Public Safety Power Shutoff (PSPS)
CALIFORNIA PUBLIC UTILITIES COMMISSION STAFF BRIEFING

July 14, 2022
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

**Topics for Discussion**

1. 2022 Overview
2. Mitigation Efforts
3. Public Safety Partner Engagement
4. Customer Resources and Engagement

**PG&E Presenters**

**Shawn Holder**  
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Senior Manager, Planning and Operations

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Director, Digital Channels
Each year, we improve our PSPS Program to:

- Further refine our ability to identify and mitigate catastrophic wildfire risk
- More precisely target PSPS through infrastructure and meteorological advancements
- Further reduce customer impacts through expanded resources and support
- Provide backup power to Community Resource Centers and critical facilities and install temporary generation microgrids to maintain service to our customers

We are building on improvements from previous years and continuing to make our system safer and more resilient.

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### Year-Over-Year PSPS Comparison

We continue to evolve and improve, keeping our customers safe and reducing the impact of PSPS events.

<table>
<thead>
<tr>
<th>Event Details</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2021 Comparison to 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSPS Events</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>17% fewer outages</td>
</tr>
<tr>
<td>Customers Impacted</td>
<td>2,014,000</td>
<td>653,000</td>
<td>80,400</td>
<td>88% fewer customers impacted</td>
</tr>
<tr>
<td>Average Number of Counties Impacted</td>
<td>17</td>
<td>17</td>
<td>10</td>
<td>41% fewer counties impacted</td>
</tr>
<tr>
<td>Average Outage Duration (hours)</td>
<td>43</td>
<td>35</td>
<td>31</td>
<td>11% less time without power</td>
</tr>
<tr>
<td>Average Outage Restoration Time (hours)</td>
<td>17</td>
<td>10</td>
<td>12</td>
<td>20% increase in restoration time</td>
</tr>
<tr>
<td>Damage/Hazards</td>
<td>722</td>
<td>257</td>
<td>442</td>
<td></td>
</tr>
<tr>
<td>Peak Wind Gusts</td>
<td>102 MPH</td>
<td>89 MPH</td>
<td>102 MPH</td>
<td>(13% decrease in restoration time when excluding January PSPS event)</td>
</tr>
<tr>
<td>Potential Impacted Acreage Prevented</td>
<td>3.5M</td>
<td>912K</td>
<td>691K</td>
<td></td>
</tr>
<tr>
<td>Potential Damaged Structures Prevented</td>
<td>280K</td>
<td>196K</td>
<td>86K</td>
<td></td>
</tr>
</tbody>
</table>

97% notification accuracy  
98% Medical Baseline notification accuracy  
**Address Alerts** launched SMS text in 16 languages for customers and non-customers
In 2021, we surveyed customers about their PSPS experience. This information was used to guide improvements in 2022.

Actions to Address Feedback

- **Improved awareness** of Community Based Organizations, food resource partnerships, outreach and education
- **Updated notifications** to be clear, concise and accurate
- **Expanded access** to portable batteries and generator rebates
- **Increased availability** of food banks, Meals on Wheels and grocery delivery
- **Working to reduce potential impacts** by installing sectionalizing devices and distribution microgrids

Survey Overview

- **~35K** De-energized customers received a survey (August – October 2021)
- **~9%** Total response rate

Top Themes

- **October showed significant improvement** from August and September
- **Top issues** identified were accurate restoration time estimates and resources for those with disabilities, medical or critical needs
- **Limited awareness** and usage of resources, comments about lost food and costs (e.g. fuel for generators)
### Continuing to Expand Short- and Long-term Mitigation Efforts

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>COMPLETED THROUGH 2021</th>
<th>PLANNED IN 2022</th>
<th>COMPLETED IN 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undergrounding Our Lines</strong></td>
<td>122 Miles</td>
<td>175 Miles</td>
<td>72 Miles</td>
</tr>
<tr>
<td>Undergrounding powerlines to reduce wildfires caused by equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overhead System Hardening</strong></td>
<td>740 Miles</td>
<td>470 Miles</td>
<td>250 Miles</td>
</tr>
<tr>
<td>Installing stronger poles and covered powerlines and conducting line removals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enhanced Powerline Safety Settings</strong></td>
<td>~11,500 Miles*</td>
<td>~44,300 Miles*</td>
<td>~41,500 Miles*</td>
</tr>
<tr>
<td>Enhanced safety settings detect powerline faults and help prevent wildfires</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weather Stations</strong></td>
<td>1,313 Stations</td>
<td>100 Stations</td>
<td>34 Stations</td>
</tr>
<tr>
<td>Better predicting and responding to severe weather threats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High-Definition Cameras</strong></td>
<td>502 Cameras</td>
<td>98 Cameras</td>
<td>47 Cameras</td>
</tr>
<tr>
<td>Monitoring and responding to wildfires through increased visibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enhanced Vegetation Management</strong></td>
<td>6,359 Miles</td>
<td>1,800 Miles</td>
<td>933 Miles</td>
</tr>
<tr>
<td>Addressing vegetation that poses a higher potential for wildfire risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sectionalizing Devices and Transmission Switches</strong></td>
<td>1,209 Devices/Switches</td>
<td>115 Devices/Switches</td>
<td>29 Devices/Switches</td>
</tr>
<tr>
<td>Separating the grid into smaller sections and narrowing the scope of PSPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temporary Distribution Microgrids</strong></td>
<td>8 Sites</td>
<td>4 Sites</td>
<td>0 Sites</td>
</tr>
<tr>
<td>Keeping customers energized during a Public Safety Power Shutoff</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data as of 06/30/2022

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*Circuit-capable miles
Enhancing the Resiliency of the Electric Grid

To help prevent wildfires and reduce the number of customers affected by PSPS, we are deploying new technology and investing in a stronger, more flexible grid.

<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>2022 PROGRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Microgrids</td>
<td>5 planned in 2022</td>
</tr>
<tr>
<td>– Energizing “main street” corridors, central community resources and critical facilities</td>
<td>8 total ready to operate</td>
</tr>
<tr>
<td>Islanding Locations</td>
<td></td>
</tr>
<tr>
<td>– Reconfiguring the electric system to allow certain areas to remain energized during PSPS events</td>
<td>6 locations ready to operate</td>
</tr>
<tr>
<td>Remote Grids</td>
<td></td>
</tr>
<tr>
<td>– Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid</td>
<td>1 completed</td>
</tr>
</tbody>
</table>

*Additional remote grids under consideration and in planning stages

Data as of 5/4/2022; Local work plans are subject to change and data is based on the best available information at this time.

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We share notifications with public safety partners* **before, during and after** a PSPS.

**In-Event Communications**

- **Texts, emails and phone calls** throughout the event
- **Situation reports, outage maps, customer lists** via the Portal
- **State Executive Briefing** with state agencies
- **Systemwide Cooperators Calls**
- **Cooperators Communications** with counties and tribes

- **Agency Representative** assigned to each county/tribe in scope; embedded support is also offered
- **Third-party representative** may request to observe PG&E’s virtual EOC
- **Notifying Public Safety Answering Points (PSAP)**
- **Critical Infrastructure Lead** single point of contact in the EOC

*First/emergency responders at the local, state, tribal and federal level, water, wastewater and communication service providers, affected community choice aggregators, publicly-owned utilities/electrical cooperatives, the CPUC and the Cal OES and CALFIRE
-enhancing our pspS agency portal

2022 refinements and updates

- Automating data uploads
- Reducing data refresh times
- Improving performance for routine maintenance activities
- Increasing stability and computing speeds through use of cloud-based environment
- Reducing time to notify users that new geospatial information is available
- Increasing our ability to update outage maps with changes to event scope or customer impacts

2,150+ total users have access

Includes:

- Public Safety Partners (cities, counties, tribes, telecommunications providers, Community Based Organization partners etc.)
- 950+

Education and Preparedness

Training sessions planned for August through October

The portal was utilized during the PSPS full-scale exercise to test new developments and end-to-end processes

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### 2022 TARGETED ENGAGEMENTS

<table>
<thead>
<tr>
<th>Activity</th>
<th>COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWSP Advisory Committee</td>
<td>2</td>
</tr>
<tr>
<td>Expanded to focus on all CWSP initiatives</td>
<td></td>
</tr>
<tr>
<td>Regional Working Groups</td>
<td>10 of 20</td>
</tr>
<tr>
<td>Continuing to provide a forum for regional and tribal stakeholders to discuss PSPS and wildfire safety work</td>
<td></td>
</tr>
<tr>
<td>Local Government Forums</td>
<td>105</td>
</tr>
<tr>
<td>Individualized meetings with cities and counties to discuss PSPS and local issues of importance</td>
<td></td>
</tr>
<tr>
<td>PSPS Exercises and Seminar</td>
<td>5</td>
</tr>
<tr>
<td>Conducting a PSPS-focused seminar and continuing exercises to simulate a PSPS with external partners</td>
<td></td>
</tr>
<tr>
<td>Tribal CWSP Webinar</td>
<td>1</td>
</tr>
<tr>
<td>Hosted with all tribes in our service area to gather feedback and discuss PSPS and wildfire safety</td>
<td></td>
</tr>
<tr>
<td>Public Safety Partner Webinars</td>
<td>3 of 5</td>
</tr>
<tr>
<td>Hosting segment-specific meetings to gather feedback and discuss PSPS and wildfire safety</td>
<td></td>
</tr>
<tr>
<td>Additional PSPS Briefings &amp; Workshops</td>
<td>121</td>
</tr>
<tr>
<td>Continuing to host ad hoc meetings and workshops to improve our PSPS Program</td>
<td></td>
</tr>
</tbody>
</table>
Lessons Learned from the first full-scale exercise on 6/13 – 6/17

What Worked Well

- **System-Wide Event**
  - 40 counties
  - 18 PG&E Divisions
  - 400K+ customers

- **Partnership**: External partner engagement including 48 external contributors from 14 partner agencies. Partners included
  - Cal OES
  - California Department of Water Resources
  - SCE
  - 194 external observers

- **Complexity**: Addition of a wildfire incident overlying the PSPS to add realistic stress and challenge to the response

Areas For Improvement

- **System Issue**: Automation of PSPS viewer importing scope from MET DB experienced bug and manual workaround was required

- **Restoration playbook**: Transmission all clear automation process was unavailable and had to be completed manually delaying playbook delivery.

- **Coordination**: Improved pre- and in-exercise communications to mitigate potential confusion regarding the context of the full-scale exercise vs. and actual event
Coordinating with Critical Customers and Facilities

- Engaged with ~2,600 critical customers, counties and tribes; reviewed facilities' lists, ensure points of contact are current and share preparedness information
- Conducted resiliency collaborative meetings with telecommunications providers
- Dedicated PG&E contact for telecommunications providers to address real-time issues
- Hosting segment-specific preparedness webinars
  - Community-choice aggregators
  - Telecommunications providers
  - Water agencies
  - Transmission customers
  - Hospital and healthcare providers
- Targeted outreach to small water agencies
- Ongoing coordination with the Association of California Water Agencies, Hospital Council of Northern and Central California, and the California Hospital Association
- Weekly collaboration with the California Hospital Association and Hospital Council
- Meetings with 12 hospitals at higher risk of PSPS to discuss permanent resiliency solutions
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### Proposed SED Updates to Post-PSPS Event Reporting

- **Total Number of Existing Post-Event Reporting Requirements**: 118
- **Infeasible Due to Turnaround Time**: 117
- **Feasible**: 48
- **16 Feasible due to accessibility**
- **181* Total Number of New Post-Event Reporting Requirements**
  - *PG&E classified 19 data points as new reporting requirements that SED had previously identified as existing requirements

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### Feedback

#### Feasibility of Obtaining Additional Data This Season
- Potential time constraints to validate the accuracy of data, creates opportunities for errors
- Time and resources needed to re-work existing systems to automate data
- Confirmation of data may not be available for days or weeks after an event

#### Shifting Critical Resources and Priorities from Emergency Response
- Concerns with template changes occurring during wildfire season
- Diversion of critical resources could compromise our ability to safely execute a PSPS event and the management of other concurrent emergencies such as a wildfire

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**What’s New in 2022**

- **Pop-up notice** directing customers with a slower internet connection to our low-bandwidth tools
- **Power restored message** shown by address up to 48 hours after power is restored
- **Increased ability to zoom** in and out on our outage map

**What’s Upcoming in 2022**

- **New PSPS landing page** with a focus on Access and Functional Needs (AFN) resources, including 2-1-1
- **New Community Resource Center (CRC) page**
- **Phase tracker** by address to let customers know where they are in the restoration process
- **Streamlined navigation** to get customers to PSPS resources more quickly
- **Aligned content** with customer vs. partner needs
Incorporating Feedback From External Partners

<table>
<thead>
<tr>
<th>Feedback/Issue</th>
<th>2022 Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>~24,800 customers received a Warning Notification with the incorrect script</td>
<td>Enhancing notification tools to mitigate such issues from occurring in the future</td>
</tr>
<tr>
<td>~750 customers were de-energized and not notified prior to the brief outage</td>
<td>Improving our processes to confirm resources are in place two hours ahead of the planned de-energization time</td>
</tr>
<tr>
<td>“Courtesy policy” limits PSPS notifications between 9 p.m. and 8 a.m., as requested by AFN stakeholders</td>
<td>Evaluating our notification approach in response to the CPUC’s Administrative Enforcement Order and associated fine</td>
</tr>
</tbody>
</table>

Updates To Our PSPS Notifications Based on 2021 Feedback

### Additional Notification Updates

**Updated Notification Language:**
- De-energization initiated
- Transmission
- Pending delay (NEW)
- Direct Mention of 2-1-1 (NEW)

**Updated Notification Tool:**
- Non-PSPS outage notification suppression
- Outage alert suppression will now be maintained at the address level instead of by ZIP code allowing for significantly more refinement.

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PSPS Notification “Courtesy Hours”

Current Policy

- Under our “courtesy hours” policy, we do not send notifications between 9 p.m. and 8 a.m.
- This can impact “Warning” (Imminent), “Power Off” (De-energization Initiated), All Clear, and/or Re-energization complete notifications

TCPA Background

- The Telephone Consumer Protection Act (TCPA) regulates auto-dialed calls, prerecorded calls, and text messages
- TCPA generally prohibits telephone solicitation calls (marketing and advertising messages) between 9 p.m. and 8 a.m.

Stakeholder Feedback

- PG&E should send notifications prior to 9 p.m. whenever possible as medical and independent living needs customers typically go to bed close to 9:00 PM.
  - Foundation of Resources for Equality and Employment for the Disabled
- People with disabilities have important routines that may include getting plenty of rest and sleep. PSPS notifications should be sent during the day and early evening hours to prevent unnecessary confusion or disruption.
  - California Foundation for Independent Living Centers

Next Steps

Clarify CPUC stance regarding courtesy hours policy and associated compliance with D.19-05-042 requirements
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<table>
<thead>
<tr>
<th>NOTIFICATION</th>
<th>DESCRIPTION</th>
<th>RELEASE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmissions</td>
<td>Created three new templates to notify customers of Warning, All-Clear, and Restore</td>
<td>6/24/2022</td>
</tr>
<tr>
<td>AI Chatbot</td>
<td>Added a link within the All-Clear template for customer-owned line customers to engage our new chatbot for real time updates</td>
<td>6/24/2022</td>
</tr>
<tr>
<td>Outage Notification Suppression Phase I</td>
<td>Phase I allows more granularity than existing ZIP code suppression by providing outage notifications by ZIP code, SPID, outage number, and message template.</td>
<td>6/24/2022</td>
</tr>
<tr>
<td>New De-energization Message</td>
<td>A message template to notify customers when power has been shut off</td>
<td>Q3 2022</td>
</tr>
<tr>
<td>Pending/Delay Messaging</td>
<td>A message template to notify customers when a PSPS outage has been delayed and no additional cancelation or update is available to customers</td>
<td>Q3 2022</td>
</tr>
</tbody>
</table>
Community Resource Center (CRC) Planning

In collaboration with counties and tribes, we have continued to build out and refine our CRC portfolio and offerings.

2022 Improvements

- Partnering with accessible transportation agencies on expanding transportation options to and from CRCs
- Piloting process for customers to leave devices at CRCs for charging during operating hours
- Driving increased awareness of CRCs through pre-season marketing, social media and local radio ads
- Providing printed materials in large print
- Increasing customer service staff training to serve visitors with access and functional needs

How We Gather Feedback

Solicited feedback on CRC sites from tribes and counties in our service territory

Reviewed portfolio of sites for gaps and opportunities for improvement

113 Indoor Sites
281 Outdoor Sites (micro, mobile or tented)
### CRC Locations and Resources

<table>
<thead>
<tr>
<th>Details/Resources</th>
<th>Indoor</th>
<th>Outdoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 Health and Safety Measures</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ADA-Accessible Restroom</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Heating and Cooling</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Device Charging*</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Wi-Fi Service</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Bottled Water</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Non-Perishable Snacks</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>“Grab-and-go” resource offerings**</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Tables and Chairs</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Bagged Ice</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Blankets</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Security Personnel</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Cellular Coverage</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Customer Service Staff</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Wind/Weather-Resistant</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Privacy Screens</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

* Medical device charging will be prioritized in times of high demand

** Grab-and-go bag contains device charger, water, snacks and info card

### Details

- **Indoor Site**
  - Indoor site (i.e. library, school)

- **Outdoor Site**
  - Open air tents at outdoor site

**COVID-19 Health and Safety Measures**

- ADA-Accessible Restroom
- Heating and Cooling

**Device Charging**

- Disability

**Wi-Fi Service**

- Non-Perishable Snacks

**“Grab-and-go” resource offerings**

- Bagged Ice
- Blankets

**Tables and Chairs**

- Security Personnel

**Cellular Coverage**

- Customer Service Staff

**Wind/Weather-Resistant**

- Privacy Screens

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**Potential CRC Locations**

Standard operating hours at all CRCs: **8 AM - 10 PM**
## EXPANDING ACCESS AND ENHANCING CUSTOMER SUPPORT

### PROGRAM

#### Community-Based Organization Partnerships

Support and resources for all interested vulnerable customers
- Expanded network of 78 community-based organization partnerships in all counties
- Partnering with accessible transportation agencies on transportation options
- Additional resources identified by AFN Collaborative Planning team (CRC improvements, additional CBO training, battery solutions for medications)

#### Food Resource Partnerships

Resources to replace food lost during PSPS
- Partnering with ~50 organizations serving all counties potentially impacted by PSPS (26 Meals on Wheels partnerships in 22 counties, 22 food bank partnerships in 37 counties)

#### Portable Batteries

Batteries available to all interested/qualiﬁed Medical Baseline and electricity-dependent AFN HFTD customers
- Distributing ~6,000 batteries to Medical Baseline and electricity dependent AFN customers (~14,300 total distributed to date; goal of ~19,000 by 2022 year-end)
- Expanded eligibility to non-income qualiﬁed Medical Baseline customers in HFTDs (total scope of ~29,000 customers)

#### Generator and Battery Rebate Program

Rebates available for all PSPS/EPSS impacted customers in HFTDs
- Adjusted tiered rebate amounts to support ~1,300 customers with rebates (799 provided to date in 2022, 2,022 since program inception)
- Expanded eligibility to all customers in HFTDs or served by an EPSS circuit AND have experienced 2 or more PSPS events.
- Backup Power Transfer Meter pilot to cover costs for ~1,500 customers (64 to date in 2022)

#### Multi-Solution Partnerships

Service-area wide, full-service solutions for individuals with Access and Functional Needs
- Building awareness through radio and direct to customer outreach and launching 2-1-1’s proactive care coordinator program

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Engaging Customers with Access and Functional Needs

**What we’re doing in 2022**

- Providing specialized materials, mailers and phone calls to customers eligible for our Medical Baseline program
- Updating contact information for Medical Baseline Customers
- Conducting ADA accessible webinars (with closed captioning available in Spanish, Chinese and English)
- Hosting webinars for organizations that serve persons with disabilities and/or access and functional needs
- Partnering with over 200 CBO Informational Partners to amplify preparedness messaging and awareness of resiliency resources
- Providing program material in sixteen languages and Braille and developing videos in American Sign Language
- Encouraging customers to self-identify as AFN
- Developing targeted radio and social media to highlight applicable programs/resources
- Issuing AFN specific PSAs before and during PSPS

**AFN Self-Identification Pilot**

**What:** Multi-channel pilot campaign to customers that includes direct mail, email and proactive call-outs requesting customers self-identify anyone in their household.

**Who:** Customers with a propensity to identify with one or more AFN characteristics and more likely to be impacted by PSPS.

**Results:**
- **Overall Response Rate:** 27%
  - Direct Mail: 35% response rate
  - Email: 19% response rate
  - Proactive Call-outs: 17% response rate

~10,460 additional customers identified as reliant on electricity to maintain necessary life functions that are not MBL
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**Medical Baseline Marketing and Outreach Activities**

PG&E is encouraging customers to participate and enroll in the Medical Baseline Program using targeted outreach.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Channel(s)</th>
<th>Target Audience</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBL Digital Media Ads</td>
<td>Google, Facebook, Nextdoor</td>
<td>Adults age 45+</td>
<td>Jan-Dec</td>
</tr>
<tr>
<td>MBL Acquisition Campaign</td>
<td>Email &amp; direct mail</td>
<td>Customers most likely eligible for MBL based on PG&amp;E's proprietary MBL propensity model</td>
<td>Apr - Jul</td>
</tr>
<tr>
<td>MBL Residential Bill Inserts</td>
<td>Bill inserts</td>
<td>All residential customers</td>
<td>May</td>
</tr>
<tr>
<td>MBL Radio Ads</td>
<td>Radio</td>
<td>Adults age 45+</td>
<td>May-Oct</td>
</tr>
<tr>
<td>MBL TV Ads</td>
<td>Pilot campaign in Spanish with Univision</td>
<td>Pilot campaign in Spanish with Univision targeting Sacramento, Stockton, Modesto, Chico, and Redding</td>
<td>May-Oct</td>
</tr>
<tr>
<td>MBL TV Ads</td>
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<td>May-Oct</td>
</tr>
</tbody>
</table>

**Medical Baseline Campaign Statistics**

<table>
<thead>
<tr>
<th></th>
<th>2021 COMPLETE</th>
<th>2022 PROGRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Channel Count</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>Direct Mail Customers Reached</td>
<td>2,463,629</td>
<td>1,000,000+</td>
</tr>
<tr>
<td>Email Customers Reached</td>
<td>2,317,955</td>
<td>600,000</td>
</tr>
<tr>
<td>Bill Insert Customers Reached</td>
<td>11,016,000</td>
<td>11,016,000</td>
</tr>
<tr>
<td>Digital Media Total Impressions</td>
<td>128,745,568</td>
<td>15,449,348</td>
</tr>
<tr>
<td>Digital Media Total Conversions (Clicks)</td>
<td>317,645</td>
<td>40,686</td>
</tr>
</tbody>
</table>

Data as of June 30, 2022
Appendix
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

Enhanced Powerline Safety Settings (EPSS) Enablement Criteria

EPSS Enablement Criteria has been extended to protect All HFRA/HFTD Circuits unless Disable Criteria met of R1 and Damp or Calm.

### EPSS Enabled on All Circuits

- **R1**
- **R2**
- **R3**
- **R4**
- **R5**

### Disable EPSS if:

- Wind speed <19+ mph, or
- Relative humidity >75%, or
- Dead Fuel Moisture >9%

### PG&E Utility Fire Potential Index

- **R5+**
- Very Dry Fuels + Wind Event

- **R5**
- Very Dry Fuels

- **R4**
- Moist fuels

- **R3**

### LAST RESORT

**PSPS considered if:**

- Wind gusts 30-40+ mph
- Relative humidity <30%
- Dead Fuel Moisture <9-11%

### EPSS during RFW / FWW / PSPS adjacent conditions

**NOTE:**
- **RFW** = Red Flag Warning
- **FWW** = Fire Weather Watch
- **PSPS** = Public Safety Power Shutoff

HFRA & HFTD

Non-Tier Buffer
**EPSS Year-To-Date Progress**

<table>
<thead>
<tr>
<th>CUSTOMERS PROTECTED</th>
<th>MILES PROTECTED</th>
<th>CIRCUITS PROTECTED</th>
<th>DAYS OF PROTECTION</th>
<th>OUTAGES RESTORED</th>
<th>AVG. OUTAGE LENGTH</th>
<th>CUSTOMERS ON AVG. IMPACTED PER OUTAGE</th>
<th>UNIQUE CUSTOMERS IMPACTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8M Customers</td>
<td>~44K Miles</td>
<td>1,018 Circuits</td>
<td>121 Days (out of 176 YTD)</td>
<td>517 Outages</td>
<td>~3 HRS Average (53% better than 2021)</td>
<td>~850 Customers</td>
<td>~320K Customers</td>
</tr>
</tbody>
</table>

Data as of June 25, 2022

~78% reduction in CPUC-Reportable Ignitions in HFTDs on powerlines with these safety settings enabled.

CIRCUITS EXPERIENCING:
- 0 outages: 533
- 1 outage: 174
- 2 outages: 62
- 3 or more outages: 55

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Incorporating Lessons Learned

2021 Stakeholder Engagement

400+ Stakeholder Meetings
26 Wildfire Safety Working Sessions
20 Regional Working Groups
10 Post-Season Listening Sessions
4 PSPS Advisory Committee
4 Post-Event Agency Surveys
4 Tabletop and Full-Scale Exercises

Engagement with critical facility stakeholders

What We Heard

- 95% of post-event survey respondents’ PSPS experience improved in 2021
- Notable process improvements for critical customers
- Data and information sharing improved but requires further refinement
- Portal sometimes contained inaccurate maps or outdated information
- Event scope/criteria changes needed more quickly and through established channels
- Proactively share information about Enhanced Powerline Safety Settings (EPSS)

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.
PG&E recognizes that ongoing engagement with healthcare practitioners, medical associations, and medical device suppliers is a key opportunity to increase enrollment in the Medical Baseline Program.

- PG&E, SCE, SDG&E and SoCalGas provided an **Annual MBL Training to In Home Support Services Providers (IHSS)** and provided online MBL resources

- PG&E, SCE, and SDG&E presented a **webinar to the Hospital Association** which included information on PSPS, MBL and other resources

- PG&E also engaged with the following **healthcare industry and durable medical equipment partners**:
  - Plumas District Hospital
  - California Association of Health Facilities (CAHF)
  - Marysville Medical Clinic
  - CA Physicians’ Assistant Board
  - Owens HealthCare and Durable Medical Equipment Company
  - We Care Home Assistants LLC
Expanding Resource Partnerships for Vulnerable Customers

We have expanded our support for customers with Access and Functional Needs, with more partnerships and resources.

- California Foundation for Independent Living Centers (CFILC)  
  - 16 centers  
  - 48 counties served

- Meals on Wheels  
  - 26 organizations  
  - 22 counties served

- Food Banks  
  - 22 organizations  
  - 37 counties served

- Portable Battery Program Providers  
  - 6 providers  
  - 42 counties served

- In-Language and Additional Partnerships  
  - 12 services  
  - 21 counties served

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**Medical Baseline Program (MBL)**
Assists residential customers who rely on power for certain medical needs.

**Vulnerable Customer Status (VCS)**
Customers that have an individual in the household with a serious illness or condition that could become life threatening if service is disconnected can self-certify.

**Electricity Dependent**
Customers who are at an increased risk of harm to their health, safety and independence during a PSPS, can self-identify.

Additional PSPS notifications and doorbell rings
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

Outreach and resources for customers who could be more acutely impacted by PSPS continues to be a primary focus for preparedness and in-event support.

**Resources for Customers with Access and Functional Needs**

**Offseason Preparedness**
- Contact Information Acquisition
- Understanding Support Options
- Pre-PSPS Event Support

**In-Event Support**
- CBO Partnerships
  - CFILC DDAR support
  - 211
  - Meals on Wheels in-event food delivery and food bank post-event food replacement
- Community Resource Centers

**In-Event Notifications**
- Watch and Warning Notifications
- Acknowledgement Required
- Hourly Retries
- Doorbell Rings

**Resource Referral Process**
- MBL Escalation Process
- 2021 Event Examples
  - Hotel accommodations and food stipend
  - In-event portable backup battery delivery
  - Delivery of fuel gift card

• Hotel accommodations and food stipend
• In-event portable backup battery delivery
• Delivery of fuel gift card