Community Wildfire Safety Program
Humboldt, Siskiyou and Trinity Counties

July 1, 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.
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.

Introductions

Vanessa Bryan  Manager, Local Customer Experience
Carl Schoenhofer  Senior Manager, Humboldt Division
Mike Weaver  Public Safety Specialist
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.
Your Electric System In Humboldt, Siskiyou and Trinity
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

<table>
<thead>
<tr>
<th>County</th>
<th>Distribution Line Miles in HFTD</th>
<th>Total Overhead Distribution Line Miles</th>
<th>Transmission Line Miles in HFTD</th>
<th>Total Overhead Transmission Line Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMBOLDT COUNTY</td>
<td>1,755</td>
<td>698</td>
<td>371</td>
<td>144</td>
</tr>
<tr>
<td>SISKIYOU COUNTY</td>
<td>5</td>
<td>5</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>TRINITY COUNTY</td>
<td>168</td>
<td>158</td>
<td>131</td>
<td>129</td>
</tr>
</tbody>
</table>

The map can be accessed at: [cpuc.ca.gov/FireThreatMaps](http://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.

The most likely electric lines to be turned off for safety are those that pass through Tier 2 or Tier 3 areas.

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

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 Weather Could Lead To A PSPS?

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

<table>
<thead>
<tr>
<th>Factor</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A RED FLAG WARNING</strong></td>
<td>declared by the National Weather Service</td>
</tr>
<tr>
<td><strong>LOW HUMIDITY LEVELS</strong></td>
<td>generally 20% and below</td>
</tr>
<tr>
<td><strong>FORECASTED SUSTAINED WINDS GENERALLY ABOVE 25 MPH AND WIND GUSTS IN EXCESS OF APPROXIMATELY 45 MPH</strong>, depending on location and site-specific conditions such as temperature, terrain and local climate</td>
<td></td>
</tr>
<tr>
<td><strong>CONDITION OF DRY FUEL</strong></td>
<td>on the ground and live vegetation moisture content</td>
</tr>
<tr>
<td><strong>ON-THE-GROUND, REAL-TIME OBSERVATIONS</strong> from PG&amp;E’s Wildfire Safety Operations Center and field observations from PG&amp;E crews</td>
<td></td>
</tr>
</tbody>
</table>

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

**Humboldt County**
1 event per year on average

**Siskiyou County**
1 event per year on average

**Trinity County**
1 event per year on average

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

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

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

WHAT WE’RE DOING:
- Installing sectionalizing devices
- Developing microgrids
- Conducting targeted undergrounding

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?

SHORTER IN LENGTH

GOAL: Restore customers twice as fast after severe weather has passed

WHAT WE’RE DOING:
- Adding more PG&E crews
- Expanding helicopter fleet from 35 to 65 and commissioning two new airplanes for aerial line inspections
- Utilizing infrared equipment to inspect at night

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.
SMARTER FOR CUSTOMERS

GOALS:
Provide more timely communications and additional resources

- AND -

Deliver more assistance before, during and after a PSPS event

WHAT WE’RE DOING:
- Enhancing meteorology technology
- 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 Community-Based Organizations (CBOs)
  - Making it easier for eligible customers to join and stay on the Medical Baseline program
  - Expanding in-language communications

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.
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.

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

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.
Sectionalizing The Electric Grid To Limit PSPS Impacts

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:

- **19 devices** planned for Humboldt County
- **0 devices** planned for Siskiyou County
- **0 devices** planned for Trinity 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.

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.
To minimize the impacts of PSPS events and outages, PG&E has reconfigured the Humboldt Bay Generating Station (HBGS) to allow for “islanding.”

This will allow portions of Humboldt, Mendocino and Trinity counties to be separated from the larger electric grid and energized exclusively from the HBGS.

HBGS will be able to provide power to up to 67,000 customers across approximately 20 cities and towns primarily within Humboldt County during a PSPS event or emergency outside of the area that impacts transmission lines serving the North Coast.

The size of the energized area is scalable to the scope of the potential PSPS event and other conditions that could be impacting the larger grid at that time.

Map is approximate and for illustrative purposes only. It shows the area potentially energized by the HBGS during a PSPS event or emergency.
We are working to lessen PSPS impacts through establishing additional temporary microgrids that can utilize backup generation sources to keep portions of communities energized.

In 2020, PG&E will have a portfolio of temporary generation assets that will support some of these microgrid locations across our service area.

- **70+** sites currently being considered across PG&E’s service area
- **2** sites considered for Humboldt County
- **0** sites considered for Siskiyou County
- **0** sites considered for Trinity County

The ability to energize these substations with temporary generation during a PSPS event will be subject to operational constraints, the specific circumstances of each event, and the available supply of temporary generation.

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.
Enhancing Vegetation 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.

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>2020 TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMBOLDT</td>
<td>54 LINE MILES</td>
</tr>
<tr>
<td>SISKIYOU</td>
<td>0 LINE MILES</td>
</tr>
<tr>
<td>TRINITY</td>
<td>0 LINE MILES</td>
</tr>
</tbody>
</table>

*Work plan is subject to change due to weather, access or other scheduled constraints

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.
Preparing For Public Safety
Power Shutoffs
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)

- **2 days** before power is turned off
- **1 day** before power is turned off
- **Just before** power is turned off
- **During** the PSPS event
- **Once** power has been restored

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.
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.

---

**WATCH EMAIL**

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.

---

**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 6pm and 10pm.

Shutoff times may be delayed if winds arrive later than forecasted.

We expect weather to improve by 6am on 10/8/20. After weather has improved, we will inspect equipment before restoring power.

**ESTIMATED RESTORATION TIME:** 10/8/20 by 4pm.

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.

---

**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.

---

---
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.

“PSPS Warning” Notifications Scripts – General Customers

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.
Community Resource Centers (CRCs)

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

- Heating and cooling
- Device charging
- 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/pspupdates 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, pop-up or reconfigured CRCs.

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.
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. We will also leverage our network of CBOs 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 Independent Living Centers (ILCs) and will be accepted at regional ILC locations.

<table>
<thead>
<tr>
<th>Resources include:</th>
<th>Portable backup power</th>
<th>Emergency preparedness assistance</th>
<th>Accessible transportation</th>
<th>Hotel vouchers and food stipends</th>
<th>Medical Baseline application assistance</th>
</tr>
</thead>
</table>

**Tri-County Independent Living (TCIL)**
707-445-8404
139 Fifth Street, Eureka, CA 95501

**Disability Action Center Satellite Office**
530-242-8550
2876 Park Marina Drive, Redding, CA 96001

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

*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.*
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

<table>
<thead>
<tr>
<th>EVENT DETAILS</th>
<th>OCT 9 - 12</th>
<th>OCT 26 - NOV 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMBOLDT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOMERS IMPACTED</td>
<td>~66,700</td>
<td>~66,800</td>
</tr>
<tr>
<td>PEAK WIND GUSTS</td>
<td>52</td>
<td>62</td>
</tr>
<tr>
<td>DAMAGE/HAZARDS</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>MAX. OUTAGE LENGTH (HRS)</td>
<td>42</td>
<td>97</td>
</tr>
<tr>
<td>SISKIYOU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOMERS IMPACTED</td>
<td>~50</td>
<td>~50</td>
</tr>
<tr>
<td>PEAK WIND GUSTS</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>DAMAGE/HAZARDS</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MAX. OUTAGE LENGTH (HRS)</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>TRINITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOMERS IMPACTED</td>
<td>~1,700</td>
<td>~1,700</td>
</tr>
<tr>
<td>PEAK WIND GUSTS</td>
<td>32</td>
<td>60</td>
</tr>
<tr>
<td>DAMAGE/HAZARDS</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MAX. OUTAGE LENGTH (HRS)</td>
<td>82</td>
<td>93</td>
</tr>
</tbody>
</table>

**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

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.

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.

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