Community Wildfire Safety Program
Butte, Plumas and Lassen Counties

April 29, 2020
Safety
Introductions

Vanessa Bryan  Manager, Local Customer Experience
Carl Schoenhofer  Senior Manager, North Valley Division
Rob Cone  Public Safety Specialist
Aaron Johnson  Vice President, Wildfire Safety and Public Engagement

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

We know that everyone is currently focused on staying safe from 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.
Your Electric System in Butte, Lassen and Plumas
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></th>
<th>Total Overhead Distribution Line Miles</th>
<th>Distribution Line Miles in HFTD</th>
<th>Total Overhead Transmission Line Miles</th>
<th>Transmission Line Miles in HFTD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Butte County</strong></td>
<td>2,729</td>
<td>1,068</td>
<td>643</td>
<td>283</td>
</tr>
<tr>
<td><strong>Lassen County</strong></td>
<td>109</td>
<td>57</td>
<td>43</td>
<td>33</td>
</tr>
<tr>
<td><strong>Plumas County</strong></td>
<td>357</td>
<td>252</td>
<td>173</td>
<td>162</td>
</tr>
</tbody>
</table>

The map can be accessed at: [cpuc.ca.gov/FireThreatMaps](http://cpuc.ca.gov/FireThreatMaps)
What Is a Public Safety Power Shutoff?
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?

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.
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>A RED FLAG WARNING</td>
<td>declared by the National Weather Service</td>
</tr>
<tr>
<td>LOW HUMIDITY LEVELS</td>
<td>generally 20% and below</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>CONDITION OF DRY FUEL</td>
<td>on the ground and live vegetation (moisture content)</td>
</tr>
<tr>
<td>ON-THE-GROUND, REAL-TIME OBSERVATIONS from PG&amp;E’s Wildfire Safety Operations Center and field observations from PG&amp;E crews</td>
<td></td>
</tr>
</tbody>
</table>
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.

Butte County

Lassen County

Plumas County

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 March 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?

<table>
<thead>
<tr>
<th>OUR GOAL THIS YEAR</th>
<th>WHAT WE’RE DOING</th>
</tr>
</thead>
</table>
| **SMALLER IN SIZE** | Reduce the number of customers impacted by PSPS events by one-third compared to 2019 | • 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** | Restore customers twice as fast after severe weather has passed | • 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 |
| **SMARTER FOR CUSTOMERS** | Provide more accurate/timely communications and additional resources | • Enhancing *meteorology technology* to pinpoint severe weather  
• Bolstering *website capacity*  
• Improving *customer alerts* and notifications  
• Upgrading *Community Resource Centers*  
• Improving *coordination* with local agencies and critical service providers |
| | Deliver more assistance before, during and after a PSPS event | • Working with the *California Foundation for Independent Living Centers* and other *Community-Based Organizations* to support vulnerable customers  
• Making it *easier for eligible customers to join the Medical Baseline program*  
• Expanding *in-language communications* |

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.

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

All data is preliminary and based on early 2020 work planning. Data as of March 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 working to install **600** new sectionalizing devices:

- **4** devices planned for Butte County
- **0** devices planned for Lassen County
- **12** devices planned for Plumas 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 PSPS.

---

All data is preliminary and based on early 2020 work planning. Data as of March 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>BUTTE</td>
<td>212 LINE MILES</td>
</tr>
<tr>
<td>LASSEN</td>
<td>N/A</td>
</tr>
<tr>
<td>PLUMAS</td>
<td>3 LINE MILES</td>
</tr>
</tbody>
</table>

All data is preliminary and based on early 2020 work planning. Data as of March 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
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 shut off 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 shut off 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.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.
Community Resource Centers (CRC)

CRCs provide customers and residents with a safe, energized, ADA-accessible location with basic resources and up-to-date information. The following resources will 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 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.

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.

**Resources include:**

- Portable backup power
- Emergency preparedness assistance
- Accessible transportation
- Hotel vouchers and food stipends

To learn more, please visit:

- cfilc.org
- disabilitydisasteraccess.org

More information is available through these ILC locations:

**Disability Action Center (DAC)**
(530) 893-8527
1161 East Ave, Chico, CA 95926

**Disability Action Center (DAC)**
(530) 242-8550
169 Hartnell Ave #128, Redding, CA 96002

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?**

**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](http://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](http://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](http://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](http://pge.com/medicalbaseline)

**KEEP UP TO DATE DURING A PSPS EVENT**

[pge.com/PSPSUpdates](http://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

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>JUNE 8 - 9</th>
<th>SEPT 23 - 26</th>
<th>OCT 5 - 6</th>
<th>OCT 9 - 12</th>
<th>OCT 23 - 25</th>
<th>OCT 26 - NOV 1</th>
<th>NOV 20 - 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMERS IMPACTED</td>
<td>~19,200</td>
<td>~23,800</td>
<td>~11,500</td>
<td>~31,200</td>
<td>~19,000</td>
<td>~19,300</td>
<td>~300</td>
</tr>
<tr>
<td>PEAK WIND GUSTS</td>
<td>51</td>
<td>54</td>
<td>51</td>
<td>56</td>
<td>63</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>DAMAGE/HAZARDS</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>11</td>
<td>3</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>MAX. OUTAGE LENGTH (HRS)</td>
<td>21</td>
<td>31</td>
<td>18</td>
<td>86</td>
<td>42</td>
<td>113</td>
<td>17</td>
</tr>
</tbody>
</table>

| CUSTOMERS IMPACTED | ~5 | ~5 | ~800 | ~300 | ~800 | - |
| PEAK WIND GUSTS | - | - | 36 | 37 | 40 | 54 | - |
| DAMAGE/HAZARDS | - | 0 | 0 | 2 | 2 | - |
| MAX. OUTAGE LENGTH (HRS) | 15 | 15 | 85 | 30 | 119 | - |

**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 March 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.

---

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

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

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 March 2020.
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.