

# 2020 Public Safety Power Shutoff Events

Joint IOUs Workshop

California Public Utilities Commission

March 29, 2021



# Building on 2020 PSPS Improvements

## FEWER IMPACTED CUSTOMERS

**55%** FEWER  
IMPACTED CUSTOMERS\*

- **600+ sectionalizing devices** and line switches limited the size of outages
- Increased **weather model resolution** resulted in more precise events
- **450 megawatts of temporary generation** supported substations and critical customers

## REDUCED RESTORATION TIMES

**41%** FASTER  
RESTORATION TIMES\*

- **30 additional aircraft** (65 total) used for faster patrols
- Used **infrared equipped aircraft** to enable night inspections
- Utilized our **expanded mutual assistance program**

## BETTER INFORMATION AND RESOURCES

BETTER **COMMUNICATIONS, RESOURCES AND ASSISTANCE** BEFORE, DURING AND AFTER A PSPS EVENT

- Improved coordination with local agencies and critical service providers; **84% of agencies said experience improved** in 2020
- Improved and strengthened **PSPS event website**
- Enhanced customer notifications with more detailed information and **98.5% notification accuracy**
- Opened **245 CRCs** supporting ~50,000 visitors
- Increased Access and Functional Needs customer support
- Partnered with **250+ community-based organizations** to provide **30,400 food packages** and **over 6,500 batteries**



## Listening and Improving

Engaging with agency/tribal leaders, public safety partners and customers before, during and after PSPS events to listen, gather feedback and identify areas for improvement.

### CUSTOMERS

- Public Safety Town Halls (6)
- Customer Wildfire Safety Webinars (23)
- Ongoing Customer Surveys (2)
- Customer Feedback from Call Center, Website, Emails (9,000+)
- People with Disabilities and Aging Council Meetings (8)
- Statewide AFN Council Meetings (6)

### AGENCIES

- Post-Season Listening Sessions (43)
- Emergency Manager Coordination Meetings (34)
- Regional Working Groups (10)
- Emergency Manager Advisory Committee (8)
- Ongoing Stakeholder Meetings (400+)
- Post-Event Agency Surveys (4)



## What we heard from our customers

- Approx. 60% of customers say PG&E's handling of PSPS improved compared to 2019
- Users of pge.com noted an improved experience and availability of information
- Experienced inaccurate or inconsistent information in some cases (notifications)
- More accurate restoration times are needed (notifications)
- Customers lose time and money due to PSPS (outage impacts)
- Medical Baseline customers want additional support and information (partnerships)



## What we heard from agencies

- Significant improvement in PSPS execution, noting scope reductions were impactful
- PSPS Portal improved, still need more timely and accurate info across channels (agency coordination)
- Build on partnerships with CBOs and explore other resource offerings (partnerships)
- Continue engagement around Community Resource Center locations (coordination)
- Find additional ways to partner with telecom providers (coordination)
- Requests for mitigation and temporary generation info and support (coordination)

# Customer Support Programs



To reflect customer feedback, we are improving notifications, providing batteries and generator rebates and bolstering resources for customers with Access and Functional Needs

PROGRAM	2020 STATUS	2021 TARGET
<b>Customer Notifications</b>	<ul style="list-style-type: none"> <li>▪ Notifications with <b>restoration timing</b></li> <li>▪ <b>ZIP code alerts</b> for non-account holders</li> <li>▪ <b>13 languages</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Accurate notifications consistent</b> across all channels</li> <li>▪ <b>Refined and concise</b> messaging</li> <li>▪ <b>Address Alerts</b> for customers and non-customers</li> <li>▪ <b>16 languages</b></li> </ul>
<b>Community-Based Organization Partnerships</b>	<ul style="list-style-type: none"> <li>▪ <b>250+ partnerships</b> in place</li> <li>▪ <b>Access and Functional Needs (AFN) support</b></li> <li>▪ <b>In-language</b> information</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>35+ additional CBOs</b> targeted</li> </ul>
<b>Food Resource Partnerships</b>	<ul style="list-style-type: none"> <li>▪ <b>Partnerships with:</b> <ul style="list-style-type: none"> <li>○ <b>21 food banks</b> in 36 counties</li> <li>○ <b>18 Meals on Wheels</b> in 20 counties</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Meal replacement options</b> for customers in <b>46 counties</b></li> <li>▪ <b>10 new partnerships</b></li> </ul>
<b>Portable Batteries</b>	<ul style="list-style-type: none"> <li>▪ <b>6,550+ batteries</b> distributed</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>~11,500 batteries</b> available</li> <li>▪ Covering all interested low-income Medical Baseline customers in high fire-threat areas</li> </ul>
<b>Community Resource Centers</b>	<ul style="list-style-type: none"> <li>▪ <b>361 locations</b> prepared in coordination with local government agencies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Targeting <b>370 total ADA-accessible sites</b></li> <li>▪ <b>Locations in partnership</b> with county and tribal agencies</li> </ul>
<b>Well Water Rebates</b>	<ul style="list-style-type: none"> <li>▪ <b>Pilot program launched</b> for well water users</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Continue well water rebate pilot program</b></li> <li>▪ <b>Expand program promotion</b></li> </ul>

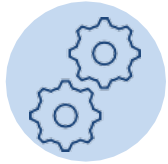
# Agency/Tribal Engagement and Support



**We are working closely with agencies/tribes to share information and incorporate local feedback on key programs like Community Resource Centers and temporary generation**

PROGRAM	2020 STATUS	2021 TARGET
<b>PSPS Listening Sessions</b>	<ul style="list-style-type: none"> <li>35+ sessions to gather feedback and determine key improvements</li> </ul>	<ul style="list-style-type: none"> <li>41 sessions held after the 2020 wildfire season</li> </ul>
<b>Emergency Manager Coordination Meetings</b>	<ul style="list-style-type: none"> <li>34 meetings on PSPS planning efforts and local details like Community Resource Centers and temporary generation</li> </ul>	<ul style="list-style-type: none"> <li>Offering to co-host 47+ sessions</li> </ul>
<b>In-Event Communications</b>	<ul style="list-style-type: none"> <li>Improved coordination through <b>dedicated Agency Representatives</b></li> <li>Revamped <b>information-sharing portal</b></li> <li>Refined <b>notification process</b></li> </ul>	<ul style="list-style-type: none"> <li>Improving <b>State briefings</b></li> <li>Revamping <b>information-sharing portal</b></li> <li>Enhancing <b>situation reports</b></li> </ul>
<b>PSPS Exercises and Trainings</b>	<ul style="list-style-type: none"> <li>3 simulated PSPS events and 3 tabletops to practice coordination and identify areas for improvement</li> </ul>	<ul style="list-style-type: none"> <li>Conducting 2 <b>tabletop exercises</b> with external partners</li> <li>Conducting 2 <b>full-scale exercises</b> with external partners</li> <li><b>Additional trainings and workshops</b>, as needed</li> </ul>
<b>Regional Working Groups and Advisory Committee</b>	<ul style="list-style-type: none"> <li>10 <b>working group meetings</b> and 8 <b>advisory committee meetings</b> held to collaborate on PSPS and wildfire safety work</li> </ul>	<ul style="list-style-type: none"> <li>Hosting 20 <b>Quarterly Regional Working Groups</b> with key agencies, public safety partners and AFN stakeholders</li> <li>Hosting 6 <b>bi-monthly Advisory Committee meetings</b> with select county, city and tribal governments</li> </ul>
<b>Ongoing Outreach and Engagement</b>	<ul style="list-style-type: none"> <li>400+ meetings on wildfire safety and PSPS</li> </ul>	<ul style="list-style-type: none"> <li>Hosting and participating in meetings</li> <li>52 meetings to date in 2021 (estimated 400+ total)</li> </ul>

# Operational Improvements



**We are taking additional actions to better pinpoint where and when the greatest wildfire risk will arise and to minimize impacts**

PROGRAM	2020 STATUS	2021 TARGET
<b>Improved Situational Awareness</b>	<ul style="list-style-type: none"> <li>▪ 1,028 advanced weather stations installed</li> <li>▪ 349 HD cameras installed</li> </ul>	<ul style="list-style-type: none"> <li>▪ 300 additional weather stations</li> <li>▪ 135 additional HD Cameras</li> </ul>
<b>Weather Modeling</b>	<ul style="list-style-type: none"> <li>▪ Refined weather modeling to narrow scope from 3km to 2km</li> <li>▪ 4 days of forecast data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing modeling improvements</li> <li>▪ 5 days of forecast data</li> </ul>
<b>Sectionalizing</b>	<ul style="list-style-type: none"> <li>▪ 600+ distribution and transmission sectionalizing devices</li> </ul>	<ul style="list-style-type: none"> <li>▪ 275+ additional distribution sectionalizing devices and transmission line switches</li> </ul>
<b>Microgrids/ Temporary Generation</b>	<ul style="list-style-type: none"> <li>▪ 60+ substations prepared</li> <li>▪ 6 temporary distribution microgrids constructed</li> <li>▪ 458 MW of power secured</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10 additional substations</li> <li>▪ 5 additional microgrids</li> <li>▪ 280 MWs of power targeted</li> </ul>
<b>Restoration</b>	<ul style="list-style-type: none"> <li>▪ Restored 95% of customers within 24 hours of weather “all clear” in 2020</li> </ul>	<ul style="list-style-type: none"> <li>▪ Restore all customers within 24 hours of weather “all clear”</li> <li>▪ More customized plans for remote, frequently impacted circuits</li> </ul>
<b>System Hardening</b>	<ul style="list-style-type: none"> <li>▪ 370+ circuit miles hardened with stronger poles and lines</li> </ul>	<ul style="list-style-type: none"> <li>▪ 180 additional circuit miles prioritized in areas with highest wildfire risk</li> </ul>