# 2022 Public Safety Power Shut Off (PSPS) CPUC Briefing

August 2, 2022

Presenters:

# Agenda

- PacifiCorp's CA Service Territory
- PSPS Zones, Event History & 2022 Goals
- NEW Pre-Season Report (PRESR)
  - CRC Plan
  - Critical Facilities & Infrastructure Plan
  - PSPS Exercise Reports
  - Education & Outreach
  - Notification Plan
- Post Event Reporting Improvements
- Elevated Fire Risk (EFR) Settings
- Grid Hardening Update
- Medical Baseline / Access and Functional Needs
- Customer Resources



# PacifiCorp's Service Territory (refresher)

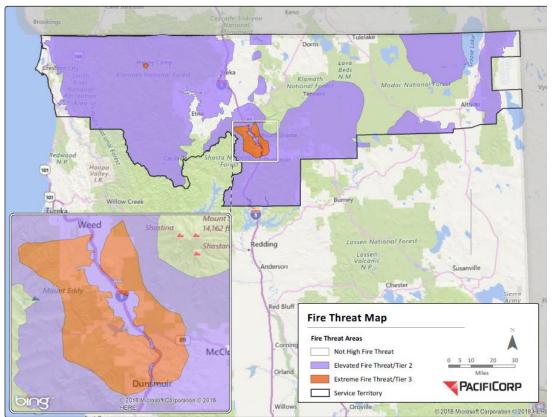
## **General Stats**

PacifiCorp provides electricity to approximately **45,000** California customers via **62 substations**, **2,500 miles** of distribution lines, and about 780 miles of transmission lines across nearly 11,000 square miles

### System Wide Initiatives

- Weather Stations
- Situational Awareness
- **Operational Protocols**
- Community Education and Outreach

# **California Service Territory**



### **HFTD**

Heightened Risk of Wildfire

Approximately 1,200 miles or 36% of all overhead lines are located within the HFTD

850 miles of overhead **distribution** in the HFTD;

350 miles of overhead transmission in the **HFTD** 

### **Programmatic Shifts**

- Increased Frequency of **Asset Inspections**
- **Accelerated Condition** Correction
- **Enhanced Vegetation** Management



# **PSPS Zones**

Extreme Risk of Wildfire

Approximately **250 miles** or 10% of all overhead distribution lines are located within 5 individual PSPS Zones

# **Prioritized System** Hardening

- **Covered Conductor**
- **Advanced Protection** and Control
- **Expulsion Fuse** Replacements

# **PSPS History & Goals**

- PacifiCorp has identified 5 discrete PSPS Zones in two extreme geographic areas
- PSPS Zones reflect extreme risk locations and serve as a starting point

# **PSPS History**

Year	# of Events	Event Duration	Total Customers Affected	AFN/ Medical Baseline Customers Affected	Critical Facilities Affected	CRCs Activated
2020	1	7.9 hours	2,559	5	13	0
2021	1	9.6 hours	1,953	11	19	1
2022	-	-	-	-	-	-

2022 Goals

Continue using PSPS as a tool and measure of last resort while:

### Reducing the Scale, Scope, & Frequency through:

- ☐ Grid Hardening to make the system more resilient
- ☐ Installation of new devices to support sectionalization
- ☐ Situational Awareness to facilitate a surgical approach



Metrics Trending Down
(OUTPACING RISK INCREASE)

# of PSPS Events
Duration of Events
Customer Impact
Restoration Time

### Mitigating Impacts of PSPS with:

- ☐ Enhanced planning & preparations
- ☐ Advanced warning and notifications
- ☐ CRC Activation to provide community services
- ☐ Customer Generation Programs

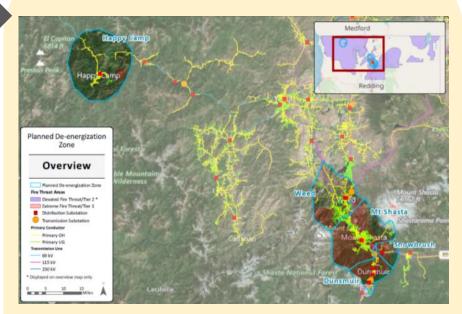


### Metrics Trending Up (CONSISTENT WITH PSPS ACTIVITY)

% Customers Notified
% AFN Positive Customer Notifications
CRC Activations

Portable Battery Deliveries

### **PSPS Zones Reflect Extreme Wildfire Risk**



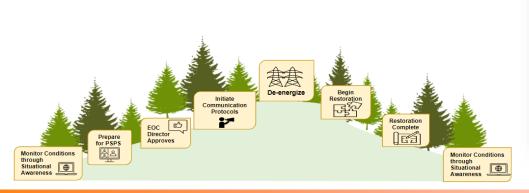
PSPS Zone Name	Customers	OH Distribution	UG Distribution	# of Circuits
Dunsmuir	1,788	31	8	11
Нарру Сатр	626	40	6	4
Mt. Shasta	5,077	86	78	11
Snowbush	18	3	1	2
Weed	2,560	88	63	16
TOTAL	10,069	248	157	

Map of Public Safety Power Shut Off Zones

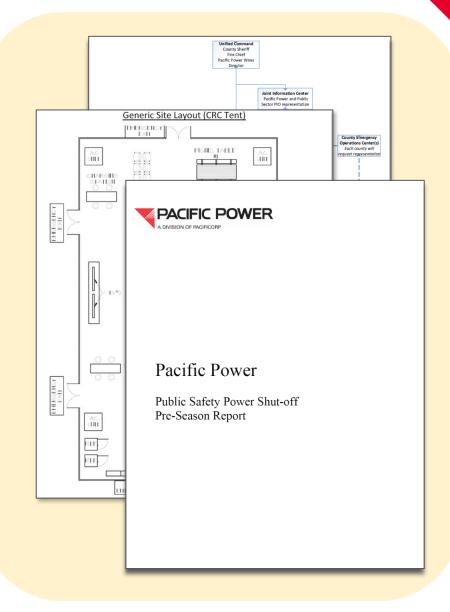
# Pre-Season Report (PRESR)

# **NEW** Pre-Season Report Overview

- Overview of Report
- Community Resource Center (CRC) Plan
- Critical Facilities and Infrastructure Plan
- PSPS Exercise Reports
- Education and Outreach
  - Preparedness coordination with local/tribal/county emergency response
  - Upgrades to public safety partner portal
  - IOU liaison representative plans at counties and tribes
  - Updates to public PSPS webpage
- Notification Plan

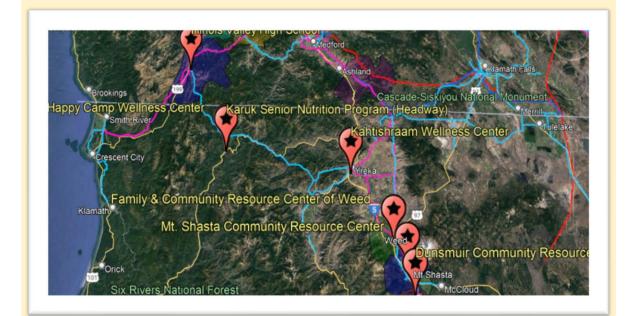






# **NEW PRESR - CRC Plan**

# **Community Resource Centers (CRCs)**



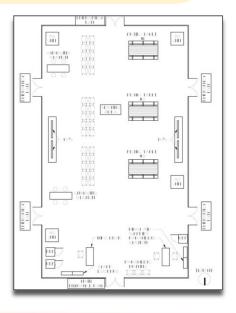
# **Available Services**

- ✓ Shelter from environment
- ✓ Air conditioning
- ✓ Potable water
- ✓ Seating and tables
- ✓ Restroom facilities
- ✓ Refrigeration for medicine and/or baby needs
- ✓ Interior and area lighting

- ✓ On-site security
- ✓ Communications capability such as Wifi access, Sat Phone, Radio, Cellular phone etc.
- ✓ Televisions
- ✓ On-site medical support (EMT-A at a minimum, Paramedic preferred)
- ✓ Charging stations

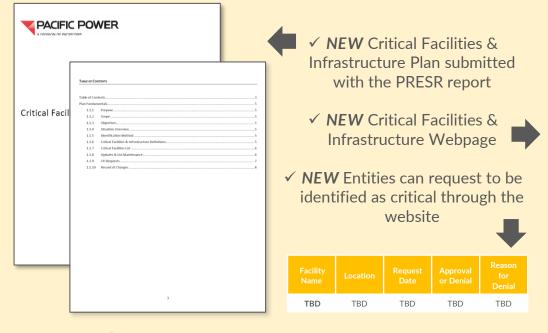
### New in 2022!

- ✓ Air Purifiers
- ✓ Air Quality Monitors
- √ Ice
- ✓ Non-perishable snacks
- ✓ Small Crates for Pets
- ✓ Portable ADA Ramp



# **NEW PRESR- Critical Facilities & Infrastructure Plan**

# **NEW** Critical Facilities & Infrastructure Plan Included in Pre-Season Report



### 2022 Goals

- Reach out to all critical facilities to review points of contact
- Gather addition information for enhanced planning, protocols, and reporting.
- Continue coordination with critical facilities and emergency response partners.

# **NEW** Critical Facilities & Infrastructure Webpage

Critical facilities and infrastructure				
< Back to wildfire safety				
The California Public Utilities Commission (CPUC) has defined facilities and critical infrastructure as entities "that are essential to the public safety and that require additional assistance and advance planning to ensure resiliency during de-energization events."				
Pacific Power provides prioritized restoration, backup power evaluation, additional communications and other resources before and during <b>Public Safety Power Shutoff events</b> to critical facility customers who provide services that are essential to public safety. We recognize that these customers require additional assistance and advance planning to ensure resiliency. Entities that fall within the industry sectors listed below are considered "critical facilities and infrastructure," as defined by the CPUC.				
Are you a public safety partner? If so, visit our Public Safety Partner Portal.				
Industry sectors				
Emergency services sector	~			
Government facilities sector	~			
Healthcare and public health sector	~			
Energy sector	~			
Water and wastewater systems sector	~			
Communications sector	~			
Chemical sector	~			
Food and agriculture sector	~			

https://www.pacificpower.net/outages-safety/wildfire-safety/critical-facilitiesinfrastructure.html

# **NEW** PRESR- PSPS Exercises

# **Completed Exercises**

- April 28: Siskiyou County Tabletop Exercise
- May 26: Siskiyou County Functional Exercise

# **Common Observation Themes**

- AFN Contact and partnership
- Telecommunications coordination for loss of capability
- Communications limits to rural areas

# **Identified Solutions**

- AFN Liaison engagement with Public Health authorities and CBO/FBO in area
- Telecommunications contact information updated and coordination procedures formalized
- Customer service changing cadence for calls to prevent overwhelming communications infrastructure





# **NEW PRESR- Education & Outreach**

# **NEW** Public Safety Partner Portal

### **Public Safety Partner Portal**

The Public Safety Partner Portal is an online resource that includes Public Safety Power Shutoff planning and event-specific information for public safety partners to support emergency management efforts. Public Safety Partners include:

- · Emergency responders from federal, state, local and tribal governments
- Telecommunications providers
- Water agencies
- Publicly owned utilities
- · Emergency hospitals
- Transportation agencies

Maps and other information are updated monthly and can be accessed at any time. In the event of a Public Safety Power Shutoff, event-specific information will be made available to portal users before, during and after the outage to support emergency management efforts.

### **Public Safety Partner Portal**

Return visitors can access the Public Safety Partner Portal through the button below. You will be taken to a secure site to log in. See instructions on signing in.

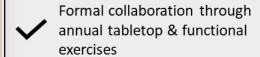
PORTAL LOGIN

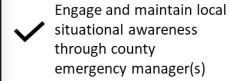
### **Portal Access**

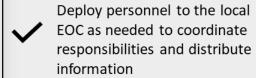
New users can request access to the portal through the "Request Access" link below. Once approved, you will receive an email notification within one business day with instructions on setting up your account.

REQUEST ACCESS

# **EMERGENCY RESPONSE PARTNERS**







Situational reporting with county emergency managers

Bring on additional PacifiCorp personnel to support more frequent coordination

## **CRITICAL INFRASTRUCTURE**

Maintain lists within our new Public Safety Partner Portal (launched June 1st, 2022)



Outreach to update primary and secondary points of contact for facilities & collect backup genera tion capabilities

Facilities can request to be added to our list online from our critical facilities page

Validation of our critical infrastructure with the respective county or tribal emergency managers

Public Safety Partner Portal

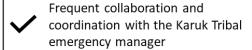
California Public Utilities Commission (CPUC) has defined critical facilities as entities "that are essential to the public safety and that require additional assistance and advance planning to ensure resiliency

Here, you can get contact and location information

for critical facilities in your jurisdiction that could be

during de-energization events.

Twice-monthly meetings with the Karuk Tribe



Coordinate and provide information to tribal communities via county emergency managers

Align messaging strategies between tribal public information and corporate communications

Bring on additional PacifiCorp personnel to support more frequent coordination



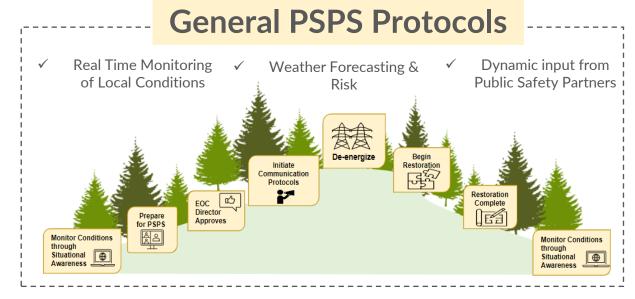


# **NEW PRESR- Notification Plan**

- Once the decision is made to implement a PSPS,
   Notification Protocols are initiated
- Pending any changes to dynamic weather factors and risk, notifications protocols generally include:

Notification Protocols				
48-72 hours prior De-energization warning to Public Safety Partner				
24-48 hours prior	De-energization warning			
1-4 hours prior	De-energization imminent			
Event begins	De-energization begins			
Re-energization begins	Re-energization begins			
Re-energization completed	Re-energization completed			
Cancellation of event	De-energization event canceled			

- During a PSPS event, notifications to medical baseline and AFN populations are managed separately from general notifications
- Pacific Power performs positive or affirmative communications using various methods:
  - □ Personal Calls □ Text Messages □ Home Visit



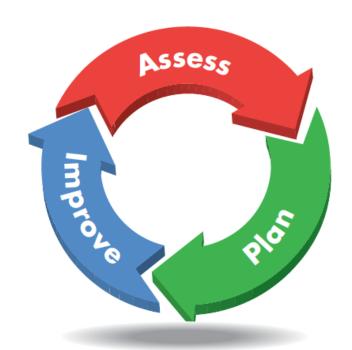
# **2022 Goals**

- Enhance ability to better categorize AFN and Medical Baseline Customers ~
- Strengthen relationships with CBOs

Example: Initiated contact with Redwood Coast Resource Centers to better understand how to identify and serve AFN populations

# **NEW** Improvements to Post Event Reporting

- Automation via shared tool
- Real time reporting and data collection
- Ready for the 10-day window for reports
- Addresses PSPS reporting requirements template





# **NEW Internal Template Created**

Document Name	Post PSPS Reporting Data Collection Template
/ersion	1
Publication Date	7/11/2022
Purpose	Capture required information to support post event reporting compliance requirements
State Applicability	Can be used in all states (Captures all information required by California)
General Instructions	Cells that require values, where applicable, are highlighted in yellow.  Tabs are separated by responsible parties & will be assigned by the ECC during a PSPS Event

General Focus Areas	Responsible Department	Assigned Staff Member(s)
Decision Making	ECC Director	
Scope	Emergency Management	
De-energization	System Operations	
Re-energization	System Operations	
Damage Assessment	Field Operations	
Mitigations to Reduce PSPS	Field Operations	
Restoration / Patrols	Field Operations	
Customer Notifications	Customer Service	
Public Safety Partner Notifications	Emergency Management	
Critical Facilities Notifications	Emergency Management	
External Notifications	External Communications	

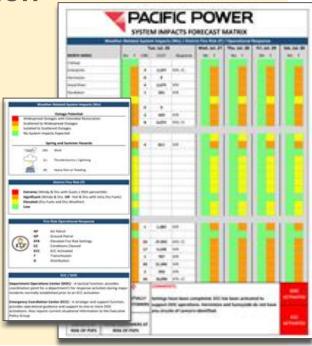


# Elevated Fire Risk (EFR) Settings

- Pacific Power is upgrading relays and reclosers (grid hardening)
- These upgraded devices are now capable of multiple types of settings or "modes", including Elevated Fire Risk (EFR) settings
- While no two circuits are the same, EFR settings are designed to clear faults in < 1 second and limit arc energy, as compared to traditional schemes where clearing times can be 4-10 seconds

**Risk-Based Application** 

- EFR Settings are deployed using a **risk-based** approach
- Daily reports are used to determine whether EFR settings are needed
- Standard outage notification and communication protocols are followed
- Enhanced patrolling performed during restoration



# **Outreach & Awareness**

Press Release, July 24, 2022

PORTLAND – With daily high temperatures forecast to near or above the 100-degree mark next week across parts of the Pacific Northwest, Pacific Power is prepared to face higher demands on the grid from both record temperatures and increased customer need.

"We've taken steps for grid hardening, in particular since last summer, to prevent overloading at the substation level and on the distribution system," said Erik Brookhouse, vice president of system operations for Pacific Power. "We are confident about our network's readiness for this summer."

Wildfire conditions have elevated too and Pacific Power has taken additional safety precautions in high risk areas to reduce the risk of wildfire. Among other measures, the company is conducting additional patrols of power lines and temporarily modifying targeted system settings to be more sensitive.

- · Operate the clothes dryer and dishwasher at night
- If you have air conditioning, set it to maintain an interior temperature of 78 degrees, higher when you are away from home.

More electric energy information is available on Pacific Power's website at: www.pacificpower.net.

# **Deployment of CFCIs**

- Risk based deployment of EFR settings can still have an inverse impact on reliability
- Deployment of CFCIs (fault indicators) improves restoration time and can reduce impact to customers



# Grid Hardening Update

# Grid Hardening Update

# In 2021, as part of Wildfire Mitigation efforts, **Grid Hardening:**

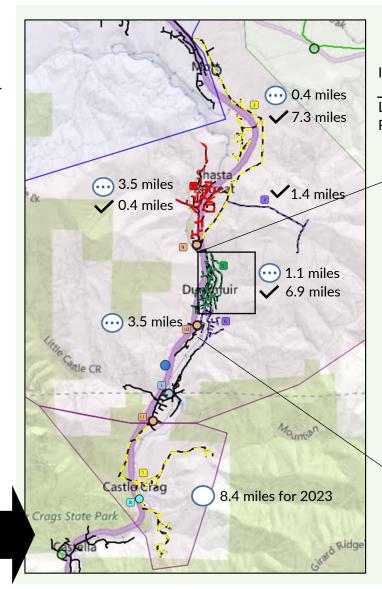
- ✓ Completed installation of 20 miles of covered conductor in HFTD
- ✓ Completed installation of 32 reclosers and relays
- ✓ 21 Weather Stations

# In 2022, as part of Wildfire Mitigation efforts, **Grid Hardening**:

2022 Progress / Plan

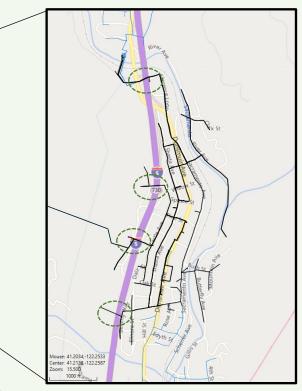
☐ Covered Conductor	26 of 112 miles
☐ Relays, Reclosers, Circuit Breakers	5 of 51 devices (up from 36)
■ Weather Stations	35 / 50 stations
☐ <b>NEW:</b> Fault Indicator Installations	550 / 557 installed
☐ <b>NEW:</b> Expulsion Fuse Replacements	Initiated / 2,269 fuses

Grid Hardening is planned and prioritized to target and mitigate PSPS Zones



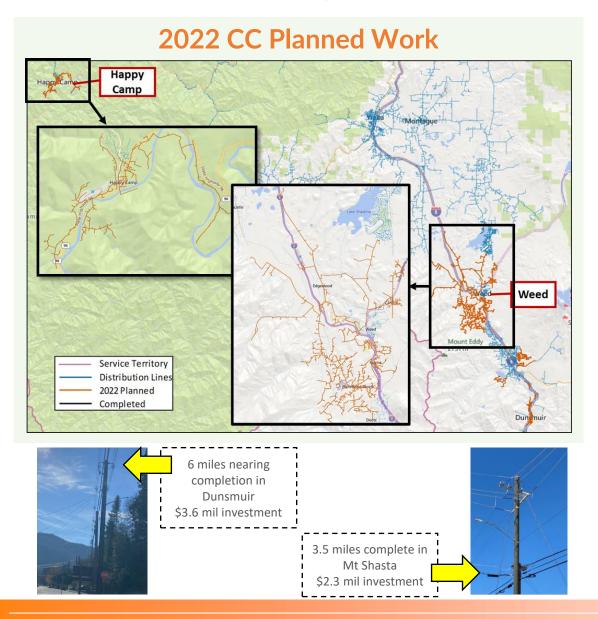
# **Dunsmuir PSPS Zone**

Initiative	Total	Complete / Nearly Complete	Planned Completion
Line Rebuild (miles)	32.9	16.0	2023
Reclosers/Relays	6	5	2023

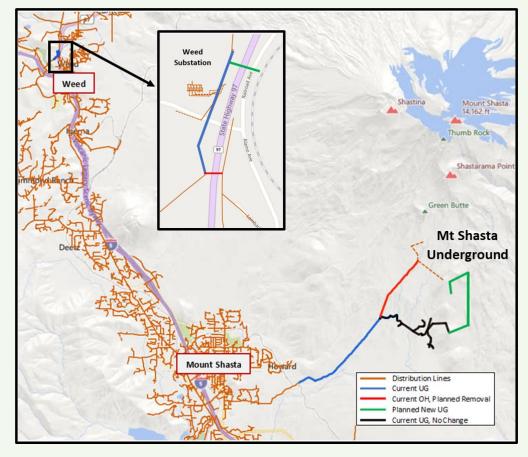


\*8.0 miles on multiple circuits out of Dunsmuir Substation nearing completion [1.1-miles remaining including I-5 crossings]

# **Grid Hardening Update**



# **2022 Undergrounding Scoped**



Two projects identified for potential underground

[Mt. Shasta & Weed]

- Heavy tree canopy with limited access
- High elevation with high pole loading requirements
- No customer meter replacements required

# Medical Baseline, AFN, & Customer Resources

# Medical Baseline & AFN Customer Identification

# CARE Program - Updated in 2021

- ✓ All applications and re-certification forms were updated with the following:
- Check this box if someone in your household has a disability, or requires accessibility, financial or language support during a public safety power outage. Pacific Power will provide an additional notification prior to a public safety power shut off. For more information, visit pacificpower.net/wildfire.
- Forms are mailed to residential and master-meter customers to enroll in the discounted rate schedule or to re-certify and remain on the rate.

### **Medical Customers**

- Due to the pandemic, customers can self-certify as a medical customer with no documentation.
- All medical customers are coded as AFN customers.
- All customers receiving an application for medical certification will receive information and will be able to identify as an AFN customer.



# 2022 Update

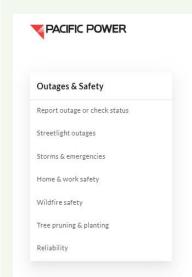
- Since February 2022, there has been an increase of 133 total AFN customers (28 percent)
- PacifiCorp continues to seek improvements to identifying the electricity dependent customers with AFN through defining. mapping, and enabling self-identification, and has mapped their respective databases to code customer accounts accordingly
- As a part of the planning process, the team worked to identify the targeted individuals and benchmark with state agencies to create an informed estimate of the number and types of individuals with disabilities and others with AFN residing in the community
- All medical baseline customers are identified as AFN customers.

July 2022 AFN Customer Counts					
PSPS De- Energization Zone	Medical Baseline AFN	Non-Medical Baseline AFN	Total		
Inside	26	108	134		
Outside	103	363	466		
Total	129	471	600		

# **Backup Generation Programs**

SAVINGS & ENERGY CHOICES

# **NEW Website and Reference Material**



# Backup electric power

An electric generator can be a valuable addition to your preparedness plan in the event of a power outage. Because generators are not connected to the power grid, they can help keep lights on and appliances operating, as well as charge important electronic devices.

We can help you determine if a portable generator or portable power station is right for your home and learn how to safely use these sources of backup power generation.



### Choose your state for more about generators, safety and possible rebates

IS BACKUP POWER RIGHT FOR YOU?

USE BACKUP POWER SAFELY

CALIFORNIA GENERATOR REBATES

### Steps to help select backup power

A portable electric generator or a portable power station can help provide electricity to the appliances, devices and systems that you need most in an emergency. But they can also be loud, costly and potentially pose safety hazards. If you decide that a portable generator is right for you, it is essential to learn how to safely operate the device prior to an emergency. Generators also require proper storage, access to fuel and regular safety checks.

Types of generators for home use

https://www.pacificpower.net/outages-safety/storm-emergency-preparedness/backup-generators.html

# **Generator Rebate Program**

- Rebate offered on the purchase of a portable generator or portable power station to customers who:
  - o Reside in Tier 2 or Tier 3 area
  - Additional rebate to
     Access and Functional Needs
     (AFN) customers



# **Free Portable Battery Program**

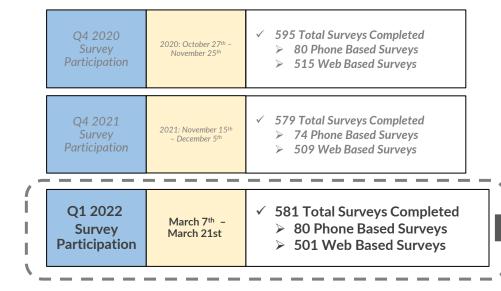
 Implemented in 2021 to provide back-up batteries – at no cost – to medical baseline customers

### Program Includes:

- ✓ Technical assessment of needs
- ✓ Free-to-the customer portable batteries
- ✓ Training
- ✓ Customer Support



# Customer Pre-Season Survey



### **Objectives**

- Measure awareness of Pacific Power messages related to wildfire preparedness
- Identify recall of specific message topics
- Identify recall of message channels
- Measure recall and understanding of Public Safety Power Shutoff or PSPS
- Evaluate sources customers are most likely to turn to for information about PSPS
- Evaluate PSPS experience
- Explore actions taken by customers to prepare for wildfire season
- Measure awareness of Pacific Power's efforts to reduce the risk of wildfires

### **Key Findings**

- ✓ Most commonly recalled channels were social networking and TV news
- ✓ The Pacific Power website remains rated as the most useful and clear source
- √ 58% reported to be aware of wildfire safety communications
- √ 52% recall seeing, hearing, or reading the phrase "Public Safety Power Shutoff of PSPS", down from 2021 post-season (61%)
- √ 62% received adequate notification/info (Among those who experienced a PSPS, down from 81%)
- ✓ Among those reporting that they rely on electricity for medical needs, 1/4 are aware of additional notices

### Recommendations

- ✓ Continue utilizing TV news and social media to reach customers; evaluate email cadence, as email is no longer among the top information channels.
- ✓ Focus media and social media communications on driving customers to the website, as well as leveraging bill inserts to communicate quick highly important information, and to refer customers to the website for more detail.
- ✓ Focus communications on PSPS, how to be prepared and respond to an outage (including an emergency kit and readiness plan), and the steps Pacific Power is taking.
- ✓ Evaluate the current off-season messaging plan.
  - \* Awareness of PSPS is down in March 2022 and mirrors May 2020, which awareness is much higher in previous August and November waves.
  - ❖ Consider off-season messaging around steps Pacific Power is taking to mitigate risk and help customers prepare.

# **CBO Pre-Season Survey**

# **CBO Surveys**

- CBOs are surveyed twice annually, pre-season and post-season, to assess the company's engagement and communication efforts.
- The survey is structured as a 30-minute conversation, so it is a much more robust feedback forum than a general questions and answers survey.
- Feedback is then incorporated into the company's ongoing communication and outreach efforts, where applicable.
  - Example: Some CBOs conveyed they can share company PSPS and wildfire safety brochures. Sending bulk informational packets to CBOs has now become a standard practice in the company's wildfire safety communication outreach.

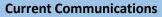
# **Latest CBO Survey**

Q1 2022 Survey **Participation** 

March 7th -March 21st

✓ Four CBOs participated

> 30-minute interviews



- Fire departments and emergency services organizations are highly engaged with Pacific Power when it comes to wildfire response and preparation, as well as preparation for PSPS events.
- Broad-based CBOs often receive communications and resources from Pacific Power related to CARE and low-income resident support, but typically not related to wildfire preparation or PSPS
- Most communications and resources received about wildfires (from any organization, including government or fire agencies) are focused on evacuation preparedness (e.g., where to go), personal preparedness (e.g., brush clearing), and less about how to prepare for an outage due to PSPS
- Organizations are not aware of Pacific Power's Generator Rebate Program, although providing access to generators did emerge as an important priority
- Social media, and Facebook in particular, are commonly used for communications, along with inperson meetings, print flyers, and door to door interactions to alert those with medical needs (in the event of a fire); traditional CBOs also interact with clients when they visit the office (when not restricted due to the pandemic)

### **Spreading the Word**

- ✓ Traditional CBOs are willing to help spread the word about wildfire preparedness, safety, and PSPS events
- ✓ English and Spanish are the primary languages required
- ✓ The most effective ways Pacific Power can support CBOs and emergency agencies in preparing the community include:
  - ✓ Sharing/creating content that can be shared on social media, either by linking to Pacific Power or for CBOs to post
  - ✓ Providing information for those with medical needs to ensure they are able to adequately prepare for a PSPS event or evacuation
  - ✓ Providing educational resources about how to prepare for an outage
  - ✓ Educating the community and CBO emergency response agencies about the Generator Rebate program



# Thank You!