



Public Safety Power Shutoff Annex

July 20, 2021

Preface

- Evolving challenge
- Uncertainty



Agenda

1. PG&E PSPS Program Updates
2. Regulatory and Advocacy Efforts
3. County Emergency Power
4. PSPS Annex



PG&E PSPS Program Updates



Community Wildfire Safety Program

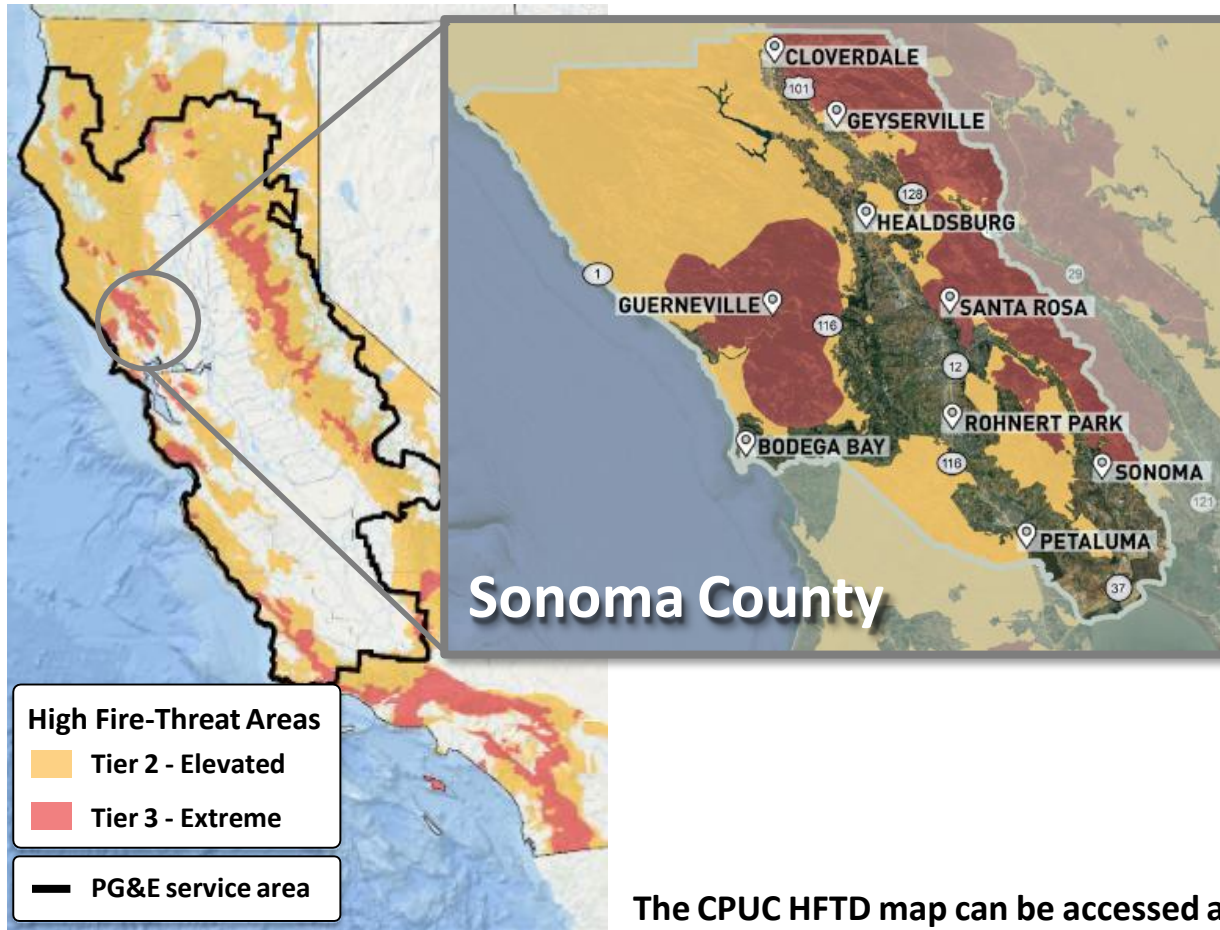
SONOMA COUNTY BOARD OF SUPERVISORS

July 20, 2021



Wildfire Risks Across PG&E's Service Area

The California Public Utilities Commission (CPUC) has a map that designates areas that are most at risk for wildfire. This map helps us plan and prioritize wildfire prevention efforts.



SONOMA COUNTY		
	Total Customers Served	223,118
	Customers in HFTD	28,849
	Total Distribution Line Miles	3,201
	Distribution Line Miles in HFTD	1,503
	Total Transmission Line Miles	611
	Transmission Line Miles in HFTD	349

The CPUC HFTD map can be accessed at:

cpuc.ca.gov/FireThreatMaps

Source: California Public Utilities Commission

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

What Conditions Could Lead to a PSPS Event?

We carefully review a combination of factors when deciding if power must be turned off for safety. These factors include:



Low humidity levels generally 30% and below



Forecasted high winds above 20 mph and gusts above 30-40 mph



A Red Flag Warning issued by the National Weather Service



Condition of dry material on the ground and vegetation near lines



On-the-ground, real-time observations





This year, our decision-making process is evolving to also account for the presence of trees tall enough to strike power lines when determining if a PSPS event is necessary.

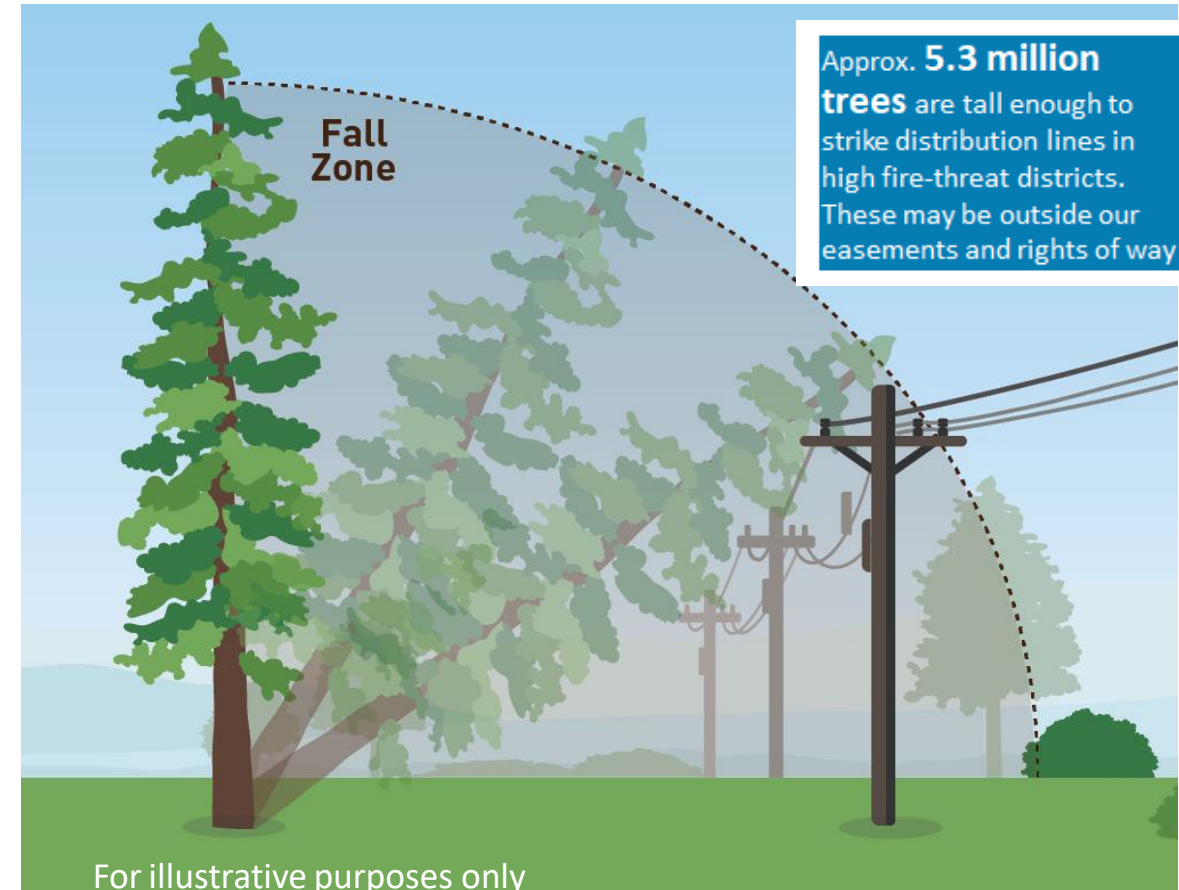
Tree Overstrike Exposure and PSPS Decision-Making

The safety of our customers and communities is our most important responsibility. Consistent with the recommendation of the federal court, we have developed additional criteria for our PSPS program.

To reduce the risk of major wildfires, PG&E may turn off power on distribution lines* where there are large amounts of trees tall enough to fall into electric lines during severe weather.

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Customers who live in areas of the highest wildfire risk may experience more frequent PSPS events compared to last year's weather conditions.

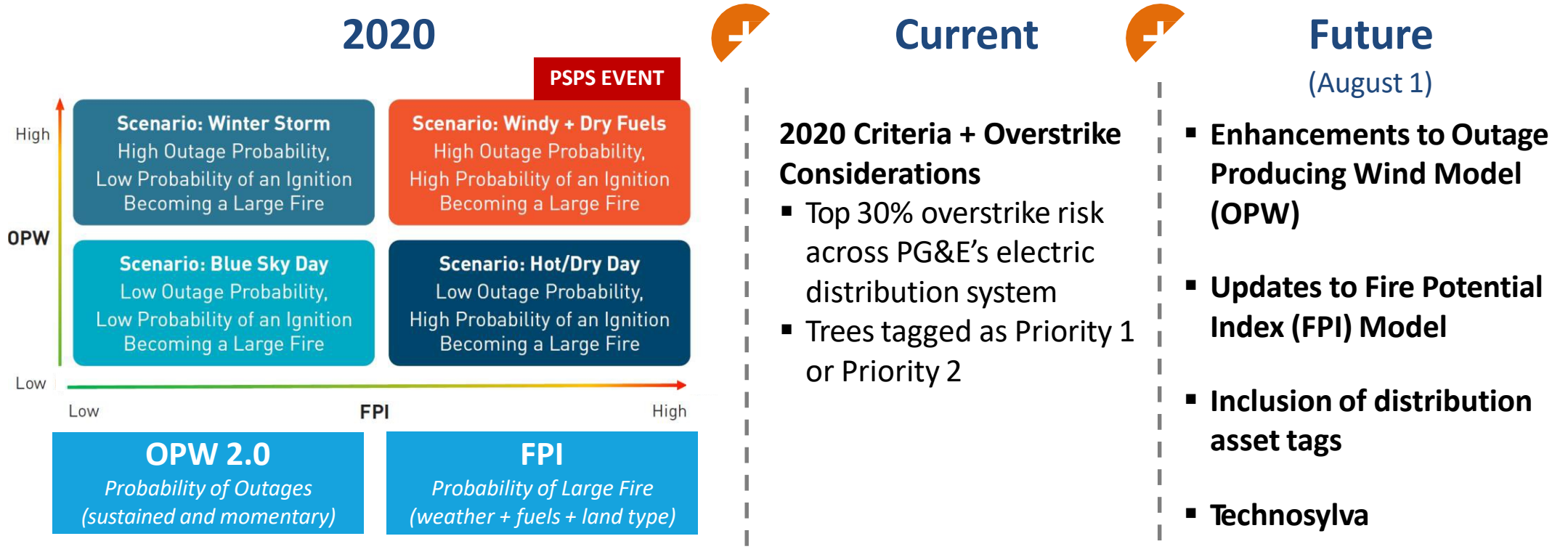
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We are sharing community-specific information regarding these potential impacts with customers, cities, counties and tribes.



*Does not include transmission lines (which are considered to be ≥ 60 kV)

Updates to Wildfire Mitigation Plan and PSPS Scoping

The 2020 PSPS Protocols plus Overstrike Tree Potential and Priority Tags are currently being used to determine when to initiate a PSPS event and this approach will change in August 2021. This may substantially modify the current 2020 PSPS Protocols Plus Tree Overstrike Potential and Priority Tags.



Planning for Community Resource Centers in Sonoma County

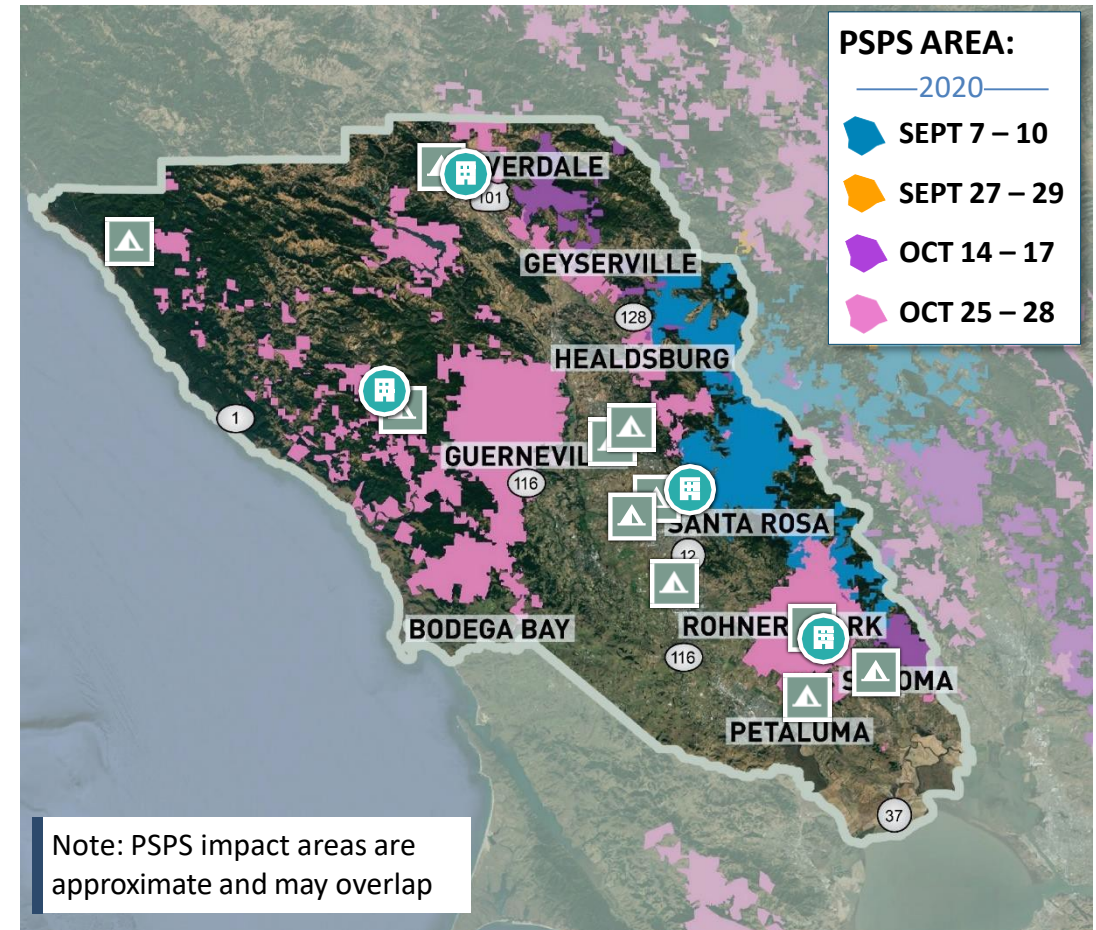
2021 CRC LOCATIONS*

Indoor Event-Ready

1	Guerneville	Russian River Senior Resource Center
2	Santa Rosa	Presbyterian Church of the Roses
3	Sonoma City	Hanna Boys Center
4	Cloverdale	Cloverdale Citrus Fairgrounds

Outdoor Event-Ready

5	Cloverdale	Cloverdale Citrus Fairgrounds
6	Guerneville	Guerneville School
7	Rohnert Park	Costco Wholesale
8	Santa Rosa	Costco Wholesale
9	Santa Rosa	Luther Burbank Center for the Arts
10	Santa Rosa	Santa Rosa Veterans Memorial Building
11	Sea Ranch	Olsen Ranch House
12	Sonoma	Hanna Boys Center
13	Sonoma	First Congregational Church of Sonoma
14	Windsor	Keiser Community Park
15	Petaluma	The Plaza North Shopping Center



Note: PSPS impact areas are approximate and may overlap

CRC LEGEND:

- Indoor Event-Ready
- Outdoor Event-Ready

*CRC locations may change without notice.

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



More Information and Tools to Prepare

For more information about our wildfire safety efforts, visit pge.com/wildfiresafety

For specific information, please consider the following:



Would you like to receive PSPS notifications but are not the PG&E account holder?

Sign up to receive PSPS alerts for any address at

pge.com/addressalerts



Do you need information in a language other than English? Find assistance at

pge.com/mywildfirealerts



Do you want to learn more about the live weather conditions we are tracking in your area?

Get up-to-the-minute weather information at

pge.com/weather



Do you need personalized emergency planning support or energy needs assessments?

Learn more by visiting

disabilitydisasteraccess.org



Are you looking for more information on how to stay safe before and during a PSPS event?

Learn more about wildfire risks and how to prepare for emergencies at

safetyactioncenter.pge.com



Do you need backup power? Check out backup power options, safety tips and financing at

See if you qualify for the Portable Battery Program at

pge.com/backuppowers

pge.com/storage

Thank You

For more information, please:

- Call us at **1-866-743-6589**
- Email us at wildfiresafety@pge.com
- Visit [**pge.com/wildfiresafety**](http://pge.com/wildfiresafety)



Appendix



Community Wildfire Safety Program



REDUCE WILDFIRE POTENTIAL

- Asset inspection and repair
- Enhanced vegetation management (EVM)
- System hardening
- Targeted device replacement
- Public Safety Power Shutoffs (PSPS)

IMPROVE SITUATIONAL AWARENESS

- Wildfire Safety Operations Center
- Weather stations
- High-definition cameras
- Meteorology
- Satellite detection
- Bolster field-based wildfire expertise for program validation

REDUCE IMPACTS OF PSPS EVENTS

- Focus on areas of highest risk
- Continuously improve based on feedback and past experience
- Further expand our ongoing coordination with and support for customers and communities
- Enhanced microgrid capability

What's New in 2021

We are continuing to harden our electric grid to reduce wildfire risks, working nonstop to lessen the impact of Public Safety Power Shutoffs (PSPS) and providing more resources to customers and communities before, during and after PSPS events.

REDUCING WILDFIRE RISKS



System hardening on: **180**
CIRCUIT MILES



Tracking conditions with: **300**
NEW WEATHER STATIONS



Enhanced vegetation management on: **1,800**
HIGH-RISK CIRCUIT MILES



Monitoring for wildfires with: **135**
NEW HIGH-DEF CAMERAS

REDUCING PSPS IMPACTS



Limiting the number of customers impacted by installing **275+** additional distribution sectionalizing devices and transmission switches



Weather modeling improvements and **5 days** of forecast data



Helping to keep the power on with **10** substations prepared for temporary generation and **5** additional microgrids constructed to power key community resources

SUPPORTING CUSTOMERS AND COMMUNITIES



Customer notifications in **16 languages** and new **Address Alerts** to keep informed about any address



~**5,550 batteries** available, covering all interested low-income Medical Baseline customers in high fire-threat areas



Targeting **additional ADA-accessible Community Resource Center sites**



Meal replacement options for customers in **46 counties**



Targeting **additional partnerships** with Community-Based Organizations to support customers with Access and Functional Needs



Sonoma County Overview

Quarterly progress updates are available at:

pge.com/wildfiresafety

WILDFIRE SAFETY AND CUSTOMER SUPPORT PROGRAM EFFORTS

	COMPLETE THROUGH 2020*		2021 PROGRESS		2021 PLAN
System Hardening Stronger poles, covered power lines and/or targeted undergrounding	63 LINE MILES		4 LINE MILES		11 LINE MILES
Sectionalizing Devices Separating the grid into small sections for operational flexibility	89 DEVICES		6 DEVICES		30 DEVICES
Enhanced Vegetation Management Address vegetation that poses a higher potential for wildfire risk	309 LINE MILES		8 LINE MILES		39 LINE MILES
Community Resource Centers (CRC) Provide basic power needs and up-to-date information	3 INDOOR	10 OUTDOOR	4 INDOOR	11 OUTDOOR	ONGOING†
Weather Stations Enhancing weather forecasting and modeling	11 STATIONS		0 STATIONS		ONGOING‡
High-Definition Cameras Improving real-time monitoring of high-risk areas and conditions	58 CAMERAS		13 CAMERAS		ONGOING‡

*Cumulative progress from 2018 through 2020.

†CRC planning for 2021 is conducted in coordination with local agencies/tribes and is ongoing.

‡Identified on a monthly basis.

What is a Public Safety Power Shutoff?

Safety is our most important responsibility. That is why we may need to turn off power as a last resort to prevent wildfires during severe weather conditions.

High winds and dangerous conditions can cause branches and debris to contact energized power lines.

This could damage our equipment and cause a wildfire.



To prevent such fires, we may need to turn off power.

This is called a **Public Safety Power Shutoff (PSPS).**



Once severe weather has passed, we will inspect the system and repair any damage.



Once inspections and any repairs are complete, power is restored.



How Will Customers be Notified?

When severe weather is forecast, we provide advance notice prior to turning off power and updates until power is restored.

Timing of Notifications (when possible)



Notifications sent via automated calls, texts and emails.

We will also use pge.com, social media and will inform local news and radio.

@pacificgasandelectric

@PGE4Me

@pacificgasandelectric

New for 2021 | Address Alerts

Receive PSPS notifications, available in multiple languages, for any location, such as:

- The home of a friend or loved one
- Your child's school or day care
- Your work or business



Enroll at: pge.com/addressalerts

Customer Preparedness and Resources

We are increasing resources to help customers and communities before, during and after PSPS events:

- 
Partnerships with 250+ Community-Based Organizations (CBOs) to provide emergency preparedness information and PSPS event assistance
- 
Sponsored food replacement through partner food banks and Meals on Wheels organizations
- 
California Foundation for Independent Living Centers (CFILC) providing emergency planning, portable backup power, accessible transportation, hotel stays and food stipends
- 
Providing portable backup batteries for low-income Medical Baseline customers in high fire-threat areas
- 
Generator rebate programs offered to customers who depend on well water pumps and live in high-fire threat areas
- 
Providing better information about when power will be turned off and back on in 16 languages

Sonoma County Community-Based Organizations

- C**
 - ability Services & al Center
- Is on Wheels**
 - astal Seniors
 - aluma People vices
- Bank**
 - dwood Empire od Bank
- r**
 - ifornia Council of Blind od For Thought
- In-Language Media**
 - ABS-CNB
 - Alianza News
 - KBBF Radio (Non-profit)
 - KBTV - Crossings TV
 - KDTV Univision
 - KIQI Radio
 - KRON 4.2 - Skylink TV
 - KSFN- News for Chinese Radio
 - KSJZ - Korean American Radio
 - KTVO - Sing Tao Radio
 - La Voz
 - Movimiento Cultural de a Union Indigena
 - PAMA One Radio
 - Radio Lazer Sacramento
 - Radio Lazer SJ (KSFN)
 - Russian American Media
 - Sound of Hope Radio Network
 - Wine Country Radio



Disability Disaster Access and Resources Program

We are collaborating with the Disability Disaster Access and Resources (DDAR) Program to provide qualifying customers with targeted outreach, personalized emergency planning support, energy needs assessments and in-event Public Safety Power Shutoff support. In-event support can include the following support based on customer needs:



Response to Escalations
received through PG&E's call center



Hotel Accommodations



Accessible Transportation
to hotels and Community Resource Centers



Food Vouchers



Portable Backup Batteries

During 2020 PSPS events, the following resources were provided:

~1,700 customer assessments

~1,000 batteries

~560 hotel accommodations

~900 food vouchers

~30 accessible transit rides

Data is subject to change and is based on best available information at this time.

Learn more about DDAR by visiting

disabilitydisasteraccess.org



Portable Battery Program

We are also conducting Public Safety Power Shutoff emergency preparedness outreach and energy needs assessments to support low-income Medical Baseline customers in high fire-threat areas with critical medical equipment and delivering fully subsidized portable battery solutions to eligible customers.

To date, this program has included the following:

	<p>Establishing relationships with seven external battery delivery partners</p>		<p>Completing energy assessments for over 8,800 customers</p>
	<p>Providing outreach to ~22,000 customers</p>		<p>Providing over 5,550 batteries to customers</p>

For more information, visit:

pgebatteryprogram.com





Generator Rebate Program

Launched in late 2020, this program provides customers who depend on a well water pump and live in high fire-threat areas with a single rebate for purchasing a qualified portable power generator.



\$300 rebate for eligible customers.

\$500 rebate for eligible customers who are also participants in the CARE or FERA program.



Rebates are offered through PG&E's backup power marketplace located at **pge.com/backuppowers**.

Over 100 customers have already taken advantage of the rebate.

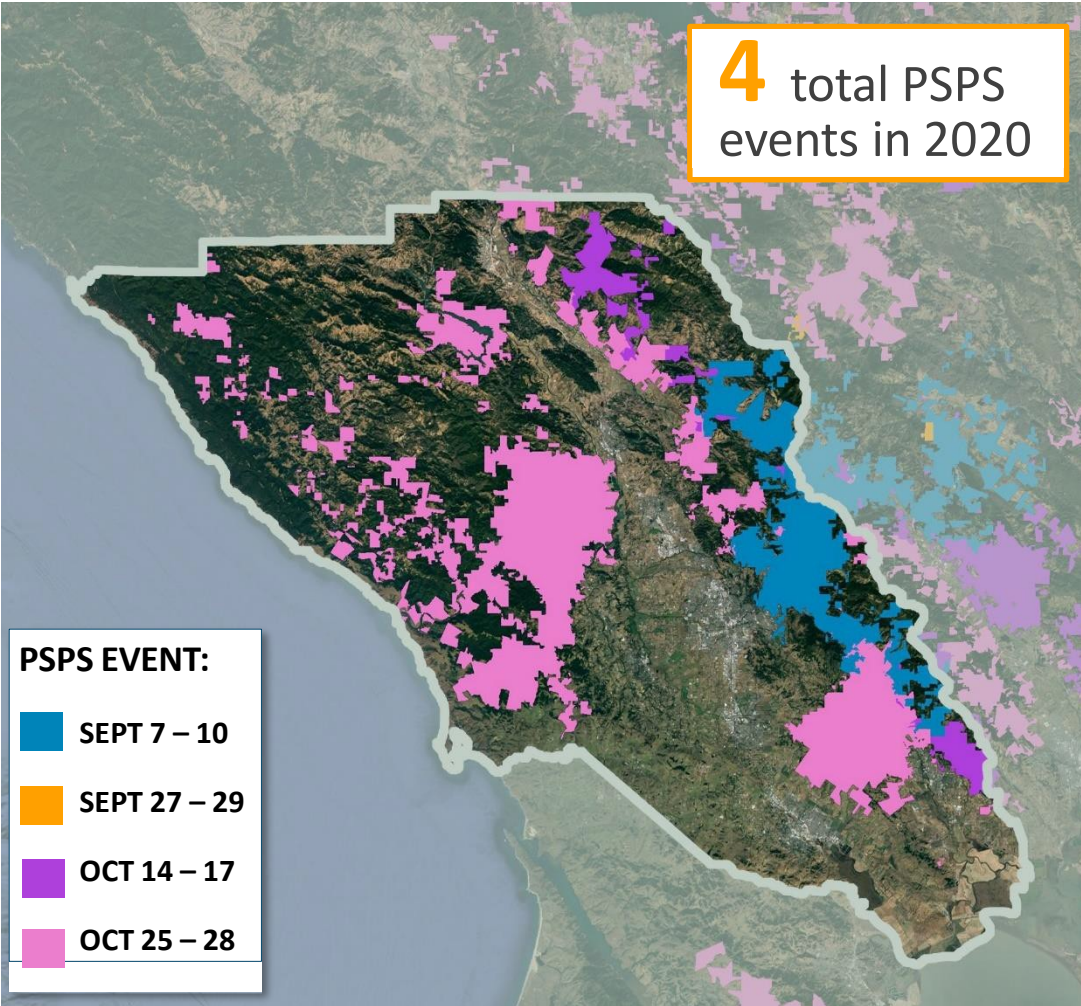
Learn more about PG&E's Generator Rebate Program by visiting

pge.com/backuppowers



2020 PSPS Event Overview – Sonoma County

4 total PSPS events in 2020



Note: PSPS impact areas are approximate and may overlap



CUSTOMERS IMPACTED

17,572	2	1,678	23,325
3	0	4	7
66 MPH	73 MPH	73 MPH	89 MPH
1	0	2	8
5 HRS	3 HRS	4 HRS	13 HRS
29 HRS	17 HRS	43 HRS	42 HRS



COMMUNITY RESOURCE CENTERS OPEN



PEAK WIND GUSTS



DAMAGE/HAZARDS



AVG. RESTORATION TIME



TOTAL AVG. OUTAGE DURATION

*PG&E's EOC was activated while monitoring a potential wind event on 12/7 but ultimately did not de-energize

Regulatory and Advocacy Efforts



Regulatory and Advocacy Efforts

- Regulatory Actions/Successes
 - PSPS
 - Broadband Resiliency
- Current efforts
- CPUC next steps



CPUC PSPS Advocacy – PSPS Rulemaking

Phase 2 (June 2020)

- Increased hands-on work between utilities and local governments
- Improved requirements for PSPS exercises, customer notifications, and Community Resource Centers
- Required utilities to identify water, communications, and transportation infrastructure requiring backup generation
- Strengthened outreach and resource planning for AFN customers

Phase 3 (June 2021)

- Increased requirements for CRC planning and resources
- Improved requirements and oversight for PSPS exercises
- Required emergency management training for utility EOC staff
- Required utilities to provide free backup batteries for medically vulnerable customers
- Improved notification and communication requirements



CPUC PSPS Advocacy – PSPS Investigations

2019 PSPS Event Investigation

- Found PG&E failed to comply with large majority of PSPS regulations
- Ordered large range of corrective actions to improve best practices
- Imposed future financial penalty as incentive for PG&E to improve balancing PSPS harms against potential benefits

2019 PG&E Order to Show Cause

- Found PG&E failed to comply with PSPS regulations relating to outage maps, local government web portal, PSPS website, and customer notifications
- Ordered \$106 million penalty (offset by \$86 million in refunds already provided)



CPUC – Communications System Resiliency

Wireless Requirements

- 72-hour backup power requirement in high fire threat areas
- Must ensure minimum service coverage (911, 211, emergency notification, basic internet browsing)
- Must submit Communications Resiliency Plans to CPUC and local governments
- Must submit annual Emergency Operations Plans
- Effective July 20, 2021

Wireline Requirements

- 72-hour backup power requirement in high fire threat areas
- Must ensure minimum service coverage
- Must submit Communications Resiliency and Emergency Operations Plans
- Effective October 18, 2021 for critical facilities, network equipment supporting wireless service, and equipment in communities without wireless service
- Effective August 18, 2022 for all other facilities



CPUC Advocacy – Next Steps

- PSPS Rulemaking: CPUC will unify all PPSR regulations into a single document; additional changes to regulations possible based on 2021 PPSR season
- 2021 PPSR Season: Provide CPUC with responses to PG&E post-event reports



County Emergency Power Projects



County Emergency Power Projects

- Scope of Projects
 - Scoping/Design
 - Furnishing/Installing
 - Automatic Transfer Switches
 - Replace Main Switchboards



County Emergency Power Projects

- Completed / Underway
 - Veterans Memorial Buildings: Sonoma, Petaluma, Santa Rosa
 - Information Services: Data Center
 - Transportation and Public Works: New Airport Terminal, Santa Rosa Road Yard
 - Registrar of Voters (mobile)
 - Health Services: Animal Services



County Emergency Power Projects

- Pending Grant Funding
 - Transportation and Public Works: Annapolis Road Yard
 - Transportation and Public Works: Forestville Road Yard
- Incomplete Funding/Unfunded
 - General Services: Heavy Fleet
 - Sheriff's Office (replacement)
 - Sonoma County Fairgrounds
 - Cloverdale Veterans Building
 - Sebastopol Veterans Building



PSPS Annex



2021 PSPS Annex

- Replaces the 2019 De-energization Annex
- Supporting plan to the County's Emergency Operations Plan (EOP)
- Modest revisions:
 - New vocabulary
 - Alignment with PG&E procedures
 - 2021 Tree Overstrike Criteria
 - Incorporates lessons learned in 2019 and 2020
- Key elements
- Sum



2021 PSPS Annex

Key Elements:

- Overview of the PG&E PSPS program
- History of PSPS incidents in Sonoma County
- Assessment of potential impacts
- Response procedures
- Stakeholder agency roles and responsibilities
- Public information tools
- Potential roles for County Supervisors



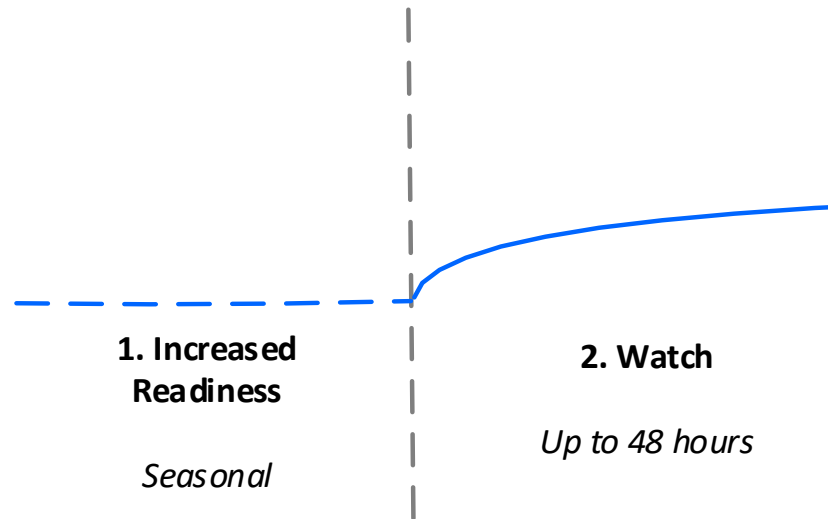
Response Phases

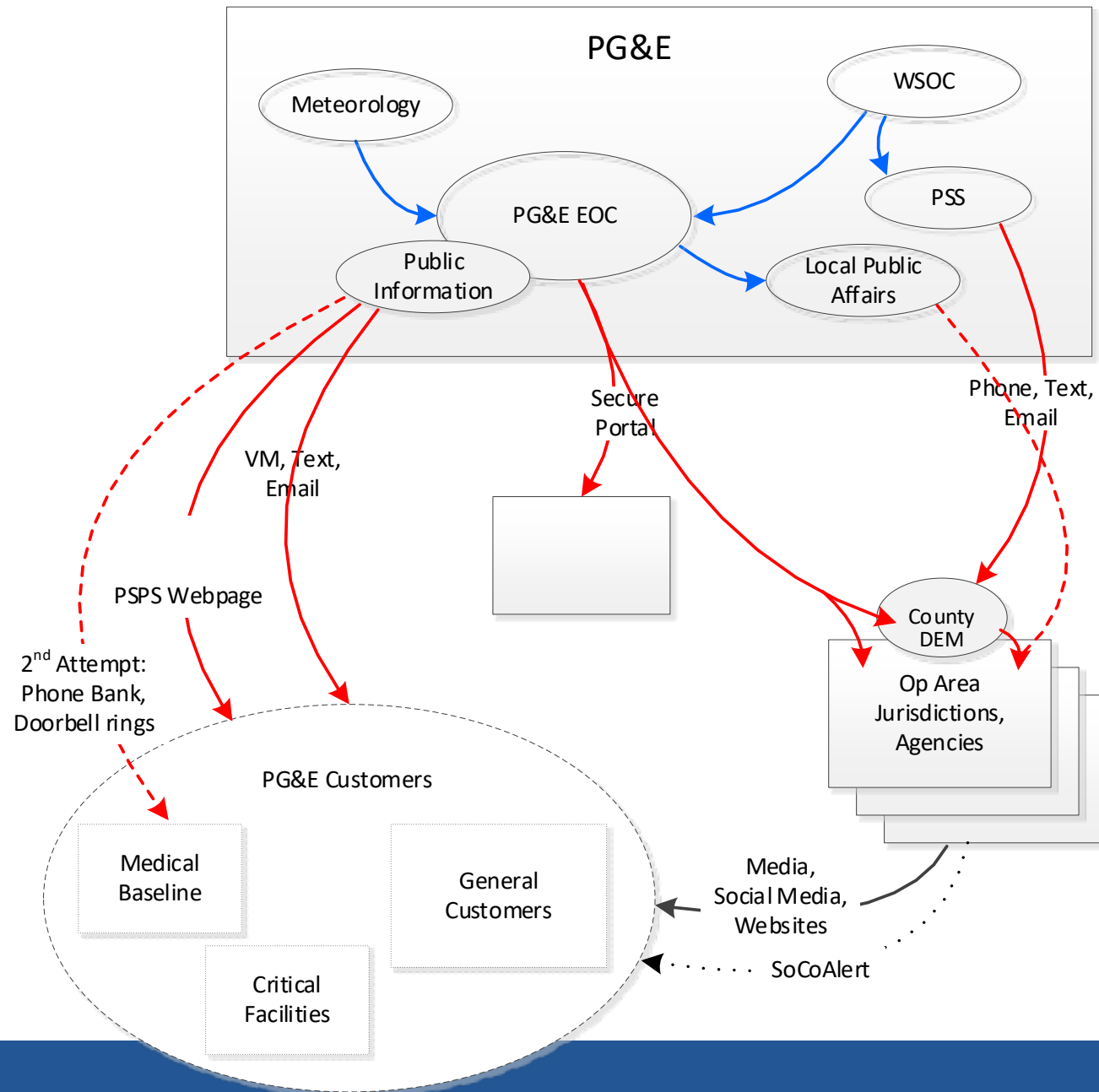
**1. Increased
Readiness /
Elevated**

Seasonal

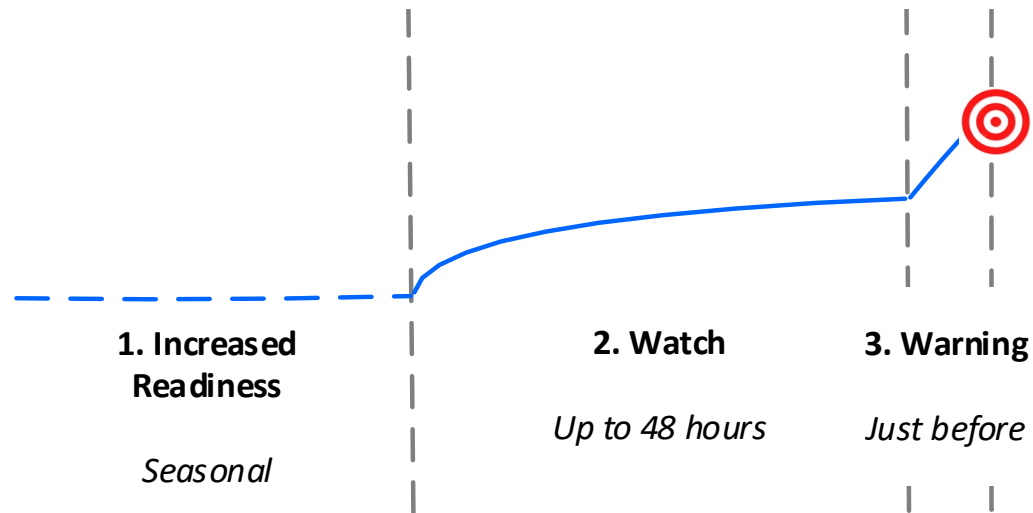


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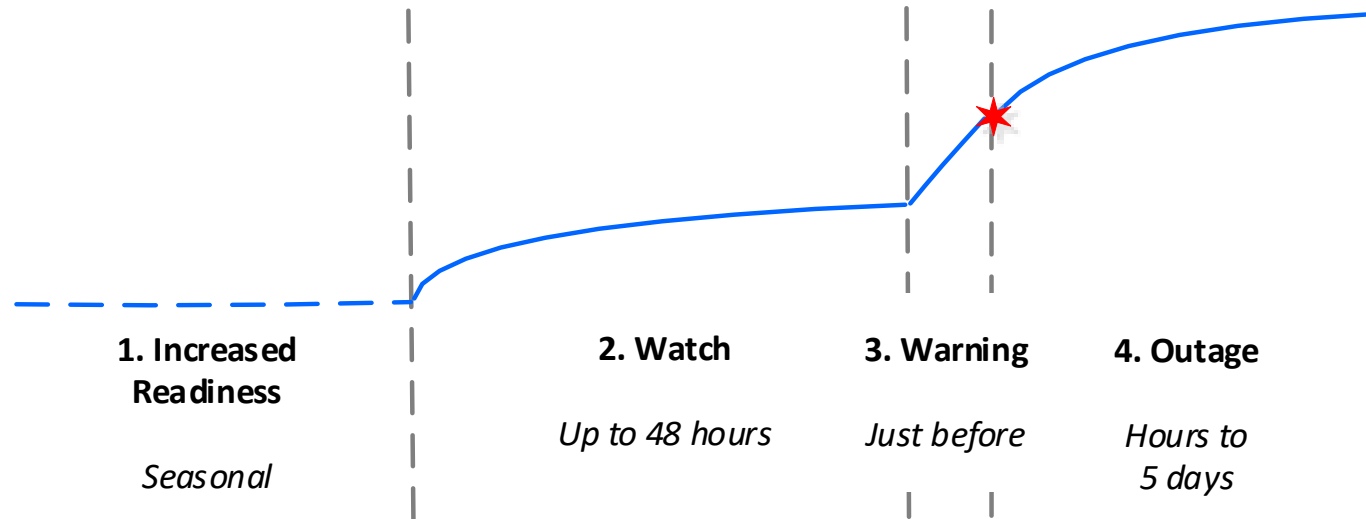


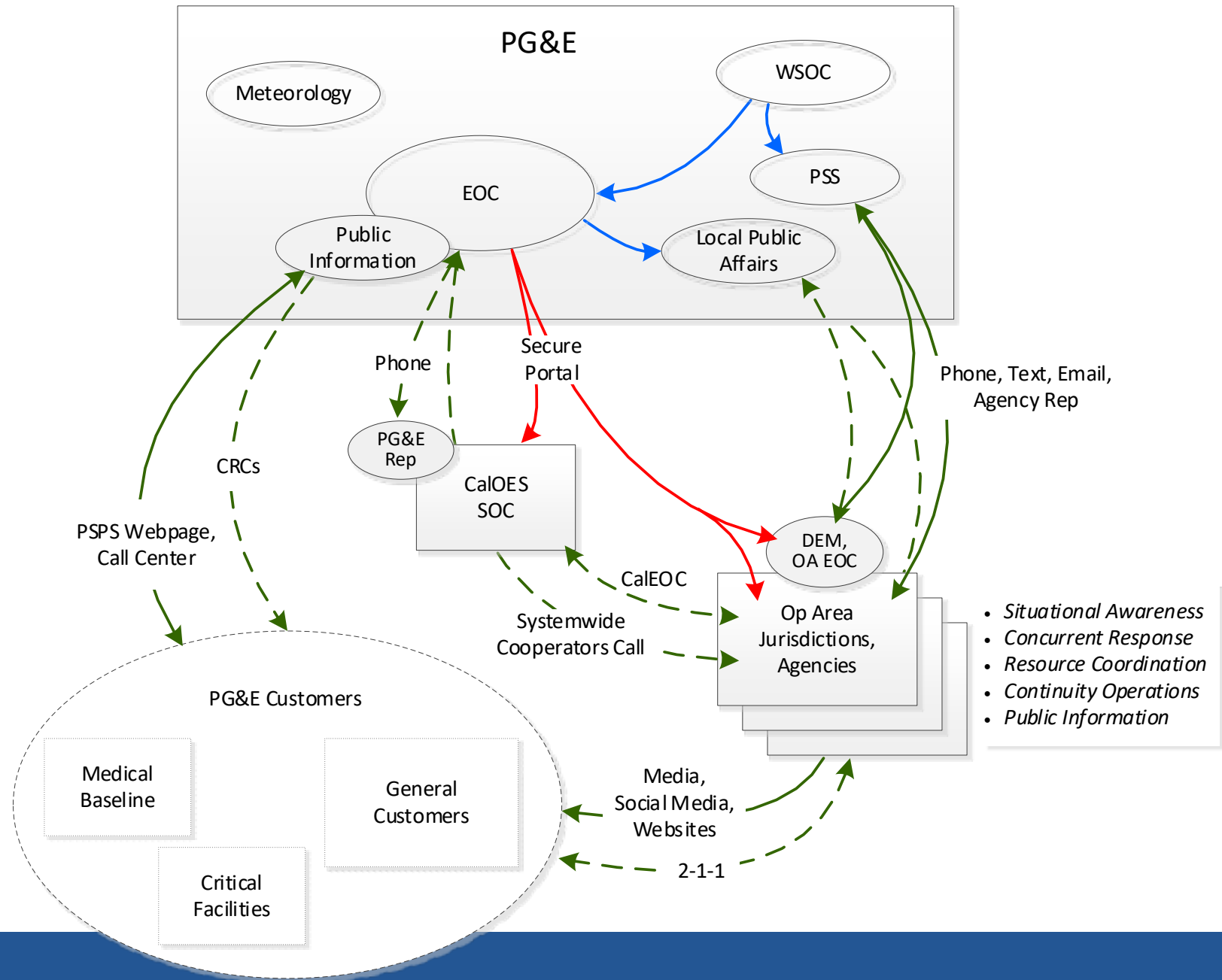


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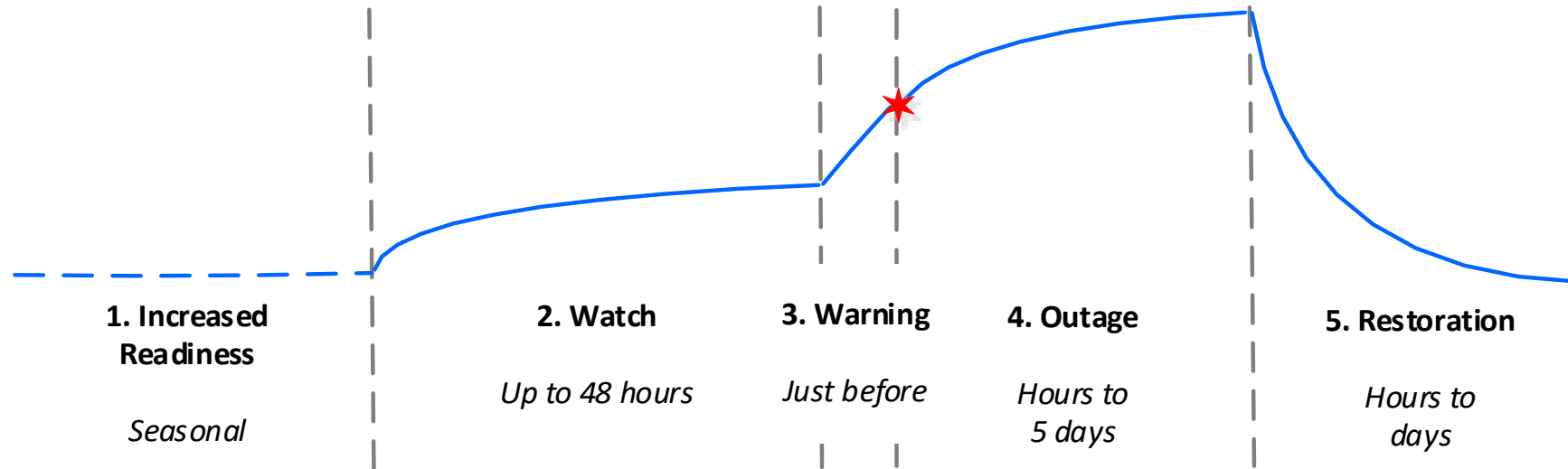


Response Phases





Response Phases



Questions / Discussion



DEPARTMENT OF
**EMERGENCY
MANAGEMENT**
SONOMA COUNTY

