due to planned sectionalizing (distribution level event only)
- New area now in scope
- No change from 2019
- ▲ PG&E Substation

Note: Map reflects projects in planning and/or underway and is subject to change. Some data points may overlap.



System Hardening Overview

As part of our efforts to prevent wildfires, we are **strengthening the electric system to further reduce wildfire risk and better withstand severe weather.**

These improvements will occur **over several years across 7,100 miles of distribution lines in the highest risk fire-threat areas**, and include:

- Installing stronger and more resilient poles
- Replacing bare conductor
- Installing more poles than required
- No longer using trees to support infrastructure
- Adding down guys and anchors
- Placing lines underground



Enhanced Vegetation Management Work In Your Community

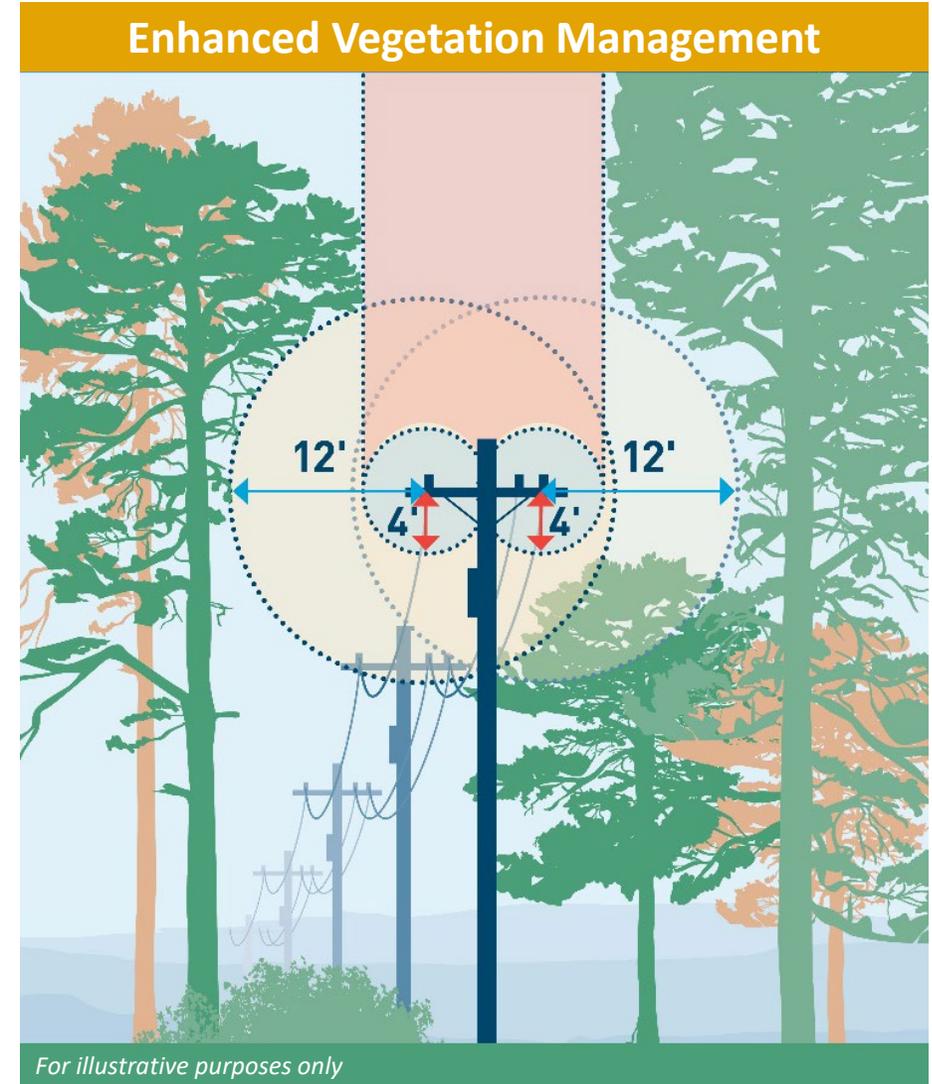
We are exceeding state vegetation and fire safety standards by addressing vegetation that poses a higher potential for wildfire risk to maximize the safety of our customers and communities.

2020 TARGET **1 LINE MILE**

2020 PROGRESS **1 LINE MILE**

Our enhanced vegetation management work:

- **Exceeding state standards for minimum clearances** around power lines, including **trimming overhanging limbs and branches above power lines.**
- **Conducting additional inspections**, beyond routine patrols, **to remove hazardous vegetation** such as dead, diseased, dying or defective **trees that could harm power lines or equipment.**



30-Year Weather Analysis



30-Year Weather Analysis

PG&E analyzed 30 years of high-resolution data covering ~80 billion data points, as well as 26 years of wildfire data in our service area to help determine the average likelihood and frequency of a PSPS event.

The following weather model data points were analyzed:



Wind Speed



Dead Fuel Moisture (4 Types)



Wind Gust



Live Fuel Moisture



Temperature



Fosberg Fire Weather Index



Relative Humidity



National Fire Danger Rating System Outputs (4 Main Outputs)



Precipitation

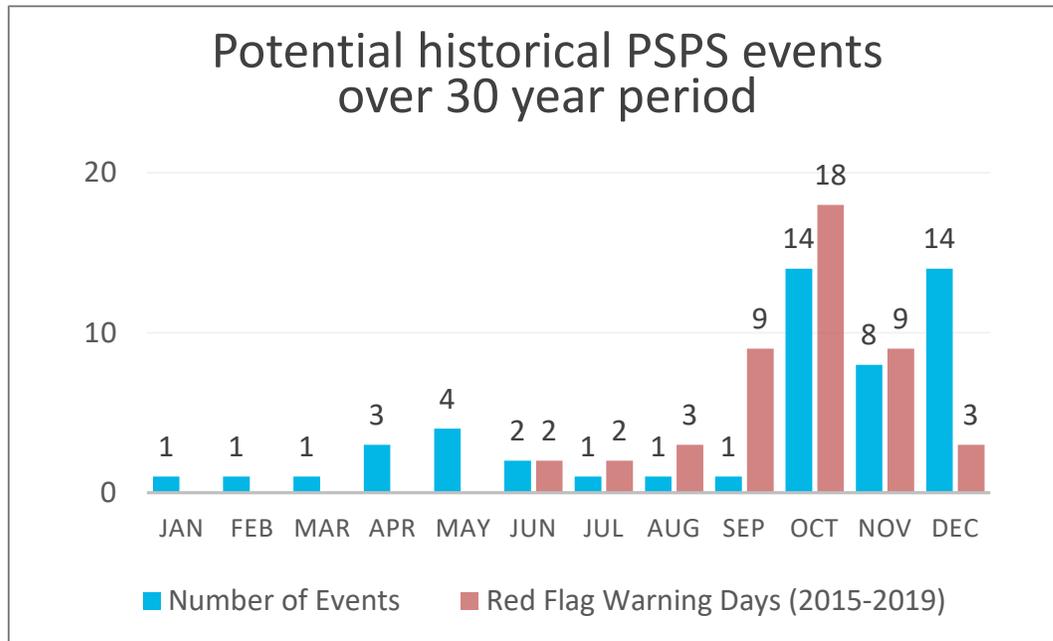
During an event, the meteorology model is updated and run 4x daily.

PG&E collaborates with the following agencies:

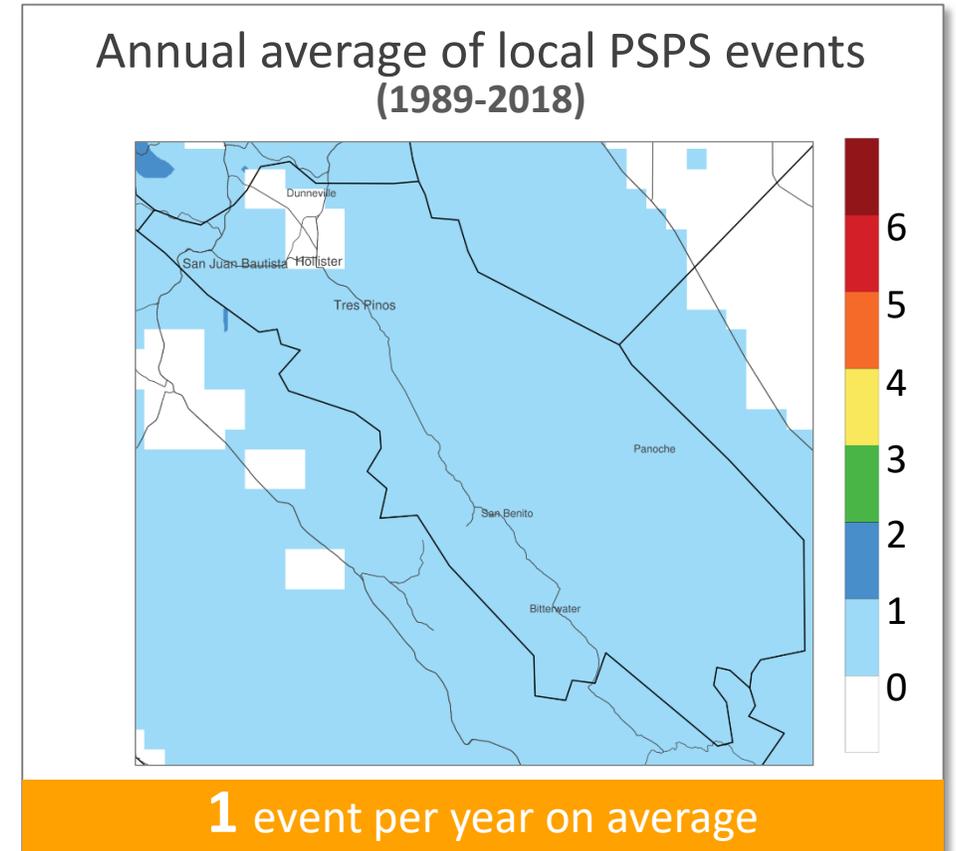
- ✓ US Forest Service
- ✓ National Weather Service
- ✓ Northern and Southern California Geographic Area Coordination Center
- ✓ CAL FIRE
- ✓ External fire agencies
- ✓ San Jose State University Fire Weather Research Lab

30-Year Weather Analysis – San Benito County

The following is a conservative estimate of potential PSPS events in your community based on 30 years of data when Fire Potential Index (FPI) and Outage Producing Winds (OPW) met the PSPS criteria threshold.



NOTE: Additional factors are considered before turning power off for safety such as **red flag warning days** or **conditions on the ground during winter months**.



Event Coordination and Information Sharing



Emergency Operations Center (EOC) Coordination

PG&E will offer the following resources to support local EOCs during a PSPS event:



Local EOC Liaison can be embedded in a county or tribe's local EOC, upon request.



Agency Representative will be assigned to each county and tribe to act as a **single point of contact during an event.**



GIS Technical Specialist can be embedded in a county or tribe's local EOC upon request; remote support is also available, if preferred.



Third-Party Representative such as cities, counties, tribes, water agencies and telecom providers may request to **send a representative to observe the PG&E EOC** during a PSPS event.

YOUR LOCAL REPRESENTATIVES

Geoffrey Money

Public Safety Specialist leads outreach to State and County OES and other emergency responders

Phone: 916-956-2743 | Email: Geoffrey.Money@pge.com

Jeana Arnold

Local Public Affairs leads outreach to city/county elected and staff

Phone: 831-202-2289 | Email: Jeana.Arnold@pge.com

Rob Morse

Senior Manager Local Customer Experience and Division Lead leads outreach to critical customers and addresses escalated issues

Phone: 831-801-8871 | Email: Robert.Morse@pge.com

Katie Allen

Media Rep serves as main point of contact between PG&E and local media

Phone: 661-865-8637 | Email: Katie.Allen@pge.com

Once PG&E’s Emergency Operations Center (EOC) is activated, we will provide information through the following:



Systemwide Cooperators Call

- Hosted once-daily by the EOC.
- Provide the latest high-level updates (inform only).
- Local and tribal agencies within the service area are welcome to join the call, as well as other public safety partners (i.e., telecom, water providers, transportation agencies, CCAs, etc.).



Event-Specific Information

- Up-to-date information will be provided twice-daily at regular intervals.
- Information provided will include counties and tribes in scope, estimated time of de-energization, estimated time of restoration, number of Medical Baseline Customers and number and types of critical facilities in scope.



When possible, we will strive to provide timely information to emergency service agencies in advance of notifying customers.

The portal includes the following:

Before an Event

PSPS Planning Maps
(GIS, KMZ)

Summary of Potentially Impacted Customers

List of Critical Customers (excluding Telecom)

List of Medical Baseline Customers

During an Event

Event-specific Information and Maps (GIS, PDF, KMZ)

Activated CRC Location Information

Summary of Affected Customers

List of Medical Baseline and Critical Customers

Public Safety Power Shutoff Portal

pge.com/pspsportal

NOTE: Though we are going to open the portal to all public safety partners (including telecom, water agencies and hospitals), not all partners will receive confidential customer data.

Overview

The information and resources in this portal are designed to help safety partners prepare in advance for Public Safety Power Shutoff (PSPS) events and respond when an actual PSPS event occurs.

PSPS planning information

The PSPS planning maps show the areas that are more likely to be shut off for safety when gusty winds and dry conditions, combined with a heightened fire risk, are forecasted to threaten a portion of the electric system.

[GO TO PSPS PLANNING](#)

PSPS event information

In the days and hours leading up to an actual PSPS event, the area(s) of impact are updated in response to changing weather conditions. Event area maps and customer and critical facility impact reports will change accordingly.

Event information will be available in June 2020.

Notifications

You will automatically receive email notifications each time PSPS planning or event information is updated. You may opt out of these notifications on the PSPS planning and event pages.



“PSPS Watch” Customer Notifications Scripts

WATCH EMAIL

PG&E
PG&E Outage Alert: Power shutoffs are required for safety
To: powercustomer@email.com

English español 中文 tiếng việt Tagalog na wika 한국어 русский язык VIEW AS A WEBPAGE >



Public Safety Power Shutoff

! PSPS Outage Watch

Due to current weather forecasts, your area is currently under a watch for a Public Safety Power Shutoff.

Current weather forecasts, including high winds and dry conditions, may require us to turn off power for wildfire safety.

 <p>ESTIMATED SHUT OFF: Wednesday, October 7th 6PM–10PM <small>Shutoffs may be delayed if weather improves</small></p>	 <p>ESTIMATED RESTORATION: Thursday, October 8th by 4PM</p>
--	---

 **3 METERS:**

To download a CSV file of your locations, [visit XXXXXX](#).

WATCH TEXT

PG&E PSPS Outage Alert
10/5/20: Due to weather
PG&E may turn off power for
safety at 1234 EL ANYWHERE
COURT on **10/7/20**.
Estimated shutoff: **6:00pm –
10:00pm**. Estimated
restoration: **10/8/20 by 4:00
pm**. Changes in weather can
affect shutoff & restoration
times. [pge.com/pspsupdates](#)
Reply w/ “1” to verify
receipt.

WATCH PHONE

This is PG&E calling with a PSPS outage alert. On 10/5/20, your power may be shut off for safety. To continue in English press 1. To replay this message at any time, press #.

Due to current weather forecasts 1234 EL ANYWHERE COURT is currently under a Watch for a Public Safety Power Shutoff. Weather forecasts including high winds and dry conditions, may require us to turn off your power to help prevent a wildfire. ESTIMATED SHUTOFF TIME: 10/7/20 between 6 pm and 10 pm. Shutoff times may be delayed if winds arrive later than forecast. We expect weather to improve by 6 am on 10/8/20. After weather has improved, we will inspect equipment before restoring power.

ESTIMATED RESTORATION TIME: 10/8/20 by 4 pm. This restoration time may change depending on weather conditions and equipment damage.

We recommend all customers have a plan for an extended outage. We will provide daily updates until the weather risk has passed or power has been restored. This will include a Warning alert if we have determined it is necessary to turn off your power. For planning resources or more information visit [pge.com/pspsupdates](#) or call 1-800-743-5002.

If you rely on power to operate life-sustaining medical devices or have access and functional needs, additional support may be available. For more information, visit [pge.com/specialresources](#).

If this is not the correct phone number for 1234 EL ANYWHERE COURT, press 2.

Press # to repeat this message.

Thank you. Goodbye.

“PSPS Warning” Notifications Scripts – General Customers

WARNING EMAIL

PG&E
PG&E Outage Alert: Power shutoffs are required for safety
To: powercustomer@email.com

English español 中文 tiếng việt Tagalog na wika 한국어 русский язык VIEW AS A WEBPAGE >

Public Safety Power Shutoff

PSPS Outage Warning
To protect public safety, PG&E has upgraded the Public Safety Power Shutoff watch to a warning.

ADDRESS:
123 Main Street

ESTIMATED SHUT OFF: Wednesday, October 7th 6PM–10PM <small>Shutoffs may be delayed if weather improves</small>	ESTIMATED RESTORATION: Thursday, October 8th by 4PM
--	--

Power will remain off until weather conditions improve and equipment inspections are complete. This restoration time could change due to weather conditions or equipment damage.

WARNING TEXT

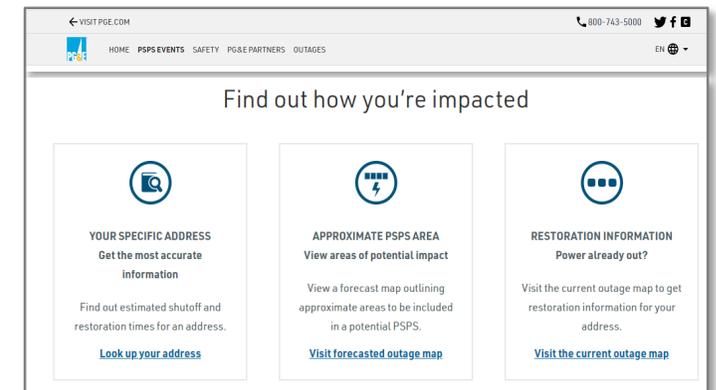
PG&E PSPS Outage Alert
10/7/20: PG&E will turn off power for safety at 1234 EL ANYWHERE COURT on **10/7/20**. Estimated shutoff: **6:00pm – 10:00pm** or later if weather improves. Estimated restoration: **10/8/20 by 4:00 pm** depending on weather & equipment damage. Info: pge.com/pspsupdates Reply w/ “1” to verify receipt.



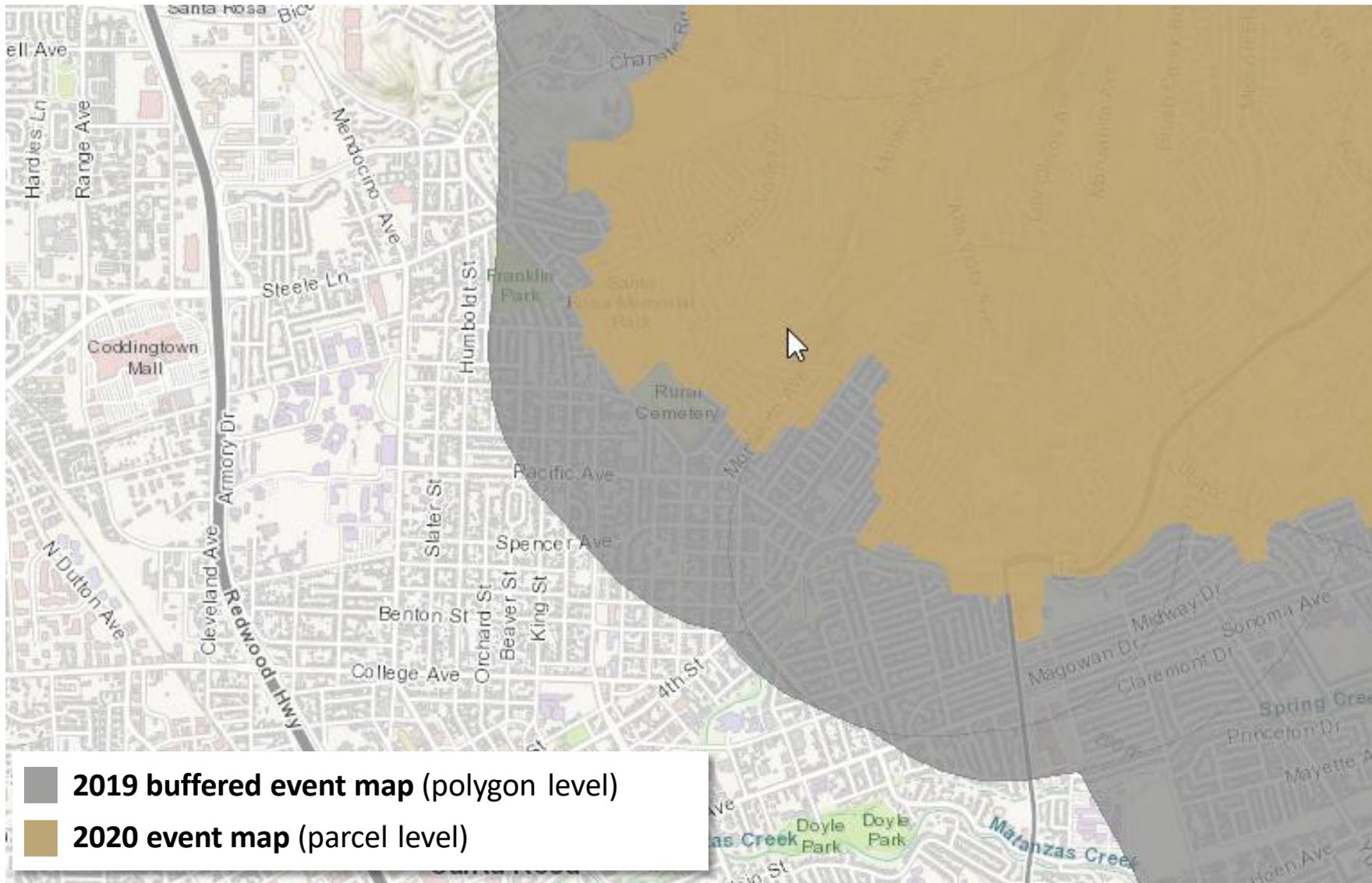
We immediately upgraded our website to serve higher levels of traffic during a PSPS event following the October 2019 PSPS event and website failure.

We are increasing website hosting capability to support even higher web traffic in the future, including:

- ✓ **Moving pge.com to the Cloud**
- ✓ **Built a new stand-alone, cloud-based website specifically for emergencies**
 - **Automatically redirects traffic** from pge.com to an alert site when an event is active
 - **Developing an “all-in-one” map** that includes both PSPS planned outages and actual outages
 - **Developed lower bandwidth options** to serve smart phone users
 - **Simpler language and layouts**
 - **Faster upload of information**
 - **Fully multilingual-translated content with ADA accessibility**



Sample PSPS Event Map Refinement



CRC Supplied Resources

During a PSPS event, PG&E will open CRCs to provide a safe location where community members can access basic resources, as well as up-to-date information. The following resources may be available:



During a PSPS event, CRC locations will be shared on [pge.com/pspsupdates](https://www.pge.com/pspsupdates) and via social media.

COVID-19 CONSIDERATIONS

PG&E is adapting our approach to CRCs to reflect appropriate COVID-19 public health considerations.

We will offer **Micro CRCs** (smaller, open air tents) and **Mobile CRCs** (vans) to **supplement Indoor CRCs** if shelter-at-home and physical distancing recommendations prevent the use of Indoor CRCs.

We are also taking measures to:

-  **Require facial coverings** in accordance with state and county guidelines
-  **Administer temperature checks** before entering indoor facilities
-  **Limit attendance** to maintain physical distancing
-  **Regularly sanitize surfaces**



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.



Resources include:	
	Portable backup power
	Emergency preparedness assistance
	Accessible transportation
	Hotel vouchers and food stipends
	Medical Baseline application assistance



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 Independent Living Centers (ILCs) and will be accepted at regional ILC locations.

cfilc.org

disabilitydisasteraccess.org

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.

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

Sharing The Message And Next Steps

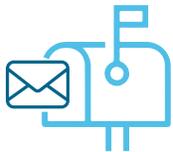
You can help your community take steps to prepare:



Encourage customers to update their contact info
(Visit pge.com/mywildfirealerts or call 1-866-743-6589)



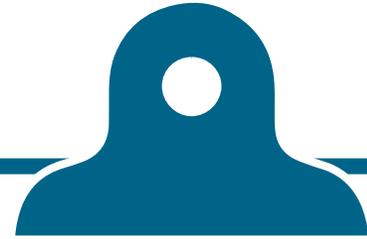
Inform customers that they may be **eligible for the Medical Baseline Program** (Visit pge.com/medicalbaseline)



Share preparedness messages through your **newsletter, website or social media**



Let us know about **other outreach opportunities** and ways we can partner



We want to coordinate with you on the following:

- Contact information
- Portal access
- CRC locations
- Critical facility information
- Event communications

Electric Grid Overview



Discussion





Appendix Table Of Contents

SLIDE # TOPIC

31 Wildfire Risks Across PG&E's Service Area

32 Wildfire Mitigation Plan Progress

33 Prioritizing Wildfire Mitigation Activities

34 Undergrounding

35 Inspection Plans

36 Community Microgrid
Enablement Program (CMEP)

SLIDE # TOPIC

37-38 2019 PSPS Overview

39 PSPS Transmission-Level Criteria

40 PSPS Decision Framework Summary

41 Critical Facility Customers

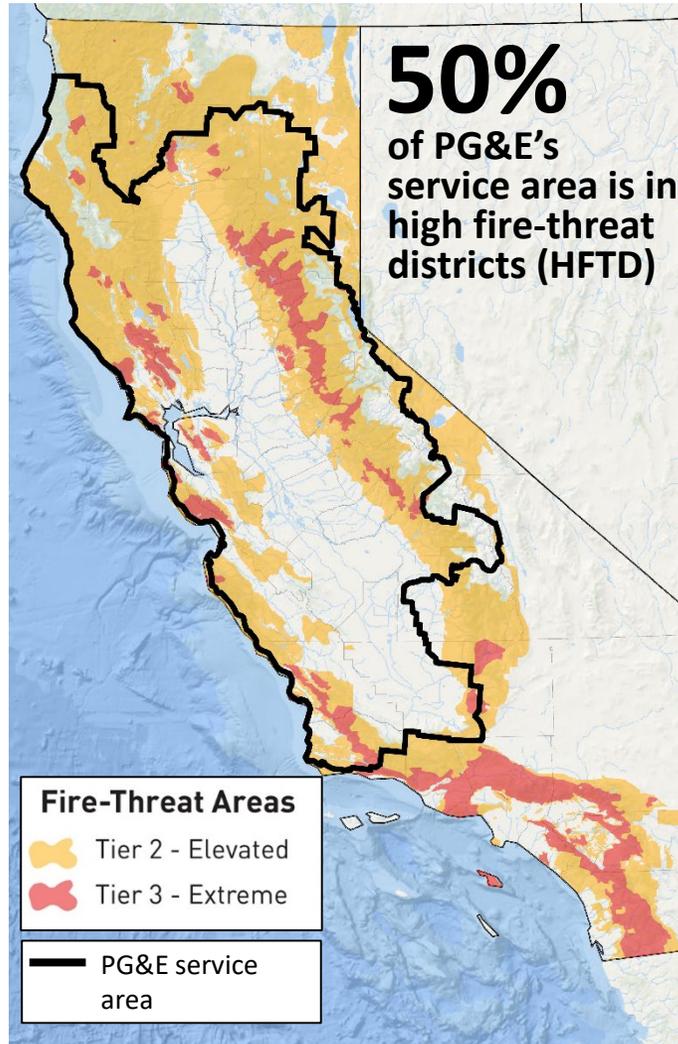
42 Medical Baseline Program

43 Additional Information

44 Preparedness Resources



Wildfire Risks Across PG&E's Service Area



Source: California Public Utilities Commission

	PG&E SYSTEMWIDE	SAN BENITO COUNTY
Electric customers served	5.5M	23,700
Electric customers in HFTD	505,600	1,300
Overhead distribution line miles	81,000	775
Overhead distribution line miles in HFTD	25,500	179
Overhead transmission miles	18,200	194
Overhead transmission miles in HFTD	5,500	92

Numbers are approximate

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

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



Wildfire Mitigation Plan Progress

PROGRAM



2019
COMPLETE



2020
TARGET



2020
PROGRESS

WEATHER STATIONS

Enhancing weather forecasting and modeling

426
STATIONS

400
STATIONS

169
STATIONS

HIGH-DEFINITION CAMERAS

Improving real-time monitoring of high-risk areas and conditions

133
CAMERAS

200
CAMERAS

75
CAMERAS

SYSTEM HARDENING

Stronger poles, covered lines and/or targeted undergrounding

171
LINE MILES

241
LINE MILES

138
LINE MILES

SECTIONALIZING DEVICES

Separating the grid into smaller sections to increase flexibility and reduce customer impact of PSPS events

287
DEVICES

600
DEVICES

469
DEVICES

TEMPORARY MICROGRIDS

Safely energize customers during a PSPS event

4
EXECUTED

62
READY TO OPERATE

45
READY TO OPERATE

ENHANCED VEGETATION MANAGEMENT

Inspecting, pruning and removing vegetation

2,498
LINE MILES

1,800
LINE MILES

1,345
LINE MILES

COMMUNITY RESOURCE CENTERS (CRCs)

Safe, energized locations for customers to receive basic resources and information

111
SITES ACTIVATED

80*
SITES TARGETED

24*
SITES READY

*PG&E originally targeted 201 CRC sites for the 2020 PSPS season; due to COVID-19 we have adjusted PSPS customer support programs during this time including creating multiple deployment strategies for CRCs (hardened sites, temporary sites, open-air tents and mobile, vehicle-based CRCs). Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

DATA AS OF 7/29

Prioritizing Wildfire Mitigation Activities

PG&E prioritizes wildfire mitigation work by evaluating which circuits in our service area are at the highest risk for wildfire. This is a dynamic and ongoing process.

We look at **three key factors** when determining a circuit's risk for wildfire:

- 1** Likelihood of an ignition
- 2** How quickly a fire could spread in that location and potential impact
- 3** How easy it is to get in and out of the area in the event of a fire

Working to include **PSPS likelihood** as an additional criteria

Circuits at the greatest risk for wildfire are prioritized for:

- ✓ Inspections and repairs
- ✓ Enhanced vegetation management
- ✓ System hardening

NOTE: In some cases, PG&E made changes to the prioritization order of circuits based on other factors (i.e., environmental issues, safety, planned projects, geographic access and weather).

The process for identifying priority circuits for undergrounding includes the following steps:



IDENTIFY overhead circuits with highest wildfire risk.



REVIEW of circuits by PG&E or contract staff specialized in electric systems, fire prevention and suppression, construction and environmental impact.



CONSIDER if elimination of high-risk assets is possible (including if customers or communities can be served through alternate means).



DETERMINE the most effective, timely and feasible approach. If undergrounding is not feasible, a hardened and/or relocated overhead system can be pursued.



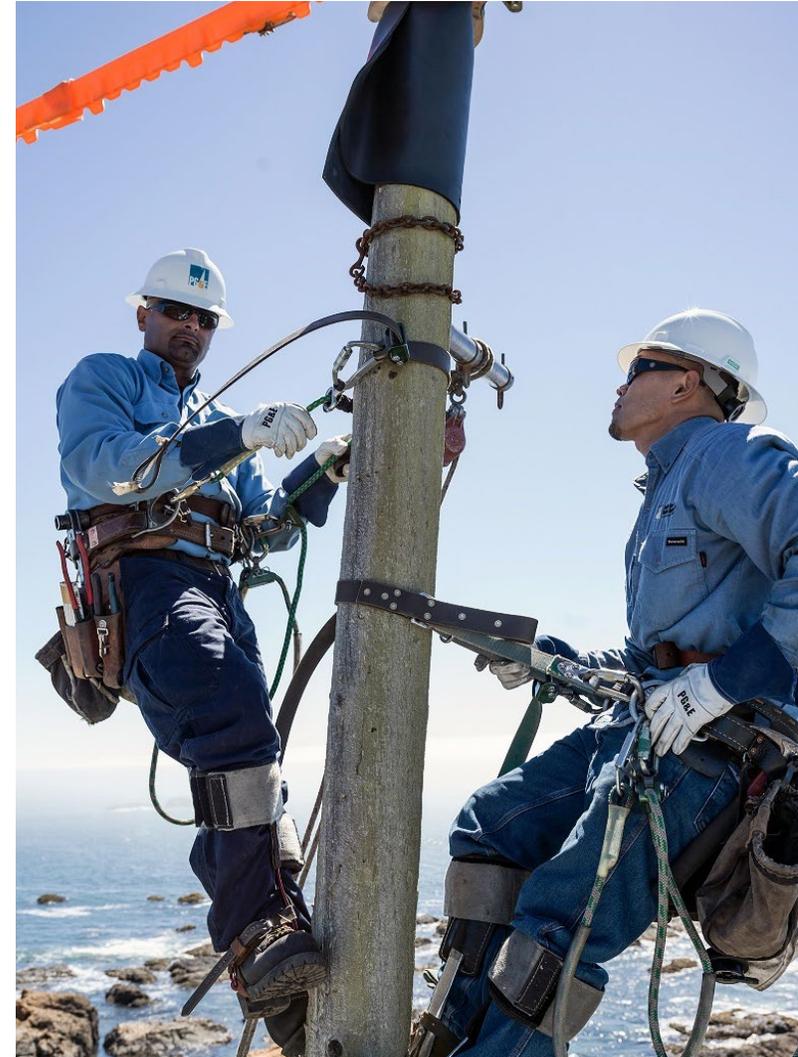
CONFIRM chosen risk mitigation approach and design (asset elimination, undergrounding or hardened overhead) will reduce wildfire risk.

We will engage with local officials throughout this process to discuss decision factors and considerations. **Note that undergrounding is a complex process that can take years to complete. We will continue to take immediate wildfire safety measures while work is planned.**

Our updated **System Inspections** program examines our **distribution, transmission and substation equipment** across the service territory to **find and fix potential risks to the safety and reliability of the system.**

- We are conducting inspections more frequently than regulations require in order to address wildfire risk, prioritizing work in Tier 2 and Tier 3 areas.
- **This year**, we plan to inspect more than 15,000 miles of electric lines, which includes:
 - **All lines in Tier 3 areas**
 - **One-third of lines in Tier 2 areas**
 - **Additional line miles in non-high fire-threat areas**

We **promptly repair the highest-priority equipment issues** found through inspections.



PG&E is exploring the ability to support communities and customers to **develop their own multi-customer or community-level microgrids** as a way to **reduce PSPS impacts**.

This may include **sponsoring enhanced technical support** for project development, **project tools** and in some cases, **one-time matching funds**.

To qualify for this program, microgrid projects must meet the following criteria:

- ✓ Serve areas that **experienced a PSPS event in 2019**
- ✓ Located in an area that could be **safely energized during a PSPS event**
- ✓ Serve **one or more critical facility**
- ✓ **Supported by local governments and stakeholders**

This program is currently under development and **pending approval by the California Public Utilities Commission (CPUC)**.



2019 PSPS Overview – System-wide

EVENT DETAILS	JUNE 8 - 9	SEPT 23 - 26	OCT 5 - 6	OCT 9 - 12	OCT 23 - 25	OCT 26 - NOV 1	NOV 20 - 21
CUSTOMERS IMPACTED	~22,000	~49,000	~12,000	~735,000	~179,000	~968,000	~49,000
COUNTIES IN SCOPE	5	7	3	35	18	39	11
CRCs OPEN	4	8	2	33	28	77	34
PEAK WIND GUSTS	63 mph	58 mph	51 mph	77 mph	80 mph	102 mph	75 mph
DAMAGE/HAZARDS	5	4	2	116	26	554	15
AVG. OUTAGE DURATION AFTER ALL CLEAR	5 HRS	7 HRS	4 HRS	25 HRS	5 HRS	22 HRS	10 HRS
AVG. OUTAGE DURATION TOTAL	16 HRS	16 HRS	14 HRS	37 HRS	24 HRS	55 HRS	25 HRS

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 July 2020.

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

EVENT DETAILS	OCT 26 - NOV 1
 CUSTOMERS IMPACTED	~1,400
 CRCs OPENED	1
 CRC VISITORS	~25

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

As part of our wildfire risk monitoring, we will review any transmission lines in the potentially impacted area.

While no single factor will drive a Public Safety Power Shutoff, **some factors for a transmission-level impact include:**

- ✓ Severity and duration of weather
- ✓ Site-specific environmental conditions that increase wear
- ✓ Age and condition of the asset
- ✓ Status of recent repairs
- ✓ Real-time field observations

If it is determined that a transmission line might be de-energized for safety, **PG&E works closely with the California Independent System Operator (CAISO) to assess the system impacts.**

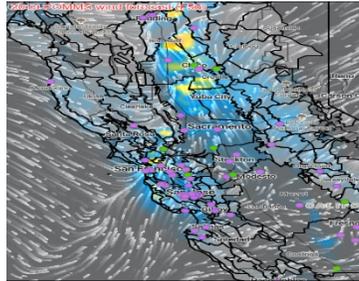


PSPS Decision Framework Summary

Distribution

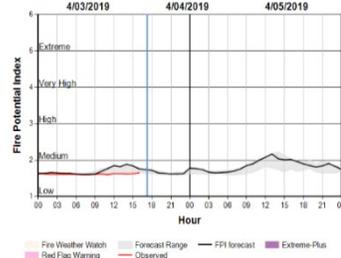
(i.e., below 60kV) and select 115 kV

Outage Producing Winds



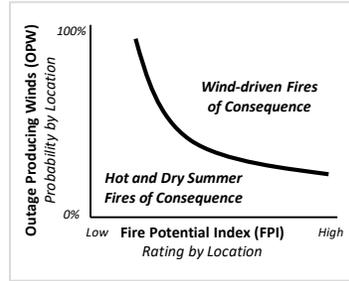
Localized quantification of outage probability based on 11-year outage history and 30-year climatology analysis

Fire Potential Index



Calibrated to PG&E's service area using 30-year climatology, historical fire occurrence and fire spread modelling

Extreme-Plus Threshold



OPW compared to FPI and normalized by location indicates a threshold for mitigating historical wind-driven fires of consequence

Threshold Analysis



OPW vs. FPI analyzed at the 3 km x 3 km grid across all of PG&E's service area during a potential PSPS event

Safety Shutoff Decision



Decision is made at the meteorological impact area

Transmission

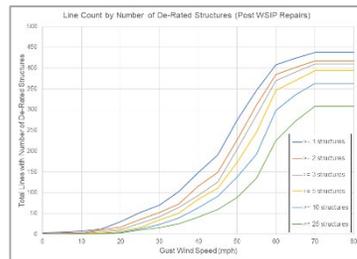
(i.e., 60/70kV, 115kV, 230 kV, 500 kV)

Asset Health



Risk assessed based on enhanced and accelerated inspections for all T-line structures in high fire-threat areas in Q4 2018 – Q2 2019

Wind Speed Threshold



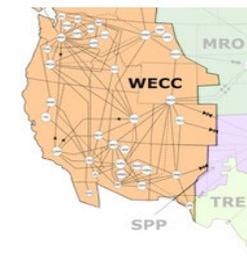
Determined wind speed threshold based on repair history and asset conditions; most conservative rating assumed for an entire T-line

CAISO Coordination



Real-time coordination studies with CAISO determine- direct and indirect impacts to grid integrity

Public Safety Impact



Grid stability and potential de-energization impacts considered (i.e., non-consequential loss, generation loss)

Safety Shutoff Decision



Decision is made on a transmission line level that intersects within a weather footprint

Critical Facility Customers

PG&E provides certain critical facility customers* with advanced communication (where possible), prioritized restoration and other resources in advance of and/or during planned outages (e.g., Public Safety Power Shutoffs) and unplanned outages (e.g., winter storms).

Facilities Identified As Critical Include:



Emergency Services Sector
(Police, Fire, Emergency)



Government Facilities Sector
(Schools, Jails, Prisons)



Health Care and Public Health Sector
(Health Departments, Medical Facilities)



Energy Sector (Public/Private Utility Facilities)



Water and Wastewater Systems Sector
(Water/Wastewater Facilities)



Communications Sector
(Communication Infrastructure)



Chemical Sector (Chemical Manufacturing, Maintenance or Distribution Facilities)



Transportation Sector (Major local and national public transportation centers)

Critical Facility Identification & Agency Outreach

- **PG&E has an existing process that identifies critical facility customers based on the criteria referenced above.**
- **We are providing cities, counties and tribal governments with a list of all critical facility customers within their jurisdiction** through our secure PSPS portal (excluding commercially sensitive customer data, including telecommunication facilities). Agencies are encouraged to review and provide feedback to this existing list in alignment with CPUC criteria.

*As defined by the California Public Utilities Commission in Public Safety Power Shutoff Decision 19-05-042.

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

Medical Baseline Program

What is Medical Baseline?



The **Medical Baseline Program** provides **financial assistance to residential customers** that have **special energy needs** due to certain **qualifying medical conditions**. Eligible customers may receive a “standard” Medical Baseline quantity of **approximately 500 kilowatt-hours (kWh) of electricity and/or 25 therms of gas per month**, in addition to regular baseline quantities.

Who Qualifies for Medical Baseline? If a full-time resident in your home is:

- 
 Dependent on **life-support equipment** used in the home.
- 
 A **paraplegic, hemiplegic, quadriplegic or multiple sclerosis patient** with special **heating and/or air-conditioning needs**.
- 
 A **scleroderma patient** with special heating needs.
- 
 Being treated for a **life-threatening illness, compromised immune system or other medical condition** with **special heating and/or air-conditioning requirements** necessary to sustain the patient’s life or prevent deterioration of the patient’s medical condition.

Applying for Medical Baseline



Complete the “**Medical Baseline Allowance**” application form. Forms can be found by visiting

pge.com/medicalbaseline



Mail the completed and signed application form to:

PG&E
Attention: Medical Baseline
 P.O. Box 8329
 Stockton, CA 95208



Due to novel coronavirus (COVID-19) shelter-at-home guidelines and changing medical practitioner priorities, customers can now **self-certify their eligibility to enroll in the Medical Baseline Program**. A signature from a qualified medical practitioner is **not required** to apply but may be requested to remain in the program beyond one year.

Where To Go For Additional Information



STAY UP TO DATE DURING A PSPS EVENT

pge.com/PSPSupdates



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/backuppower



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



PREPARING FOR OUTAGES

Tips for making a safety plan, building an emergency kit, planning for medical needs and more.

prepareforpowerdown.com



prepareforpowerdown.com

Statewide education and awareness resource, led jointly by PG&E, San Diego Gas & Electric and Southern California Edison at the direction of the CPUC

ready.gov

Disaster preparedness information from the U.S. Department of Homeland Security

readyforwildfire.org

CAL FIRE's wildfire preparedness website

cpuc.ca.gov/wildfiresinfo

Information on the CPUC's wildfire safety efforts

caloes.ca.gov

California Governor's Office of Emergency Services website

cafiresafecouncil.org

California Fire Safe Council website

noaa.gov

National Oceanic and Atmospheric Administration website