

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 6681E
As of September 20, 2022

Subject: Information Only: After-Meeting Reports for Semi-Annual Resiliency Workshops Pursuant to Decision 20-06-017

Division Assigned: Energy

Date Filed: 08-17-2022

Date to Calendar: 08-26-2022

Authorizing Documents: None

Disposition:	Accepted
Effective Date:	08-17-2022

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Annie Ho

(415) 973-8794

PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov



Sidney Bob Dietz II
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

August 17, 2022

Advice 6681-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Information Only: After-Meeting Reports for Semi-Annual Resiliency Workshops Pursuant to Decisions 20-06-017

Purpose

Pacific Gas and Electric Company ("PG&E") hereby submits this information-only Tier 1 Advice Letter ("AL") in compliance with the California Public Utilities Commission ("CPUC" or "Commission") Decision ("D.") 20-06-017 ("Decision") Ordering Paragraph ("OP") 8. The AL demonstrates PG&E's compliance with Section 4.3.2.1 which requires (1) the investor-owned utilities ("IOUs") to conduct semi-annual workshops designed to, among other things, help empower local and tribal jurisdictions with a better understanding of grid operations, utility infrastructure, and the nature of weather events alongside public safety power shutoff ("PSPS") mitigation initiatives and (2) submit on the first day of each calendar quarter an advice letter that compiles all after-meeting reports from the prior quarter, if applicable.

Background

The Commission initiated Rulemaking ("R.") 19-09-009 to develop a policy framework surrounding the commercialization of microgrids and related resiliency strategies and to implement Senate Bill ("SB") 1339 (Stern, 2018).

On December 20, 2019 the assigned Commissioner's Scoping Memo and Ruling was issued, adopting a scope and schedule for Track 1 of the proceeding. Track 1 addressed deploying resiliency planning in areas that are prone to outage events and wildfires, with the goal of establishing key microgrid and resiliency strategies as soon as possible. Subsequently, on January 21, 2020, Administrative Law Judge Rizzo issued a Ruling with Energy Division staff's ("Staff's") proposal on short-term actions related to microgrids and other resiliency strategies that could be initiated in early 2020 to reduce the impact of PSPS outages or other catastrophic events.

On June 11, 2020, the Commission adopted D.20-06-017, which, among other actions, approved certain Staff proposals for information sharing with local and tribal governments.

This AL addresses the requirements included in Ordering Paragraph 8 of D.20-06-017, which requires:

Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each submit informational filings in this proceeding, no later than five business days after the local and tribal government semi-annual meetings are held. These after-meeting reports shall demonstrate compliance with Section 4.3.2.1 of this decision by showing:

- a) Commission staff were notified at least one (1) month prior to the meeting date;*
- b) Presentations and other materials were distributed to attendees at least twenty-four (24) hours in advance;*
- c) Contact information for meeting attendees, with a copies of a sign-in sheet;*
- d) Workshop agenda;*
- e) Workshop minutes or transcript;*
- f) Any presentations shown at the workshop; and*
- g) Any data formally provided to stakeholders at the workshop*

PG&E submits this information-only Tier 1 Advice Letter in compliance with Ordering Paragraph 8 of D.20-06-017.

Discussion

Pursuant to OP 8 of D.20-06-017, PG&E is attaching to this Advice Letter a compiled set of after-meeting reports for semi-annual resiliency workshops held between August 10, 2022 and August 12, 2022. This includes the following attachments:

- Attachment 1 – Pacific Gas and Electric Company Community Wildfire Safety Program – Regional Working Groups (Third Quarter, 2022) Meeting Summary
- Attachment 2 – Agenda and Presentations for the Third Quarter 2022, Regional Working Groups (including Resiliency Workshop)

Protests

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than September 6, 2022, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
E-mail: EDTariffUnit@cpuc.ca.gov

The protest shall also be electronically sent to PG&E via E-mail at the address shown below on the same date it is electronically delivered to the Commission:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name and e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.1, and General Rule 7.3.3, and OP 8 of D. 20-06-017, this advice letter is submitted with a Tier 1 designation. PG&E requests that this Tier 1 advice submittal become effective upon date of submittal, which is August 17, 2022.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically to parties shown on the attached list and the parties on the service list for R.19-09-009 and R.18-12-005. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

_____/S/
Sidney Bob Dietz II
Director, Regulatory Relations

Attachments

cc: Service Lists R.19-09-009, R.18-12-005



ADVICE LETTER SUMMARY



ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39 E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Annie Ho

Phone #: (415) 973-8794

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: AMHP@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6681-E

Tier Designation: Info-Only

Subject of AL: Information Only: After-Meeting Reports for Semi-Annual Resiliency Workshops Pursuant to Decision 20-06-017

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 8/17/22

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name: Sidnev Bob Dietz II. c/o Megan Lawson
Title: Director, Regulatory Relations
Utility/Entity Name: Pacific Gas and Electric Company

Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Clear Form

Attachment 1

**Pacific Gas and Electric Company Community Wildfire Safety
Program – Regional Working Groups (Third Quarter, 2022)
Meeting Summary**



August 17, 2022

**Pacific Gas and Electric Company
Community Wildfire Safety Program – Regional Working Groups
(Third Quarter, 2022)
Meeting Summary**

Background

From August 10-12, Pacific Gas and Electric Company (PG&E) hosted the third quarterly Regional Working Group meetings of 2022 with key stakeholders from communities impacted by Public Safety Power Shutoff (PSPS) outages in each of the five regions of PG&E's service area: Central Valley, North Valley/Sierra, North Coast, South Bay/Central Coast and Bay Area. These meetings provided participants and PG&E a forum to provide updates regarding wildfire safety, Enhanced Powerline Safety Settings (EPSS), microgrids, other resiliency efforts, safety and reliability trends as well as PG&E's Company Emergency Response Plan (CERP).

The 2022 first quarter Regional Working Group meetings addressed the topics required under the California Public Utilities Commission's (CPUC) PSPS Phase II Decision¹: lessons learned and feedback from prior PSPS events, communication strategies and information sharing and strategies for supporting people/communities with Access and Functional Needs (AFN).

As we have done in past meetings, we also addressed the topics required under the California Public Utilities Commission's (CPUC) Microgrids and Resiliency Strategies Rulemaking (Microgrid OIR)² which directs utilities to conduct semi-annual workshops to share valuable information and take a collaborative approach to planning grid resiliency measures responsive to local needs. The Microgrid OIR also expanded the meeting scope to include grid resiliency and hardening efforts, data on resilience progress in each region and an adjusted invitee list.

PG&E representatives participated in the meetings to answer questions and engage with meeting participants. Working group participants included representatives from tribal and local government entities; small multi-jurisdictional electric utilities; publicly owned electric utilities; communications and water service providers; public safety partners; AFN community-based organizations (CBO) and agencies (e.g., members of local Independent Living Centers) and CPUC staff. Meetings were structured to provide attendees with key information and metrics on the above topics. Participants were encouraged to provide feedback and engage and collaborate with each other.

Timing and Facilitation

The Regional Working Group meetings were held from August 10-12 and moderated by a PG&E Senior Manager or Director assigned as a lead for each region, with support from Local Government Affairs

¹ D.20-05-051

² D.20-06-017

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

representatives, Tribal Liaisons and Public Safety Specialists from each respective region, along with Microgrid/Resilience and EPSS subject matter experts. PG&E's Regional Vice Presidents also participated in three of the five meetings (Bay Area, Central Valley and North Coast).

Attendance

The Regional Working Group meetings were attended by an average of 21 participants per session this quarter.

Sample Comments Received

The 2022 third quarter Regional Working Group meetings were held on a virtual platform. This platform, Microsoft Teams, provided attendees with the ability to participate verbally and through the chat feature, and granted access to live captions for access and functional needs participants. All questions and comments were addressed in real-time and below are some participant comments captured during the five working groups:

- *"It would be great to be able to be notified of which (EPSS) zone is out when it goes out." – Karuk Tribe*
- *"No questions, just compliments! Colusa has been well served and thank you for your continual updates and communications." – Colusa County Office of Emergency Services*
- *"Would the microgrids program consider supporting small-scale community biomass projects?" – Northern California Power Agency*
- *"In instances like this (EPSS), do you send out 3rd party notifications (or other types of notifications) so that other companies can respond to their facilities (when applicable)?" – Comcast Cable*
- *"Will EPSS warrant an after hours call when activated as PSPS would?" – Redwood Coast Regional Center*
- *"Can people opt out of the extended (after hours) calls?" – Disability Action Center*

Continued Engagement

The feedback gathered during each Regional Working Group and subsequent participant surveys helps to further inform our plans and local solutions to reduce PSPS impacts and wildfire risk. Additionally, we are continuing to engage with key stakeholders from each region through ongoing outreach efforts and upcoming Regional Working Groups. The fourth quarter Regional Working Group meetings of 2022 will be focused on 2023 planning updates and a wildfire safety outage season recap. For reference, detailed follow-up items captured during each meeting, along with meeting participant lists, are in the meeting summary forms located in the Appendix. At the end of this quarter, we will also submit survey data but were not able to include the data in this summary due to the expedited timing required by the Microgrid OIR.

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

Appendix



**Community Wildfire Safety Program
Regional Working Group Summary Sheet**

MEETING INFORMATION		
Region: Central Valley	Quarter: Q3	Meeting Date: August 10, 2022

INFORMATION REQUESTS / FOLLOW-UP ITEMS			
Description	Owner	Recipient	Status
N/A	N/A	N/A	N/A

FEEDBACK / LESSONS LEARNED	
Topic	Summary
Safety Updates	<ul style="list-style-type: none"> N/A
Enhanced Powerline Safety Settings (EPSS) Update	<ul style="list-style-type: none"> N/A
Microgrid and Resiliency Update	<ul style="list-style-type: none"> Northern California Power Agency inquired if the microgrid program would consider supporting small-scale community biomass projects. Participants were encouraged to reach out to communitymicrogrids@pge.com to discuss potential solutions. Amador Water Agency inquired if microgrid funding covers water and wastewater facilities, as the San Andreas area have been impacted by PSPS outages. Noted that CMEP may cover enhanced technical support and offset costs for certain distribution system upgrades, if eligible.
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none"> N/A

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Safety and Reliability Update	<ul style="list-style-type: none">• N/A
Open Discussion/Q&A	<ul style="list-style-type: none">• N/A

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MEETING PARTICIPANTS (21)		
Name	Title	Agency
Terri Meorado		Fresno County Office of Emergency Services
Steven Klaiber		California Public Utilities Commission
Gabriel De La Cerda		Fresno County Office of Emergency Services
Hai Normen	Emergency Preparedness Coordinator	Resources for Independent Living Central Valley
Darrell D Johnson		Comcast Cable
Aaron McDonald	Emergency Response Coordinator	Valley Mountain Regional Center
Lew Desmond		California Public Utilities Commission
Anthony Noll		California Public Utilities Commission
Annette Rogers	Emergency Operations Manager	Central Valley Regional Center
Thomas Dulin	Transit Systems, Director	Fresno Economic Opportunities Commission
Randy Howard		Northern California Power Agency
Rick Ferriera	Operations and Engineering Manager	Amador Water Agency
Shelby Chase		California Public Utilities Commission
Alyson Feldmeir		California Foundation for Independent Living
Xuan "Cindy" Chen		California Public Utilities Commission
Kevin McCusker		California Water Service
Gregory Padilla		CALFIRE
Austin S. Avery		Turlock Irrigation District
Lisa Austin		California Foundation for Independent Living
Dore Bietz		Tuolumne County Office of Emergency Services
John Saucedo	Cultural Monitor Resources	Picayune Rancheria of the Chukchansi Indians

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Community Wildfire Safety Program Regional Working Group Summary Sheet

MEETING INFORMATION		
Region: North Valley/Sierra	Quarter: Q3	Meeting Date: August 10, 2022

INFORMATION REQUESTS / FOLLOW-UP ITEMS			
Description	Owner	Recipient	Status
PG&E to provide an update in Q4 on the Report It App (e.g., statistics, roll out plan).	Andrew Ace	Q4 RWG	In Progress

FEEDBACK / LESSONS LEARNED	
Topic	Summary
Safety Updates	<ul style="list-style-type: none"> Participants asked if they could opt-out of outage notifications. Participants were informed that they are able to adjust notification preferences on PG&E's website under outage alerts.
Enhanced Powerline Safety Settings (EPSS) Update	<ul style="list-style-type: none"> Participants inquired if PG&E notifies joint pole owners of damages. Discussion followed to explain that joint pole owners would be notified. Inquiry received if EPSS outages would be identified on the website as "EPSS" under the outage status. Discussed the process for updating outage causes as soon as they're identified.
Microgrid and Resiliency Update	<ul style="list-style-type: none"> N/A
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none"> N/A
Safety and Reliability Update	<ul style="list-style-type: none"> N/A
Open Discussion/Q&A	<ul style="list-style-type: none"> Inquiry if there will be an update on the PG&E Report It App and plans to roll out the app to the public. Received comment that Colusa County has been well-served by PG&E and thanked PG&E for continual updates and communications.

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

MEETING PARTICIPANTS (23)		
Name	Title	Agency
Theresa Laughlin		Pit River Tribe Office of Emergency Services
Shelby Boston		Butte County Department of Employment and Social Services
Troy Morton		El Dorado County Sheriff's Office of Emergency Services
Ron Halog		Independent Living Resources of Solano and Contra Costa Counties
Mabel Wu		California Public Utilities Commission
Dan Corcoran		El Dorado Irrigation District
Rob Sandbloom		Shasta County Sheriff's Office of Emergency Services
Richard A Saldivar		California American Water
Darrell D Johnson		Comcast Cable
Lew Desmond		California Public Utilities Commission
Shelby Chase		California Public Utilities Commission
Alexia Retallack		Pioneer Community Energy
John Osbourn		Calaveras County
Dave Atkinson		Placer County
Lee Brown		Sierra County
Rudy Saenz		Dignity Health
Janice Bell		Colusa County Office of Emergency Services
Jason Harston		Plumas Sierra Rural Electric Co-Op
Wendy Longwell		Disability Action Center
Carolyn Nava		Disability Action Center
Hewitt Matanari		Alta California Regional Center
Alyson Feldmeir		California Foundation for Independent Living Centers

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Community Wildfire Safety Program Regional Working Group Summary Sheet

MEETING INFORMATION		
Region: North Coast	Quarter: Q3	Meeting Date: August 11, 2022

INFORMATION REQUESTS / FOLLOW-UP ITEMS			
Description	Owner	Recipient	Status
Possibility of drone use for inspections following outages on EPSS-enabled circuits	Reno Franklin	Misty Rickwalt	In Progress
Follow-up regarding EPSS outage notifications during courtesy hours	Rich Noonan/Carl Schoenhofer	Fred Keplinger	In Progress
If PG&E is working with Tesla on battery support for AFN populations	Megan Geraci/Andrew Ace	Chris (Chris@MarinCIL.org), Fred Keplinger	In Progress

FEEDBACK / LESSONS LEARNED	
Topic	Summary
Safety Updates	<ul style="list-style-type: none"> N/A
Enhanced Powerline Safety Settings (EPSS) Update	<ul style="list-style-type: none"> Marin County OES inquired if there will be notifications when EPSS is enabled on circuits within a county. Notifications will not be provided, as all circuits in high fire risk areas are enabled throughout fire season. Additional information regarding circuits is located on Outage Portal. Marin County OES believed that outages on EPSS-enabled lines affected an entire circuit. We clarified how PG&E has reduced impacts for customers by making adjustments and system improvements to localize outages just downstream to the nearest EPSS protection device. Karuk Tribe requested zone information if there are outages on an EPSS-enabled circuit. Outage area information is located on the Outage Portal. Karuk Tribe inquired if PG&E uses drones to conduct inspections following outages. Outages on EPSS-enabled circuits typically require onsite inspections prior to re-energization. PG&E is also mindful of aerial inspections during Tribal ceremonies.

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Microgrid and Resiliency Update	<ul style="list-style-type: none"> Marin Center for Independent Living inquired if PG&E is working with Tesla to provide battery support to vulnerable customers.
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none"> N/A
Safety and Reliability Update	<ul style="list-style-type: none"> Sonoma County OES inquired on which categories on the Safety and Reliability Highlight includes EPSS outages. Outages on EPSS-enabled circuits are categorized by root cause (i.e., tree branch, animal).
Open Discussion/Q&A	<ul style="list-style-type: none"> N/A

MEETING PARTICIPANTS (29)		
Name	Title	Agency
Darrell Johnson		Comcast Cable
Fred Simmons	Environmental Technician	Cahto Tribe of Laytonville
Leah Sautelet	Office of Emergency Services Manager	Lake County Sheriff's Office of Emergency Services
Kelsey Carreiro	Emergency Manager	City of Healdsburg
Woody Baker-Cohn		Marin County Office of Emergency Services
Shawn Swatosh		Mediacom Communications
Erica Torgerson		Sonoma Clean Power
Lew Desmond		California Public Utilities Commission
Alma Perez		Lake County Sheriff's Office of Emergency Services
Steven Klaiber		California Public Utilities Commission
Garrett James		Mendocino County
Margaret DiGenova		American Water
Daniel Tutt		California Public Utilities Commission
Richard A Saldivar		American Water
Scott Harter		Lake County
Carolyn Nava		Disability Action Center
Leanne Hoadley		MCE Community Choice Energy

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

Fred Keplinger		Redwood Coast Regional Center
Eddie A Morgan		Tri-County Independent Living
Naveed Paydar		California Public Utilities Commission
Chris Godley		Sonoma County Office of Emergency Services
Angel Hernandez		Napa County
Kendra Bowyer		Napa County
Rachael McDavid		Coyote Valley
Misty Rickwalt		Karuk Tribe
Dorthea Partida		Hopland Tribe
Chris		
Rachael		
		Environmental Protection Agency

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**Community Wildfire Safety Program
Regional Working Group Summary Sheet**

MEETING INFORMATION		
Region: South Bay/Central Coast	Quarter: Q3	Meeting Date: August 11, 2022

INFORMATION REQUESTS / FOLLOW-UP ITEMS			
Description	Owner	Recipient	Status
N/A	N/A	N/A	N/A

FEEDBACK / LESSONS LEARNED	
Topic	Summary
Safety Updates	<ul style="list-style-type: none"> N/A
Enhanced Powerline Safety Settings (EPSS) Update	<ul style="list-style-type: none"> N/A
Microgrid and Resiliency Update	<ul style="list-style-type: none"> N/A
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none"> N/A
Safety and Reliability Update	<ul style="list-style-type: none"> N/A
Open Discussion/Q&A	<ul style="list-style-type: none"> N/A

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

MEETING PARTICIPANTS (16)		
Name	Title	Agency
Darrell Johnson		Comcast Cable
Andrew Young		City of Gilroy
Lew Desmond		California Public Utilities Commission
Norma Amaro		Sunnyvale Department of Public Safety
Michael Beaton		Santa Cruz County
Marcos Santiago		City of San Jose
George Nunez		CALFIRE
Natalie Baylosis		San Andreas Regional Center
Ray Riordan		City of San Jose
Andrew Rubang		California Public Utilities Commission
Jay McAmis		City of San Jose
Madison Mitchell		San Benito Office of Emergency Services
Zachary Struyk		City of San Jose
Jonathan Stornetta		City of Paso Robles
Dana Reed		County of Santa Clara
Myisha Aban		Tri-Counties Regional Center

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



**Community Wildfire Safety Program
Regional Working Group Summary Sheet**

MEETING INFORMATION		
Region: Bay Area	Quarter: Q3	Meeting Date: August 12, 2022

INFORMATION REQUESTS / FOLLOW-UP ITEMS			
Description	Owner	Recipient	Status
N/A	N/A	N/A	N/A

FEEDBACK / LESSONS LEARNED	
Topic	Summary
Safety Updates	<ul style="list-style-type: none"> N/A
Enhanced Powerline Safety Settings (EPSS) Update	<ul style="list-style-type: none"> N/A
Microgrid and Resiliency Update	<ul style="list-style-type: none"> N/A
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none"> N/A
Safety and Reliability Update	<ul style="list-style-type: none"> N/A
Open Discussion/Q&A	<ul style="list-style-type: none"> N/A

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

MEETING PARTICIPANTS (16)		
Name	Title	Agency
Lisa Austin		California Foundation for Independent Living Centers
Darrell D Johnson		Comcast Cable
Nacho Mendoza	Manager of Water Operations	Diablo Water District
	DEM Duty Officer	City and County of San Francisco
Kellie Hanson	Disability Disaster Access and Resources Coordinator	Center for Independence, San Mateo
Steven Klaiber		California Public Utilities Commission
Brett Kawakami		East Bay Municipal Utility District
Ron Halog		Independent Living Resources Solano & Contra Costa Counties
Donald Mattei		County of San Mateo
Naveed Paydar		California Public Utilities Commission
Kim Springer		City/County Association of Governments of San Mateo County
David Soares		Disability Resources Agency for Independent Living
Michael Galvan		Community Resources for Independent Living Hayward
Joe Medici		Golden Gate Regional Center
Leslie Brown		Peninsula Clean Energy
Alicia Masri		Alameda County Office of Education

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

Attachment 2

**Agenda and Presentations for the Third Quarter 2022,
Regional Working Groups (including Resiliency Workshop)**



Pacific Gas and Electric Company Community Wildfire Safety Program

Q3 Regional Working Group – August 2022

Agenda

Topic	Questions to Consider	Duration
Safety and Introductions		5 min
Safety Updates <ul style="list-style-type: none">▪ Outage Types Discussion (EPSS vs. PSPS vs. Other)▪ PSPS Policies and Procedures	<ul style="list-style-type: none">✓ Where can I find more information about electricity outages?✓ Where can I find PG&E's policies and procedures and what is included in the document?	15 min
Enhanced Powerline Safety Settings (EPSS) Update <ul style="list-style-type: none">▪ New Outage Portal▪ Program Updates	<ul style="list-style-type: none">✓ Who has access to the Outage Portal?✓ What is PG&E doing to improve reliability?	20 min
Microgrid and Resiliency Update <ul style="list-style-type: none">▪ Microgrid Portal▪ Resiliency Program Update	<ul style="list-style-type: none">✓ Who has access to the Microgrid Portal?✓ What other microgrid related updates can we expect in the future?	25 min
Company Emergency Response Plan (CERP) Update	<ul style="list-style-type: none">✓ How can I provide CERP feedback?	5 min
Safety and Reliability Update	<ul style="list-style-type: none">✓ What safety and reliability trends did we see last quarter?	5 min
Open Discussion/Q&A	<ul style="list-style-type: none">✓ Are there any topics you would like to see included in future Regional Working Groups?✓ Do you have any feedback regarding the structure of the Regional Working Group meetings?	15 min

Community Wildfire Safety Program

Q3 2022 REGIONAL WORKING GROUP

Central Valley Region

August 10, 2022



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email.**



Safety

General Safety Tips

Identify two exit routes from your current work area in the event of a fire or other emergency.

.....

“Drop, cover and hold” in the event of an earthquake.

.....

Notify emergency services if you are in danger. You can also ask for help by putting a message in the chat function of this meeting.



Working Group Participants

- Access and Functional Needs Representatives
- City/County Staff
- Community-Based Organizations
- Community Choice Aggregators
- County Offices of Emergency Services
- First Responders
- Health and Human Services Representatives
- Paratransit Partners
- In-Home Support Service Providers
- Durable Medical Equipment Providers
- Publicly Owned Electric Utilities
- Red Cross Staff
- Electric Co-Ops and Small, Multi-Jurisdictional Electric Utilities
- Telecommunications Providers
- Tribal Governments
- Water Agencies
- Filsinger Energy Partners
- California Public Utilities Commission Staff



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.



Agenda

DISCUSSION TOPICS

- 1 Safety Updates**
 - Outage Types
 - Public Safety Power Shutoff (PSPS) Policies and Procedures

- 2 Enhanced Powerline Safety Settings (EPSS)**
 - New Outage Portal
 - Program Updates

- 3 Microgrid and Resiliency Update**
 - Microgrid Portal
 - Resiliency Program Update

- 4 Company Emergency Response Plan (CERP) Update**

- 5 Safety and Reliability Update**

MEETING PRESENTERS

Joshua Simes

Regional Vice President

Tracy Mello

Division Lead

Nathan Alonzo

Local Government Affairs

Deron Mills

Public Safety Specialist

Reno Franklin

Tribal Liaison

Eric Lamoureux

Enhanced Powerline Safety Settings

Jon Stallman

Grid Planning and Innovations

Safety Updates





Different Types of Outages Customers May Experience

HOW WILL WE INFORM CUSTOMERS?

PG&E can notify you in advance of...

Public Safety Power Shutoff

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach
- CBO** outreach

Rotating Outages (CAISO Ordered)

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach

Planned Maintenance

10-day advance notification

Emergency Repairs

Updates during and after outages

- Phone calls*
- Texts
- Emails

Active Wildfires

Updates during and after outages

- Phone calls*
- Texts
- Emails

Enhanced Powerline Safety Settings

Updates during and after outages

- Phone calls*
- Texts
- Emails

PG&E is unable to send advance notification prior to...

*Via interactive voice recordings (IVR) **Community-based organization

Public Safety Power Shutoffs (PSPS)

Turning off power to prevent tree branches and debris from contacting energized lines



WHEN

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

In advance through automated calls, texts and emails along with real-time updates



2022 FOCUS

Continuing to refine the program and reducing impacts in the areas at highest risk

Enhanced Powerline Safety Settings (EPSS)

Settings quickly and automatically turn off power if a problem is detected on the line.



WHEN

Elevated wildfire risk is present, most likely from May to November, but can occur year-round.



NOTIFICATIONS

Customers receive notifications at the start of an outage and regular updates; Since power is automatically shut off within one-tenth of a second when a fault occurs, we are unable to provide advanced notice.



2022 FOCUS

Expanding from approximately 45% High Fire Threat District to 100% of High Fire Risk Area circuits

2022 PSPS Policies and Procedures

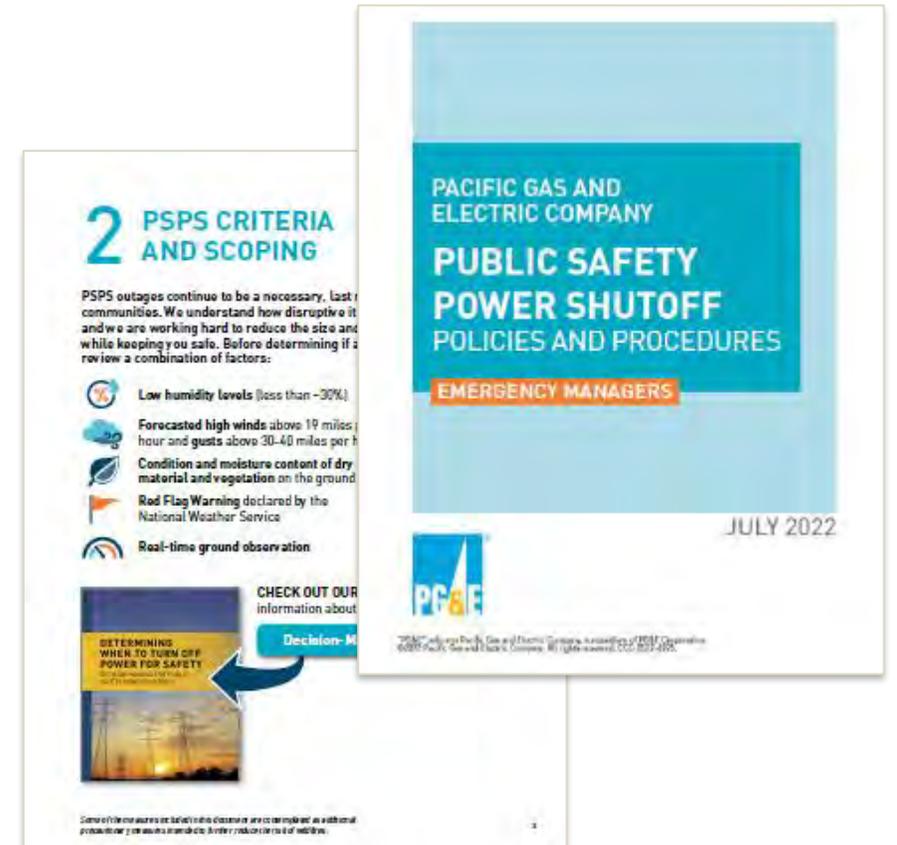
PG&E has recently updated our PSPS Policies and Procedures document for Emergency Managers.

Notable updates:

- Changes to Courtesy Hours Notifications
- Priority Notice Webpage Removal
- Self-Identified Electricity Dependent Customers

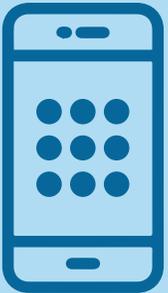
The document is available at:

- pge.com/pspsportal
- pge.com/pspspartners

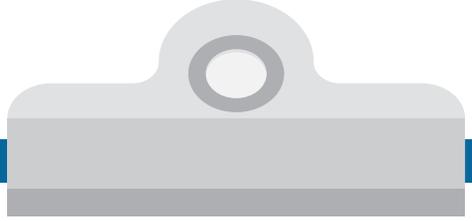




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Where can I find more information about electricity outages?**
 - **Where can I find PG&E's Policies and Procedures and what is included in the document?**

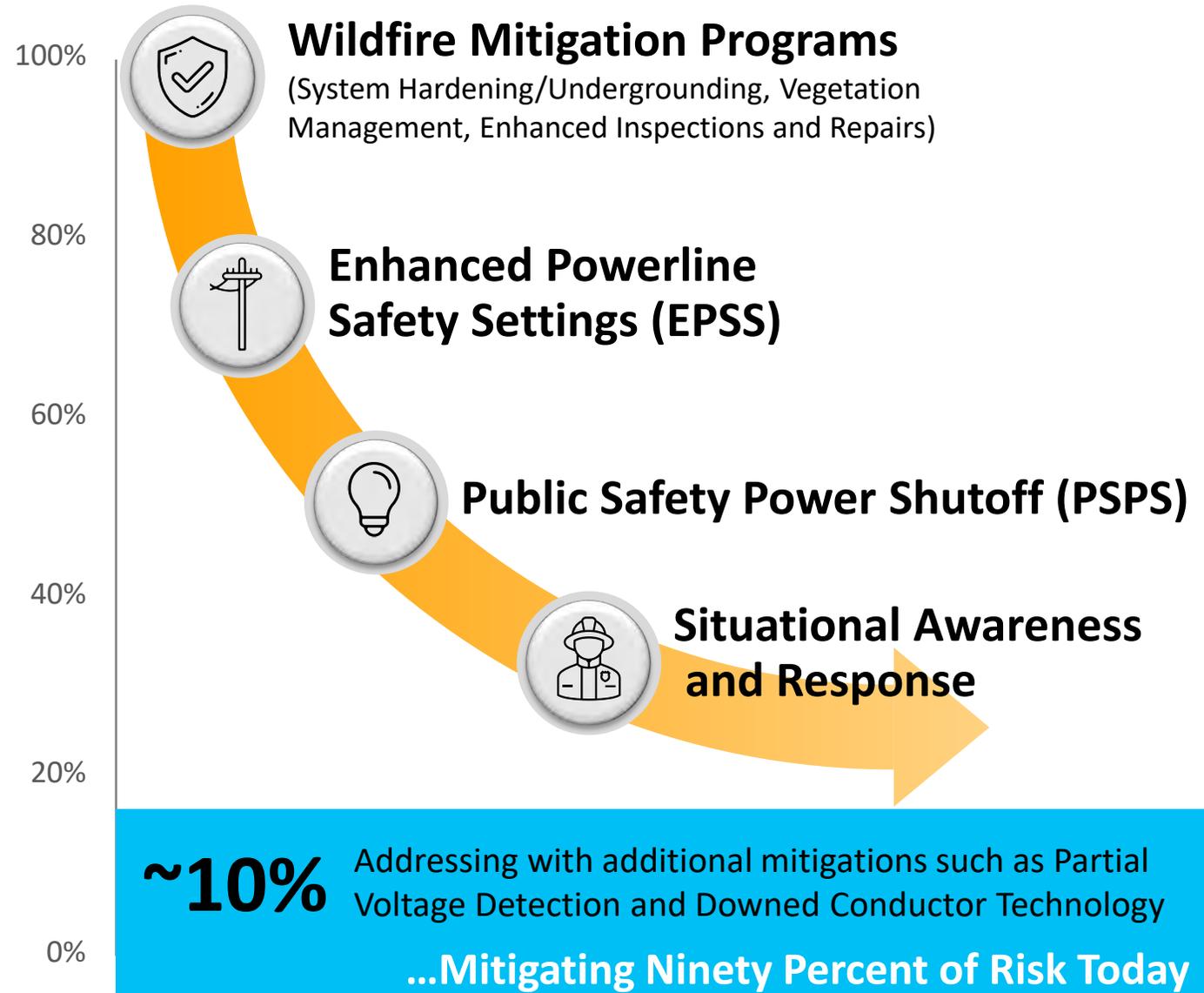
Enhanced Powerline Safety Settings (EPSS)





Layers of Protection...

PG&E actions
have mitigated
~90%
of wildfire risk





Enhanced Powerline Safety Settings (EPSS) A Technology To Prevent Wildfires

How It Works

PG&E powerlines have equipment that allows power to automatically turn off within one-tenth of a second if there is a wildfire risk, like a tree branch or other object striking the line.

Why We Do It

Quickly and automatically shutting off power when a hazard is detected can help stop wildfires before they have a chance to start.

Preventing Wildfires

~80% decrease in CPUC-reportable ignitions
in 2021 on EPSS-enabled circuits
compared to the prior 3-year average as of 12/31/21



SAFETY SETTINGS IN ACTION

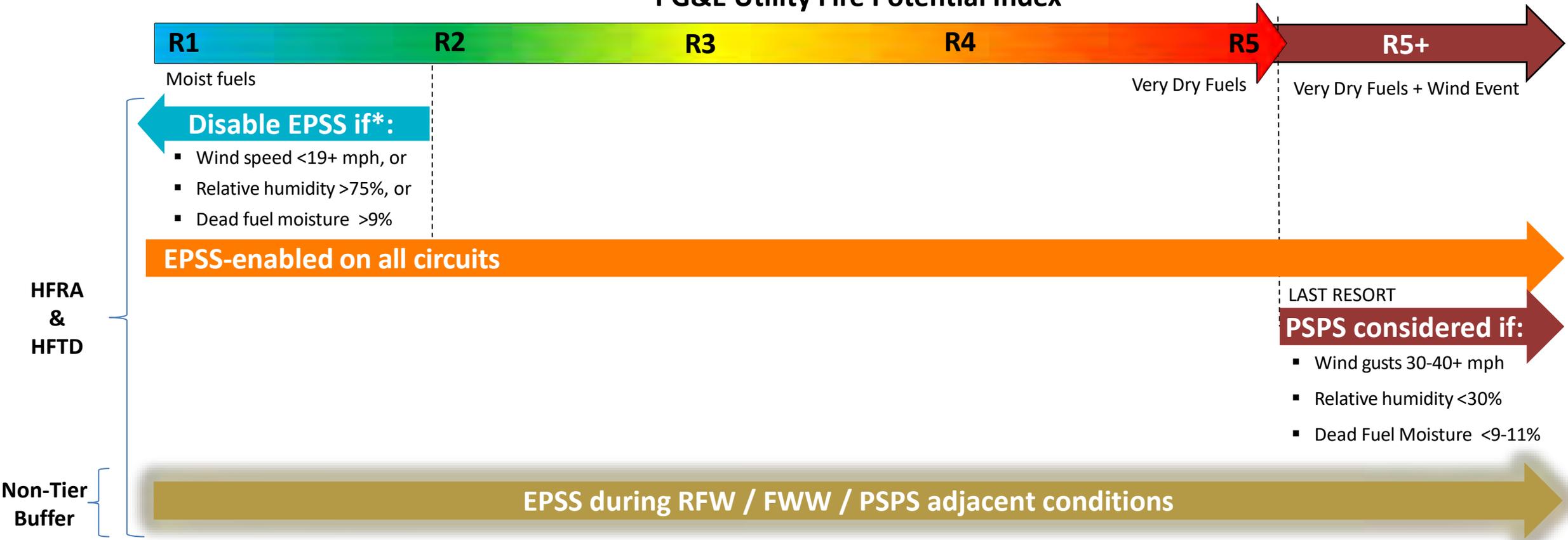
An example of these settings preventing a potential ignition in Santa Cruz County, when a tree branch fell into a powerline in 2022 and power was quickly and automatically turned off.



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.

PG&E Utility Fire Potential Index

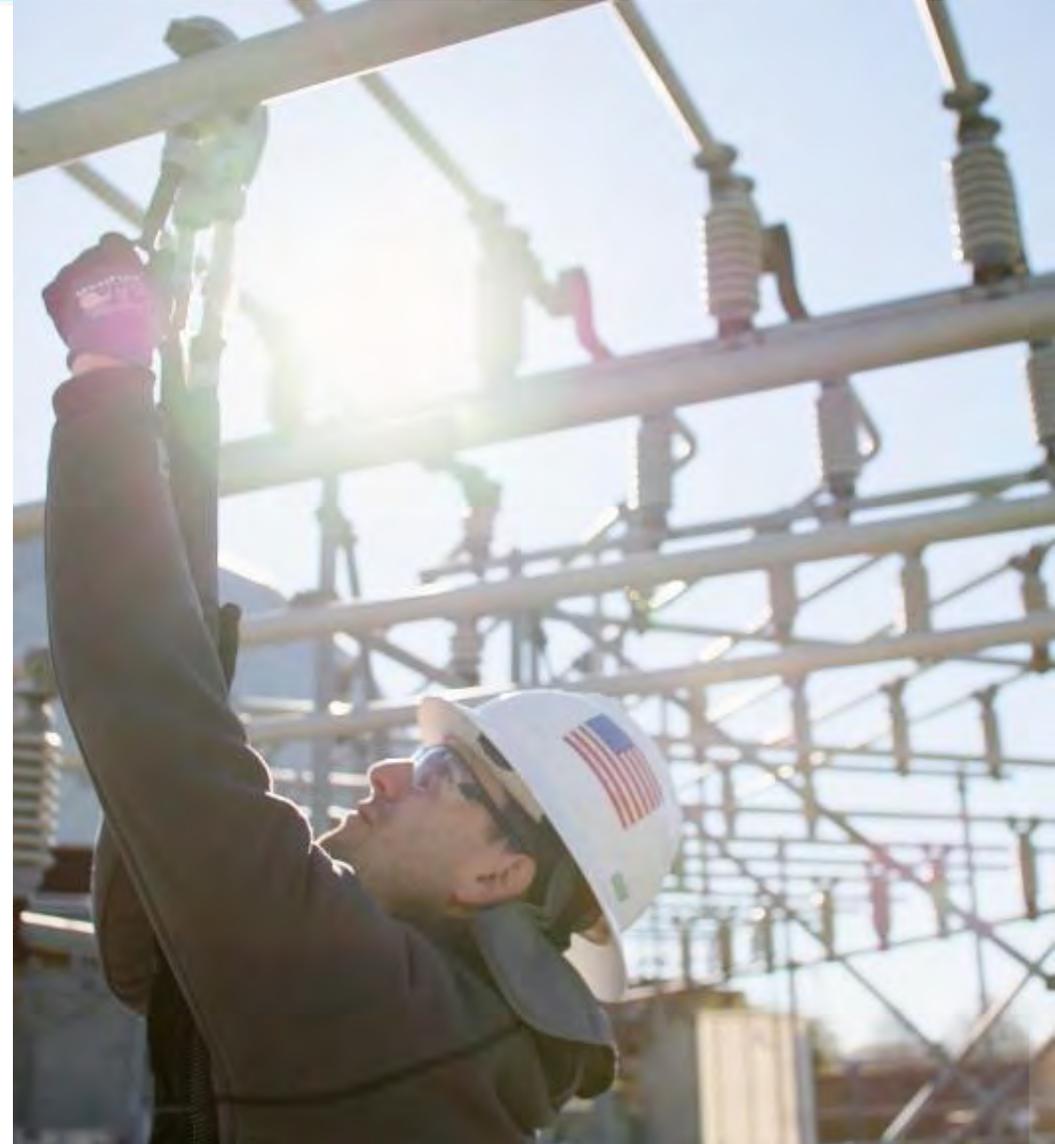


NOTE: RFW = Red Flag Warning; **FWW** = Fire Weather Watch; **PSPS** = Public Safety Power Shutoff

*If all conditions are sustained.

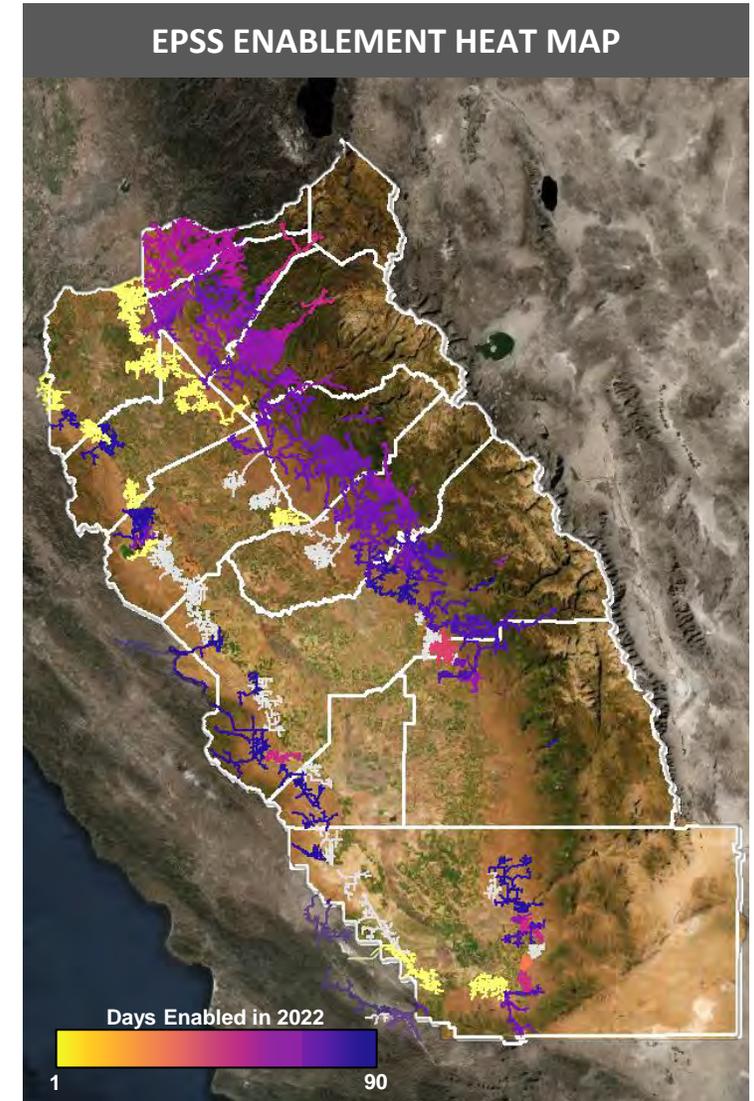
Steps we are taking...

- ✓ Installing technology to help **quickly identify outage locations**
- ✓ Conducting **vegetation** management on trees near powerlines
- ✓ Installing sectionalizing devices that isolate hazards to **limit the number of customers impacted** during outages

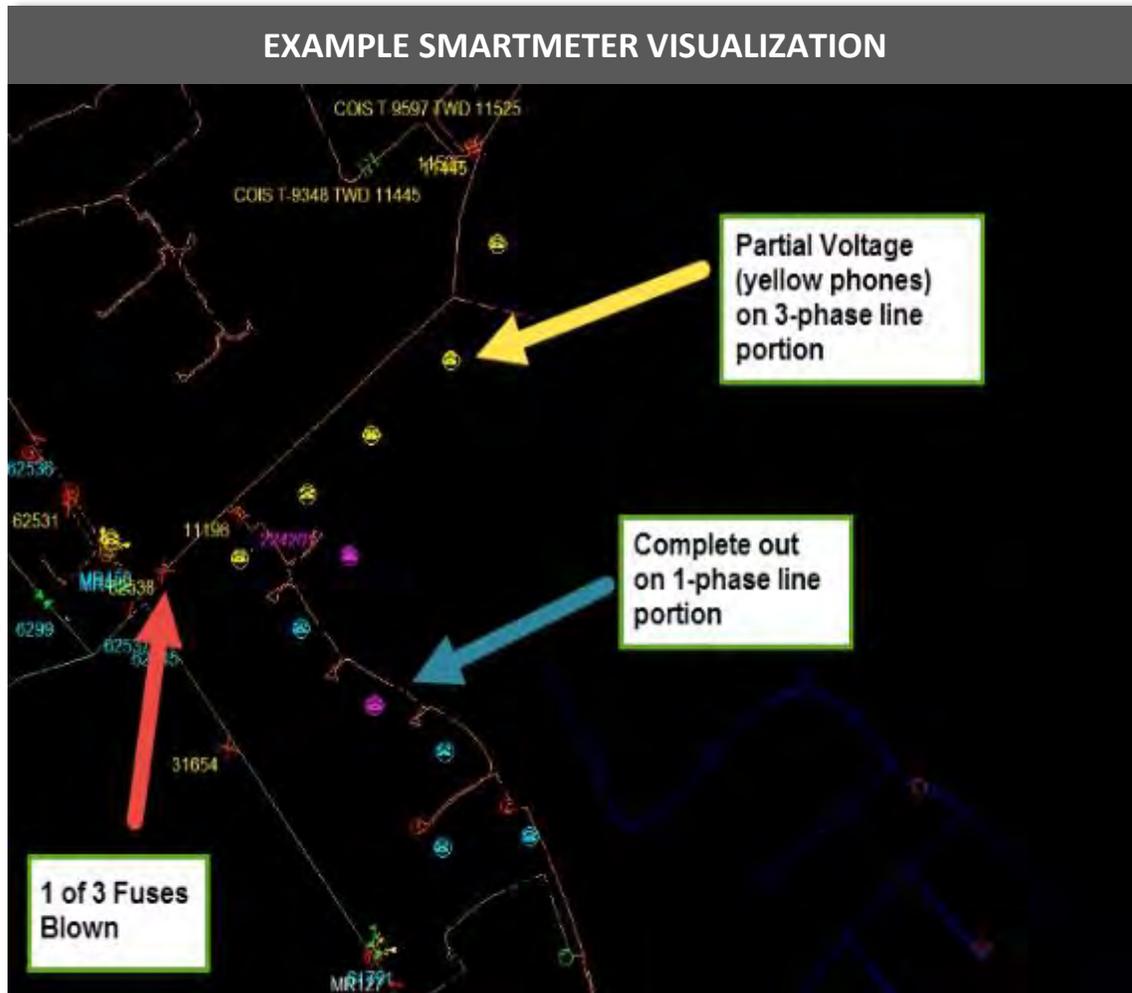


EPSS is a proven tool for reducing ignitions. In the Central Valley Region, 161 distribution circuits serving about 157,000 customers are currently protected.

- This year, there have been 163 outages on EPSS-enabled circuits across the region.
- The average number of customers included in each of these outages has been 666 and outages have lasted an average of 4.5 hours, a 31% improvement over last year.
- We are prioritizing reliability improvements on circuits that have had multiple outages and are actively making adjustments.
- For example, the Poso Mountain 2101 circuit in Kern County has experienced 10 outages in 2022. To improve reliability on this circuit we have:
 - Replaced equipment
 - Adjusted sensitivity settings
 - Conducted additional vegetation management
 - Installed animal guards
 - Adjusted grid configuration in the area



Data is subject to change and as of 07/31/2022.



To help identify low and very low current faults in our system (which can “look like” a minor increase in load on a circuit), we are beginning to leverage our SmartMeter network to determine when the lines serving a particular area may be experiencing these conditions and need to be de-energized for safety.

This is called a Partial Voltage Force Out.

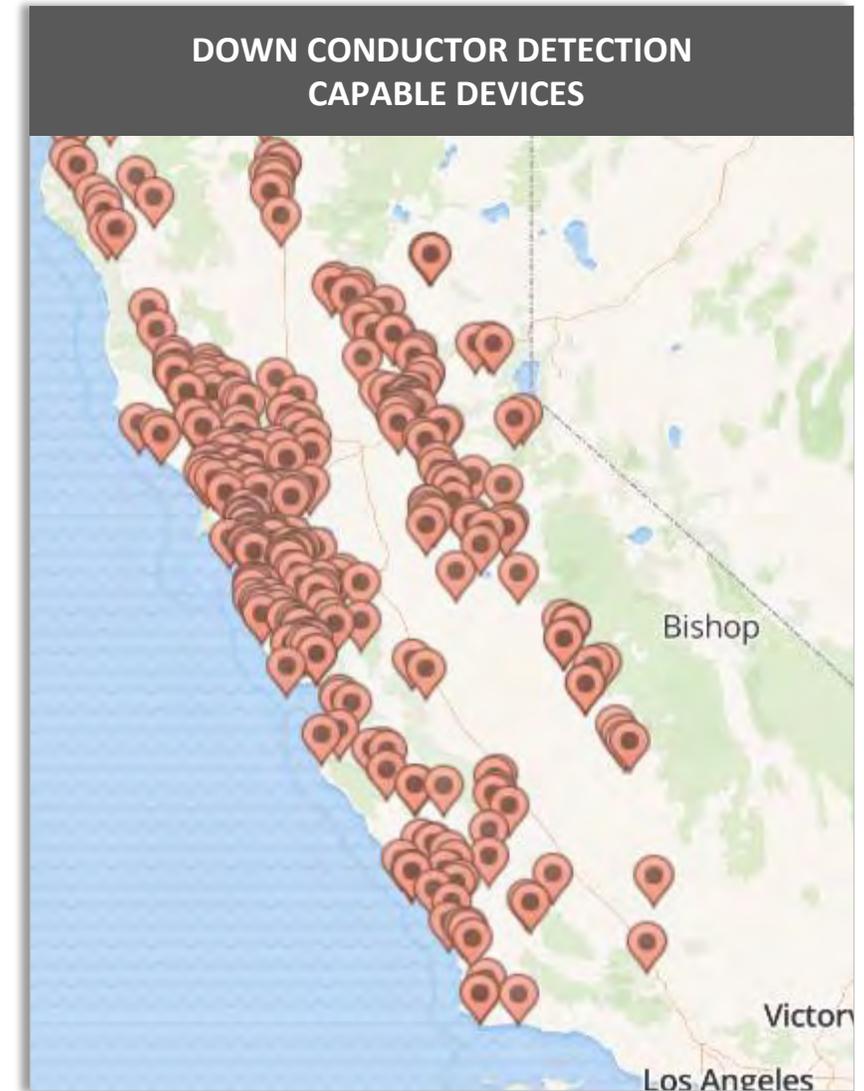
We are enabling Partial Voltage Force Outs on all EPSS devices in High Fire Risk Areas.

Recloser Detection of Low/Very Low Current Faults

Another recent EPSS update includes piloting “Down Conductor Detection” on some reclosing devices across our system.

This feature:

- Uses a sophisticated analysis to determine when low and very low current faults are present (which can “look like” high impedance faults).
- De-energizes reclosers immediately.
- Can detect previously hard to detect fault conditions that could result in an ignition.





PG&E Data Portals



Welcome to PG&E Data Portals

On this site you can access various datasets.

PSPS Portal

The **PSPS Portal** includes planning and event-specific information, and is available for public safety partners that support emergency management efforts, which include: emergency responders from federal, state, local and tribal governments, telecommunication providers, water agencies, public-owned utilities, emergency hospitals, and transportation agencies.

[GO TO PSPS PORTAL](#)

Outage Portal

The **Outage Portal** includes information pertaining to EPSS-caused outages within PG&E's service territory. The portal will provide circuit and outage area maps for active EPSS outages. Supplementary EPSS and other outage data may be added as the product matures. This data is available for public safety partners that support emergency management efforts.

[GO TO OUTAGE PORTAL](#)

Microgrid Portal

The **Microgrid Portal** includes facility information, High Fire Threat Districts, Historical PSPS information, and GO131-D and GO166 data. It is available as required by CPUC Order 20-06-017, to tribal governments, County OESs, or organizations created by political subdivisions to carry out provisions of the State Emergency Plan.

[GO TO MICROGRID PORTAL](#)

Don't have access?

[REQUEST ACCESS](#)

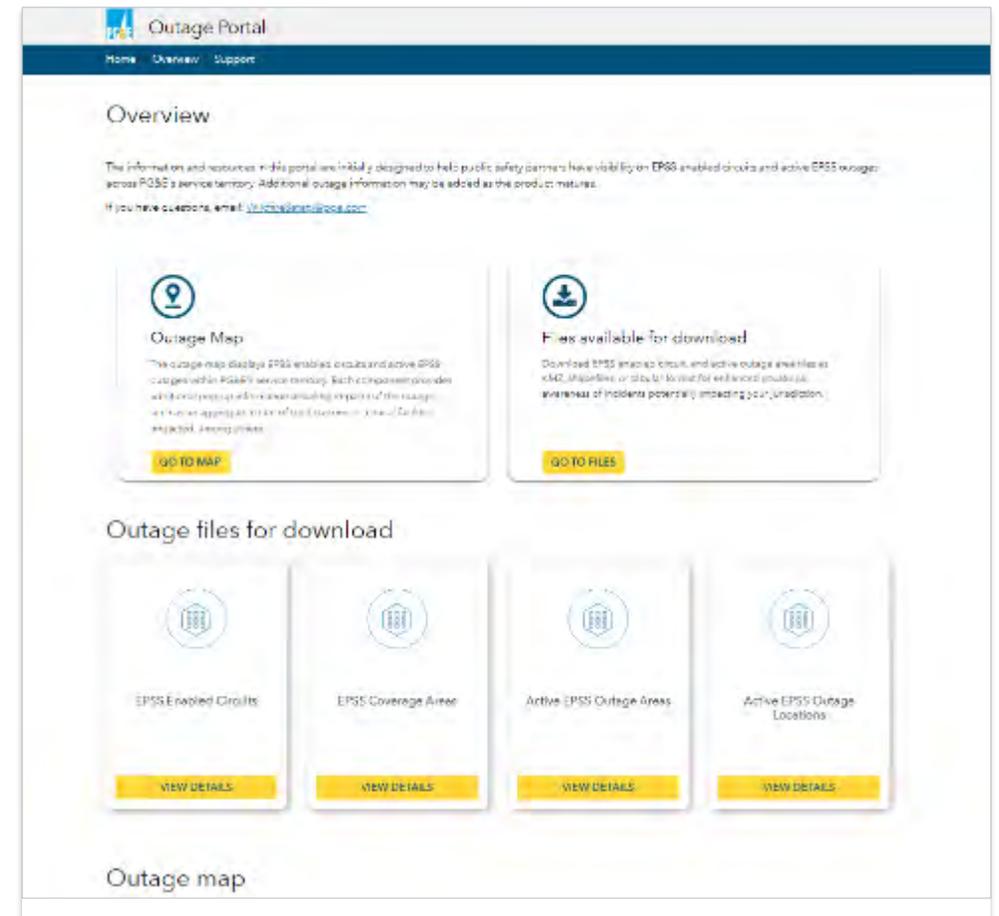
pgedataportals.pge.com



New Outage Portal

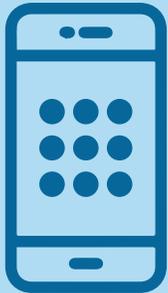
PG&E's new Outage Portal is focused on providing data regarding circuits and outages occurring on lines protected by EPSS-enabled devices. In the future, information about all outage types will be included.

- ✓ **The portal is available to Public Safety Partners** and others who currently have PSPS portal access.
- ✓ **An invitation email was sent to all PSPS Portal users**, and you can also visit pgedataportals.pge.com to request access.
- ✓ **Data on the portal currently includes:**
 - Locations of currently enabled EPSS devices
 - Details of active outages on EPSS circuits

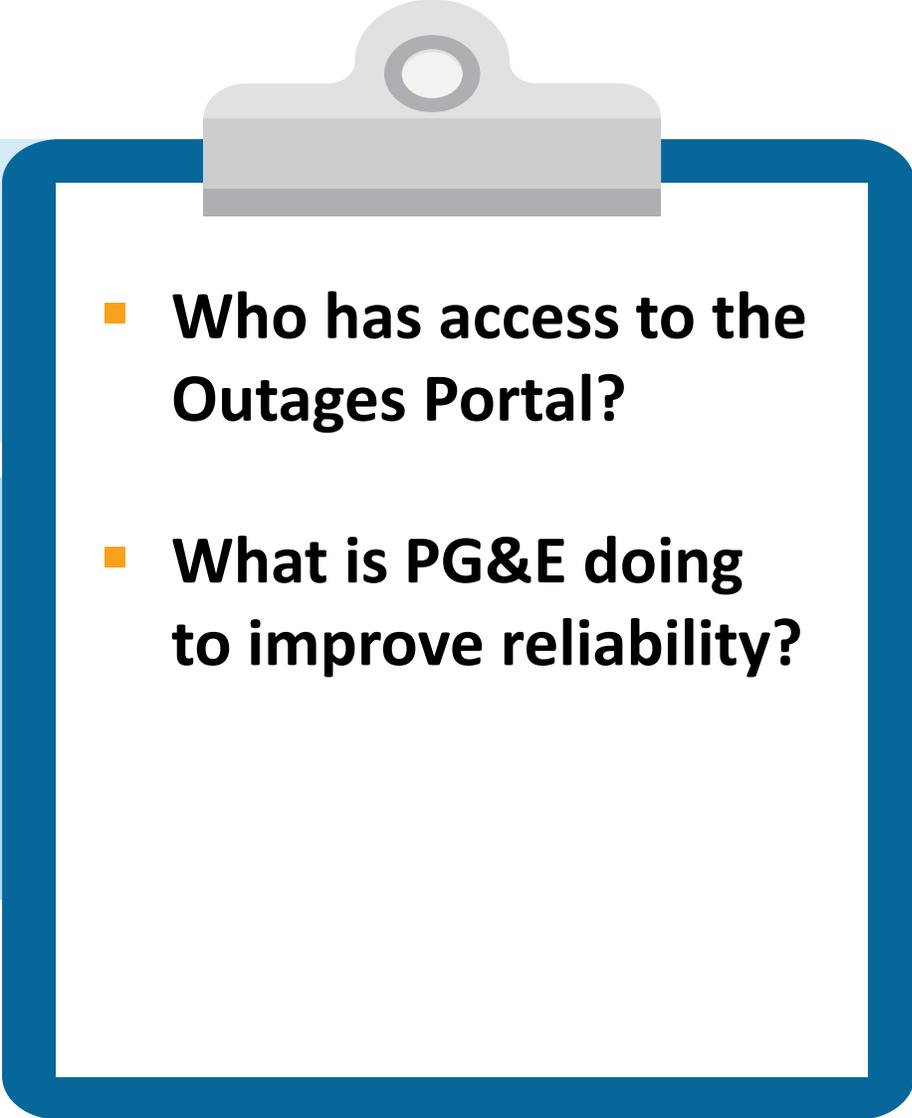




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Who has access to the Outages Portal?**
 - **What is PG&E doing to improve reliability?**

Microgrid and Resiliency Update

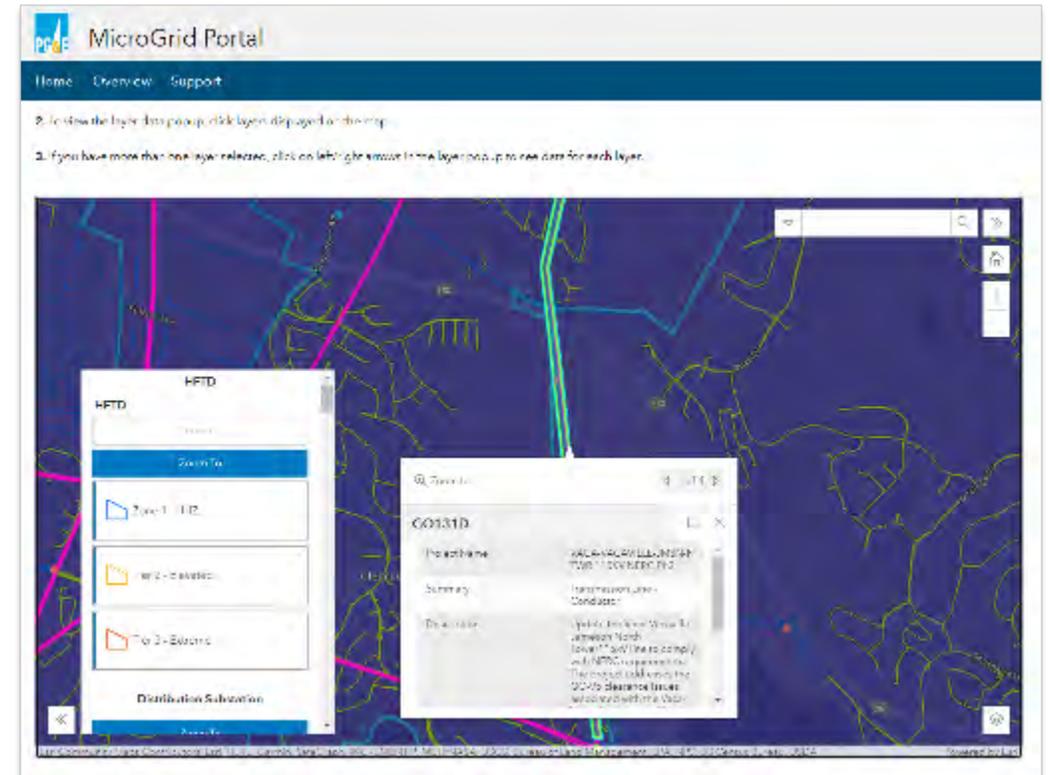


Last year, PG&E developed a Microgrid Portal to share information with local agencies and tribes to assist in their own resiliency efforts. This tool:

Is available to County OES representatives, tribal governments and other “organizations created by political subdivisions to carry out the provisions of the State Emergency Plan.”

Includes the following data:

- **Utility planned work/grid investments**
- **High Fire-Threat District Map layers**
- **Electric infrastructure map layers**
- **Weather polygon map layers**





Microgrid Incentive Program (MIP)

PG&E, along with San Diego Gas and Electric and Southern California Edison are in the process of developing a new Microgrid Incentive Program to fund clean community microgrids that support the critical needs of vulnerable populations most likely to be impacted by outages.

- ✓ **Increase reliability and resiliency for critical public facilities** in communities that are at higher risk of electrical outages
- ✓ **Prioritize communities** with higher portions of low-income, Access and Functional Needs, and electricity dependent residents
- ✓ **Enable communities with lower ability to fund development of backup generation** to maintain critical loads during outages pending CPUC approval.

The new Microgrid Incentive Program (MIP) will have limited funding. Access will be through a competitive application process.

Pending CPUC approval, we expect to be able to share additional details about the program later this year or in early 2023.



Overview of Microgrids and Other Resilience Efforts

This year, we are continuing to build upon our distribution microgrid and remote grid programs and plan to continue to utilize our previously identified islanding locations when possible.

PROGRAM	2020 TOTAL SITES	2021 TOTAL SITES	2022 TOTAL SITES PLANNED
Distribution Microgrids Microgrids prepared to energize “main street” corridors, central community resources and critical facilities in areas that frequently experience PSPS events.	3*	8**	13
Islanding Locations Reconfiguration of local generation sources to allow certain areas to be separated from the larger electric grid and remain energized during PSPS events.	0	6	6
Remote Grids Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid. These projects are intended to help reduce the risk of wildfires but can also improve reliability as well.	0	1	3***

Local work plans are subject to change, and data is based on the best available information at this time.

**Does not include 4 additional sites that were made ready to operate using a temporary configuration in 2020*

***Does not include 1 additional site that was made ready to operate using a temporary configuration in 2021*

****Additional sites may also be completed in 2022 through 2024*



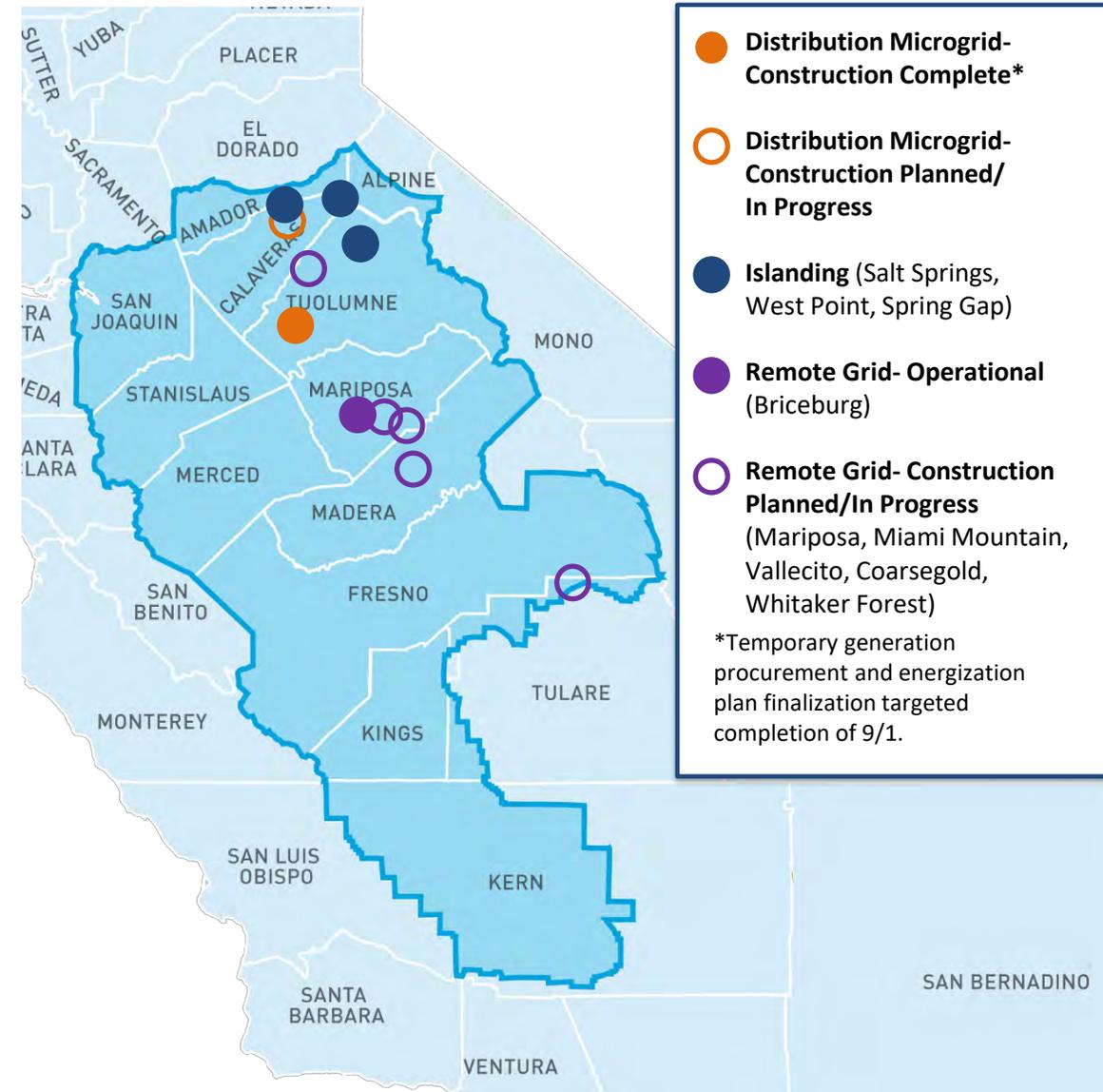
Grid Resilience Efforts – Central Valley Region

COUNTY	COMPLETE THROUGH 2021	NEW 2022 SITES	NEW 2023 SITES
Calaveras	2 LOCATIONS	1 LOCATION	0 LOCATIONS
Mariposa	1 LOCATION	2 LOCATIONS	0 LOCATIONS
Tuolumne	1 LOCATION	1 LOCATION	1 LOCATION
Madera	0 LOCATIONS	0 LOCATIONS	1 LOCATION
Tulare	0 LOCATIONS	0 LOCATIONS	1 LOCATION

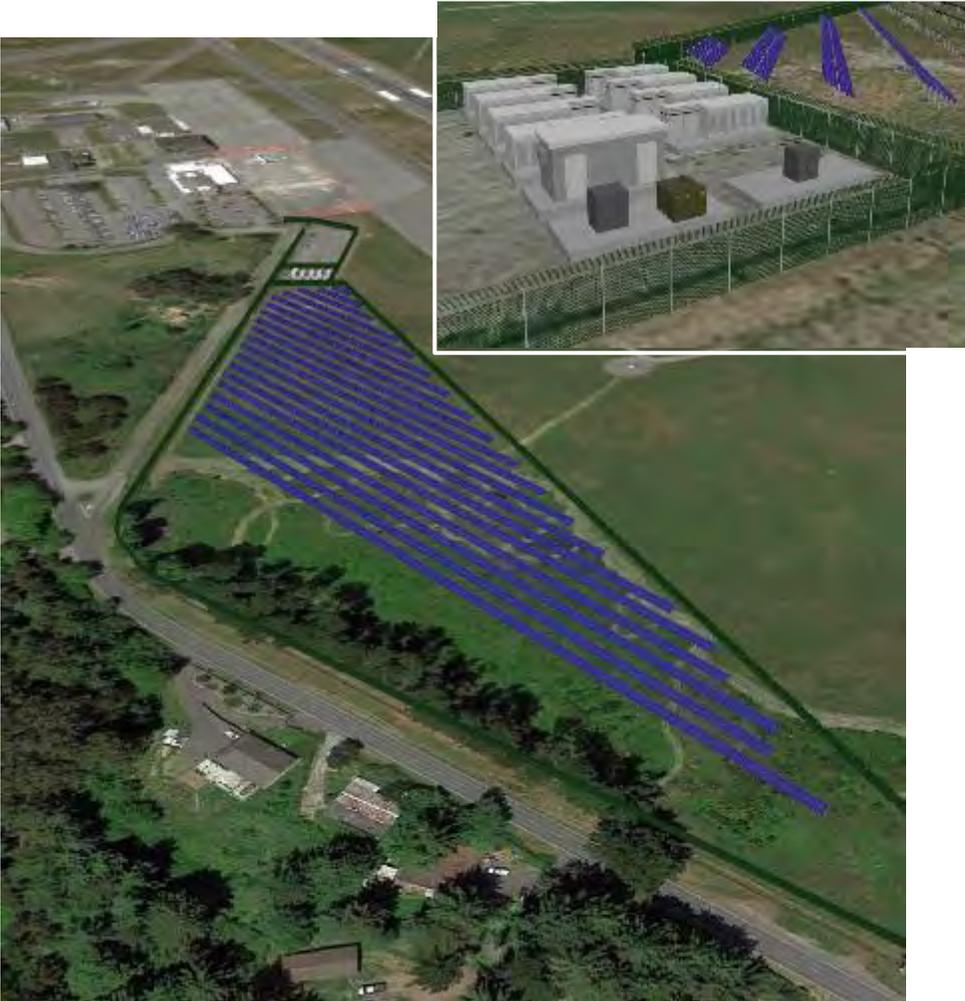
Note: Additional resilience work is not currently planned in the remaining counties within the region.

PG&E is prioritizing its wildfire safety work by locations with the highest risk of wildfire and locations that will reduce PSPS impacts for the most customers.

Local work plans are subject to change and data is based on the best available information at this time.



Redwood Coast Airport Microgrid



In coordination with Schatz Energy Research Center and Redwood Coast Energy Authority, PG&E supported the development of California's first fully automated and 100% renewable multi-customer microgrid.

This innovative project:

- Serves multiple customers “in-front-of-the meter” including:
 - California Redwood Coast-Humboldt County Airport
 - U.S. Coast Guard Humboldt Bay Air Station
- Leverages solar arrays and Tesla Megapack storage
- Is owned and operated by the Redwood Coast Energy Authority but interfaces with PG&E's control center.

Hospital Support

- PG&E will continue to support hospitals this year by pre-staging approximately 25 megawatts of temporary generation at 11 hospitals that have experienced frequent Public Safety Power Shutoffs in the past.
- New this year, we have made improvements to our backup generation at St. Helena Hospital to support that facility during all outages (PSPS, EPSS, etc.)
- We continue to develop pilot programs with alternatives to diesel power and intend to make these systems available for use in 2023 to facilities that can meet our pilot criteria.



2022 Mobile Battery Energy Storage System (MBESS) Pilot

PG&E is expanding our mobile battery efforts to provide support during outages.

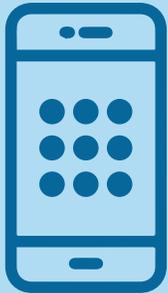
MBESS Pilot Details

- PG&E is working with industry partners to develop a small pilot fleet of mobile Tesla Megapacks for response to planned and unplanned outages.
- These units will feature a steel frame for portability/durability.
- Each unit can be connected both in front of and behind the meter at primary or secondary voltages.
- The batteries are also capable of remote observation and flexible dispatching.
- PG&E is developing a pilot roll-out strategy and expects to launch initial pilot locations in 2022-2023.





Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- **Who has access to the Microgrid Portal?**
- **What other microgrid related updates can we expect in the future?**

Company Emergency Response Plan (CERP)



Company Emergency Response Plan (CERP)

PG&E's Company Emergency Response Plan (CERP) assists with the safe, efficient and coordinated response to all-hazard emergency incidents affecting gas or electric generation, distribution, storage, transmission systems or any other emergency incident within our service area.

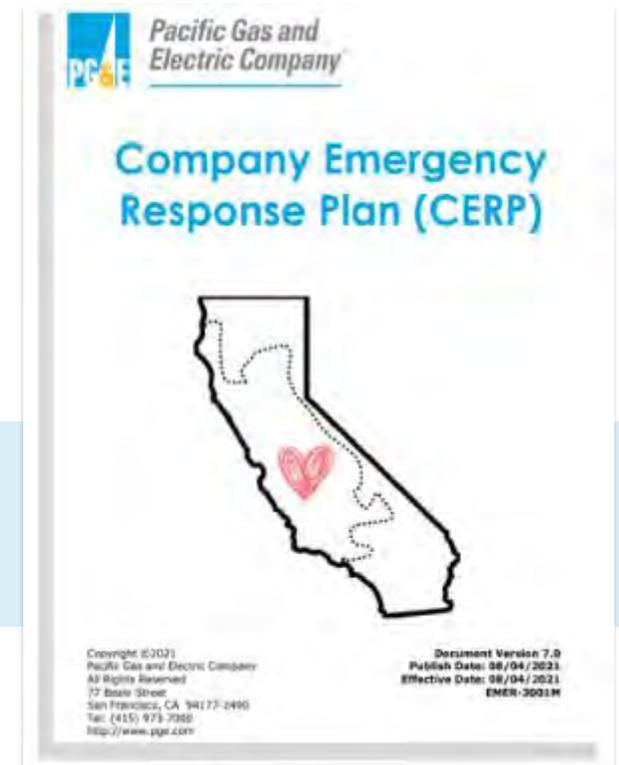
A key element of the CERP is the identification of coordination efforts with outside organizations.

To support these coordination efforts, agencies can expect PG&E:

- Share invites to 2023 CERP review meetings in Q4 2022.
- Share a revised 2023 CERP in January 2023.
- Host six virtual CERP review meetings in Q1 2023.

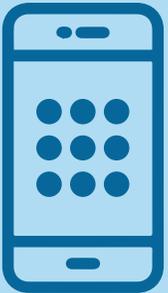
A copy of the current PG&E CERP can be found here:

pgera.azurewebsites.net/Regulation/search

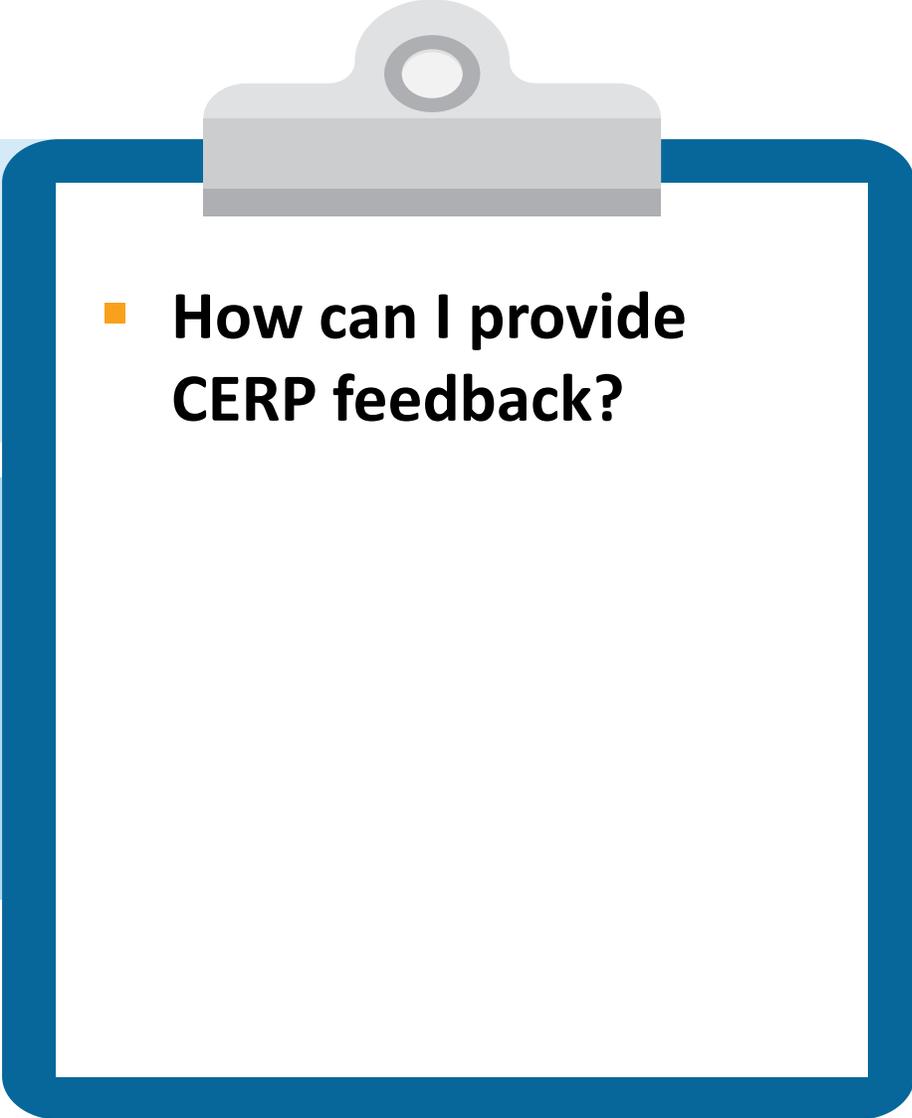




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **How can I provide CERP feedback?**

Safety and Reliability Update





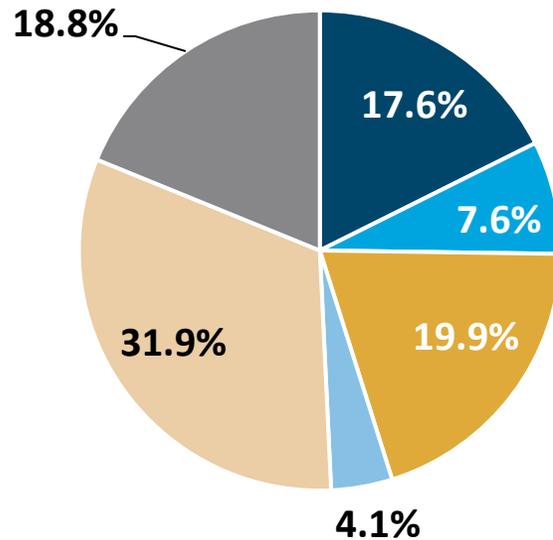
Safety and Reliability in the Central Valley Region

Power was on
99.94%
of the time

Power Outages in Your Region

- > Average Outage Size: **83 customers**
- > Average Outage Duration: **3 hours**

County- and city-level versions of this report are being shared with all electric customers in August 2022* and are available [here](#).



Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Data from April-June 2022

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

Steps PG&E is Taking to Better Serve You

Wildfire Safety in Your County
We are working hard every day to keep you safe and improve our electric system.

	2022 PLAN*	2022 COMPLETE
Undergrounding electric distribution powerlines	0 miles	0 miles
Installing stronger poles and power lines	19 miles	2 miles
Enhancing vegetation work around powerlines	171.2 miles	106.8 miles

*Plans are subject to change due to weather, permitting and other restrictions.

High Fire-Risk Areas
Fresno County

Enhanced Powerline Safety Settings (EPSS)
This technology is helping to reduce wildfire risk. If a hazard, like a tree branch on the line, is detected, power is automatically turned off within one-tenth of a second.

EPSS in Your County:

Customers Protected	16,539
Average Outage Size (customers)	492
Average Outage Duration (hours)	5

Steps we are taking to reduce customer impact

- Adjusting device sensitivity based on wildfire risk and disabling the safety settings when it is safe to do so
- Installing technology to quickly identify and address outage sources
- Adapting patrol methods to shorten outages

Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Power Outages in Your County

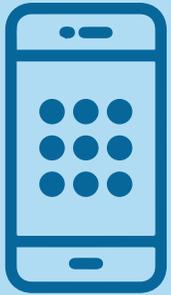
- > Average Outage Size: **93 customers**
- > Average Outage Duration: **2 hours**

DATA AS OF JUNE 2022
Some of the measures included in this document are contemplated as additional precautionary measures intended to further reduce the risk of wildfires. ©2022 PG&E. PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. 03/22/2022 PG&E and Electric Company. All rights reserved. All data is approximate and subject to change. 07/26/2022

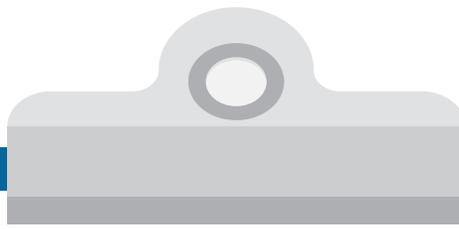
*Report is released in phases and all customers will receive this report by 8/17/22.



Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- A large blue clipboard icon with a silver clip at the top, containing a white sheet of paper with a list item.
- **What safety and reliability trends did we see last quarter?**

Open Discussion/Q&A





Next Steps

- ✓ Meeting survey shared with participants to gather feedback on approach and content of Regional Working Groups
- ✓ Follow-up on items identified by local agencies/stakeholders
- ✓ Upcoming meetings
 - CWSP All Customer Webinar (8/10)
 - Weekly Portal Trainings (Beginning 8/12)
 - CERP Meetings (Q1 2023)

2022 REGIONAL WORKING GROUP CALENDAR

TIMING	TOPICS
Q4 2022 (December)	Wildfire Safety Outage Season Recap, 2023 Planning Updates

Thank You



Appendix





Outstanding Follow Up and Action Items – Central Valley

Below is a list of the follow up and action items identified during the previous Regional Working Group meetings as well as corresponding statuses.

Action Item	Agency	Status
Requested follow up regarding what PSPS related resources are available for deaf customers.	Fresno County OES	In Progress



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated 2022 Operational Readiness
Distribution Microgrids	Butte	Magalia	Construction Complete	Q3 2022*
	Calaveras	Arnold	Planning	Q4 2022
	El Dorado	Georgetown	Construction Complete	Q3 2022*
	El Dorado	Pollock Pines	Construction Complete	Q3 2022*
	Humboldt	Redwood Coast Airport Microgrid*****	Construction Complete	N/A
	Lake	Clearlake North	Planning	Q4 2022
	Lake	Lucerne	Construction Complete	Q4 2022
	Lake	Middletown	Construction Complete	Q3 2022*
	Napa	Angwin	Construction Complete	Q3 2022*
	Napa	Calistoga	Construction Complete	Q3 2022*
	Placer	Colfax	Construction Complete	Q4 2022*
	Placer	Foresthill	Construction Complete	Q3 2022*
	Shasta	Shingletown	Construction Complete	Q3 2022*
Tuolumne	Groveland	Construction Complete	Q4 2022	
Islanding	Calaveras**	Salt Springs Island	Operational	N/A
	Calaveras***	West Point Island	Operational	N/A
	Humboldt	Humboldt Bay Island	Operational	N/A
	Plumas	Caribou Island	Operational	N/A
	Tehama	Red Bluff Island	Operational	N/A
	Tuolumne	Spring Gap	Operational	N/A

Local work plans are subject to change and data is based on the best available information at this time.

*Temporary generation procurement and energization plan finalization targeted completion of 10/1.

**Also serves portions of Amador and Alpine Counties.

***Also serves portions of Amador County.

****Facility owned by Redwood Coast Energy Authority; PG&E owns, operates and maintains microgrid circuit.

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



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated Completion
Remote Grids	Mariposa	Briceburg	Operational	N/A
	Mariposa	Miami Mountain	Planning	Q4 2022
	Tehama	Corning 1	Planning	Q4 2022
	Tehama	Corning 2	Planning	Q4 2022
	Mariposa	Mariposa (Slaughterhouse)	Planning	Q4 2022
	Sonoma	Pepperwood Preserve	Planning	Q4 2023
	Tehama	Manton (Wildcat)	Planning	Q4 2023
	Tehama	Manton (Shingletown Wildcat)	Planning	Q4 2023
	Tehama	Manton (Battle Creek)	Planning	Q4 2023
	Madera	Coarsegold (Melvin)	Planning	Q4 2023
	Yuba	Bangor (Ponderosa Way – Challenge)	Planning	Q4 2023
	Lake	Middletown (Anderson Spring)	Planning	Q4 2023
	Tulare	Whitaker Forest	Planning	Q4 2023
	Tuolumne	Vallecito (Forebay – Stanislaus)	Planning	Q4 2023
	Glenn	Alder Springs (Valley View)	Planning	Q3 2024
	San Luis Obispo	Carrizo Plains	Planning	Q3 2024
Marin	Inverness (Mt. Vision PRNS)	Planning	Q3 2023	

Local work plans are subject to change and data is based on the best available information at this time.

Community Wildfire Safety Program

Q3 2022 REGIONAL WORKING GROUP

North Valley/Sierra Region

August 10, 2022



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.



Safety

General Safety Tips

Identify two exit routes from your current work area in the event of a fire or other emergency.

.....

“Drop, cover and hold” in the event of an earthquake.

.....

Notify emergency services if you are in danger. You can also ask for help by putting a message in the chat function of this meeting.





Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.

Working Group Participants

- Access and Functional Needs Representatives
- City/County Staff
- Community-Based Organizations
- Community Choice Aggregators
- County Offices of Emergency Services
- First Responders
- Health and Human Services Representatives
- Paratransit Partners
- In-Home Support Service Providers
- Durable Medical Equipment Providers
- Publicly Owned Electric Utilities
- Red Cross Staff
- Electric Co-Ops and Small, Multi-Jurisdictional Electric Utilities
- Telecommunications Providers
- Tribal Governments
- Water Agencies
- Filsinger Energy Partners
- California Public Utilities Commission Staff



Agenda

DISCUSSION TOPICS

- 1 Safety Updates**
 - Outage Types
 - Public Safety Power Shutoff (PSPS) Policies and Procedures

- 2 Enhanced Powerline Safety Settings (EPSS)**
 - New Outage Portal
 - Program Updates

- 3 Microgrid and Resiliency Update**
 - Microgrid Portal
 - Resiliency Program Update

- 4 Company Emergency Response Plan (CERP) Update**

- 5 Safety and Reliability Update**

MEETING PRESENTERS

Jim Monninger

Division Lead

Johnnise Foster-Downs

Local Government Affairs

Jeff Lee

Public Safety Specialist

Reno Franklin

Tribal Liaison

Tom Smith

Enhanced Powerline Safety Settings

Jon Stallman

Grid Planning and Innovations

Safety Updates





Different Types of Outages Customers May Experience

HOW WILL WE INFORM CUSTOMERS?

PG&E can notify you in advance of...

Public Safety Power Shutoff

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach
- CBO** outreach

Rotating Outages (CAISO Ordered)

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach

Planned Maintenance

10-day advance notification

Emergency Repairs

Updates during and after outages

- Phone calls*
- Texts
- Emails

Active Wildfires

Updates during and after outages

- Phone calls*
- Texts
- Emails

Enhanced Powerline Safety Settings

Updates during and after outages

- Phone calls*
- Texts
- Emails

PG&E is unable to send advance notification prior to...

*Via interactive voice recordings (IVR) **Community-based organization

Public Safety Power Shutoffs (PSPS)

Turning off power to prevent tree branches and debris from contacting energized lines



WHEN

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

In advance through automated calls, texts and emails along with real-time updates



2022 FOCUS

Continuing to refine the program and reducing impacts in the areas at highest risk

Enhanced Powerline Safety Settings (EPSS)

Settings quickly and automatically turn off power if a problem is detected on the line.



WHEN

Elevated wildfire risk is present, most likely from May to November, but can occur year-round.



NOTIFICATIONS

Customers receive notifications at the start of an outage and regular updates; Since power is automatically shut off within one-tenth of a second when a fault occurs, we are unable to provide advanced notice.



2022 FOCUS

Expanding from approximately 45% High Fire Threat District to 100% of High Fire Risk Area circuits

2022 PSPS Policies and Procedures

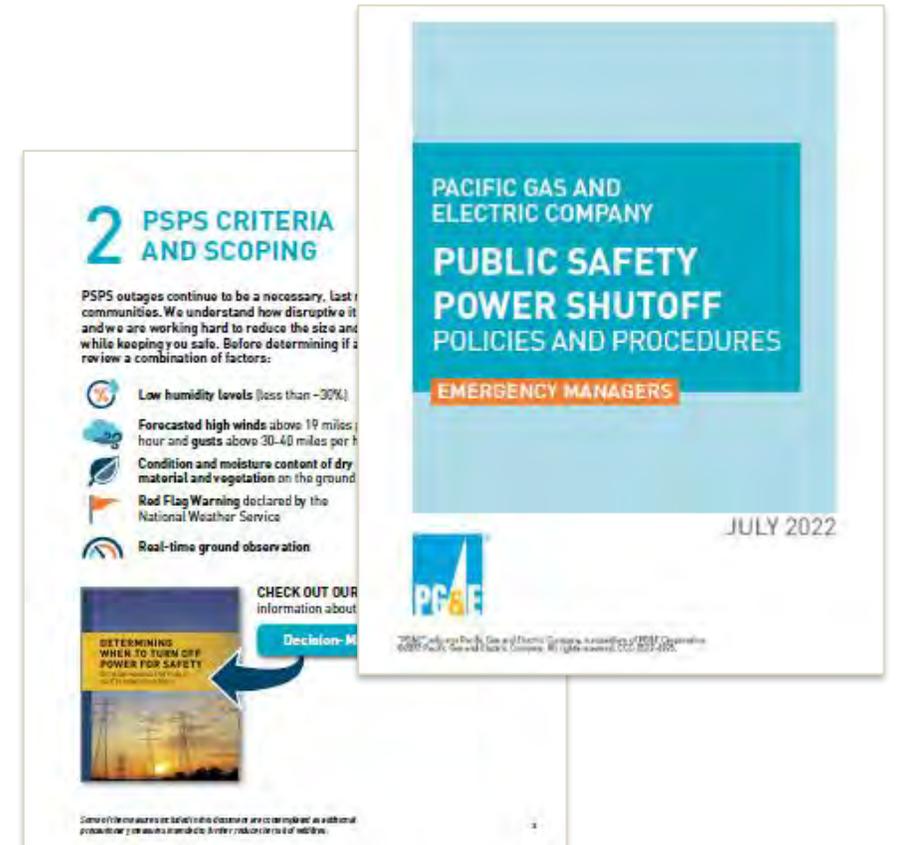
PG&E has recently updated our PSPS Policies and Procedures document for Emergency Managers.

Notable updates:

- Changes to Courtesy Hours Notifications
- Priority Notice Webpage Removal
- Self-Identified Electricity Dependent Customers

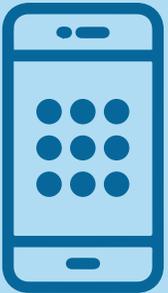
The document is available at:

- pge.com/pspsportal
- pge.com/pspspartners

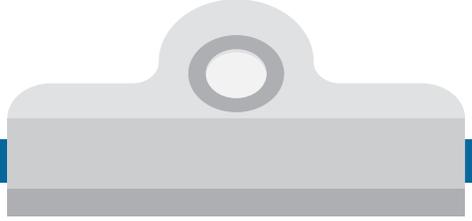




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Where can I find more information about electricity outages?**
 - **Where can I find PG&E's Policies and Procedures and what is included in the document?**

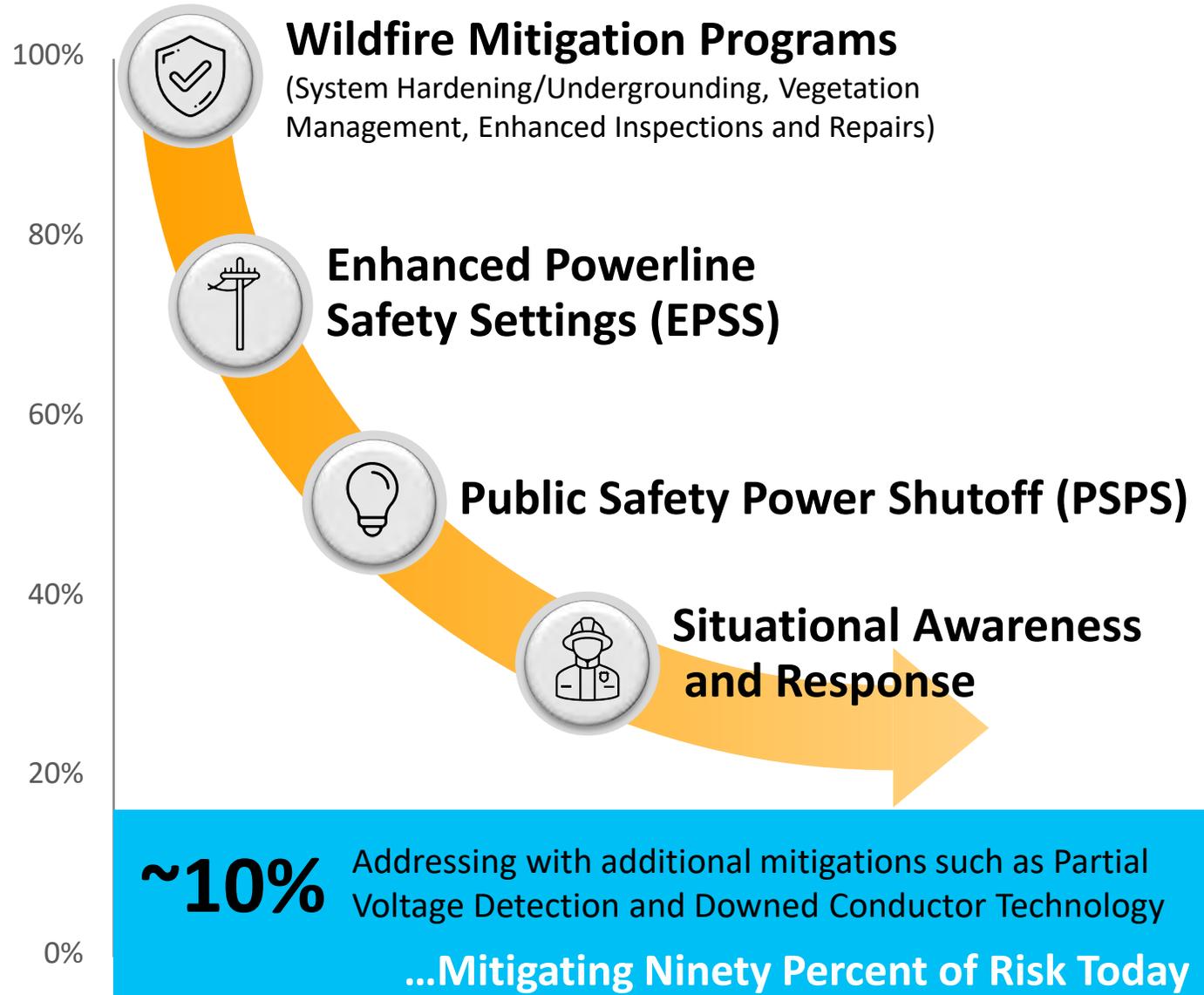
Enhanced Powerline Safety Settings (EPSS)





Layers of Protection...

PG&E actions
have mitigated
~90%
of wildfire risk





Enhanced Powerline Safety Settings (EPSS) A Technology To Prevent Wildfires

How It Works

PG&E powerlines have equipment that allows power to automatically turn off within one-tenth of a second if there is a wildfire risk, like a tree branch or other object striking the line.

Why We Do It

Quickly and automatically shutting off power when a hazard is detected can help stop wildfires before they have a chance to start.

Preventing Wildfires

~80% decrease in CPUC-reportable ignitions
in 2021 on EPSS-enabled circuits
compared to the prior 3-year average as of 12/31/21

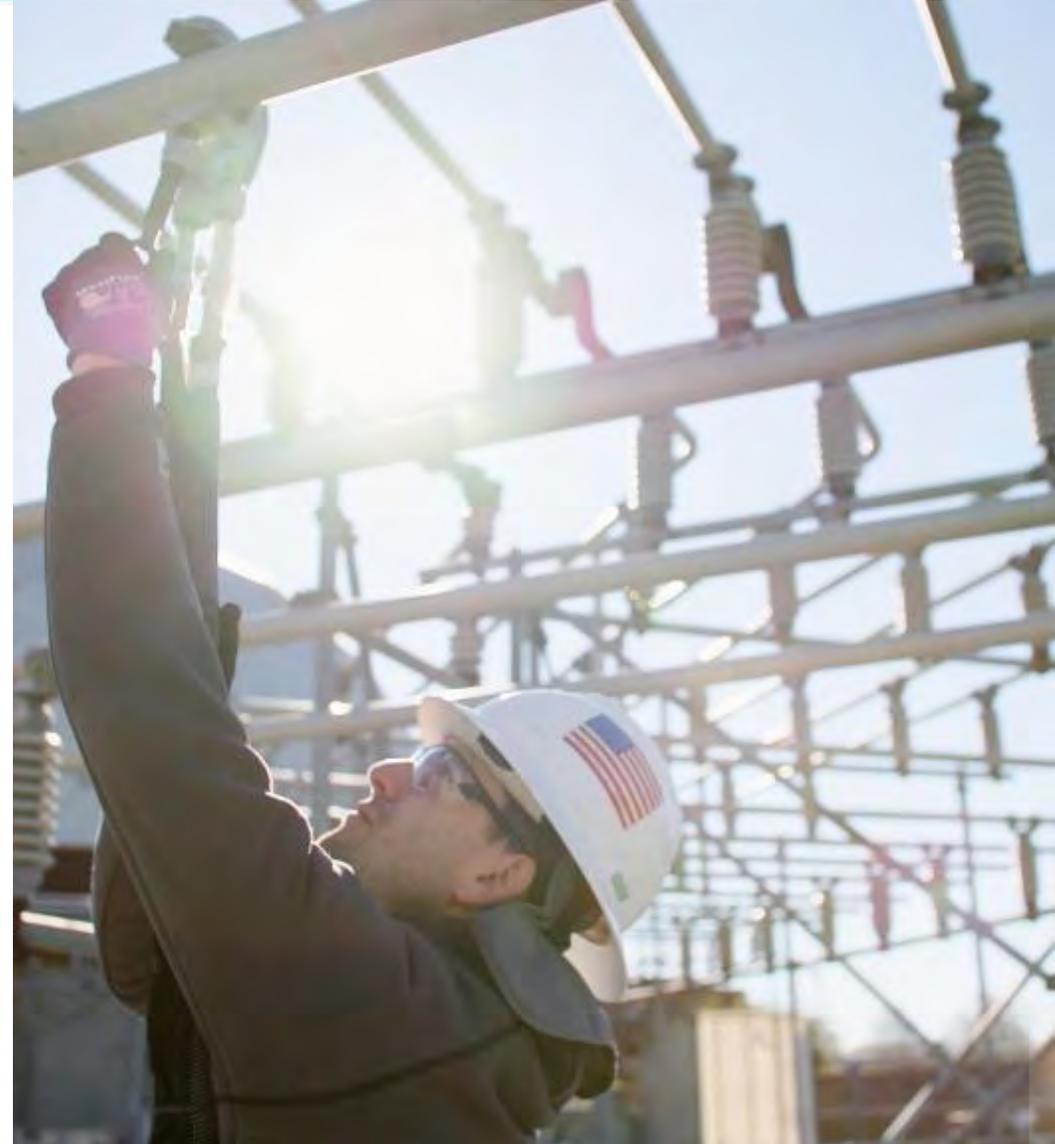


SAFETY SETTINGS IN ACTION

An example of these settings preventing a potential ignition in Santa Cruz County, when a tree branch fell into a powerline in 2022 and power was quickly and automatically turned off.

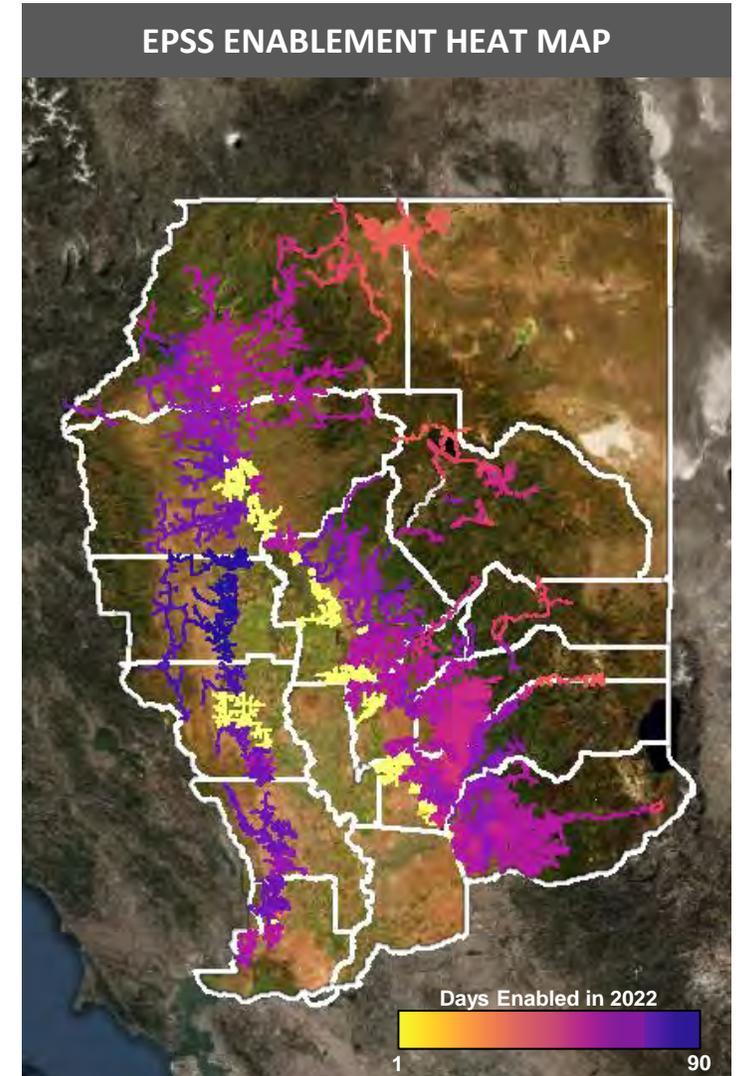
Steps we are taking...

- ✓ Installing technology to help **quickly identify outage locations**
- ✓ Conducting **vegetation** management on trees near powerlines
- ✓ Installing sectionalizing devices that isolate hazards to **limit the number of customers impacted** during outages



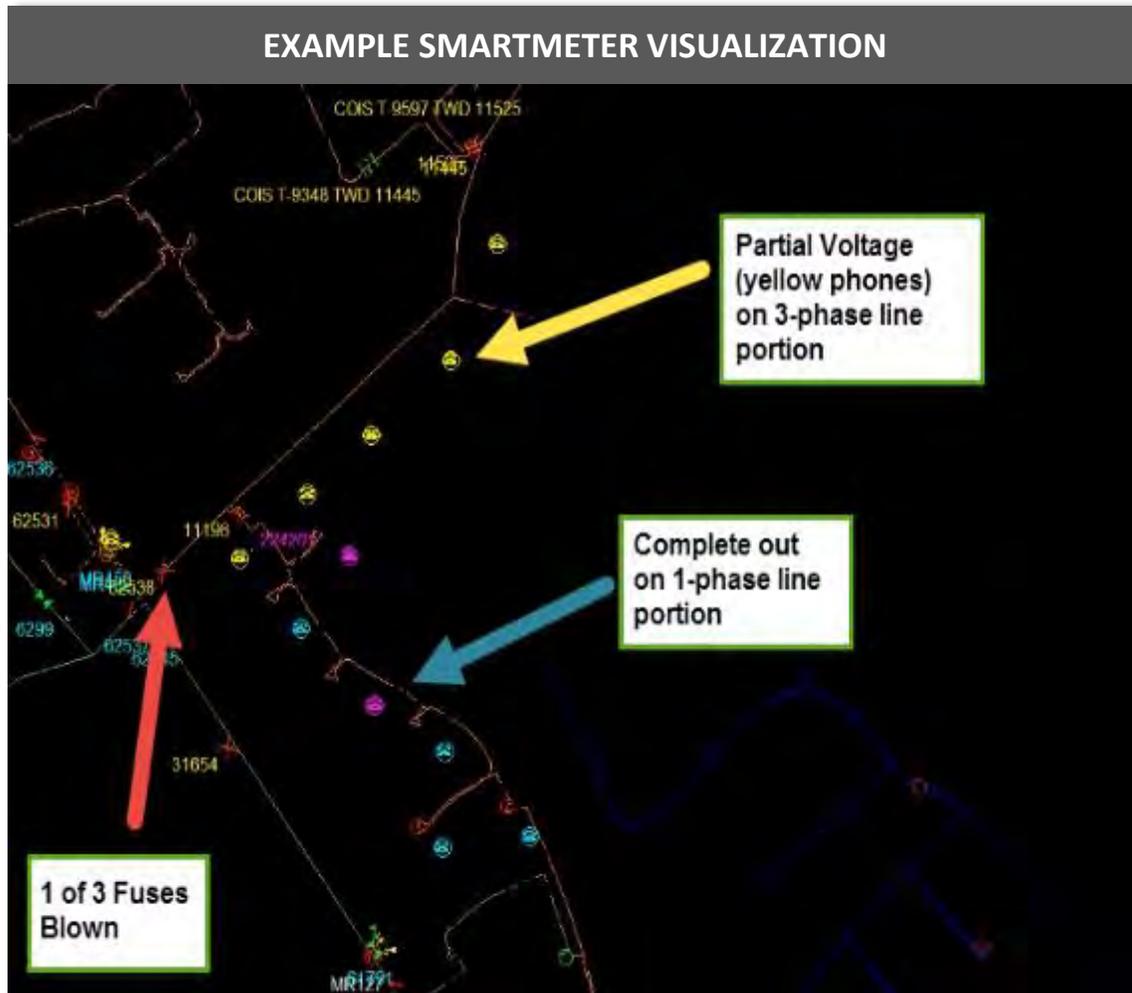
EPSS is a proven tool for reducing ignitions. In the North Valley/Sierra Region, 237 distribution circuits serving about 353,000 customers are currently protected.

- This year, there have been 301 outages on EPSS-enabled circuits across the region.
- The average number of customers included in each outage has been 829 and they have lasted an average of 3.2 hours, a 53% improvement over last year.
- We are prioritizing reliability improvements on circuits that have had multiple outages and are actively making adjustments.
- For example, the Tyler 1105 circuit in Tehama County has experienced 7 outages in 2022. To improve reliability on this circuit we have:
 - Adjusted sensitivity settings
 - Installed new technology to help identify outage sources faster
 - Installed animal guards
 - Adjusted patrols



Data is subject to change and as of 07/31/2022.

SmartMeter Detection of Low/Very Low Current Faults



To help identify low and very low current faults in our system (which can “look like” a minor increase in load on a circuit), we are beginning to leverage our SmartMeter network to determine when the lines serving a particular area may be experiencing these conditions and need to be de-energized for safety.

This is called a Partial Voltage Force Out.

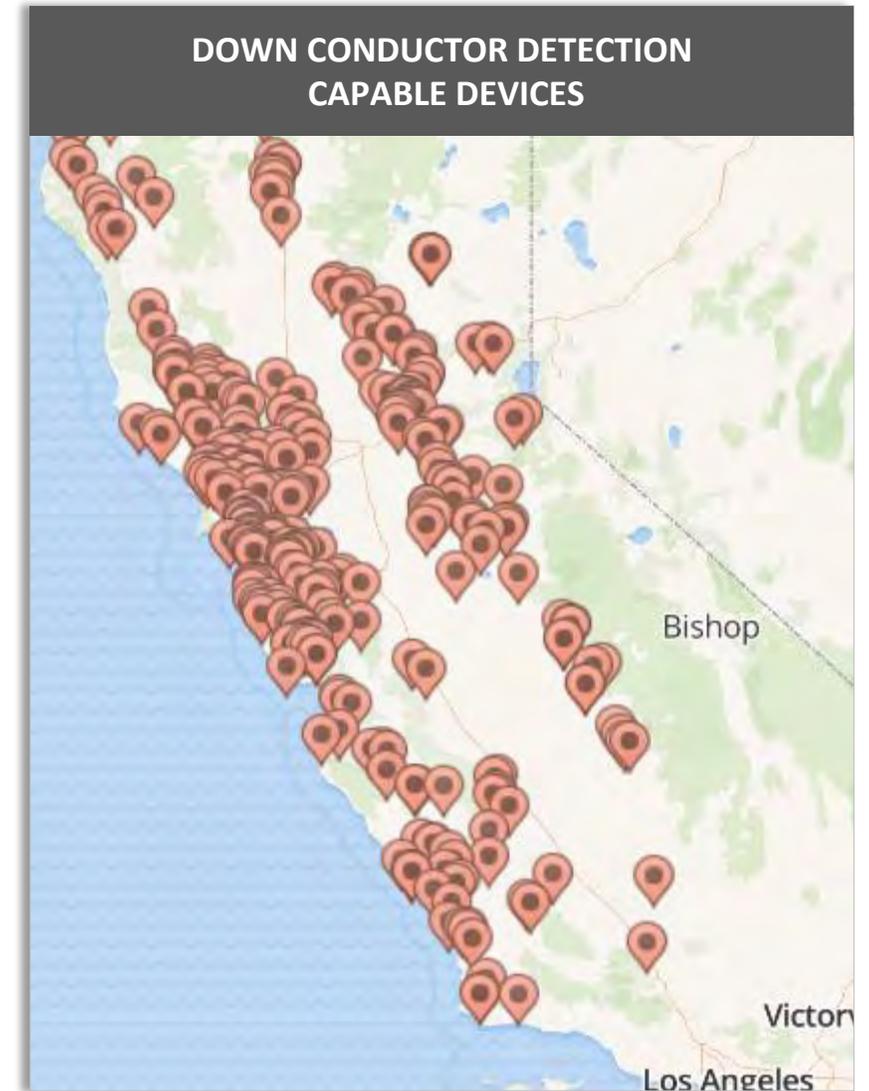
We are enabling Partial Voltage Force Outs on all EPSS devices in High Fire Risk Areas and the devices will be capable of these types of outages whenever they are enabled.

Recloser Detection of Low/Very Low Current Faults

Another recent EPSS update includes piloting “Down Conductor Detection” on some reclosing devices across our system.

This feature:

- Uses a sophisticated analysis to determine when low and very low current faults are present (which “look like” high impedance faults).
- De-energizes reclosers immediately.
- Has already proven to be successful in detecting previously undetectable faults.





PG&E Data Portals



Welcome to PG&E Data Portals

On this site you can access various datasets.

PSPS Portal

The **PSPS Portal** includes planning and event-specific information, and is available for public safety partners that support emergency management efforts, which include: emergency responders from federal, state, local and tribal governments, telecommunication providers, water agencies, public-owned utilities, emergency hospitals, and transportation agencies.

[GO TO PSPS PORTAL](#)

Outage Portal

The **Outage Portal** includes information pertaining to EPSS-caused outages within PG&E's service territory. The portal will provide circuit and outage area maps for active EPSS outages. Supplementary EPSS and other outage data may be added as the product matures. This data is available for public safety partners that support emergency management efforts.

[GO TO OUTAGE PORTAL](#)

Microgrid Portal

The **Microgrid Portal** includes facility information, High Fire Threat Districts, Historical PSPS information, and GO131-D and GO166 data. It is available as required by CPUC Order 20-06-017, to tribal governments, County OESs, or organizations created by political subdivisions to carry out provisions of the State Emergency Plan.

[GO TO MICROGRID PORTAL](#)

Don't have access?

[REQUEST ACCESS](#)

pgedataportals.pge.com



New Outage Portal

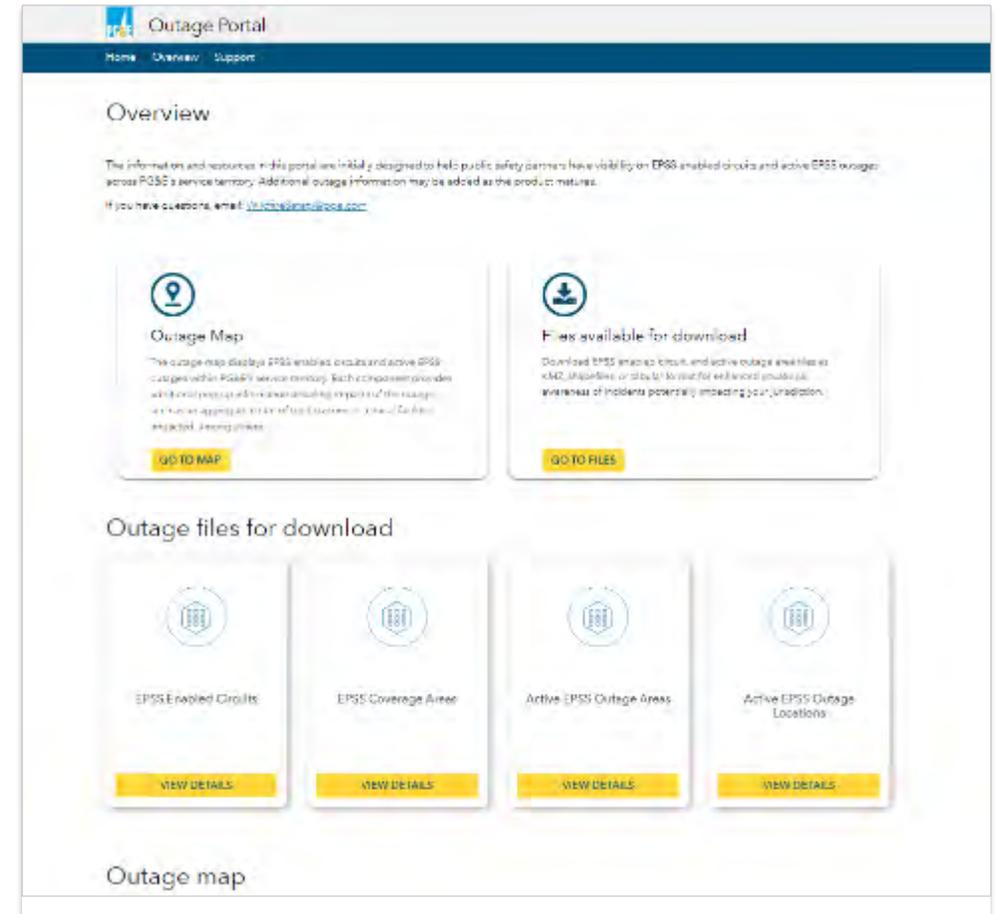
PG&E's new Outage Portal is focused on providing data regarding circuits and outages occurring on lines protected by EPSS-enabled devices. In the future, information about all outage types will be included.

✓ **The portal is available to Public Safety Partners** and others who currently have PSPS portal access.

✓ **An invitation email was sent to all PSPS Portal users**, and you can also visit pgedataportals.pge.com to request access.

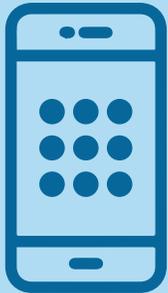
✓ **Data on the portal currently includes:**

- Locations of currently enabled EPSS devices
- Details of active outages on EPSS circuits

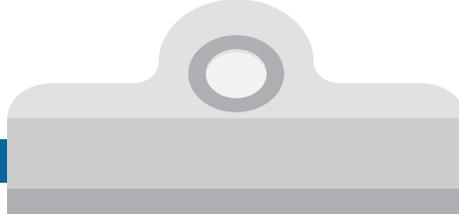




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- A grey clipboard icon with a white circular hole at the top center, positioned at the top of a large blue-bordered box that contains a list of questions.
- **Who has access to the Outages Portal?**
 - **What is PG&E doing to improve reliability?**

Microgrid and Resiliency Update





Microgrid Incentive Program (MIP)

PG&E, along with San Diego Gas and Electric and Southern California Edison are in the process of developing a new Microgrid Incentive Program to fund clean community microgrids that support the critical needs of vulnerable populations most likely to be impacted by outages.

- ✓ **Increase reliability and resiliency for critical public facilities** in communities that are at higher risk of electrical outages
- ✓ **Prioritize communities** with higher portions of low-income, Access and Functional Needs, and electricity dependent residents
- ✓ **Enable communities with lower ability to fund development of backup generation** to maintain critical loads during outages pending CPUC approval.

The new Microgrid Incentive Program (MIP) will have limited funding. Access will be through a competitive application process.

Pending CPUC approval, we expect to be able to share additional details about the program later this year or in early 2023.



Overview of Microgrids and Other Resilience Efforts

This year, we are continuing to build upon our distribution microgrid and remote grid programs and plan to continue to utilize our previously identified islanding locations when possible.

PROGRAM	2020 TOTAL SITES	2021 TOTAL SITES	2022 TOTAL SITES PLANNED
Distribution Microgrids Microgrids prepared to energize “main street” corridors, central community resources and critical facilities in areas that frequently experience PSPS events.	3*	8**	13
Islanding Locations Reconfiguration of local generation sources to allow certain areas to be separated from the larger electric grid and remain energized during PSPS events.	0	6	6
Remote Grids Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid. These projects are intended to help reduce the risk of wildfires but can also improve reliability as well.	0	1	3***

Local work plans are subject to change, and data is based on the best available information at this time.

**Does not include 4 additional sites that were made ready to operate using a temporary configuration in 2020*

***Does not include 1 additional site that was made ready to operate using a temporary configuration in 2021*

****Additional sites may also be completed in 2022 through 2024*



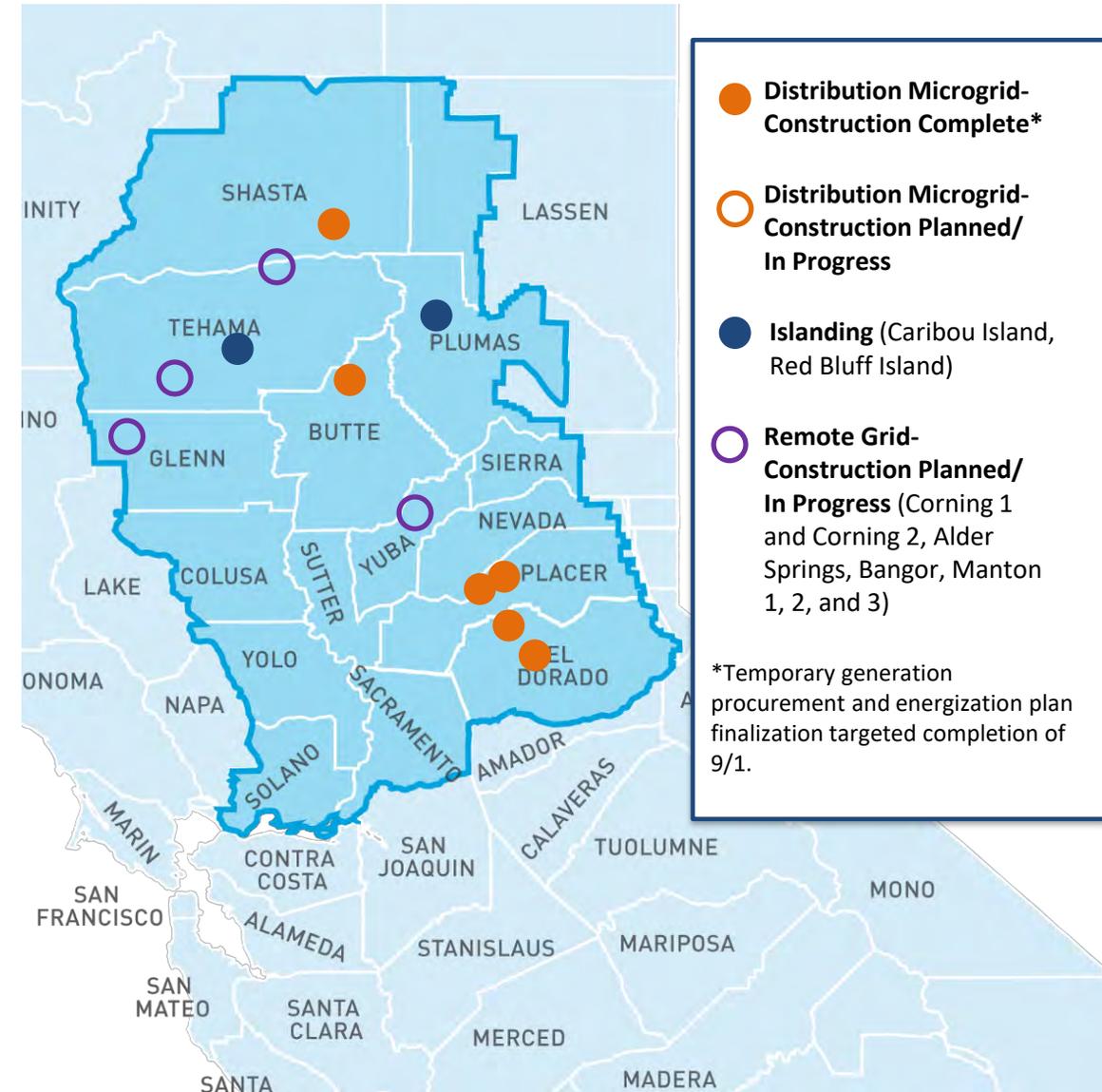
Grid Resilience Efforts – North Valley/Sierra Region

COUNTY	COMPLETE THROUGH 2021	NEW 2022 SITES	NEW 2023 SITES	NEW 2024 SITES
Butte	1 LOCATION	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS
El Dorado	2 LOCATIONS	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS
Glenn	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS	1 LOCATION
Plumas	1 LOCATION	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS
Placer	1 LOCATION	1 LOCATION	0 LOCATIONS	0 LOCATIONS
Shasta	1 LOCATION	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS
Tehama	1 LOCATION	2 LOCATIONS	3 LOCATIONS	0 LOCATIONS
Yuba	0 LOCATIONS	0 LOCATIONS	1 LOCATION	0 LOCATIONS

Note: Additional resilience work is not currently planned in the remaining counties within the region.

PG&E is prioritizing its wildfire safety work by locations with the highest risk of wildfire and locations that will reduce PSPS impacts for the most customers.

Local work plans are subject to change and data is based on the best available information at this time.



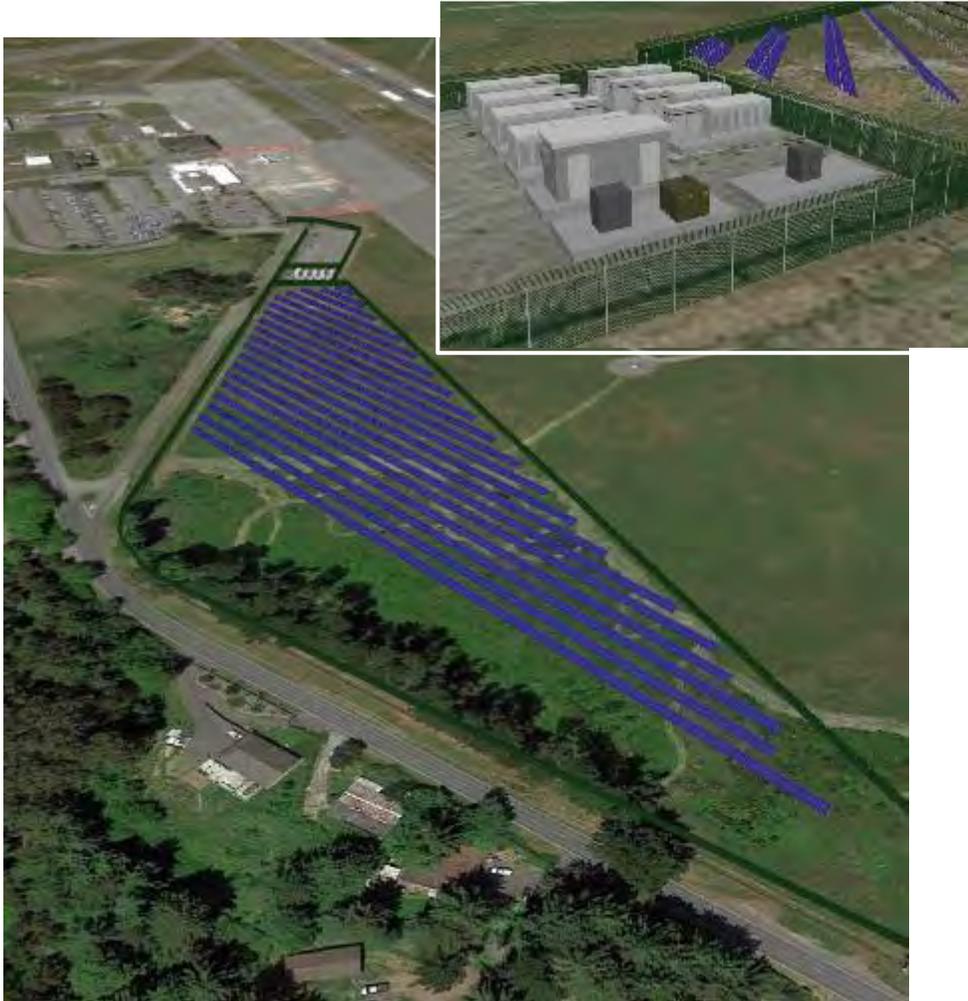
*Temporary generation procurement and energization plan finalization targeted completion of 9/1.

Hospital Support

- PG&E will continue to support hospitals this year by pre-staging approximately 25 megawatts of temporary generation at 11 hospitals that have experienced frequent Public Safety Power Shutoffs in the past.
- New this year, we have made improvements to our backup generation at St. Helena Hospital to support that facility during all outages (PSPS, EPSS, etc.)
- We continue to develop pilot programs with alternatives to diesel power and intend to make these systems available for use in 2023 to facilities that can meet our pilot criteria.



Redwood Coast Airport Microgrid



In coordination with Schatz Energy Research Center and Redwood Coast Energy Authority, PG&E supported the development of California’s first fully automated and 100% renewable multi-customer microgrid.

This innovative project:

- Serves multiple customers “in-front-of-the meter” including:
 - California Redwood Coast-Humboldt County Airport
 - U.S. Coast Guard Humboldt Bay Air Station
- Leverages solar arrays and Tesla Megapack storage
- Is owned and operated by the Redwood Coast Energy Authority but interfaces with PG&E’s control center.

2022 Mobile Battery Energy Storage System (MBESS) Pilot

PG&E is expanding our mobile battery efforts to provide support during outages.

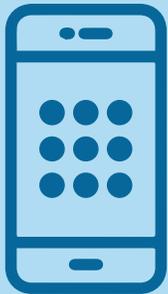
MBESS Pilot Details

- PG&E is working with industry partners to develop a small pilot fleet of mobile Tesla Megapacks for response to planned and unplanned outages.
- These units will feature a steel frame for portability/durability.
- Each unit can be connected both in front of and behind the meter at primary or secondary voltages.
- The batteries are also capable of remote observation and flexible dispatching.
- PG&E is developing a pilot roll-out strategy and expects to launch initial pilot locations in 2022-2023.





Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- **Who has access to the Microgrid Portal?**
- **What other microgrid related updates can we expect in the future?**

Company Emergency Response Plan (CERP)



Company Emergency Response Plan (CERP)

PG&E's Company Emergency Response Plan (CERP) assists with the safe, efficient and coordinated response to all-hazard emergency incidents affecting gas or electric generation, distribution, storage, transmission systems or any other emergency incident within our service area.

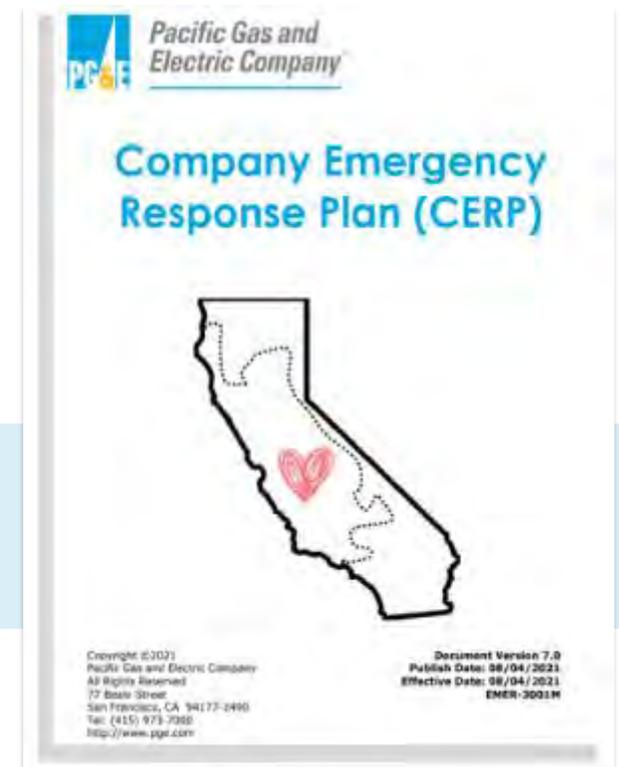
A key element of the CERP is the identification of coordination efforts with outside organizations.

To support these coordination efforts, agencies can expect PG&E:

- Share invites to 2023 CERP review meetings in Q4 2022.
- Share a revised 2023 CERP in January 2023.
- Host six virtual CERP review meetings in Q1 2023.

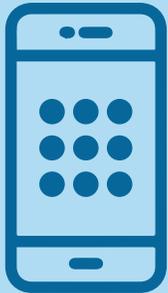
A copy of the current PG&E CERP can be found here:

pgera.azurewebsites.net/Regulation/search

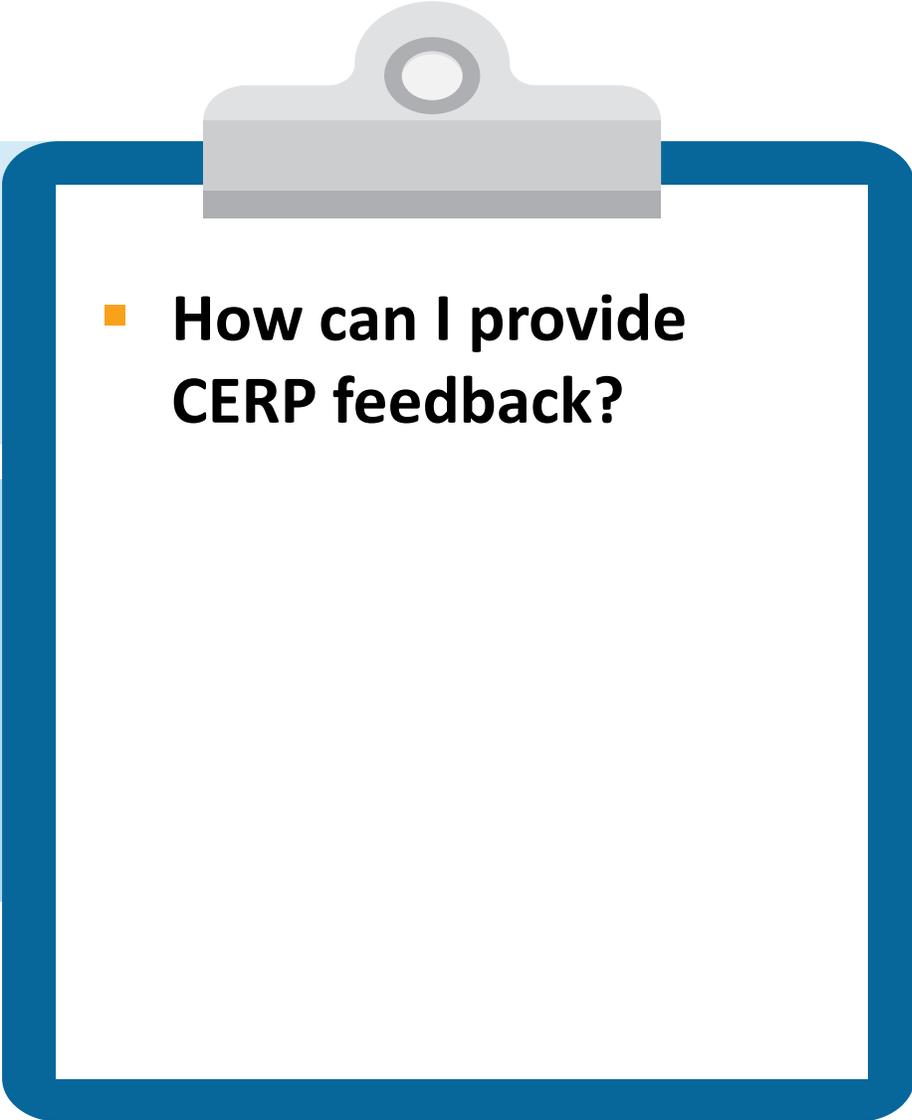




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- A large blue clipboard icon with a silver clip at the top, containing a white sheet of paper with a list item.
- **How can I provide CERP feedback?**

Safety and Reliability Update





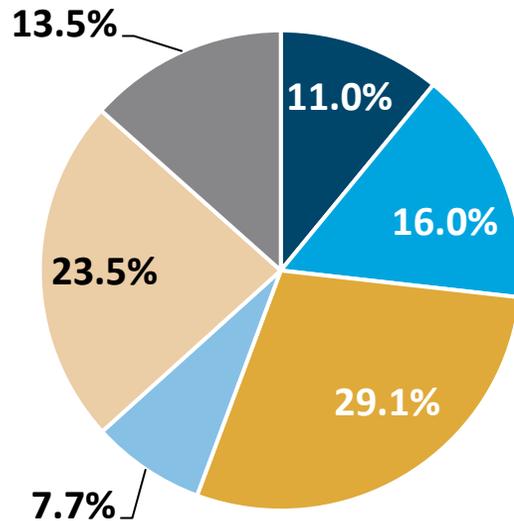
Safety and Reliability in the North Valley/Sierra Region

Power was on
99.83%
of the time

Power Outages in Your Region

- > Average Outage Size: **85 customers**
- > Average Outage Duration: **3 hours**

County- and city-level versions of this report are being shared with all electric customers in August 2022* and are available [here](#).



Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Data from April-June 2022

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

Steps PG&E is Taking to Better Serve You

Wildfire Safety in Your County
We are working hard every day to keep you safe and improve our electric system.

	2022 PLAN*	2022 COMPLETE
Undergrounding electric distribution powerlines	122 miles	57 miles
Installing stronger poles and powerlines	49 miles	41 miles
Enhancing vegetation work around powerlines	131.6 miles	22.7 miles

*Plans are subject to change due to weather, permitting and other restrictions.

High Fire-Risk Areas
Butte County

Enhanced Powerline Safety Settings (EPSS)
This technology is helping to reduce wildfire risk. If a hazard, like a tree branch on the line, is detected, power is automatically turned off within one-tenth of a second.

EPSS in Your County:

Customers Protected	47,277
Average Outage Size (customers)	832
Average Outage Duration (hours)	3

Steps we are taking to reduce customer impact

- Adjusting device sensitivity based on wildfire risk and disabling the safety settings when it is safe to do so
- Installing technology to quickly identify and address outage sources
- Adapting patrol methods to shorten outages

Power Outages in Your County

- > Average Outage Size: **75 customers**
- > Average Outage Duration: **2 hours**

Types of Outages

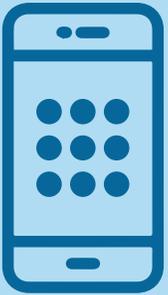
- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

DATA AS OF JUNE 2022
Some of the measures included in this document are contemplated as additional precautionary measures intended to further reduce the risk of wildfires. *PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2022 Pacific Gas and Electric Company. All rights reserved. All data is approximate and subject to change. 07/28/2022

*Report is released in phases and all customers will receive this report by 8/17/22.



Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **What safety and reliability trends did we see last quarter?**

Open Discussion/Q&A





Next Steps

- ✓ Meeting survey shared with participants to gather feedback on approach and content of Regional Working Groups

- ✓ Follow-up on items identified by local agencies/stakeholders

- ✓ Upcoming meetings
 - CWSP All Customer Webinar (8/10)
 - Weekly Portal Trainings (Beginning 8/12)
 - CERP Meetings (Q1 2023)

2022 REGIONAL WORKING GROUP CALENDAR

TIMING	TOPICS
Q4 2022 (December)	Wildfire Safety Outage Season Recap, 2023 Planning Updates

Thank You



Appendix





Outstanding Follow Up and Action Items – North Valley/Sierra

Below is a list of the follow up and action items identified during the previous Regional Working Group meetings as well as corresponding statuses.

Action Item	Agency	Status
We have a list of which circuits our accounts are on, is it possible to determine which are on EPSS circuits?	El Dorado Irrigation District	In Progress



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated 2022 Operational Readiness
Distribution Microgrids	Butte	Magalia	Construction Complete	Q3 2022*
	Calaveras	Arnold	Planning	Q4 2022
	El Dorado	Georgetown	Construction Complete	Q3 2022*
	El Dorado	Pollock Pines	Construction Complete	Q3 2022*
	Humboldt	Redwood Coast Airport Microgrid*****	Construction Complete	N/A
	Lake	Clearlake North	Planning	Q4 2022
	Lake	Lucerne	Construction Complete	Q4 2022
	Lake	Middletown	Construction Complete	Q3 2022*
	Napa	Angwin	Construction Complete	Q3 2022*
	Napa	Calistoga	Construction Complete	Q3 2022*
	Placer	Colfax	Construction Complete	Q4 2022*
	Placer	Foresthill	Construction Complete	Q3 2022*
	Shasta	Shingletown	Construction Complete	Q3 2022*
Tuolumne	Groveland	Construction Complete	Q4 2022	
Islanding	Calaveras**	Salt Springs Island	Operational	N/A
	Calaveras***	West Point Island	Operational	N/A
	Humboldt	Humboldt Bay Island	Operational	N/A
	Plumas	Caribou Island	Operational	N/A
	Tehama	Red Bluff Island	Operational	N/A
	Tuolumne	Spring Gap	Operational	N/A

Local work plans are subject to change and data is based on the best available information at this time.

*Temporary generation procurement and energization plan finalization targeted completion of 10/1.

**Also serves portions of Amador and Alpine Counties.

***Also serves portions of Amador County.

****Facility owned by Redwood Costa Energy Authority; PG&E owns, operates and maintains microgrid circuit

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



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated Completion
Remote Grids	Mariposa	Briceburg	Operational	N/A
	Mariposa	Miami Mountain	Planning	Q4 2022
	Tehama	Corning 1	Planning	Q4 2022
	Tehama	Corning 2	Planning	Q4 2022
	Mariposa	Mariposa (Slaughterhouse)	Planning	Q4 2022
	Sonoma	Pepperwood Preserve	Planning	Q4 2023
	Tehama	Manton (Wildcat)	Planning	Q4 2023
	Tehama	Manton (Shingletown Wildcat)	Planning	Q4 2023
	Tehama	Manton (Battle Creek)	Planning	Q4 2023
	Madera	Coarsegold (Melvin)	Planning	Q4 2023
	Yuba	Bangor (Ponderosa Way – Challenge)	Planning	Q4 2023
	Lake	Middletown (Anderson Spring)	Planning	Q4 2023
	Tulare	Whitaker Forest	Planning	Q4 2023
	Tuolumne	Vallecito (Forebay – Stanislaus)	Planning	Q4 2023
	Glenn	Alder Springs (Valley View)	Planning	Q3 2024
	San Luis Obispo	Carrizo Plains	Planning	Q3 2024
Marin	Inverness (Mt. Vision PRNS)	Planning	Q3 2023	

Local work plans are subject to change and data is based on the best available information at this time.

Community Wildfire Safety Program

Q3 2022 REGIONAL WORKING GROUP

North Coast Region

August 11, 2022



Virtual Sign In Reminder

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Safety

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Identify two exit routes from your current work area in the event of a fire or other emergency.

.....

“Drop, cover and hold” in the event of an earthquake.

.....

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Regional Vice President

Carl Schoenhofer
Division Lead

Melinda Rivera
Local Government Affairs

Rich Noonan
Public Safety Specialist

Reno Franklin
Tribal Liaison

Eric Lamoureux
Enhanced Powerline Safety Settings

Jon Stallman
Grid Planning and Innovations

Safety Updates





Different Types of Outages Customers May Experience

HOW WILL WE INFORM CUSTOMERS?

PG&E can notify you in advance of...

Public Safety Power Shutoff

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach
- CBO** outreach

Rotating Outages (CAISO Ordered)

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach

Planned Maintenance

10-day advance notification

Emergency Repairs

Updates during and after outages

- Phone calls*
- Texts
- Emails

Active Wildfires

Updates during and after outages

- Phone calls*
- Texts
- Emails

Enhanced Powerline Safety Settings

Updates during and after outages

- Phone calls*
- Texts
- Emails

PG&E is unable to send advance notification prior to...

*Via interactive voice recordings (IVR) **Community-based organization

Public Safety Power Shutoffs (PSPS)

Turning off power to prevent tree branches and debris from contacting energized lines



WHEN

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

In advance through automated calls, texts and emails along with real-time updates



2022 FOCUS

Continuing to refine the program and reducing impacts in the areas at highest risk

Enhanced Powerline Safety Settings (EPSS)

Settings quickly and automatically turn off power if a problem is detected on the line.



WHEN

Elevated wildfire risk is present, most likely from May to November, but can occur year-round.



NOTIFICATIONS

Customers receive notifications at the start of an outage and regular updates; Since power is automatically shut off within one-tenth of a second when a fault occurs, we are unable to provide advanced notice.



2022 FOCUS

Expanding from approximately 45% High Fire Threat District to 100% of High Fire Risk Area circuits

2022 PSPS Policies and Procedures

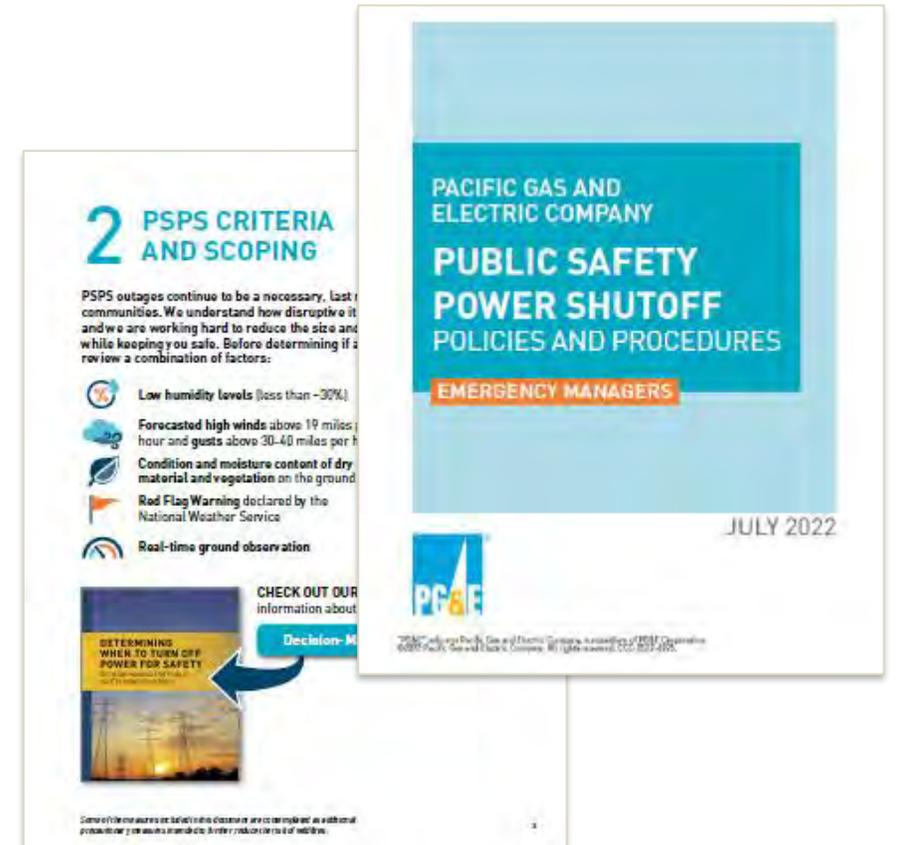
PG&E has recently updated our PSPS Policies and Procedures document for Emergency Managers.

Notable updates:

- Changes to Courtesy Hours Notifications
- Priority Notice Webpage Removal
- Self-Identified Electricity Dependent Customers

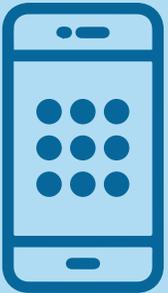
The document is available at:

- pge.com/pspsportal
- pge.com/pspspartners

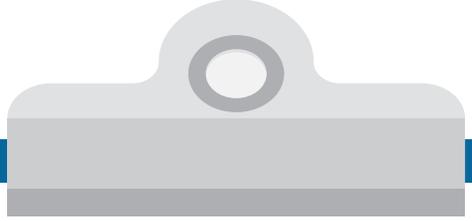




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Where can I find more information about electricity outages?**
 - **Where can I find PG&E's Policies and Procedures and what is included in the document?**

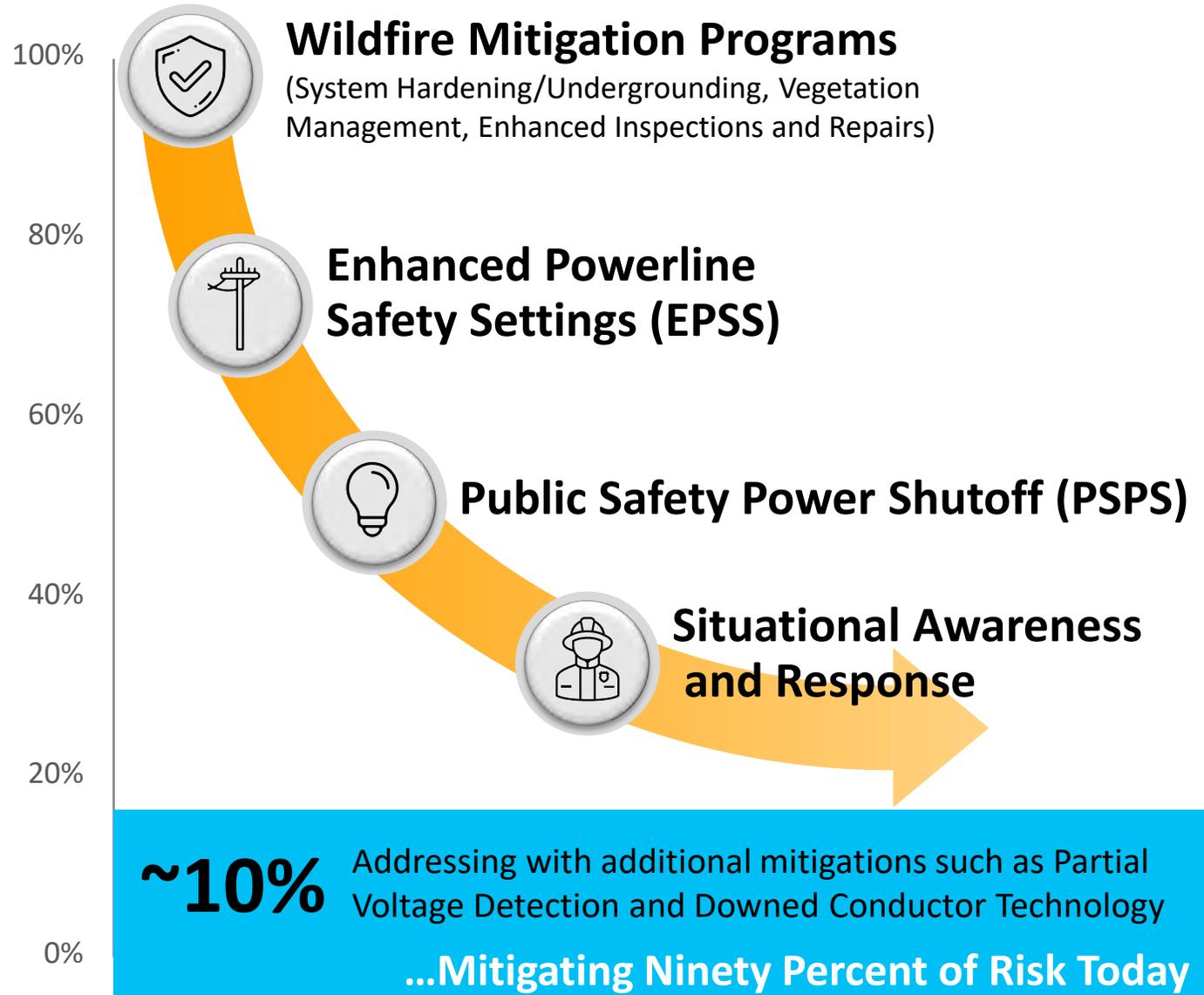
Enhanced Powerline Safety Settings (EPSS)





Layers of Protection...

PG&E actions
have mitigated
~90%
of wildfire risk





Enhanced Powerline Safety Settings (EPSS) A Technology To Prevent Wildfires

How It Works

PG&E powerlines have equipment that allows power to automatically turn off within one-tenth of a second if there is a wildfire risk, like a tree branch or other object striking the line.

Why We Do It

Quickly and automatically shutting off power when a hazard is detected can help stop wildfires before they have a chance to start.

Preventing Wildfires

~80% decrease in CPUC-reportable ignitions
in 2021 on EPSS-enabled circuits
compared to the prior 3-year average as of 12/31/21



SAFETY SETTINGS IN ACTION

An example of these settings preventing a potential ignition in Santa Cruz County, when a tree branch fell into a powerline in 2022 and power was quickly and automatically turned off.



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.

PG&E Utility Fire Potential Index



Disable EPSS if*:

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

EPSS-enabled on all circuits

HFRA & HFTD

LAST RESORT

PSPS considered if:

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

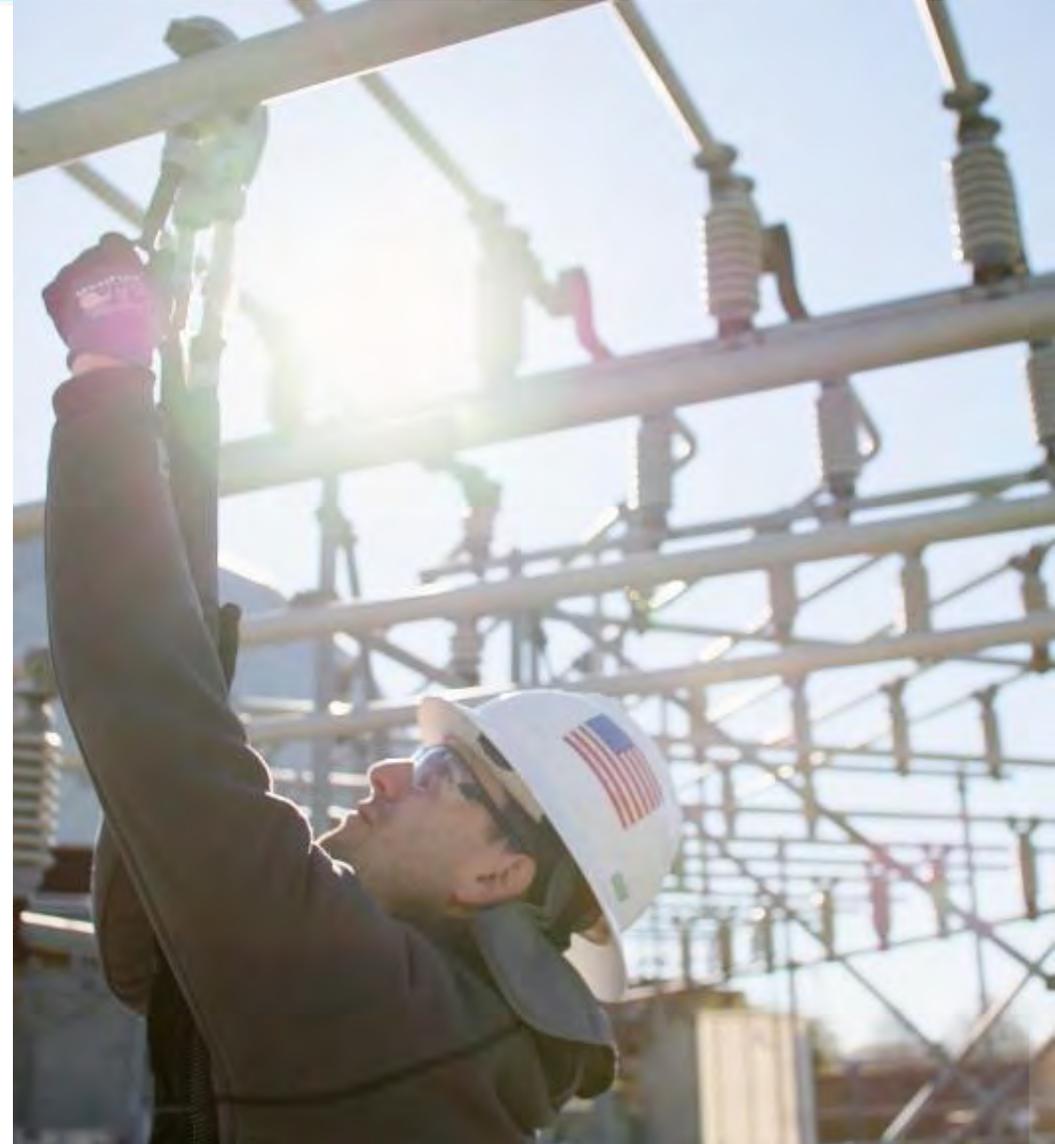
EPSS during RFW / FWW / PSPS adjacent conditions

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

*If all conditions are sustained.

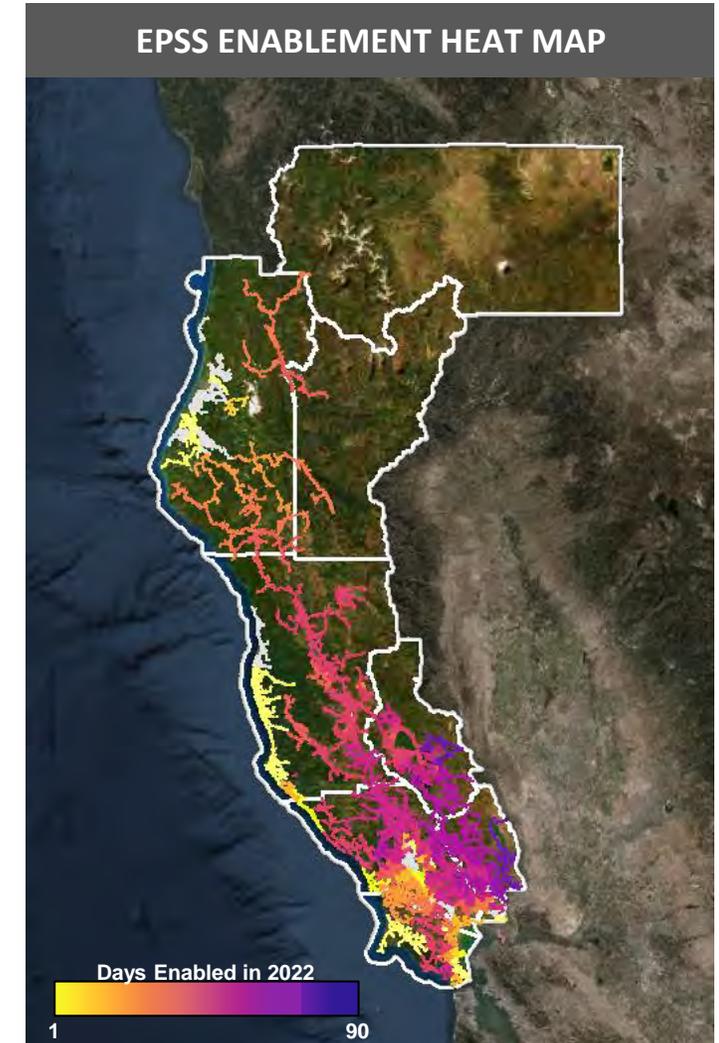
Steps we are taking...

- ✓ Installing technology to help **quickly identify outage locations**
- ✓ Conducting **vegetation** management on trees near powerlines
- ✓ Installing sectionalizing devices that isolate hazards to **limit the number of customers impacted** during outages

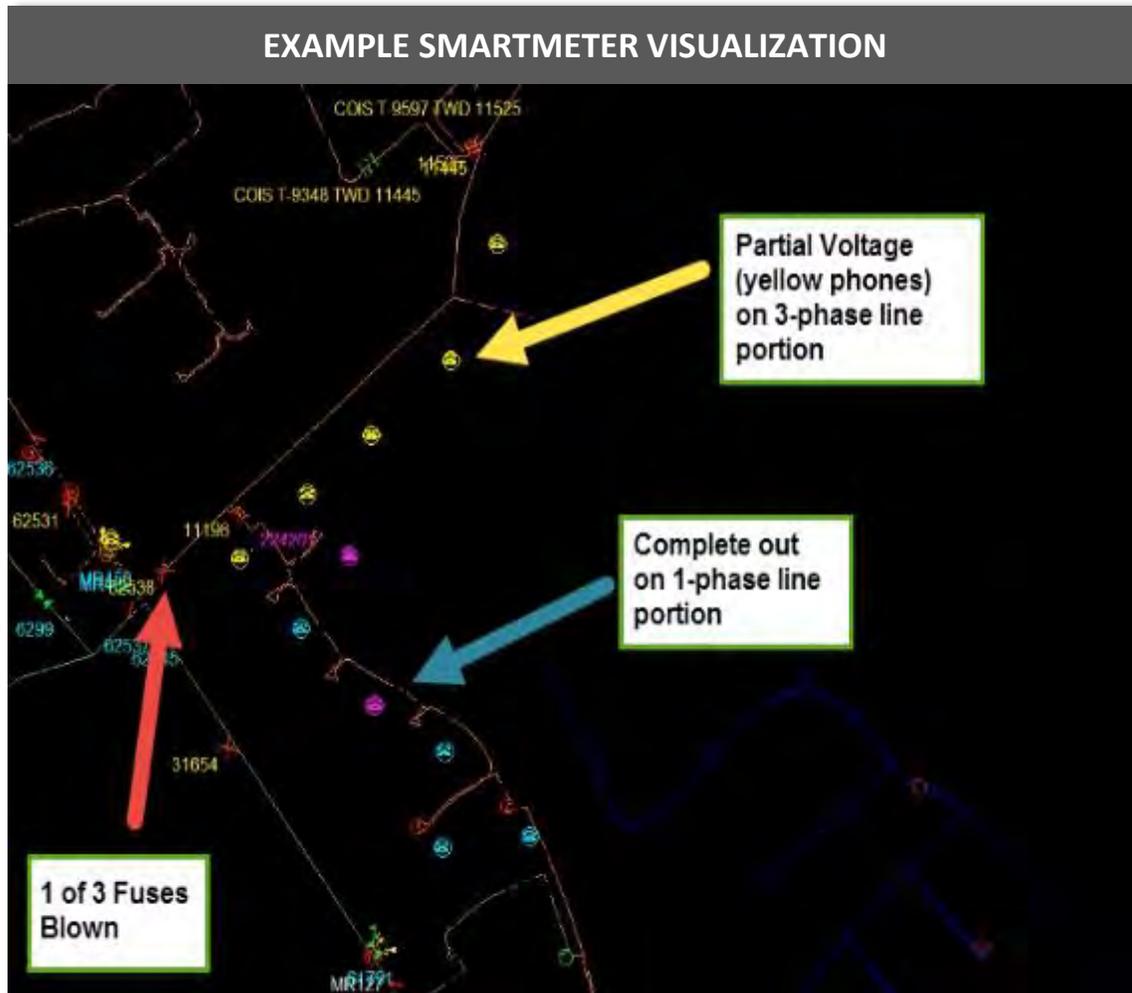


EPSS is a proven tool for reducing ignitions. In the North Coast Region, 208 distribution circuits serving about 424,000 customers are currently protected.

- This year, there have been 188 outages on EPSS-enabled circuits across the region.
- The average number of customers included in each outage has been 749 and outages have lasted an average of 3.3 hours, a 60% improvement over last year.
- We are prioritizing reliability improvements on circuits that have had multiple outages and are making adjustments.
- For example, the Woodacre 1102 circuit in Marin County has experienced 5 outages in 2022. To improve reliability on this circuit we have:
 - Adjusted sensitivity settings
 - Installed new technology to help identify outage sources faster
 - Installed animal guards
 - Adjusted patrols



Data is subject to change and as of 07/31/2022.



To help identify low and very low current faults in our system (which can “look like” a minor increase in load on a circuit), we are beginning to leverage our SmartMeter network to determine when the lines serving a particular area may be experiencing these conditions and need to be de-energized for safety.

This is called a Partial Voltage Force Out.

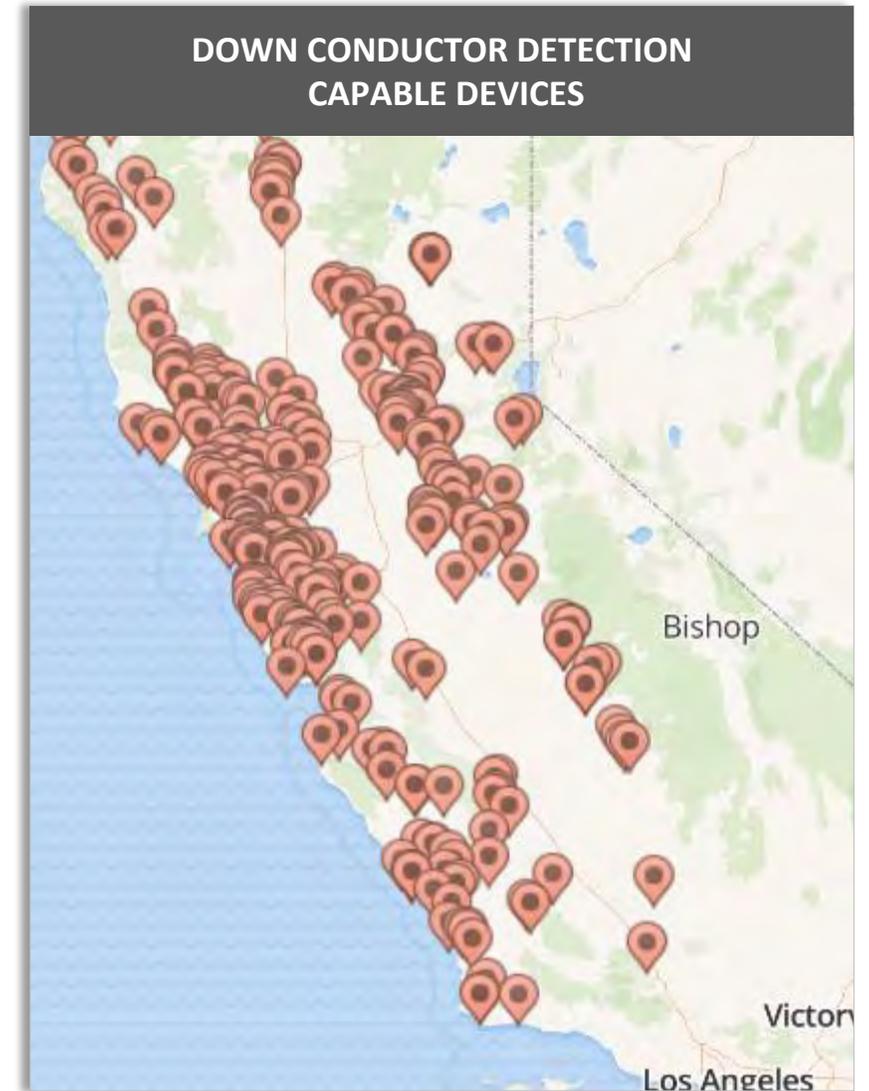
We are enabling Partial Voltage Force Outs on all EPSS devices in High Fire Risk Areas.

Recloser Detection of Low/Very Low Current Faults

Another recent EPSS update includes piloting “Down Conductor Detection” on some reclosing devices across our system.

This feature:

- Uses a sophisticated analysis to determine when low and very low current faults are present (which “look like” high impedance faults).
- De-energizes reclosers immediately.
- Can detect previously hard to detect fault conditions that could result in an ignition.





PG&E Data Portals



Welcome to PG&E Data Portals

On this site you can access various datasets.

PSPS Portal

The **PSPS Portal** includes planning and event-specific information, and is available for public safety partners that support emergency management efforts, which include: emergency responders from federal, state, local and tribal governments, telecommunication providers, water agencies, public-owned utilities, emergency hospitals, and transportation agencies.

[GO TO PSPS PORTAL](#)

Outage Portal

The **Outage Portal** includes information pertaining to EPSS-caused outages within PG&E's service territory. The portal will provide circuit and outage area maps for active EPSS outages. Supplementary EPSS and other outage data may be added as the product matures. This data is available for public safety partners that support emergency management efforts.

[GO TO OUTAGE PORTAL](#)

Microgrid Portal

The **Microgrid Portal** includes facility information, High Fire Threat Districts, Historical PSPS information, and GO131-D and GO166 data. It is available as required by CPUC Order 20-06-017, to tribal governments, County OESs, or organizations created by political subdivisions to carry out provisions of the State Emergency Plan.

[GO TO MICROGRID PORTAL](#)

Don't have access?

[REQUEST ACCESS](#)

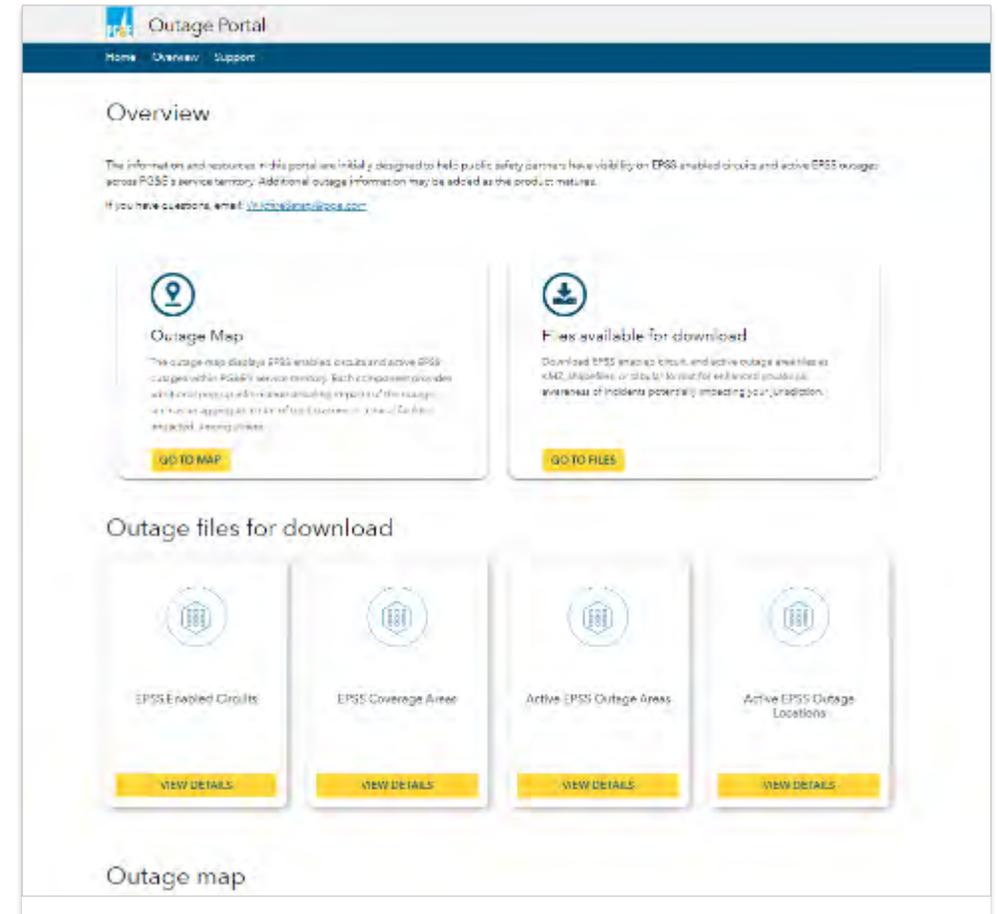
pgedataportals.pge.com



New Outage Portal

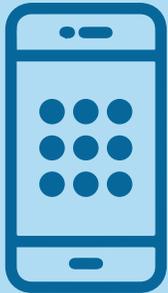
PG&E's new Outage Portal is focused on providing data regarding circuits and outages occurring on lines protected by EPSS-enabled devices. In the future, information about all outage types will be included.

- ✓ **The portal is available to Public Safety Partners** and others who currently have PSPS portal access.
- ✓ **An invitation email was sent to all PSPS Portal users**, and you can also visit pgedataportals.pge.com to request access.
- ✓ **Data on the portal currently includes:**
 - Locations of currently enabled EPSS devices
 - Details of active outages on EPSS circuits

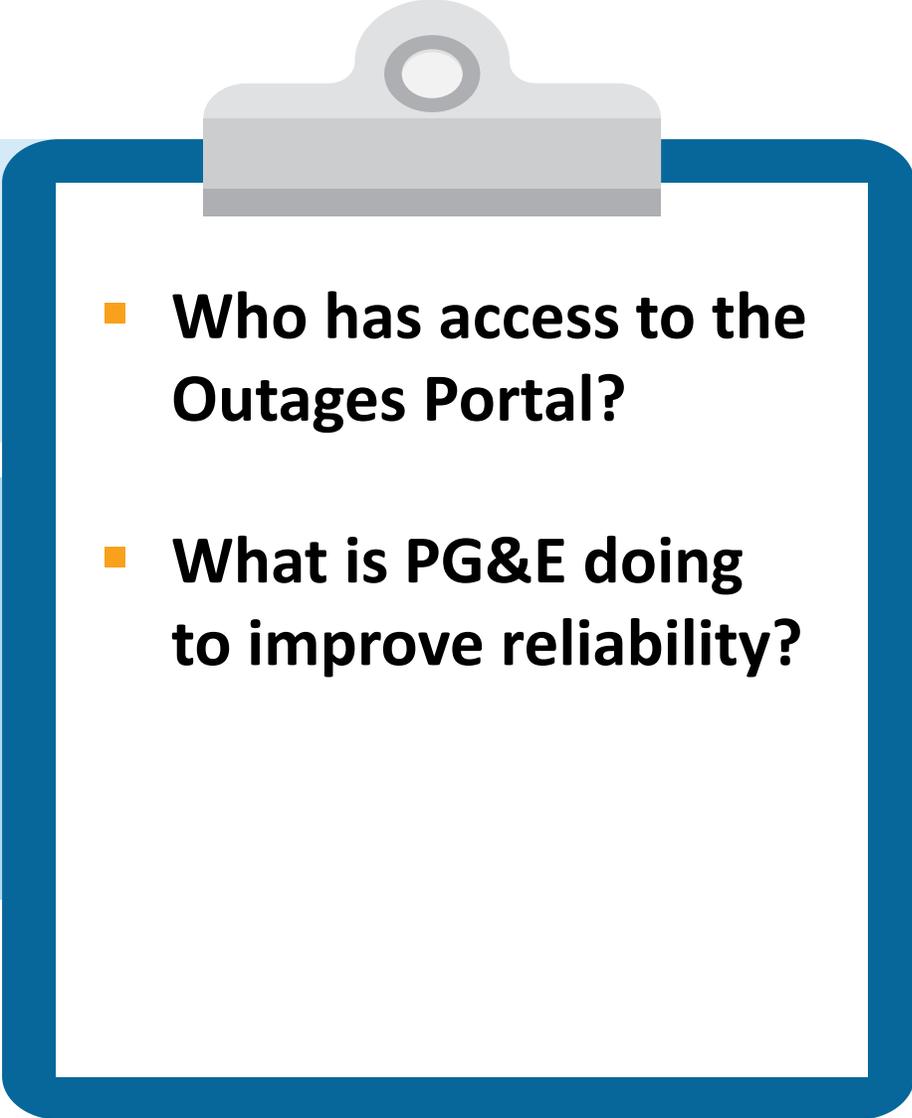




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Who has access to the Outages Portal?**
 - **What is PG&E doing to improve reliability?**

Microgrid and Resiliency Update

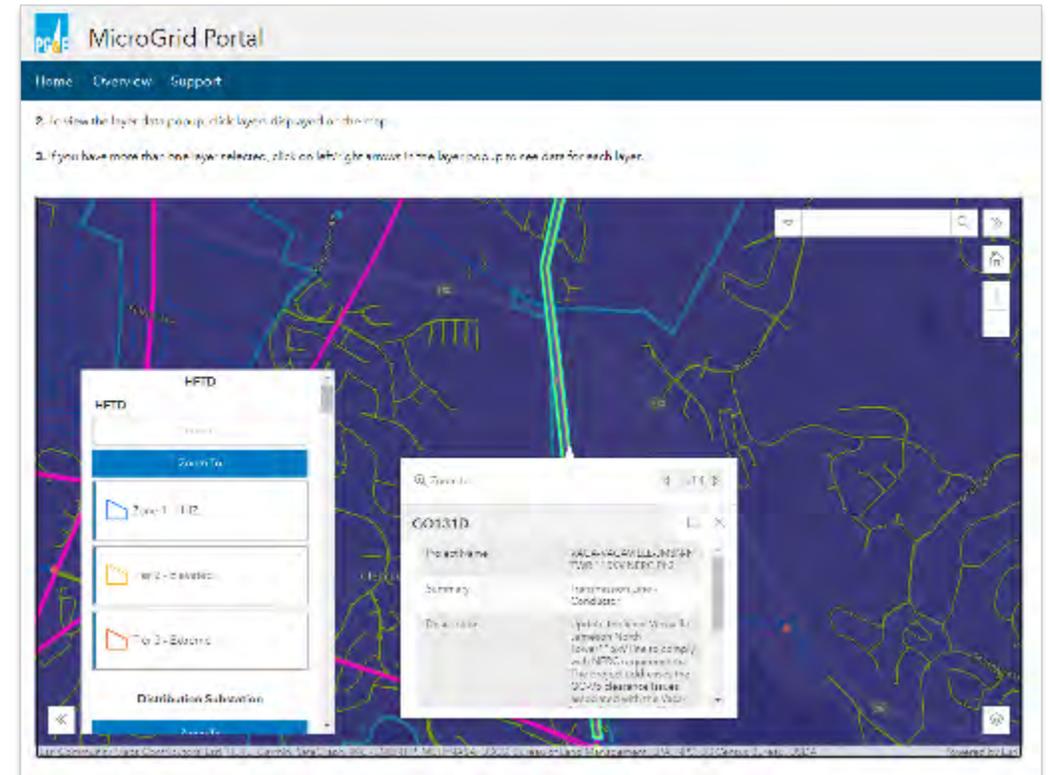


Last year, PG&E developed a Microgrid Portal to share information with local agencies and tribes to assist in their own resiliency efforts. This tool:

Is available to County OES representatives, tribal governments and other “organizations created by political subdivisions to carry out the provisions of the State Emergency Plan.”

Includes the following data:

- **Utility planned work/grid investments**
- **High Fire-Threat District Map layers**
- **Electric infrastructure map layers**
- **Weather polygon map layers**





Microgrid Incentive Program (MIP)

PG&E, along with San Diego Gas and Electric and Southern California Edison are in the process of developing a new Microgrid Incentive Program to fund clean community microgrids that support the critical needs of vulnerable populations most likely to be impacted by outages.

- ✓ **Increase reliability and resiliency for critical public facilities** in communities that are at higher risk of electrical outages
- ✓ **Prioritize communities** with higher portions of low-income, Access and Functional Needs, and electricity dependent residents
- ✓ **Enable communities with lower ability to fund development of backup generation** to maintain critical loads during outages pending CPUC approval.

The new Microgrid Incentive Program (MIP) will have limited funding. Access will be through a competitive application process.

Pending CPUC approval, we expect to be able to share additional details about the program later this year or in early 2023.



Overview of Microgrids and Other Resilience Efforts

This year, we are continuing to build upon our distribution microgrid and remote grid programs and plan to continue to utilize our previously identified islanding locations when possible.

PROGRAM	2020 TOTAL SITES	2021 TOTAL SITES	2022 TOTAL SITES PLANNED
Distribution Microgrids Microgrids prepared to energize “main street” corridors, central community resources and critical facilities in areas that frequently experience PSPS events.	3*	8**	13
Islanding Locations Reconfiguration of local generation sources to allow certain areas to be separated from the larger electric grid and remain energized during PSPS events.	0	6	6
Remote Grids Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid. These projects are intended to help reduce the risk of wildfires but can also improve reliability as well.	0	1	3***

Local work plans are subject to change, and data is based on the best available information at this time.

**Does not include 4 additional sites that were made ready to operate using a temporary configuration in 2020*

***Does not include 1 additional site that was made ready to operate using a temporary configuration in 2021*

****Additional sites may also be completed in 2022 through 2024*



Grid Resilience Efforts – North Coast Region

COUNTY	COMPLETE THROUGH 2021	NEW 2022 SITES	NEW 2023 SITES
Humboldt	2 LOCATIONS	0 LOCATIONS	0 LOCATIONS
Lake	2 LOCATIONS	1 LOCATION	1 LOCATION
Sonoma	0 LOCATIONS	1 LOCATION	0 LOCATIONS
Napa	2 LOCATIONS	0 LOCATIONS	0 LOCATIONS
Marin	0 LOCATIONS	0 LOCATIONS	1 LOCATION

Note: Additional resilience work is not currently planned in the remaining counties within the region.

PG&E is prioritizing its wildfire safety work by locations with the highest risk of wildfire and locations that will reduce PSPS impacts for the most customers.

Local work plans are subject to change and data is based on the best available information at this time.



*Owned and operated by Redwood Coast Energy Authority

**Temporary generation procurement and energization plan finalization targeted completion of 9/1.

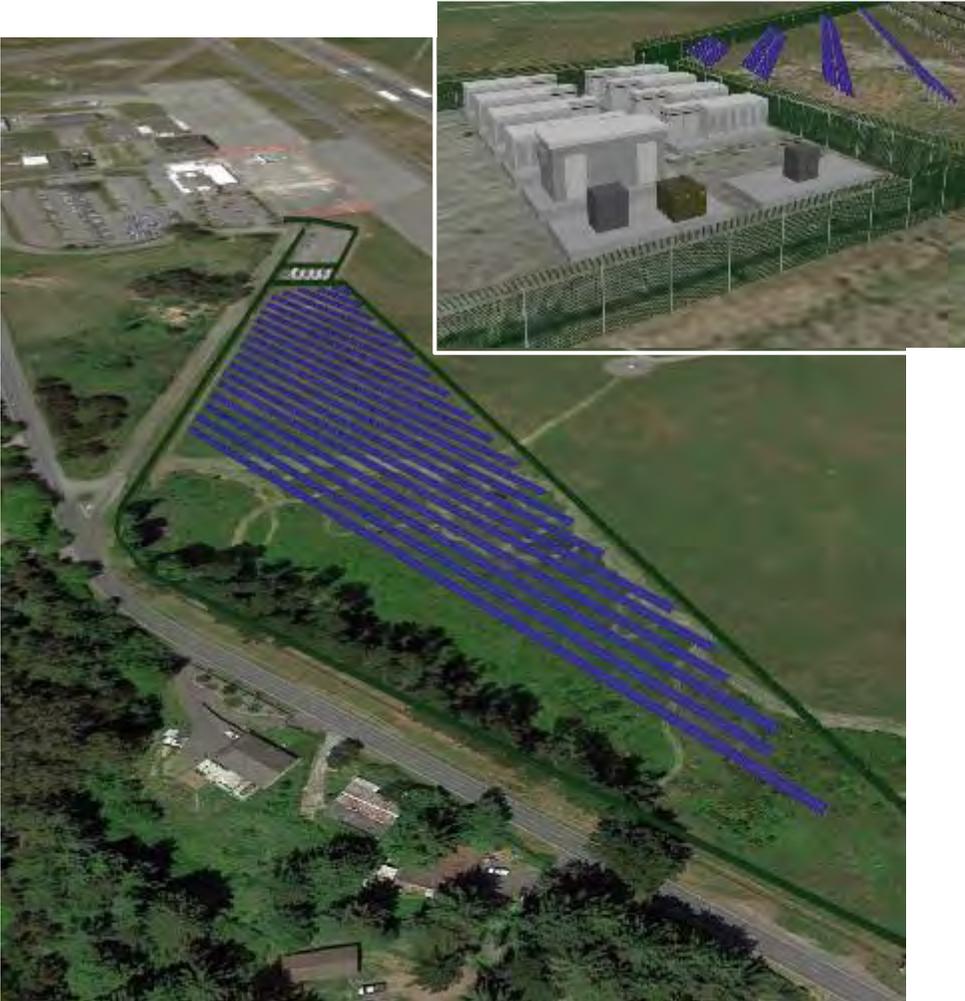
***Can serve up to 66,000 customers in Humboldt County when in use.

Hospital Support

- PG&E will continue to support hospitals this year by pre-staging approximately 25 megawatts of temporary generation at 11 hospitals that have experienced frequent Public Safety Power Shutoffs in the past.
- New this year, we have made improvements to our backup generation at St. Helena Hospital to support that facility during all outages (PSPS, EPSS, etc.)
- We continue to develop pilot programs with alternatives to diesel power and intend to make these systems available for use in 2023 to facilities that can meet our pilot criteria.



Redwood Coast Airport Microgrid



In coordination with Schatz Energy Research Center and Redwood Coast Energy Authority, PG&E supported the development of California’s first fully automated and 100% renewable multi-customer microgrid.

This innovative project:

- Serves multiple customers “in-front-of the meter” including:
 - California Redwood Coast-Humboldt County Airport
 - U.S. Coast Guard Humboldt Bay Air Station
- Leverages solar arrays and Tesla Megapack storage
- Is owned and operated by the Redwood Coast Energy Authority but interfaces with PG&E’s control center.

2022 Mobile Battery Energy Storage System (MBESS) Pilot

PG&E is expanding our mobile battery efforts to provide support during outages.

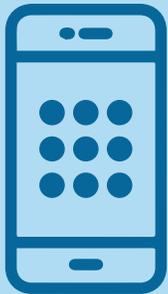
MBESS Pilot Details

- PG&E is working with industry partners to develop a small pilot fleet of mobile Tesla Megapacks for response to planned and unplanned outages.
- These units will feature a steel frame for portability/durability.
- Each unit can be connected both in front of and behind the meter at primary or secondary voltages.
- The batteries are also capable of remote observation and flexible dispatching.
- PG&E is developing a pilot roll-out strategy and expects to launch initial pilot locations in 2022-2023.





Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- **Who has access to the Microgrid Portal?**
- **What other microgrid related updates can we expect in the future?**

Company Emergency Response Plan (CERP)



Company Emergency Response Plan (CERP)

PG&E's Company Emergency Response Plan (CERP) assists with the safe, efficient and coordinated response to all-hazard emergency incidents affecting gas or electric generation, distribution, storage, transmission systems or any other emergency incident within our service area.

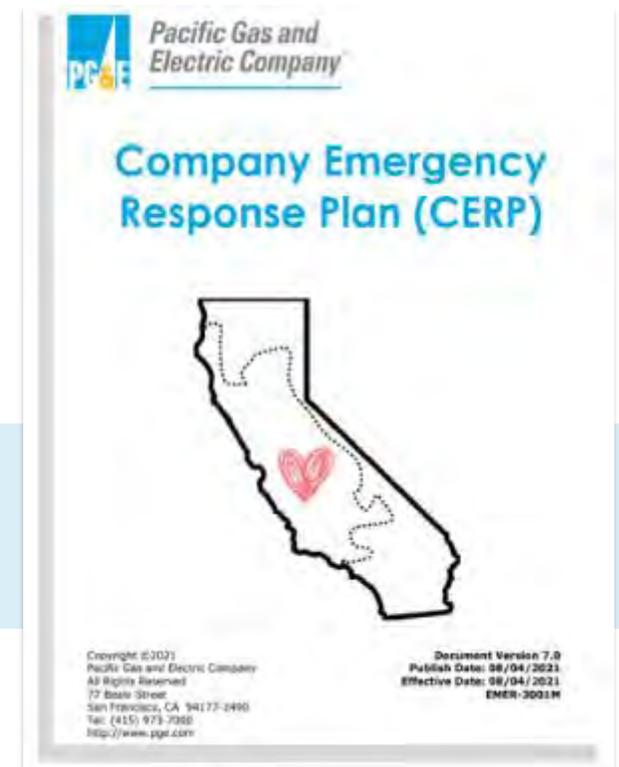
A key element of the CERP is the identification of coordination efforts with outside organizations.

To support these coordination efforts, agencies can expect PG&E:

- Share invites to 2023 CERP review meetings in Q4 2022.
- Share a revised 2023 CERP in January 2023.
- Host six virtual CERP review meetings in Q1 2023.

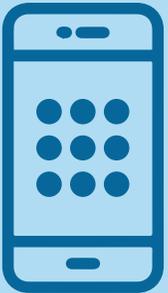
A copy of the current PG&E CERP can be found here:

pgera.azurewebsites.net/Regulation/search

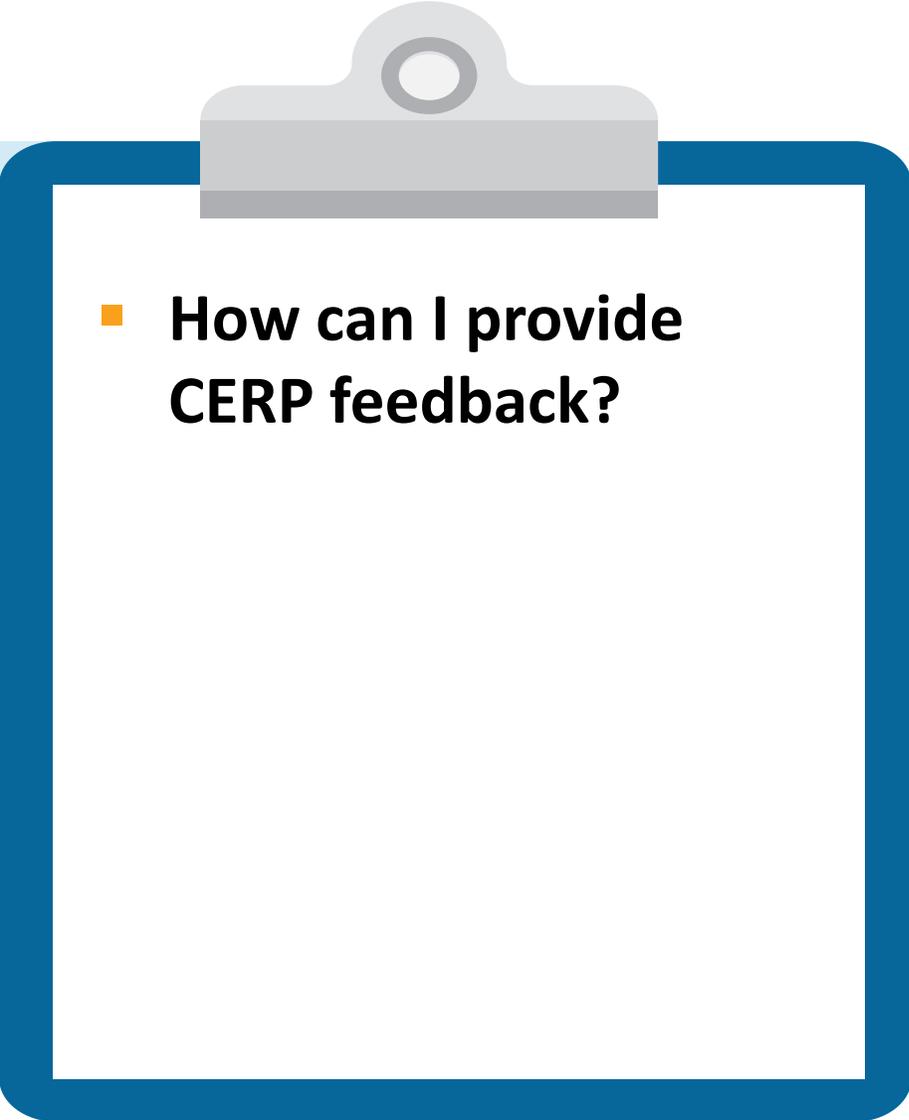




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **How can I provide CERP feedback?**

Safety and Reliability Update



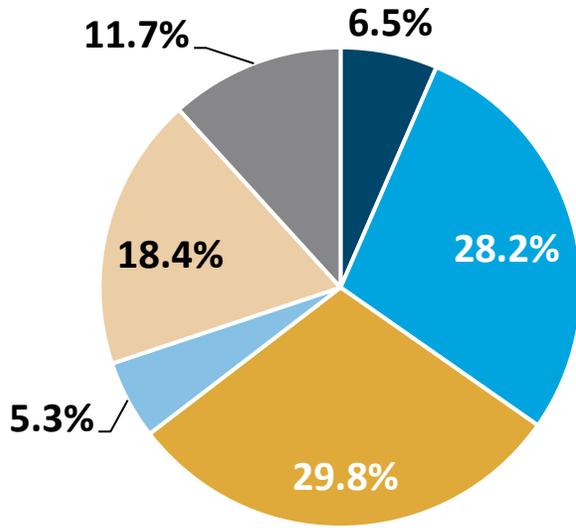


Safety and Reliability in the North Coast Region

Power was on
99.66%
of the time

Power Outages in Your Region

- > Average Outage Size: **75 customers**
- > Average Outage Duration: **4 hours**



Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Data from April-June 2022

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

County- and city-level versions of this report are being shared with all electric customers in August 2022* and are available [here](#).

Steps PG&E is Taking to Better Serve You

Wildfire Safety in Your County
We are working hard every day to keep you safe and improve our electric system.

	2022 PLAN*	2022 COMPLETE
Undergrounding electric distribution powerlines	<1 mile	0 miles
Installing stronger poles and powerlines	2 miles	<1 mile
Enhancing vegetation work around powerlines	224.5 miles	18.1 miles

High Fire-Risk Areas
Humboldt County

Enhanced Powerline Safety Settings (EPSS)
This technology is helping to reduce wildfire risk. If a hazard, like a tree branch on the line, is detected, power is automatically turned off within one-tenth of a second.

EPSS in Your County:

Customers Protected	47,964
Average Outage Size (customers)	178
Average Outage Duration (hours)	14

Steps we are taking to reduce customer impact

- Adjusting device sensitivity based on wildfire risk and disabling the safety settings when it is safe to do so
- Installing technology to quickly identify and address outage sources
- Adapting patrol methods to shorten outages

Power Outages in Your County
Average Outage Size: **85 customers**
Average Outage Duration: **3 hours**

Types of Outages

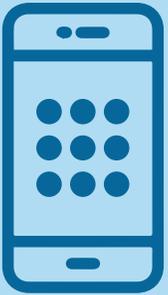
- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

DATA AS OF JUNE 2022
Some of the measures included in this document are contemplated as additional precautionary measures intended to further reduce the risk of wildfires. *PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2022 Pacific Gas and Electric Company. All rights reserved. All data is approximate and subject to change. 07/29/2022

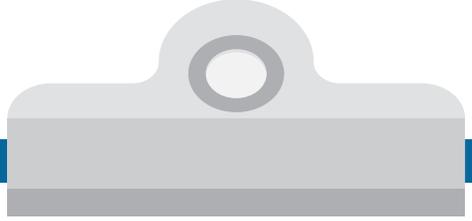
*Report is released in phases and all customers will receive this report by 8/17/22.



Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **What safety and reliability trends did we see last quarter?**

Open Discussion/Q&A





Next Steps

- ✓ Meeting survey shared with participants to gather feedback on approach and content of Regional Working Groups
- ✓ Follow-up on items identified by local agencies/stakeholders
- ✓ Upcoming meetings
 - Weekly Portal Trainings (Beginning 8/12)
 - CERP Meetings (Q1 2023)

2022 REGIONAL WORKING GROUP CALENDAR

TIMING	TOPICS
Q4 2022 (December)	Wildfire Safety Outage Season Recap, 2023 Planning Updates

Thank You



Appendix





Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated 2022 Operational Readiness
Distribution Microgrids	Butte	Magalia	Construction Complete	Q3 2022*
	Calaveras	Arnold	Planning	Q4 2022
	El Dorado	Georgetown	Construction Complete	Q3 2022*
	El Dorado	Pollock Pines	Construction Complete	Q3 2022*
	Humboldt	Redwood Coast Airport Microgrid*****	Construction Complete	N/A
	Lake	Clearlake North	Planning	Q4 2022
	Lake	Lucerne	Construction Complete	Q4 2022
	Lake	Middletown	Construction Complete	Q3 2022*
	Napa	Angwin	Construction Complete	Q3 2022*
	Napa	Calistoga	Construction Complete	Q3 2022*
	Placer	Colfax	Construction Complete	Q4 2022*
	Placer	Foresthill	Construction Complete	Q3 2022*
	Shasta	Shingletown	Construction Complete	Q3 2022*
Tuolumne	Groveland	Construction Complete	Q4 2022	
Islanding	Calaveras**	Salt Springs Island	Operational	N/A
	Calaveras***	West Point Island	Operational	N/A
	Humboldt	Humboldt Bay Island	Operational	N/A
	Plumas	Caribou Island	Operational	N/A
	Tehama	Red Bluff Island	Operational	N/A
	Tuolumne	Spring Gap	Operational	N/A

Local work plans are subject to change and data is based on the best available information at this time.

*Temporary generation procurement and energization plan finalization targeted completion of 10/1.

**Also serves portions of Amador and Alpine Counties.

***Also serves portions of Amador County.

****Facility owned by Redwood Coast Energy Authority; PG&E owns, operates and maintains microgrid circuit.

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



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated Completion
Remote Grids	Mariposa	Briceburg	Operational	N/A
	Mariposa	Miami Mountain	Planning	Q4 2022
	Tehama	Corning 1	Planning	Q4 2022
	Tehama	Corning 2	Planning	Q4 2022
	Mariposa	Mariposa (Slaughterhouse)	Planning	Q4 2022
	Sonoma	Pepperwood Preserve	Planning	Q4 2023
	Tehama	Manton (Wildcat)	Planning	Q4 2023
	Tehama	Manton (Shingletown Wildcat)	Planning	Q4 2023
	Tehama	Manton (Battle Creek)	Planning	Q4 2023
	Madera	Coarsegold (Melvin)	Planning	Q4 2023
	Yuba	Bangor (Ponderosa Way – Challenge)	Planning	Q4 2023
	Lake	Middletown (Anderson Spring)	Planning	Q4 2023
	Tulare	Whitaker Forest	Planning	Q4 2023
	Tuolumne	Vallecito (Forebay – Stanislaus)	Planning	Q4 2023
	Glenn	Alder Springs (Valley View)	Planning	Q3 2024
	San Luis Obispo	Carrizo Plains	Planning	Q3 2024
	Marin	Inverness (Mt. Vision PRNS)	Planning	Q3 2023

Local work plans are subject to change and data is based on the best available information at this time.

Community Wildfire Safety Program

Q3 2022 REGIONAL WORKING GROUP

South Bay/Central Coast Region

August 11, 2022



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.



Safety

General Safety Tips

Identify two exit routes from your current work area in the event of a fire or other emergency.

.....

“Drop, cover and hold” in the event of an earthquake.

.....

Notify emergency services if you are in danger. You can also ask for help by putting a message in the chat function of this meeting.





Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.

Working Group Participants

- Access and Functional Needs Representatives
- City/County Staff
- Community-Based Organizations
- Community Choice Aggregators
- County Offices of Emergency Services
- First Responders
- Health and Human Services Representatives
- Paratransit Partners
- In-Home Support Service Providers
- Durable Medical Equipment Providers
- Publicly Owned Electric Utilities
- Red Cross Staff
- Electric Co-Ops and Small, Multi-Jurisdictional Electric Utilities
- Telecommunications Providers
- Tribal Governments
- Water Agencies
- Filsinger Energy Partners
- California Public Utilities Commission Staff



Agenda

DISCUSSION TOPICS

- 1 Safety Updates**
 - Outage Types
 - Public Safety Power Shutoff (PSPS) Policies and Procedures

- 2 Enhanced Powerline Safety Settings (EPSS)**
 - New Outage Portal
 - Program Updates

- 3 Microgrid and Resiliency Update**
 - Microgrid Portal
 - Resiliency Program Update

- 4 Company Emergency Response Plan (CERP) Update**

- 5 Safety and Reliability Update**

MEETING PRESENTERS

Alinda Martinez-Smith

Division Lead

Jeana Arnold

Local Government Affairs

Steve Crawford

Public Safety Specialist

Reno Franklin

Tribal Liaison

Eric Lamoureux

Enhanced Powerline Safety Settings

Jon Stallman

Grid Planning and Innovations

Safety Updates





Different Types of Outages Customers May Experience

HOW WILL WE INFORM CUSTOMERS?

PG&E can notify you in advance of...

Public Safety Power Shutoff

Advanced notification/regular updates

- Phone calls*
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- CBO** outreach

Rotating Outages (CAISO Ordered)

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach

Planned Maintenance

10-day advance notification

Emergency Repairs

Updates during and after outages

- Phone calls*
- Texts
- Emails

Active Wildfires

Updates during and after outages

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PG&E is unable to send advance notification prior to...

*Via interactive voice recordings (IVR) **Community-based organization

Public Safety Power Shutoffs (PSPS)

Turning off power to prevent tree branches and debris from contacting energized lines



WHEN

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

In advance through automated calls, texts and emails along with real-time updates



2022 FOCUS

Continuing to refine the program and reducing impacts in the areas at highest risk

Enhanced Powerline Safety Settings (EPSS)

Settings quickly and automatically turn off power if a problem is detected on the line.



WHEN

Elevated wildfire risk is present, most likely from May to November, but can occur year-round.



NOTIFICATIONS

Customers receive notifications at the start of an outage and regular updates; Since power is automatically shut off within one-tenth of a second when a fault occurs, we are unable to provide advanced notice.



2022 FOCUS

Expanding from approximately 45% High Fire Threat District to 100% of High Fire Risk Area circuits

2022 PSPS Policies and Procedures

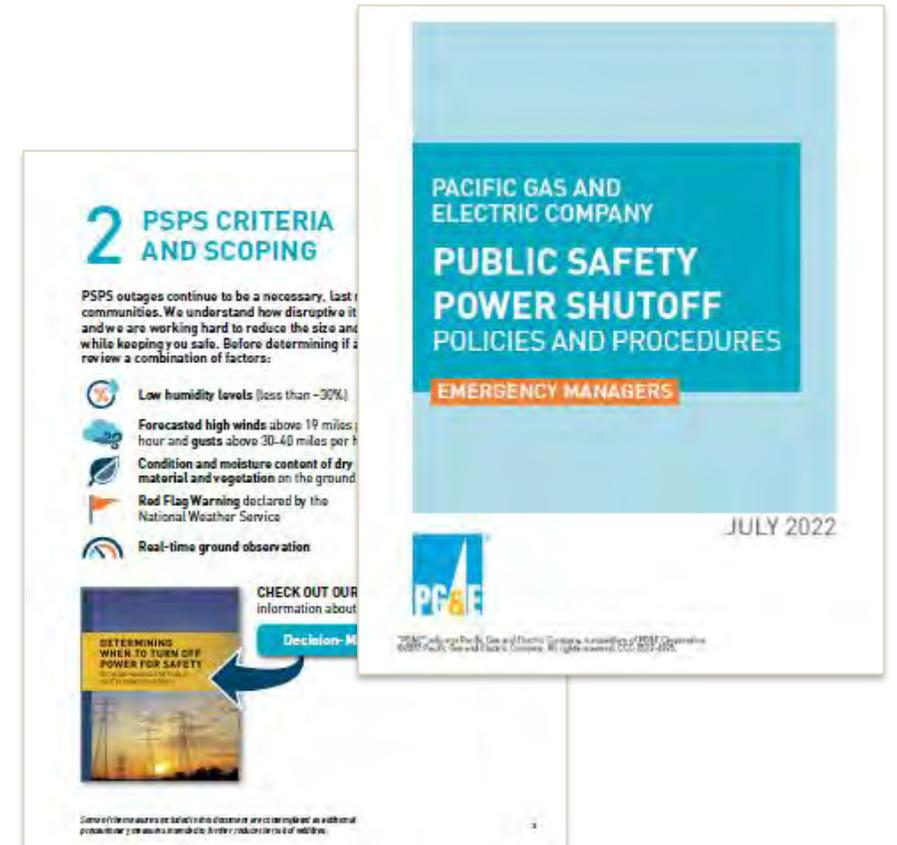
PG&E has recently updated our PSPS Policies and Procedures document for Emergency Managers.

Notable updates:

- Changes to Courtesy Hours Notifications
- Priority Notice Webpage Removal
- Self-Identified Electricity Dependent Customers

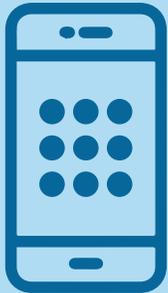
The document is available at:

- pge.com/pspsportal
- pge.com/pspspartners

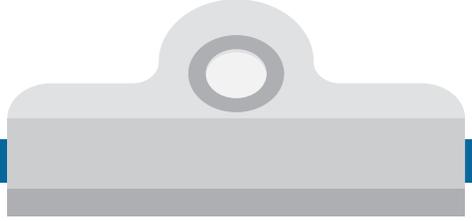




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Where can I find more information about electricity outages?**
 - **Where can I find PG&E's Policies and Procedures and what is included in the document?**

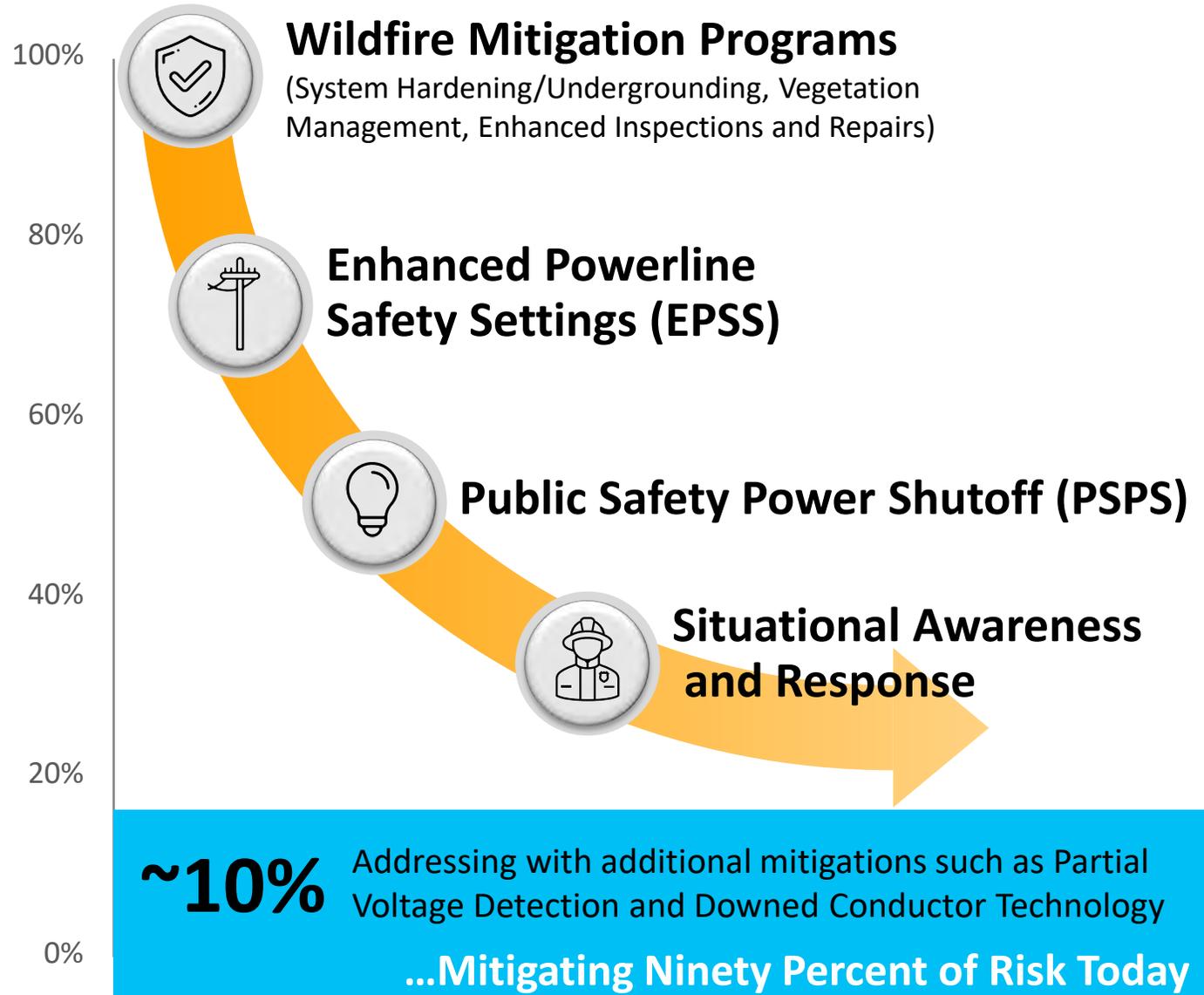
Enhanced Powerline Safety Settings (EPSS)





Layers of Protection...

PG&E actions
have mitigated
~90%
of wildfire risk





Enhanced Powerline Safety Settings (EPSS) A Technology To Prevent Wildfires

How It Works

PG&E powerlines have equipment that allows power to automatically turn off within one-tenth of a second if there is a wildfire risk, like a tree branch or other object striking the line.

Why We Do It

Quickly and automatically shutting off power when a hazard is detected can help stop wildfires before they have a chance to start.

Preventing Wildfires

~80% decrease in CPUC-reportable ignitions
in 2021 on EPSS-enabled circuits
compared to the prior 3-year average as of 12/31/21



SAFETY SETTINGS IN ACTION

An example of these settings preventing a potential ignition in Santa Cruz County, when a tree branch fell into a powerline in 2022 and power was quickly and automatically turned off.



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.

PG&E Utility Fire Potential Index



Disable EPSS if*:

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

EPSS-enabled on all circuits

HFRA & HFTD

LAST RESORT

PSPS considered if:

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

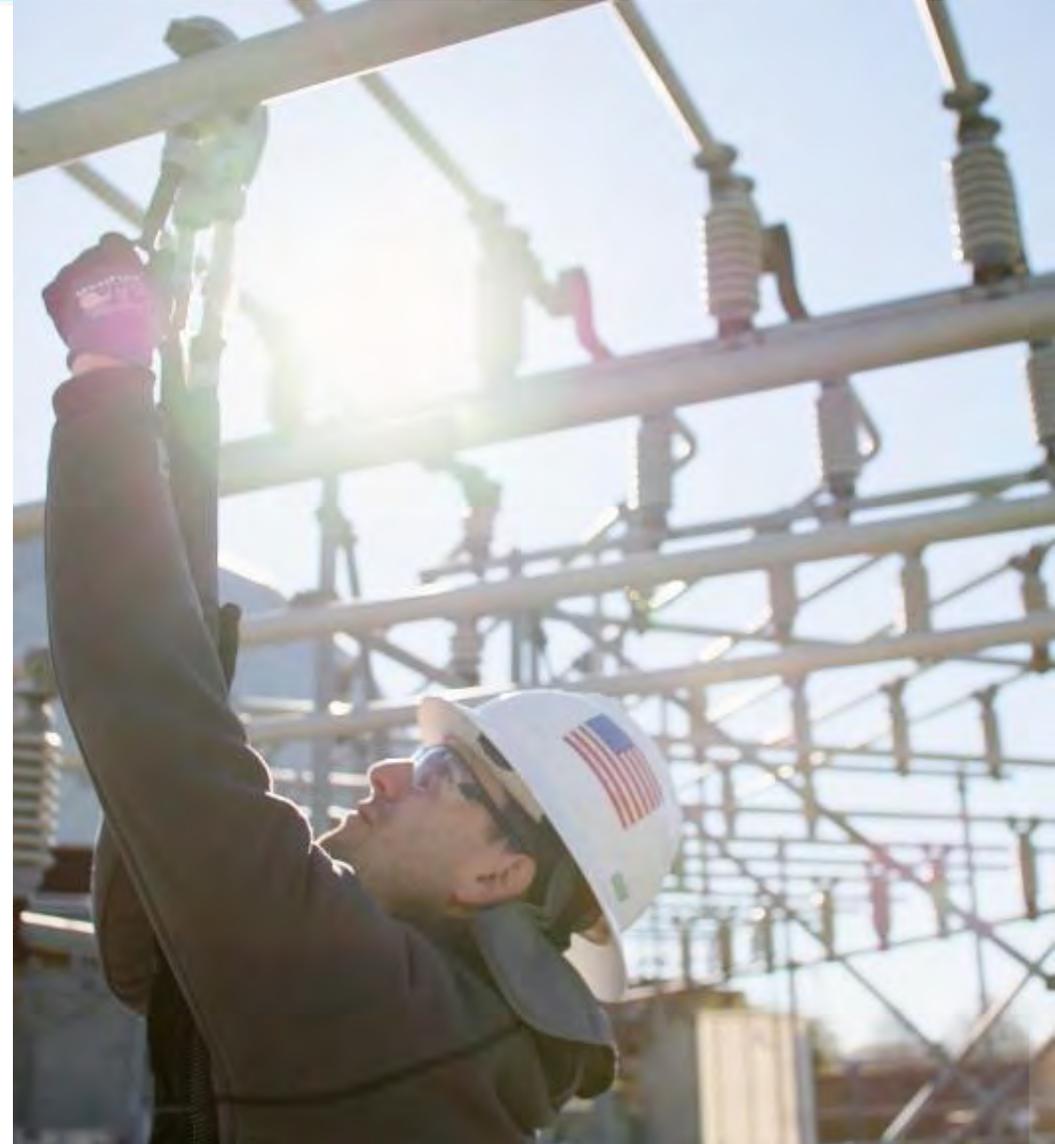
EPSS during RFW / FWW / PSPS adjacent conditions

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

*If all conditions are sustained.

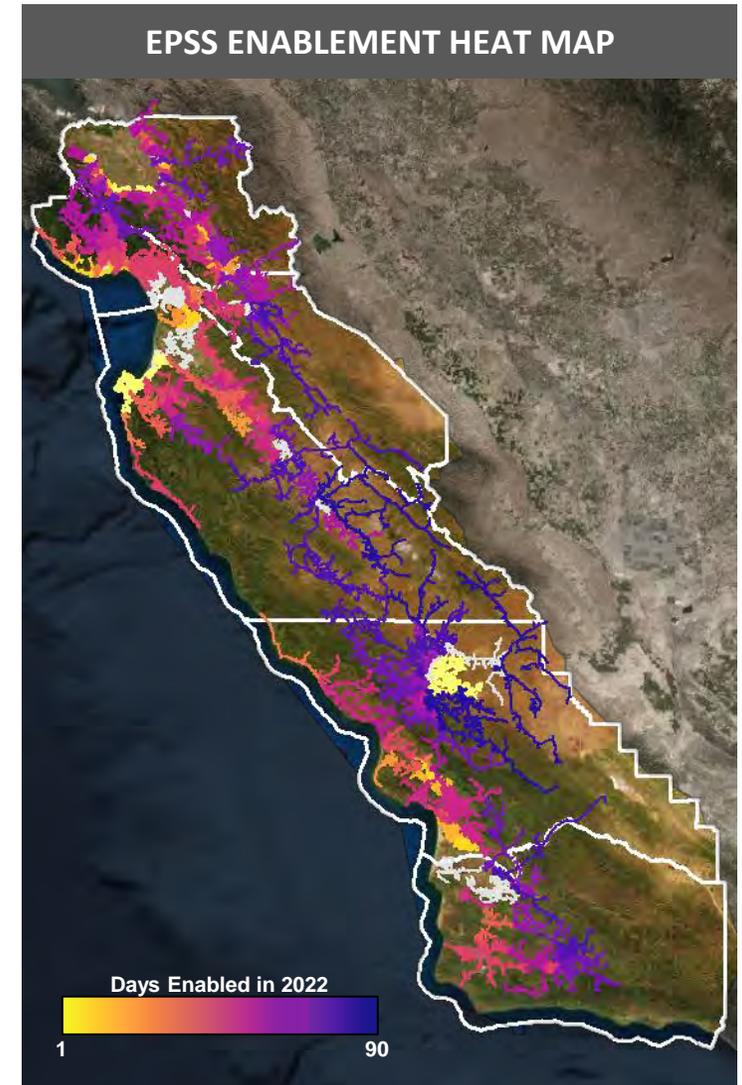
Steps we are taking...

- ✓ Installing technology to help **quickly identify outage locations**
- ✓ Conducting **vegetation** management on trees near powerlines
- ✓ Installing sectionalizing devices that isolate hazards to **limit the number of customers impacted** during outages

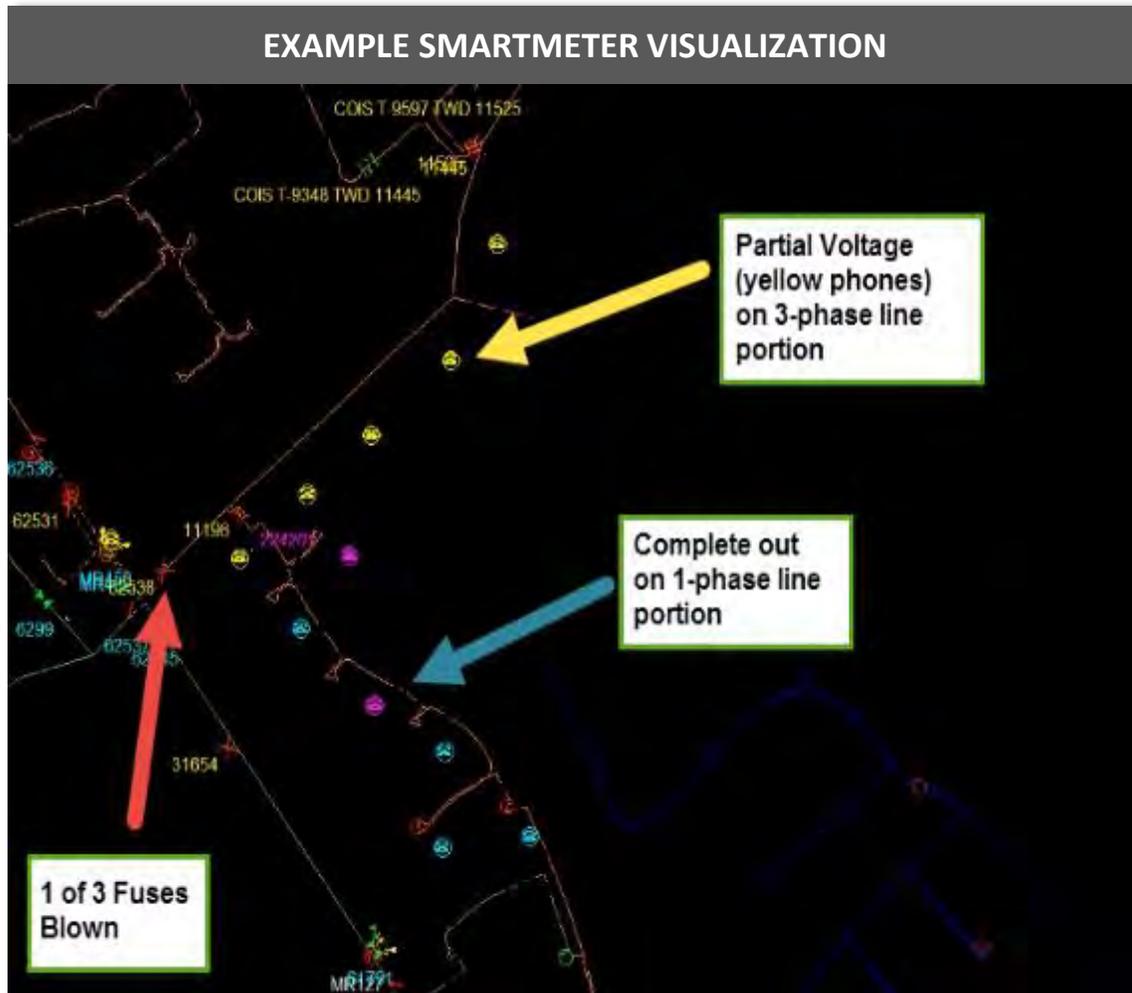


EPSS is a proven tool for reducing ignitions. In the South Bay/Central Coast Region, 211 distribution circuits serving about 440,000 customers are currently protected.

- This year, there have been 245 outages on EPSS-enabled circuits across the region.
- The average number of customers included in each outage has been 984 and outages have lasted an average of 2.7 hours, a 57% improvement over last year.
- We are prioritizing reliability improvements on circuits that have had multiple outages and are making adjustments.
- For example, the San Luis Obispo 1107 circuit in San Luis Obispo County has experienced 10 outages in 2022. To improve reliability on this circuit we have:
 - Replaced equipment
 - Adjusted sensitivity settings
 - Conducted additional vegetation management
 - Adjusted how our grid is configured in the area



Data is subject to change and as of 07/31/2022.



To help identify low and very low current faults in our system (which can “look like” a minor increase in load on a circuit), we are beginning to leverage our SmartMeter network to determine when the lines serving a particular area may be experiencing these conditions and need to be de-energized for safety.

This is called a Partial Voltage Force Out.

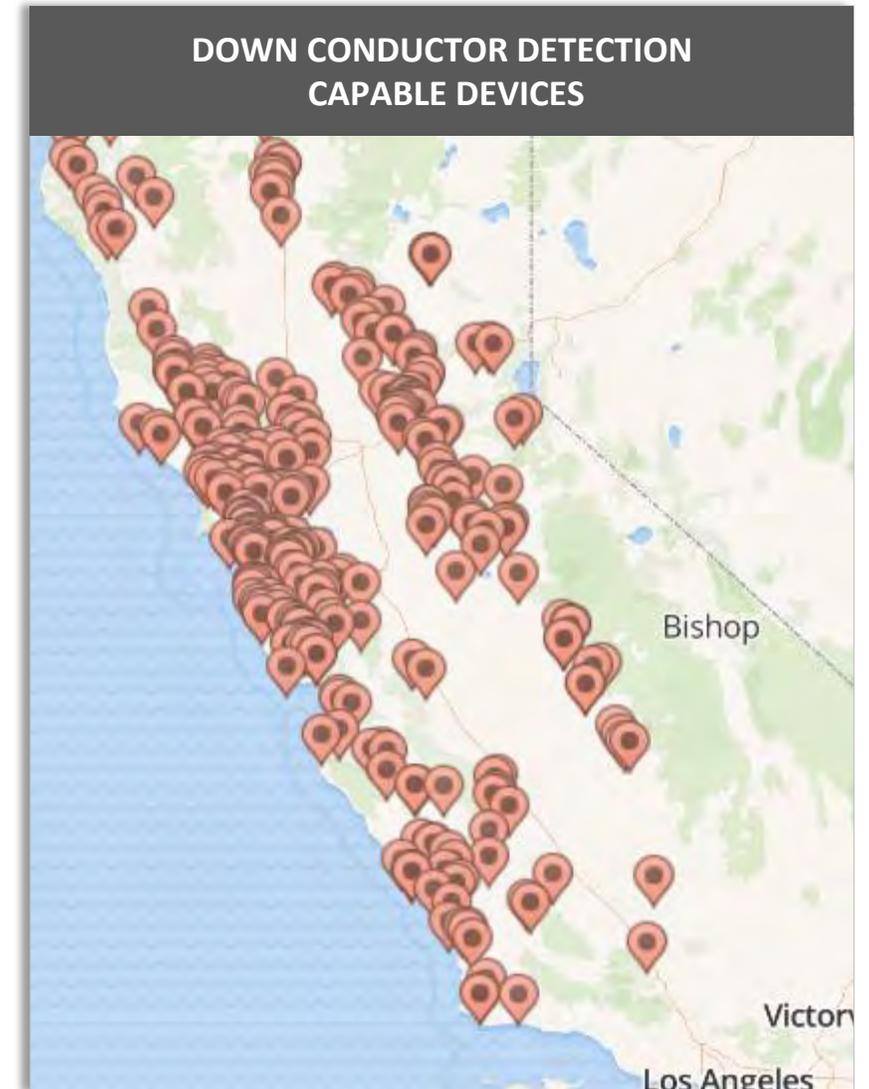
We are enabling Partial Voltage Force Outs on all EPSS devices in High Fire Risk Areas.

Recloser Detection of Low/Very Low Current Faults

Another recent EPSS update includes piloting “Down Conductor Detection” on some reclosing devices across our system.

This feature:

- Uses a sophisticated analysis to determine when low and very low current faults are present (which “look like” high impedance faults).
- De-energizes reclosers immediately.
- Can detect previously hard to detect fault conditions that could result in an ignition.





PG&E Data Portals



Welcome to PG&E Data Portals

On this site you can access various datasets.

PSPS Portal

The **PSPS Portal** includes planning and event-specific information, and is available for public safety partners that support emergency management efforts, which include: emergency responders from federal, state, local and tribal governments, telecommunication providers, water agencies, public-owned utilities, emergency hospitals, and transportation agencies.

[GO TO PSPS PORTAL](#)

Outage Portal

The **Outage Portal** includes information pertaining to EPSS-caused outages within PG&E's service territory. The portal will provide circuit and outage area maps for active EPSS outages. Supplementary EPSS and other outage data may be added as the product matures. This data is available for public safety partners that support emergency management efforts.

[GO TO OUTAGE PORTAL](#)

Microgrid Portal

The **Microgrid Portal** includes facility information, High Fire Threat Districts, Historical PSPS information, and GO131-D and GO166 data. It is available as required by CPUC Order 20-06-017, to tribal governments, County OESs, or organizations created by political subdivisions to carry out provisions of the State Emergency Plan.

[GO TO MICROGRID PORTAL](#)

Don't have access?

[REQUEST ACCESS](#)

pgedataportals.pge.com

New Outage Portal

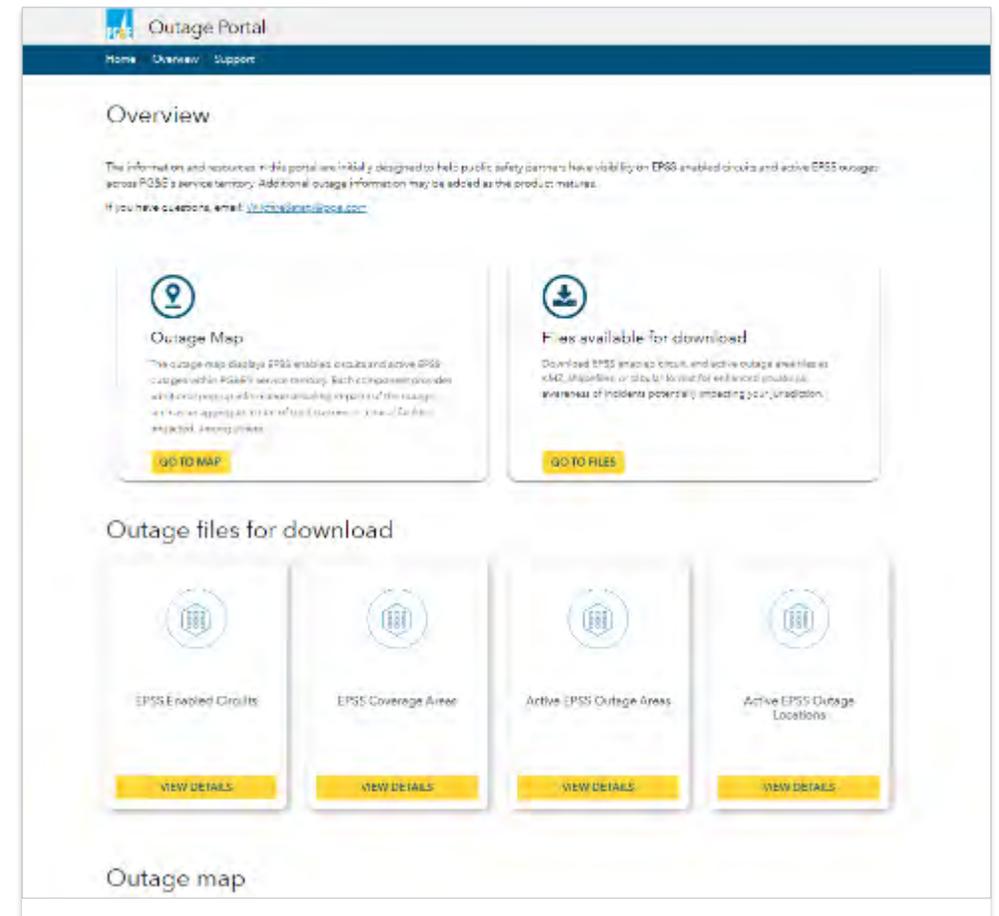
PG&E's new Outage Portal is focused on providing data regarding circuits and outages occurring on lines protected by EPSS-enabled devices. In the future, information about all outage types will be included.

✓ **The portal is available to Public Safety Partners** and others who currently have PSPS portal access.

✓ **An invitation email was sent to all PSPS Portal users**, and you can also visit pgedataportals.pge.com to request access.

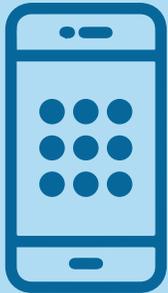
✓ **Data on the portal currently includes:**

- Locations of currently enabled EPSS devices
- Details of active outages on EPSS circuits

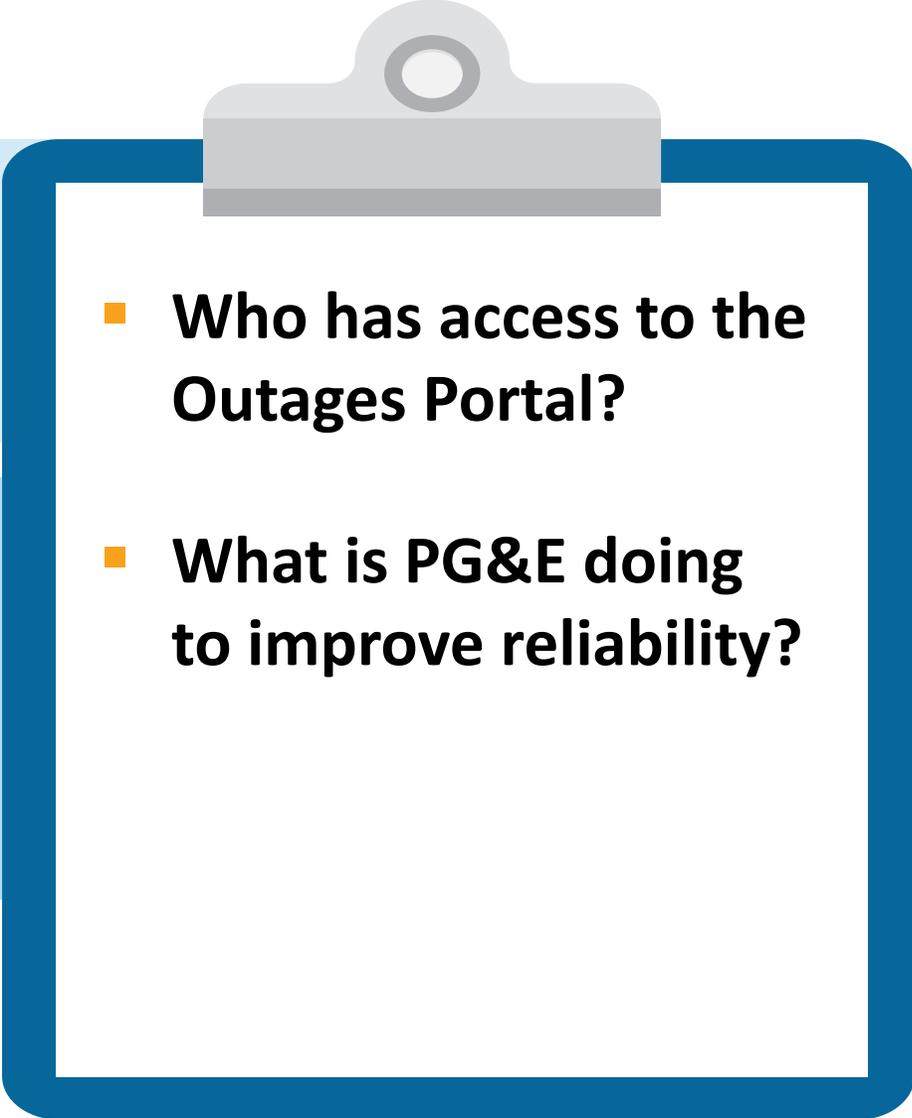




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Who has access to the Outages Portal?**
 - **What is PG&E doing to improve reliability?**

Microgrid and Resiliency Update

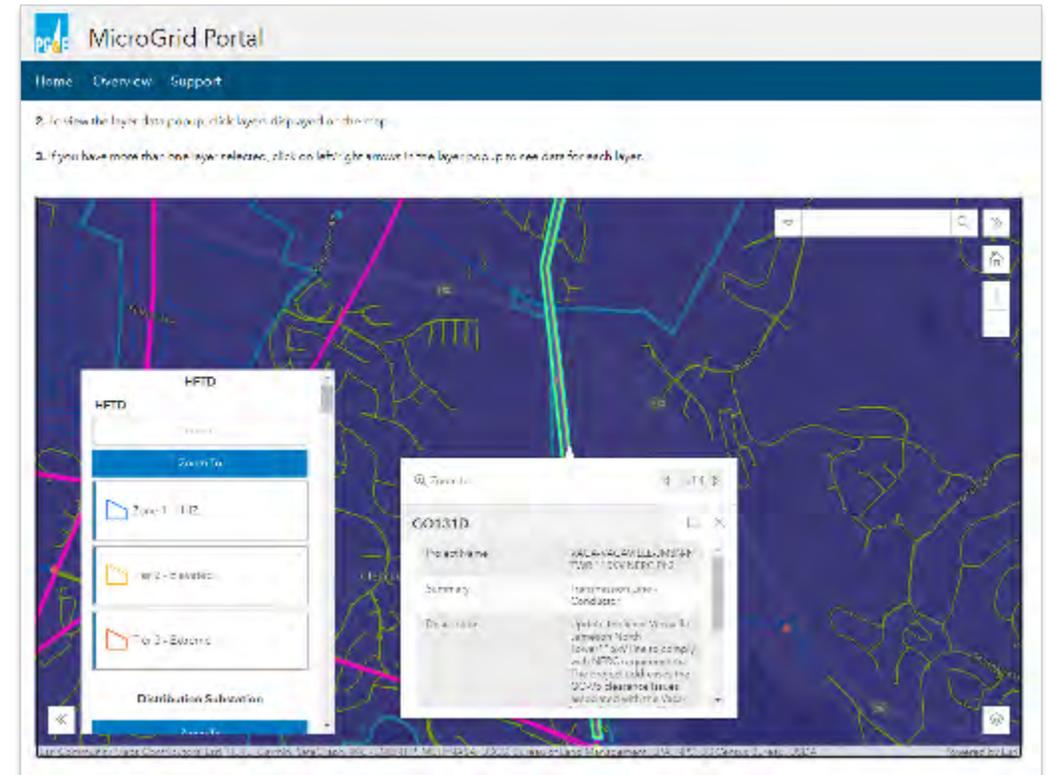


Last year, PG&E developed a Microgrid Portal to share information with local agencies and tribes to assist in their own resiliency efforts. This tool:

Is available to County OES representatives, tribal governments and other “organizations created by political subdivisions to carry out the provisions of the State Emergency Plan.”

Includes the following data:

- **Utility planned work/grid investments**
- **High Fire-Threat District Map layers**
- **Electric infrastructure map layers**
- **Weather polygon map layers**





Microgrid Incentive Program (MIP)

PG&E, along with San Diego Gas and Electric and Southern California Edison are in the process of developing a new Microgrid Incentive Program to fund clean community microgrids that support the critical needs of vulnerable populations most likely to be impacted by outages.

- ✓ **Increase reliability and resiliency for critical public facilities** in communities that are at higher risk of electrical outages
- ✓ **Prioritize communities** with higher portions of low-income, Access and Functional Needs, and electricity dependent residents
- ✓ **Enable communities with lower ability to fund development of backup generation** to maintain critical loads during outages pending CPUC approval.

The new Microgrid Incentive Program (MIP) will have limited funding. Access will be through a competitive application process.

Pending CPUC approval, we expect to be able to share additional details about the program later this year or in early 2023.



Overview of Microgrids and Other Resilience Efforts

This year, we are continuing to build upon our distribution microgrid and remote grid programs and plan to continue to utilize our previously identified islanding locations when possible.

PROGRAM	2020 TOTAL SITES	2021 TOTAL SITES	2022 TOTAL SITES PLANNED
Distribution Microgrids Microgrids prepared to energize “main street” corridors, central community resources and critical facilities in areas that frequently experience PSPS events.	3*	8**	13
Islanding Locations Reconfiguration of local generation sources to allow certain areas to be separated from the larger electric grid and remain energized during PSPS events.	0	6	6
Remote Grids Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid. These projects are intended to help reduce the risk of wildfires but can also improve reliability as well.	0	1	3***

Local work plans are subject to change, and data is based on the best available information at this time.

**Does not include 4 additional sites that were made ready to operate using a temporary configuration in 2020*

***Does not include 1 additional site that was made ready to operate using a temporary configuration in 2021*

****Additional sites may also be completed in 2022 through 2024*



Grid Resilience Efforts – South Bay/Central Coast Region

COUNTY	COMPLETE THROUGH 2021	NEW 2022 SITES	NEW 2023 SITES	NEW 2024 SITES
San Luis Obispo	0 LOCATIONS	0 LOCATIONS	0 LOCATIONS	1 LOCATION

Note: Additional resilience work is not currently planned in the remaining counties within the region.

PG&E is prioritizing its wildfire safety work by locations with the highest risk of wildfire and locations that will reduce PSPS impacts for the most customers.

Local work plans are subject to change and data is based on the best available information at this time.

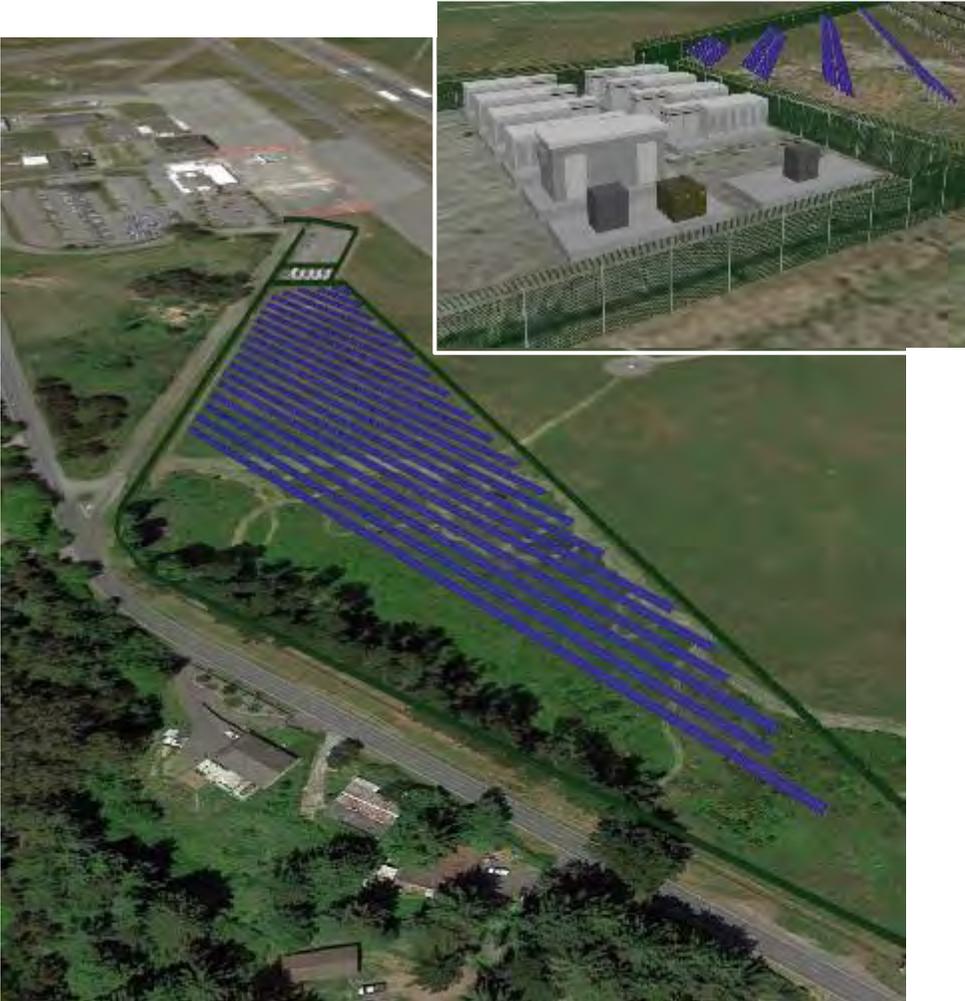


Hospital Support

- PG&E will continue to support hospitals this year by pre-staging approximately 25 megawatts of temporary generation at 11 hospitals that have experienced frequent Public Safety Power Shutoffs in the past.
- New this year, we have made improvements to our backup generation at St. Helena Hospital to support that facility during all outages (PSPS, EPSS, etc.)
- We continue to develop pilot programs with alternatives to diesel power and intend to make these systems available for use in 2023 to facilities that can meet our pilot criteria.



Redwood Coast Airport Microgrid



In coordination with Schatz Energy Research Center and Redwood Coast Energy Authority, PG&E supported the development of California's first fully automated and 100% renewable multi-customer microgrid.

This innovative project:

- Serves multiple customers “in-front-of-the meter” including:
 - California Redwood Coast-Humboldt County Airport
 - U.S. Coast Guard Humboldt Bay Air Station
- Leverages solar arrays and Tesla Megapack storage
- Is owned and operated by the Redwood Coast Energy Authority but interfaces with PG&E's control center.

2022 Mobile Battery Energy Storage System (MBESS) Pilot

PG&E is expanding our mobile battery efforts to provide support during outages.

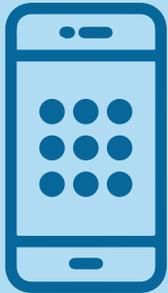
MBESS Pilot Details

- PG&E is working with industry partners to develop a small pilot fleet of mobile Tesla Megapacks for response to planned and unplanned outages.
- These units will feature a steel frame for portability/durability.
- Each unit can be connected both in front of and behind the meter at primary or secondary voltages.
- The batteries are also capable of remote observation and flexible dispatching.
- PG&E is developing a pilot roll-out strategy and expects to launch initial pilot locations in 2022-2023.





Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- **Who has access to the Microgrid Portal?**
- **What other microgrid related updates can we expect in the future?**

Company Emergency Response Plan (CERP)



Company Emergency Response Plan (CERP)

PG&E's Company Emergency Response Plan (CERP) assists with the safe, efficient and coordinated response to all-hazard emergency incidents affecting gas or electric generation, distribution, storage, transmission systems or any other emergency incident within our service area.

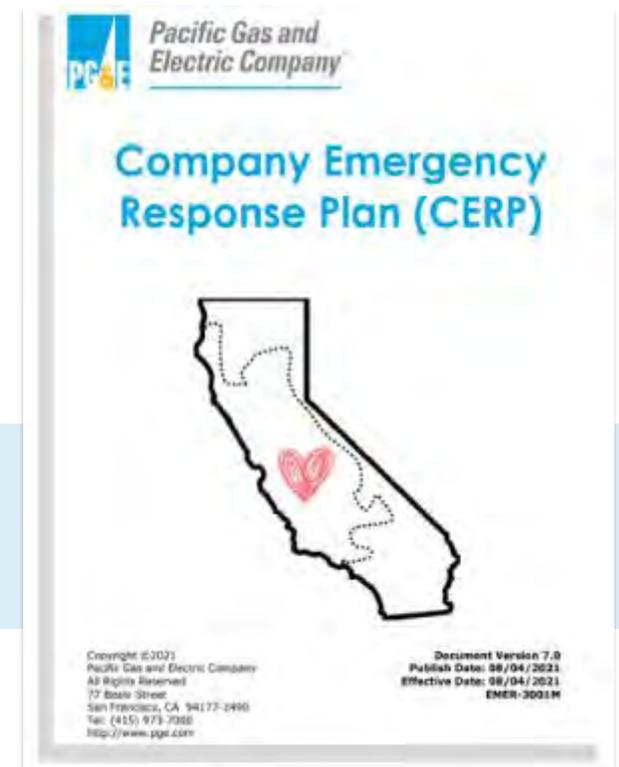
A key element of the CERP is the identification of coordination efforts with outside organizations.

To support these coordination efforts, agencies can expect PG&E:

- Share invites to 2023 CERP review meetings in Q4 2022.
- Share a revised 2023 CERP in January 2023.
- Host six virtual CERP review meetings in Q1 2023.

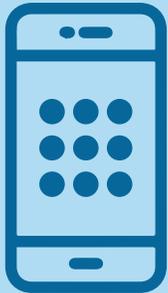
A copy of the current PG&E CERP can be found here:

pgera.azurewebsites.net/Regulation/search

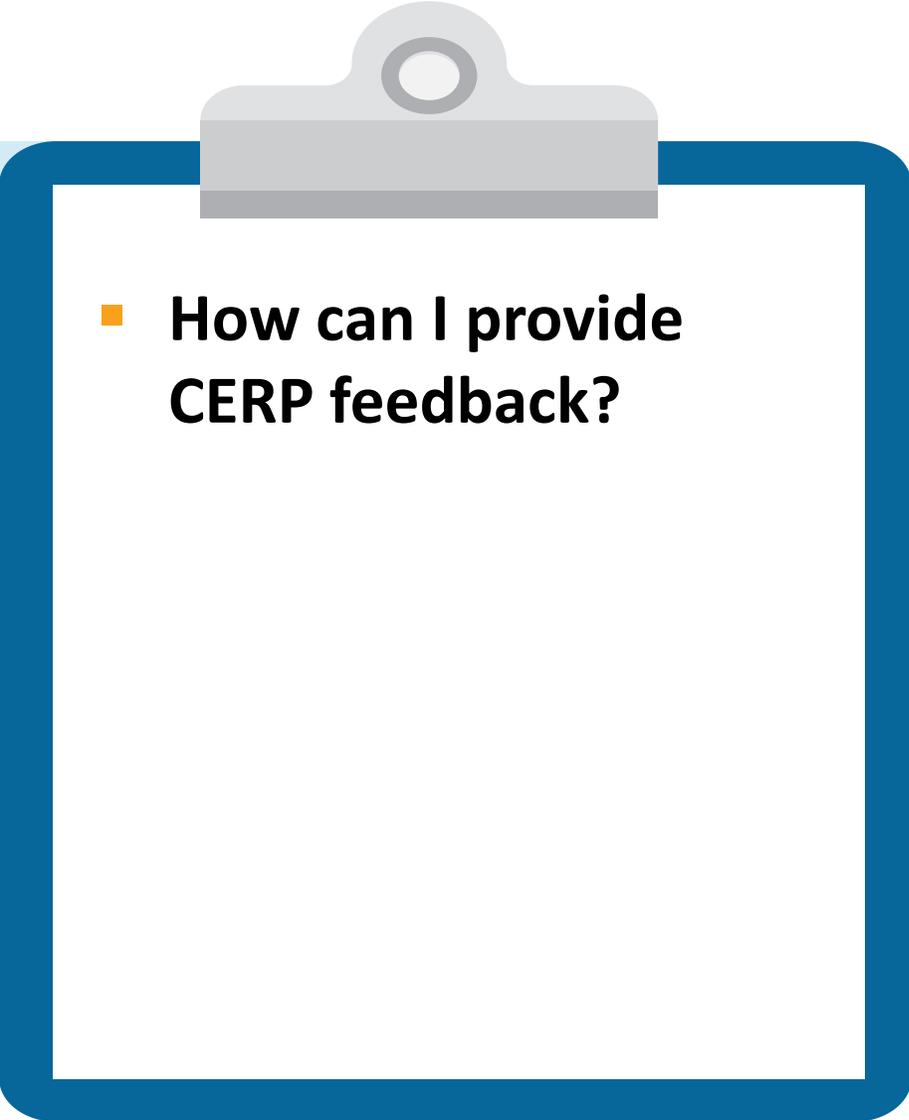




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **How can I provide CERP feedback?**

Safety and Reliability Update





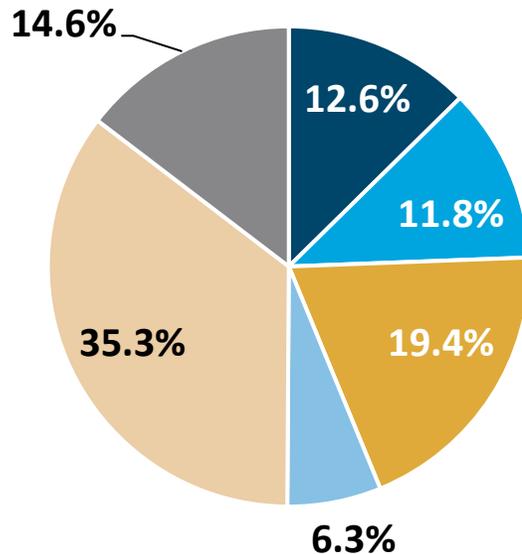
Safety and Reliability in the South Bay/Central Coast Region

Power was on
99.96%
of the time

Power Outages in Your Region

- > Average Outage Size: **111 customers**
- > Average Outage Duration: **2 hours**

County- and city-level versions of this report are being shared with all electric customers in August 2022* and are available [here](#).



Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Data from April-June 2022

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

Steps PG&E is Taking to Better Serve You

Wildfire Safety in Your County
We are working hard every day to keep you safe and improve our electric system.

	2022 PLAN*	2022 COMPLETE
Undergrounding electric distribution powerlines	0 miles	0 miles
Installing stronger poles and powerlines	20 miles	<1 mile
Enhancing vegetation work around powerlines	<1 mile	<1 mile

*Plans are subject to change due to weather, permitting and other restrictions.

High Fire-Risk Areas
San Luis Obispo County

Enhanced Powerline Safety Settings (EPSS)
This technology is helping to reduce wildfire risk. If a hazard, like a tree branch on the line, is detected, power is automatically turned off within one-tenth of a second.

EPSS in Your County:

Customers Protected	123,407
Average Outage Size (customers)	1,085
Average Outage Duration (hours)	2

Steps we are taking to reduce customer impact

- Adjusting device sensitivity based on wildfire risk and disabling the safety settings when it is safe to do so
- Installing technology to quickly identify and address outage sources
- Adapting patrol methods to shorten outages

San Luis Obispo County
Power Outages in Your County
Average Outage Size: **109 customers**
Average Outage Duration: **2 hours**

Types of Outages

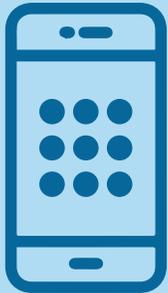
- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

DATA AS OF JUNE 2022
Some of the measures included in this document are contemplated as additional precautionary measures intended to further reduce the risk of wildfires. PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation, ©2022 Pacific Gas and Electric Company. All rights reserved. All data is approximate and subject to change. 07/26/2022

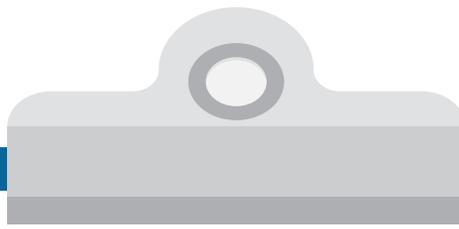
*Report is released in phases and all customers will receive this report by 8/17/22.



Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- A large graphic of a clipboard with a silver clip at the top and a blue border. Inside the clipboard is a white area containing a list item.
- **What safety and reliability trends did we see last quarter?**

Open Discussion/Q&A





Next Steps

- ✓ Meeting survey shared with participants to gather feedback on approach and content of Regional Working Groups
- ✓ Follow-up on items identified by local agencies/stakeholders
- ✓ Upcoming meetings
 - Weekly Portal Trainings (Beginning 8/12)
 - CERP Meetings (Q1 2023)

2022 REGIONAL WORKING GROUP CALENDAR

TIMING	TOPICS
Q4 2022 (December)	Wildfire Safety Outage Season Recap, 2023 Planning Updates

Thank You



Appendix





Outstanding Follow Up and Action Items – South Bay/Central Coast

Below is a list of the follow up and action items identified during the previous Regional Working Group meetings as well as corresponding statuses.

Action Item	Agency	Status
Asked for a county level breakdown of battery distribution.	Santa Barbara County OES	In Progress



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated 2022 Operational Readiness
Distribution Microgrids	Butte	Magalia	Construction Complete	Q3 2022*
	Calaveras	Arnold	Planning	Q4 2022
	El Dorado	Georgetown	Construction Complete	Q3 2022*
	El Dorado	Pollock Pines	Construction Complete	Q3 2022*
	Humboldt	Redwood Coast Airport Microgrid*****	Construction Complete	N/A
	Lake	Clearlake North	Planning	Q4 2022
	Lake	Lucerne	Construction Complete	Q4 2022
	Lake	Middletown	Construction Complete	Q3 2022*
	Napa	Angwin	Construction Complete	Q3 2022*
	Napa	Calistoga	Construction Complete	Q3 2022*
	Placer	Colfax	Construction Complete	Q4 2022*
	Placer	Foresthill	Construction Complete	Q3 2022*
	Shasta	Shingletown	Construction Complete	Q3 2022*
Tuolumne	Groveland	Construction Complete	Q4 2022	
Islanding	Calaveras**	Salt Springs Island	Operational	N/A
	Calaveras***	West Point Island	Operational	N/A
	Humboldt	Humboldt Bay Island	Operational	N/A
	Plumas	Caribou Island	Operational	N/A
	Tehama	Red Bluff Island	Operational	N/A
	Tuolumne	Spring Gap	Operational	N/A

Local work plans are subject to change and data is based on the best available information at this time.

*Temporary generation procurement and energization plan finalization targeted completion of 10/1.

**Also serves portions of Amador and Alpine Counties.

***Also serves portions of Amador County.

****Facility owned by Redwood Costa Energy Authority; PG&E owns, operates and maintains microgrid circuit

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



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated Completion
Remote Grids	Mariposa	Briceburg	Operational	N/A
	Mariposa	Miami Mountain	Planning	Q4 2022
	Tehama	Corning 1	Planning	Q4 2022
	Tehama	Corning 2	Planning	Q4 2022
	Mariposa	Mariposa (Slaughterhouse)	Planning	Q4 2022
	Sonoma	Pepperwood Preserve	Planning	Q4 2023
	Tehama	Manton (Wildcat)	Planning	Q4 2023
	Tehama	Manton (Shingletown Wildcat)	Planning	Q4 2023
	Tehama	Manton (Battle Creek)	Planning	Q4 2023
	Madera	Coarsegold (Melvin)	Planning	Q4 2023
	Yuba	Bangor (Ponderosa Way – Challenge)	Planning	Q4 2023
	Lake	Middletown (Anderson Spring)	Planning	Q4 2023
	Tulare	Whitaker Forest	Planning	Q4 2023
	Tuolumne	Vallecito (Forebay – Stanislaus)	Planning	Q4 2023
	Glenn	Alder Springs (Valley View)	Planning	Q3 2024
	San Luis Obispo	Carrizo Plains	Planning	Q3 2024
Marin	Inverness (Mt. Vision PRNS)	Planning	Q3 2023	

Local work plans are subject to change and data is based on the best available information at this time.

Community Wildfire Safety Program

Q3 2022 REGIONAL WORKING GROUP

Bay Area Region

August 12, 2022



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.



Safety

General Safety Tips

Identify two exit routes from your current work area in the event of a fire or other emergency.

.....

“Drop, cover and hold” in the event of an earthquake.

.....

Notify emergency services if you are in danger. You can also ask for help by putting a message in the chat function of this meeting.



Working Group Participants

- Access and Functional Needs Representatives
- City/County Staff
- Community-Based Organizations
- Community Choice Aggregators
- County Offices of Emergency Services
- First Responders
- Health and Human Services Representatives
- Paratransit Partners
- In-Home Support Service Providers
- Durable Medical Equipment Providers
- Publicly Owned Electric Utilities
- Red Cross Staff
- Electric Co-Ops and Small, Multi-Jurisdictional Electric Utilities
- Telecommunications Providers
- Tribal Governments
- Water Agencies
- Filsinger Energy Partners
- California Public Utilities Commission Staff



Virtual Sign In Reminder

Please “sign in” using the chat function and provide your **name, organization and email**.



Agenda

DISCUSSION TOPICS

- 1 Safety Updates**
 - Outage Types
 - Public Safety Power Shutoff (PSPS) Policies and Procedures

- 2 Enhanced Powerline Safety Settings (EPSS)**
 - New Outage Portal
 - Program Updates

- 3 Microgrid and Resiliency Update**
 - Microgrid Portal
 - Resiliency Program Update

- 4 Company Emergency Response Plan (CERP) Update**

- 5 Safety and Reliability Update**

MEETING PRESENTERS

Aaron Johnson
Regional Vice President

Monica Tell
Division Lead

Claudia Luna
Local Government Affairs

Jim Wickham
Public Safety Specialist

Reno Franklin
Tribal Liaison

Eric Lamoureux
Enhanced Powerline Safety Settings

Jon Stallman
Grid Planning and Innovations

Safety Updates





Different Types of Outages Customers May Experience

HOW WILL WE INFORM CUSTOMERS?

PG&E can notify you in advance of...

Public Safety Power Shutoff

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach
- CBO** outreach

Rotating Outages (CAISO Ordered)

Advanced notification/regular updates

- Phone calls*
- Emails
- Texts
- Social media
- News releases
- Local/Tribal government outreach

Planned Maintenance

10-day advance notification

Emergency Repairs

Updates during and after outages

- Phone calls*
- Texts
- Emails

Active Wildfires

Updates during and after outages

- Phone calls*
- Texts
- Emails

Enhanced Powerline Safety Settings

Updates during and after outages

- Phone calls*
- Texts
- Emails

PG&E is unable to send advance notification prior to...

*Via interactive voice recordings (IVR) **Community-based organization

Public Safety Power Shutoffs (PSPS)

Turning off power to prevent tree branches and debris from contacting energized lines



WHEN

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

In advance through automated calls, texts and emails along with real-time updates



2022 FOCUS

Continuing to refine the program and reducing impacts in the areas at highest risk

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2022 FOCUS

Expanding from approximately 45% High Fire Threat District to 100% of High Fire Risk Area circuits



2022 PSPS Policies and Procedures

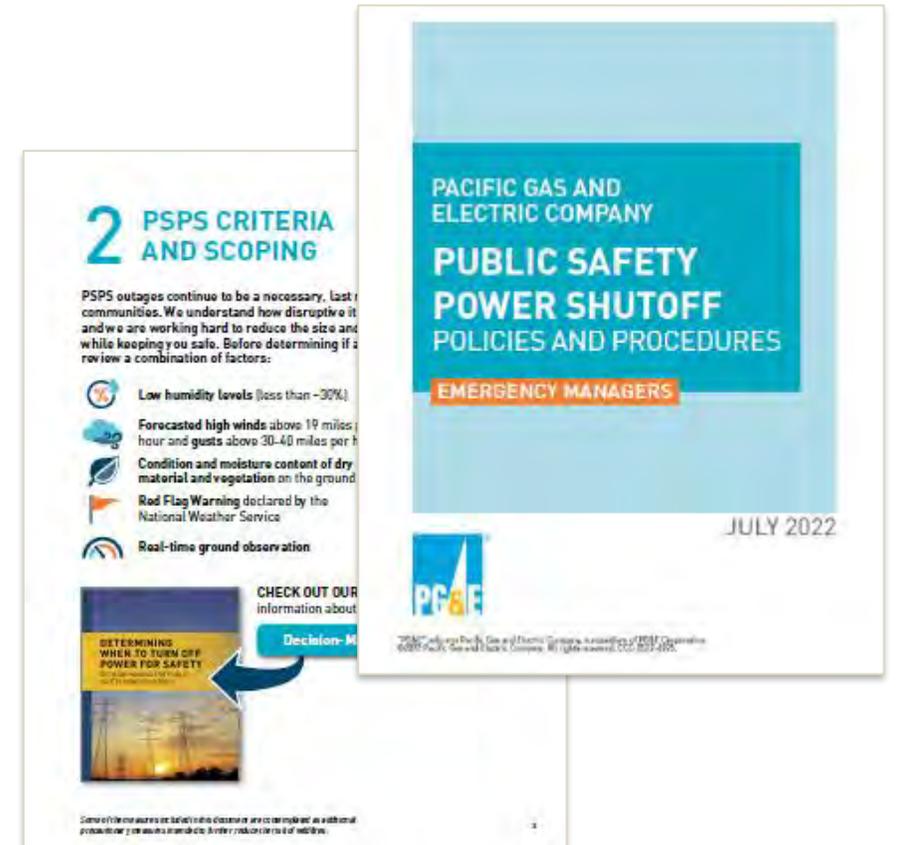
PG&E has recently updated our PSPS Policies and Procedures document for Emergency Managers.

Notable updates:

- Changes to Courtesy Hours Notifications
- Priority Notice Webpage Removal
- Self-Identified Electricity Dependent Customers

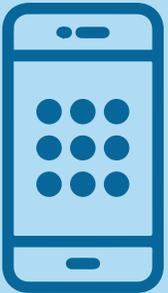
The document is available at:

- pge.com/pspsportal
- pge.com/pspspartners

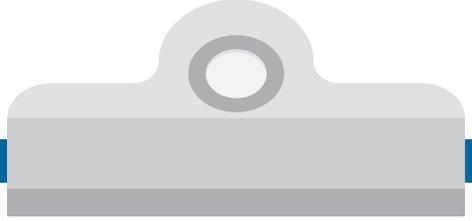




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Where can I find more information about electricity outages?**
 - **Where can I find PG&E's Policies and Procedures and what is included in the document?**

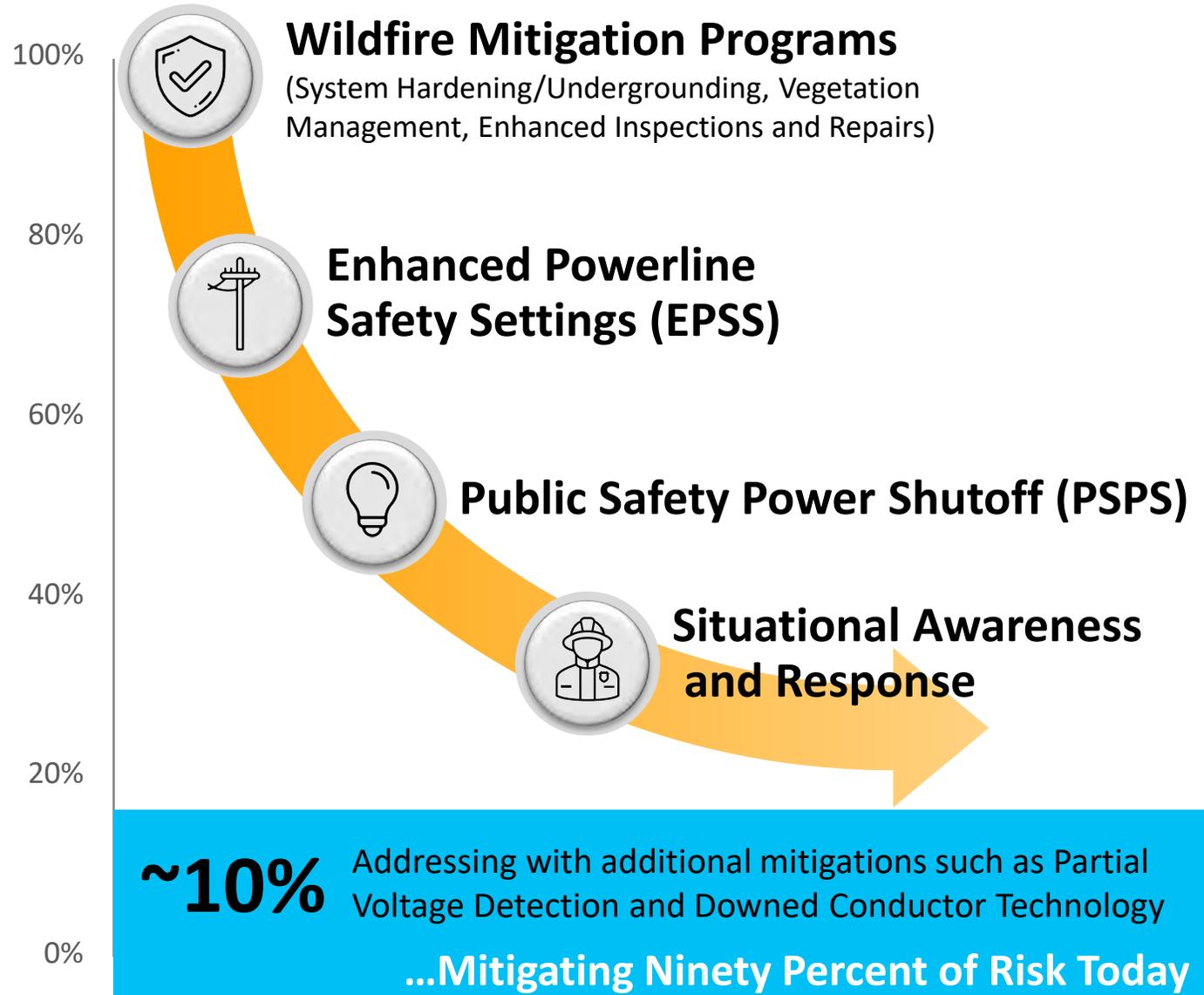
Enhanced Powerline Safety Settings (EPSS)





Layers of Protection...

PG&E actions
have mitigated
~90%
of wildfire risk





Enhanced Powerline Safety Settings (EPSS) A Technology To Prevent Wildfires

How It Works

PG&E powerlines have equipment that allows power to automatically turn off within one-tenth of a second if there is a wildfire risk, like a tree branch or other object striking the line.

Why We Do It

Quickly and automatically shutting off power when a hazard is detected can help stop wildfires before they have a chance to start.

Preventing Wildfires

~80% decrease in CPUC-reportable ignitions
in 2021 on EPSS-enabled circuits
compared to the prior 3-year average as of 12/31/21



SAFETY SETTINGS IN ACTION

An example of these settings preventing a potential ignition in Santa Cruz County, when a tree branch fell into a powerline in 2022 and power was quickly and automatically turned off.



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.

PG&E Utility Fire Potential Index



Disable EPSS if*:

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

EPSS-enabled on all circuits

HFRA & HFTD

LAST RESORT

PSPS considered if:

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

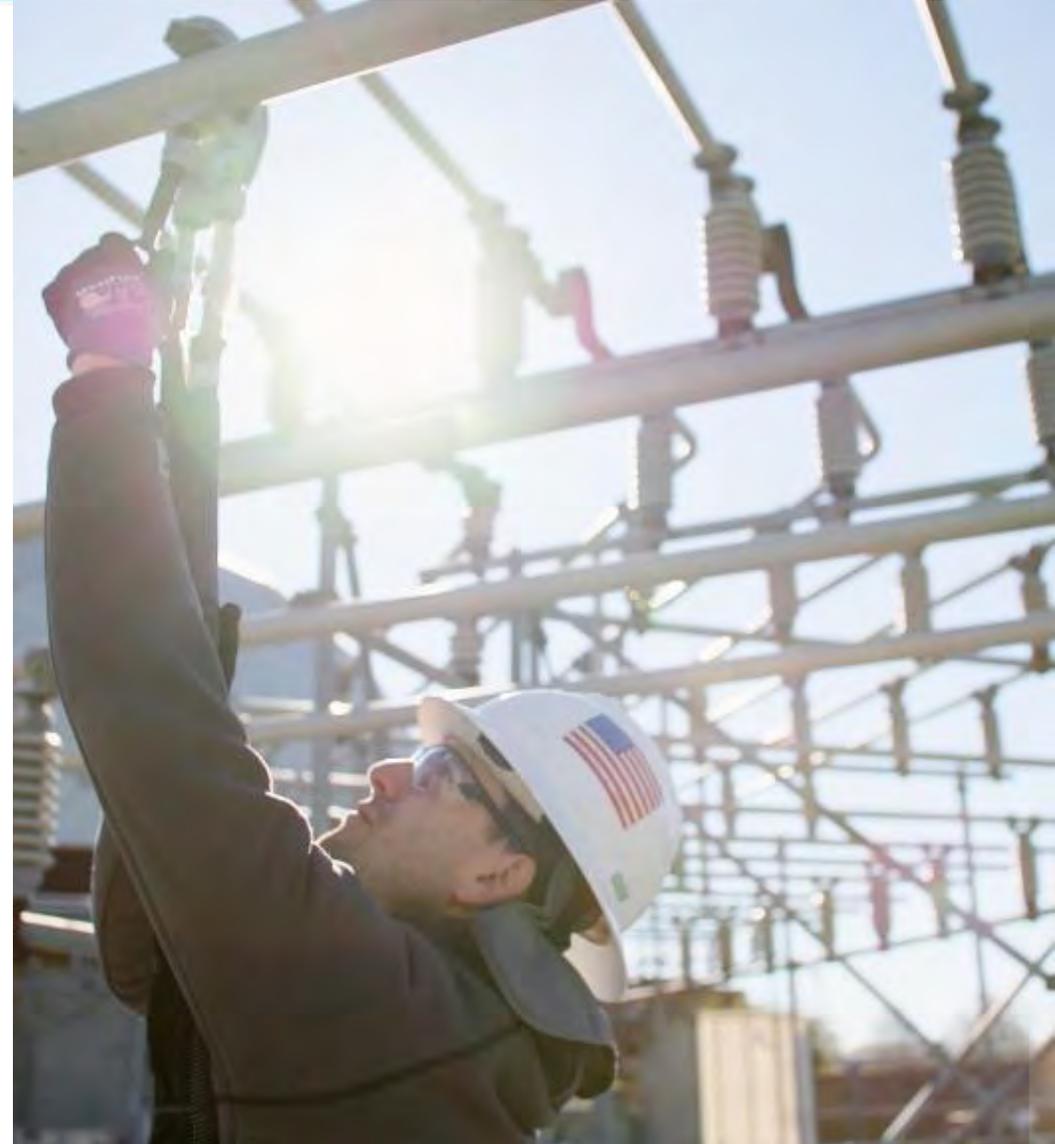
EPSS during RFW / FWW / PSPS adjacent conditions

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

*If all conditions are sustained.

Steps we are taking...

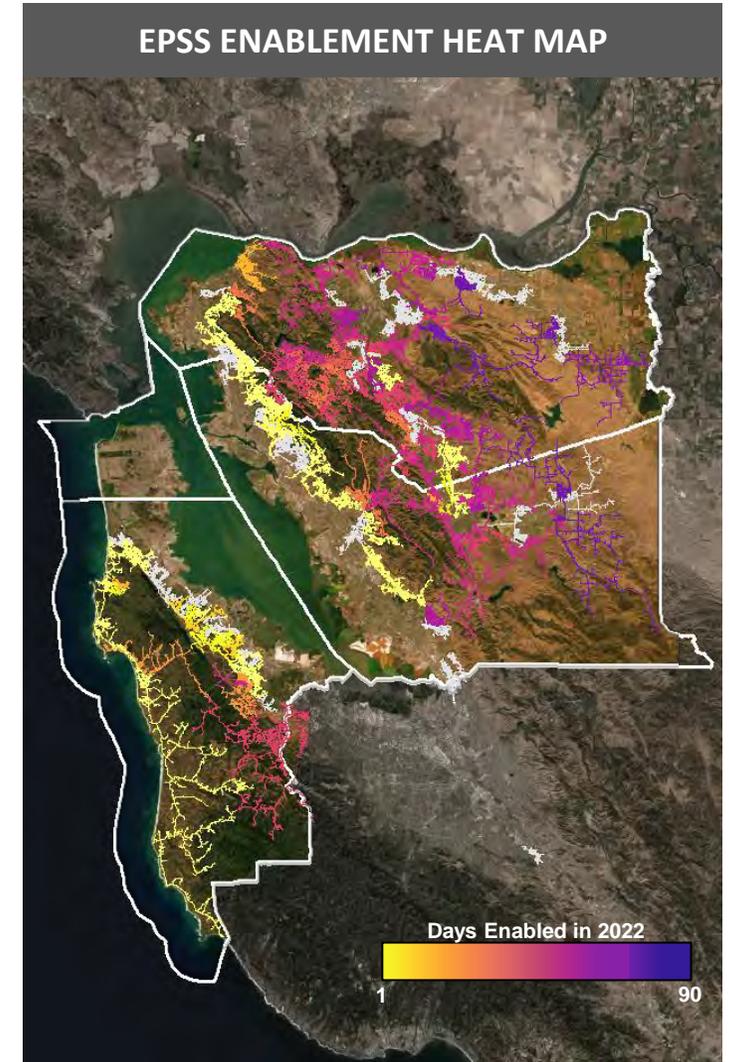
- ✓ Installing technology to help **quickly identify outage locations**
- ✓ Conducting **vegetation** management on trees near powerlines
- ✓ Installing sectionalizing devices that isolate hazards to **limit the number of customers impacted** during outages



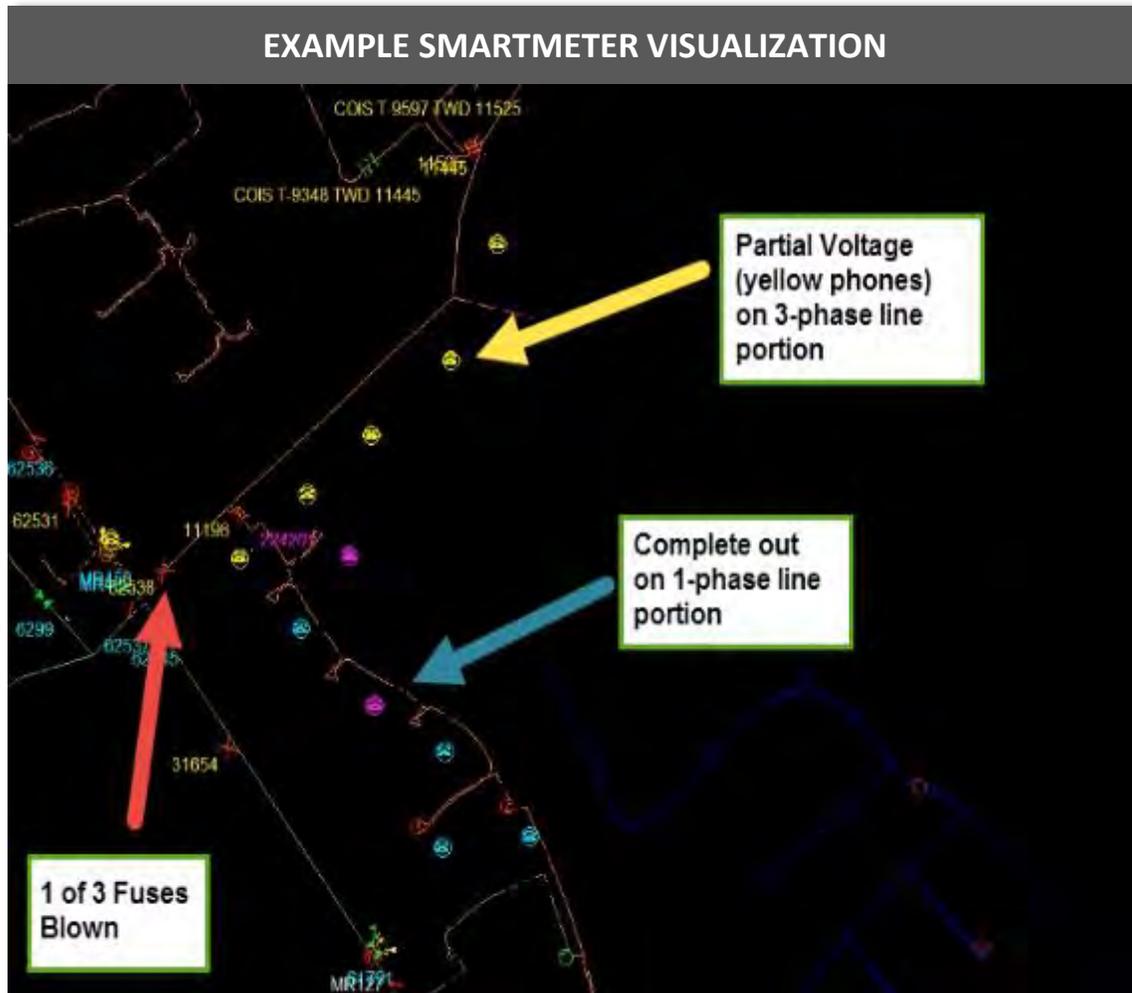
EPSS Trends in the Bay Area Region

EPSS is a proven tool for reducing ignitions. In the Bay Area Region, 198 distribution circuits serving about 462,000 customers are currently protected.

- This year, there have been 80 outages on EPSS-enabled circuits across the region.
- The average number of customers included in each outage has been 1,574 and outages have lasted an average of 2.6 hours, a 60% improvement over last year.
- We are prioritizing reliability improvements on circuits that have had multiple outages and are making adjustments.
- For example, the Half Moon Bay 1103 circuit in San Mateo County has experienced 6 outages in 2022. To improve reliability on this circuit we have:
 - Adjusted sensitivity settings
 - Installed new technology to help identify outage sources faster
 - Installed animal guards
 - Adjusted patrols



Data is subject to change and as of 07/31/2022.



To help identify low and very low current faults in our system (which can “look like” a minor increase in load on a circuit), we are beginning to leverage our SmartMeter network to determine when the lines serving a particular area may be experiencing these conditions and need to be de-energized for safety.

This is called a Partial Voltage Force Out.

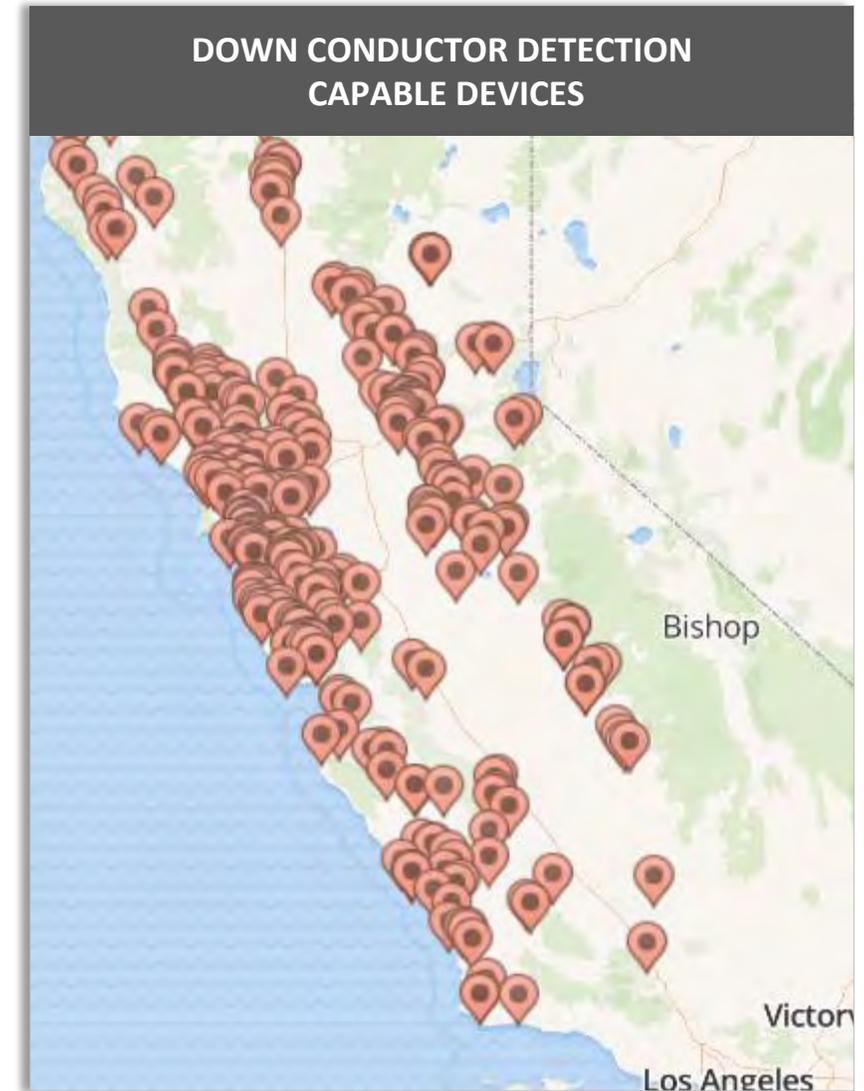
We are enabling Partial Voltage Force Outs on all EPSS devices in High Fire Risk Areas.

Recloser Detection of Low/Very Low Current Faults

Another recent EPSS update includes piloting “Down Conductor Detection” on some reclosing devices across our system.

This feature:

- Uses a sophisticated analysis to determine when low and very low current faults are present (which “look like” high impedance faults).
- De-energizes reclosers immediately.
- Can detect previously hard to detect fault conditions that could result in an ignition.





PG&E Data Portals



Welcome to PG&E Data Portals

On this site you can access various datasets.

PSPS Portal

The **PSPS Portal** includes planning and event-specific information, and is available for public safety partners that support emergency management efforts, which include: emergency responders from federal, state, local and tribal governments, telecommunication providers, water agencies, public-owned utilities, emergency hospitals, and transportation agencies.

[GO TO PSPS PORTAL](#)

Outage Portal

The **Outage Portal** includes information pertaining to EPSS-caused outages within PG&E's service territory. The portal will provide circuit and outage area maps for active EPSS outages. Supplementary EPSS and other outage data may be added as the product matures. This data is available for public safety partners that support emergency management efforts.

[GO TO OUTAGE PORTAL](#)

Microgrid Portal

The **Microgrid Portal** includes facility information, High Fire Threat Districts, Historical PSPS information, and GO131-D and GO166 data. It is available as required by CPUC Order 20-06-017, to tribal governments, County OESs, or organizations created by political subdivisions to carry out provisions of the State Emergency Plan.

[GO TO MICROGRID PORTAL](#)

Don't have access?

[REQUEST ACCESS](#)

pgedataportals.pge.com

New Outage Portal

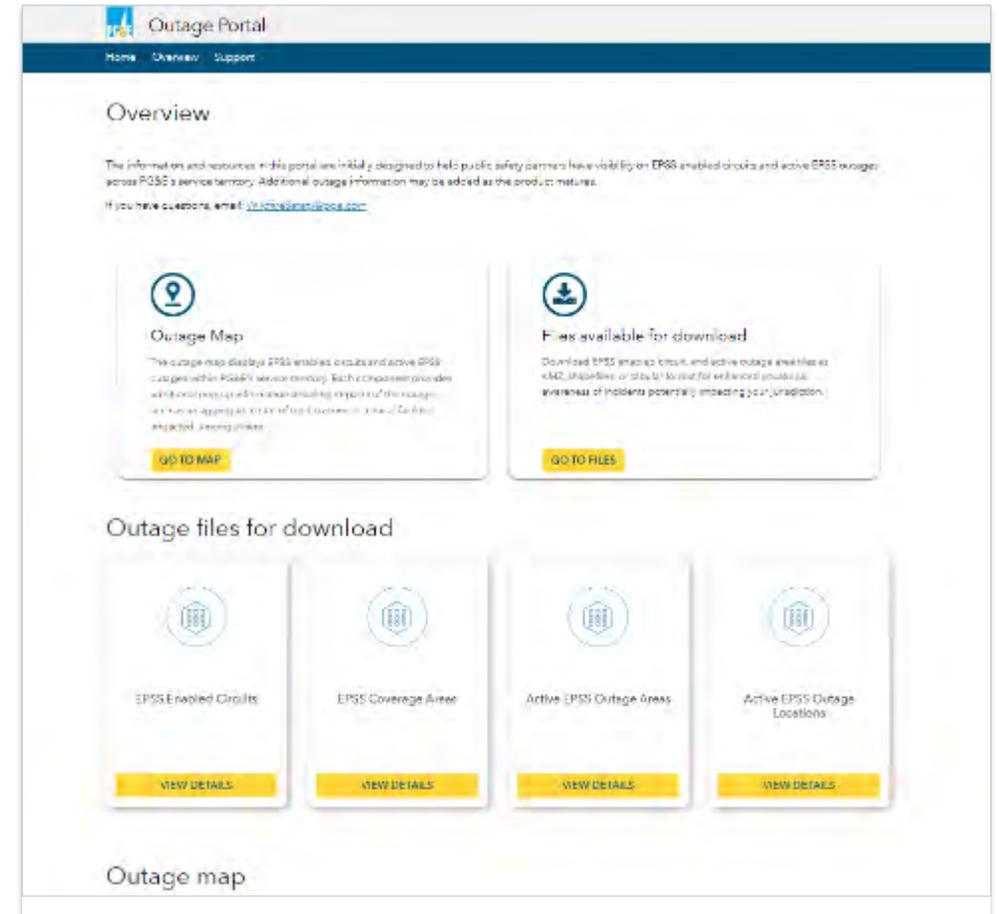
PG&E's new Outage Portal is focused on providing data regarding circuits and outages occurring on lines protected by EPSS-enabled devices. In the future, information about all outage types will be included.

✓ **The portal is available to Public Safety Partners** and others who currently have PSPS portal access.

✓ **An invitation email was sent to all PSPS Portal users**, and you can also visit pgedataportals.pge.com to request access.

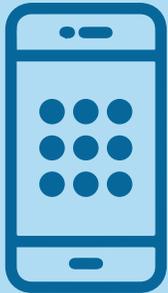
✓ **Data on the portal currently includes:**

- Locations of currently enabled EPSS devices
- Details of active outages on EPSS circuits

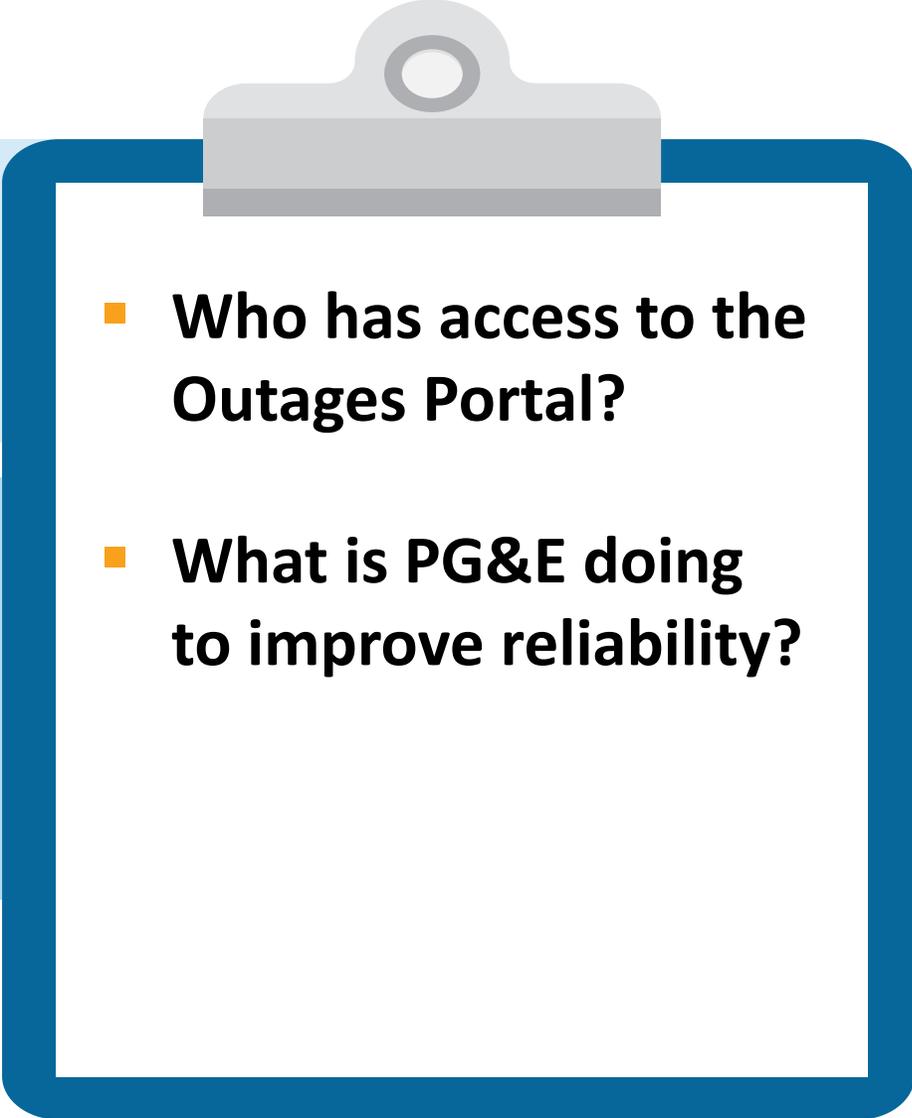




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Who has access to the Outages Portal?**
 - **What is PG&E doing to improve reliability?**

Microgrid and Resiliency Update

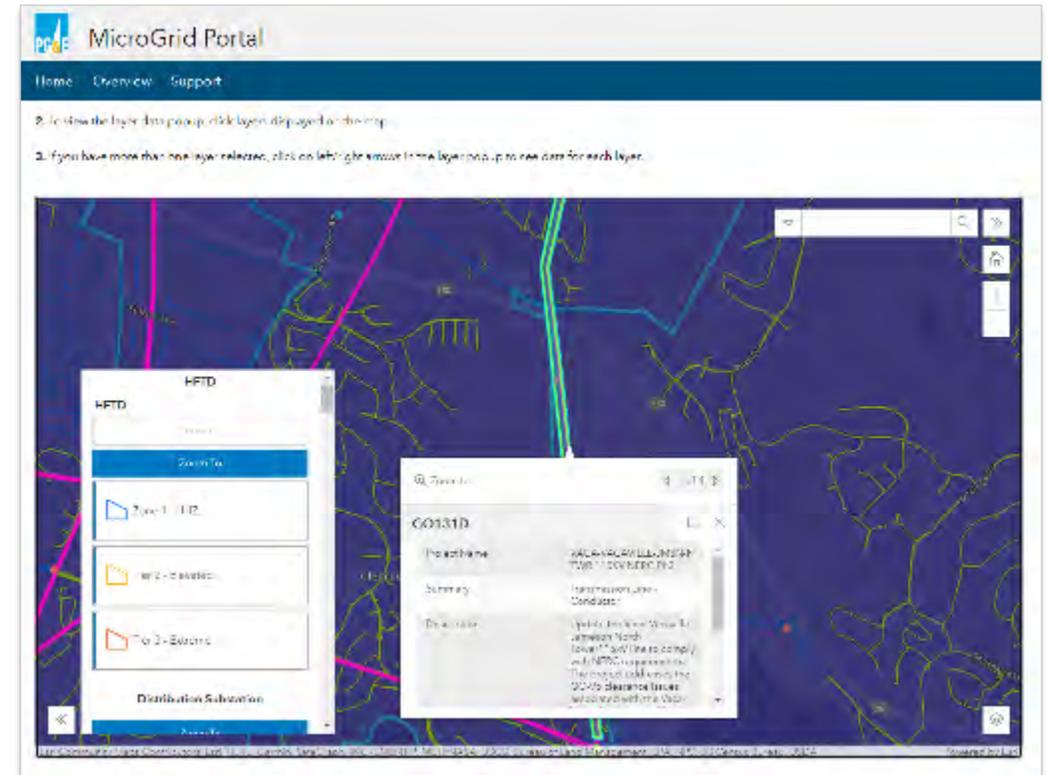


Last year, PG&E developed a Microgrid Portal to share information with local agencies and tribes to assist in their own resiliency efforts. This tool:

Is available to County OES representatives, tribal governments and other “organizations created by political subdivisions to carry out the provisions of the State Emergency Plan.”

Includes the following data:

- **Utility planned work/grid investments**
- **High Fire-Threat District Map layers**
- **Electric infrastructure map layers**
- **Weather polygon map layers**





Microgrid Incentive Program (MIP)

PG&E, along with San Diego Gas and Electric and Southern California Edison are in the process of developing a new Microgrid Incentive Program to fund clean community microgrids that support the critical needs of vulnerable populations most likely to be impacted by outages.

- ✓ **Increase reliability and resiliency for critical public facilities** in communities that are at higher risk of electrical outages
- ✓ **Prioritize communities** with higher portions of low-income, Access and Functional Needs, and electricity dependent residents
- ✓ **Enable communities with lower ability to fund development of backup generation** to maintain critical loads during outages pending CPUC approval.

The new Microgrid Incentive Program (MIP) will have limited funding. Access will be through a competitive application process.

Pending CPUC approval, we expect to be able to share additional details about the program later this year or in early 2023.



Overview of Microgrids and Other Resilience Efforts

This year, we are continuing to build upon our distribution microgrid and remote grid programs and plan to continue to utilize our previously identified islanding locations when possible.

PROGRAM	2020 TOTAL SITES	2021 TOTAL SITES	2022 TOTAL SITES PLANNED
Distribution Microgrids Microgrids prepared to energize “main street” corridors, central community resources and critical facilities in areas that frequently experience PSPS events.	3*	8**	13
Islanding Locations Reconfiguration of local generation sources to allow certain areas to be separated from the larger electric grid and remain energized during PSPS events.	0	6	6
Remote Grids Remote Grids use a combination of solar power, battery storage and propane generation to provide energy to customers independent from the larger electric grid. These projects are intended to help reduce the risk of wildfires but can also improve reliability as well.	0	1	3***

Local work plans are subject to change, and data is based on the best available information at this time.

**Does not include 4 additional sites that were made ready to operate using a temporary configuration in 2020*

***Does not include 1 additional site that was made ready to operate using a temporary configuration in 2021*

****Additional sites may also be completed in 2022 through 2024*

Hospital Support

- PG&E will continue to support hospitals this year by pre-staging approximately 25 megawatts of temporary generation at 11 hospitals that have experienced frequent Public Safety Power Shutoffs in the past.
- New this year, we have made improvements to our backup generation at St. Helena Hospital to support that facility during all outages (PSPS, EPSS, etc.)
- We continue to develop pilot programs with alternatives to diesel power and intend to make these systems available for use in 2023 to facilities that can meet our pilot criteria.



Redwood Coast Airport Microgrid



In coordination with Schatz Energy Research Center and Redwood Coast Energy Authority, PG&E supported the development of California’s first fully automated and 100% renewable multi-customer microgrid.

This innovative project:

- Serves multiple customers “in-front-of-the meter” including:
 - California Redwood Coast-Humboldt County Airport
 - U.S. Coast Guard Humboldt Bay Air Station
- Leverages solar arrays and Tesla Megapack storage
- Is owned and operated by the Redwood Coast Energy Authority but interfaces with PG&E’s control center.

2022 Mobile Battery Energy Storage System (MBESS) Pilot

PG&E is expanding our mobile battery efforts to provide support during outages.

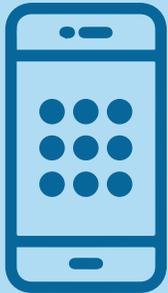
MBESS Pilot Details

- PG&E is working with industry partners to develop a small pilot fleet of mobile Tesla Megapacks for response to planned and unplanned outages.
- These units will feature a steel frame for portability/durability.
- Each unit can be connected both in front of and behind the meter at primary or secondary voltages.
- The batteries are also capable of remote observation and flexible dispatching.
- PG&E is developing a pilot roll-out strategy and expects to launch initial pilot locations in 2022-2023.

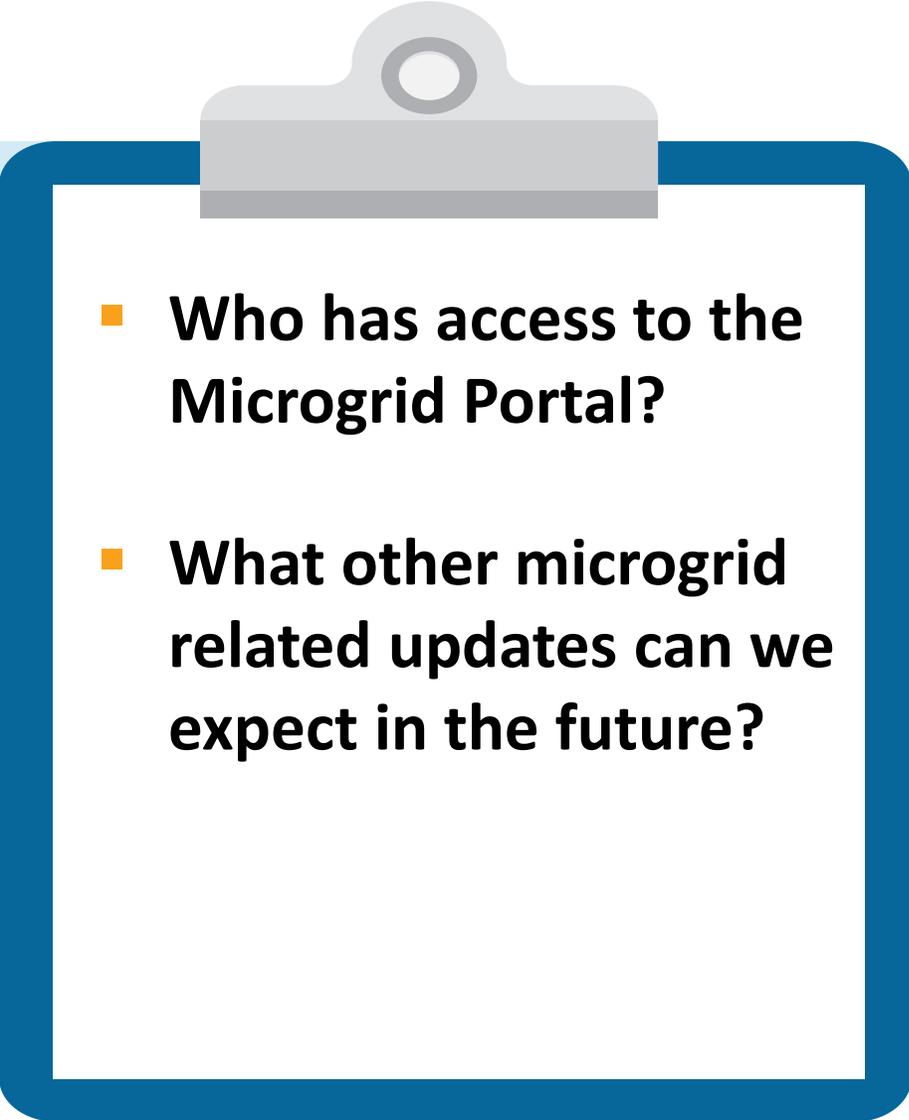




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **Who has access to the Microgrid Portal?**
 - **What other microgrid related updates can we expect in the future?**

Company Emergency Response Plan (CERP)



Company Emergency Response Plan (CERP)

PG&E's Company Emergency Response Plan (CERP) assists with the safe, efficient and coordinated response to all-hazard emergency incidents affecting gas or electric generation, distribution, storage, transmission systems or any other emergency incident within our service area.

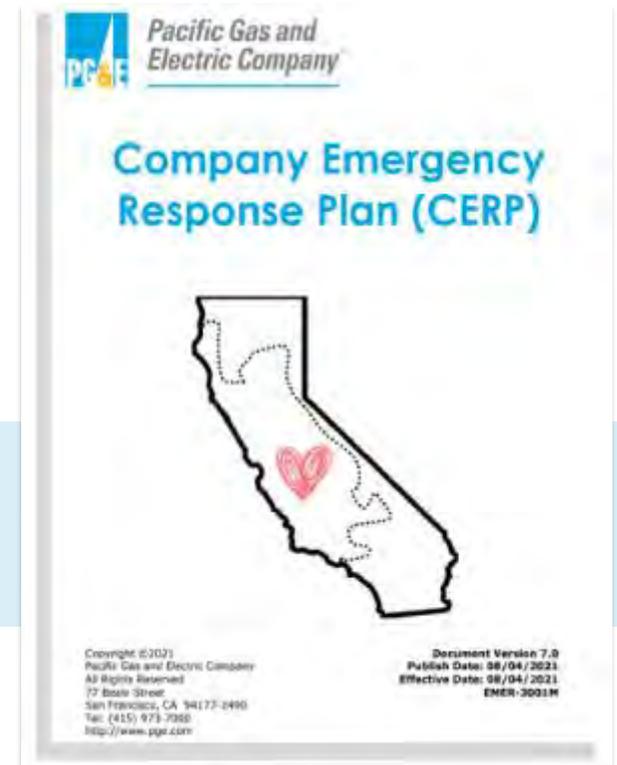
A key element of the CERP is the identification of coordination efforts with outside organizations.

To support these coordination efforts, agencies can expect PG&E:

- Share invites to 2023 CERP review meetings in Q4 2022.
- Share a revised 2023 CERP in January 2023.
- Host six virtual CERP review meetings in Q1 2023.

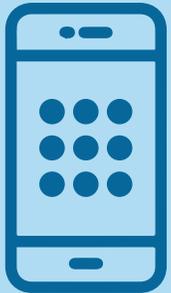
A copy of the current PG&E CERP can be found here:

pgera.azurewebsites.net/Regulation/search

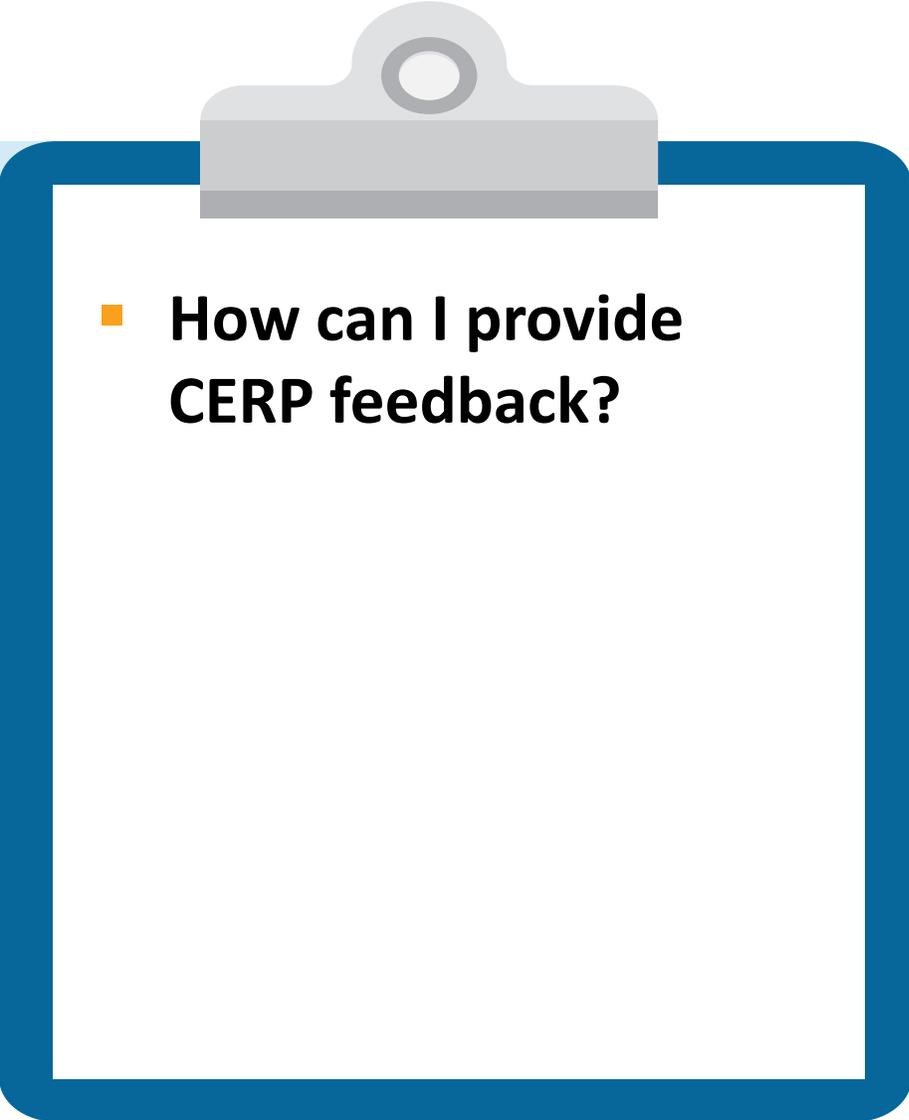




Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- **How can I provide CERP feedback?**

Safety and Reliability Update

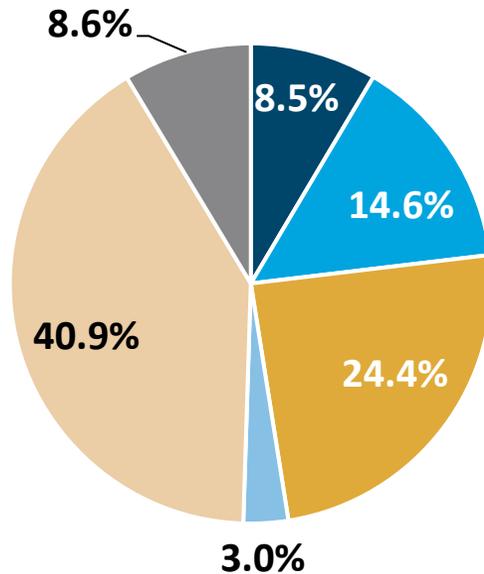


Power was on
99.97%
of the time

Power Outages in Your Region

- > Average Outage Size: **219 customers**
- > Average Outage Duration: **2 hours**

County- and city-level versions of this report are being shared with all electric customers in August 2022* and are available [here](#).



Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

Steps PG&E is Taking to Better Serve You

High Fire-Risk Areas in Alameda County
We are working hard every day to keep you safe and improve our electric system.

Enhanced Powerline Safety Settings (EPSS)
This technology is helping to reduce wildfire risk. If a hazard, like a tree branch on the line, is detected, power is automatically turned off within one-tenth of a second.

EPSS in Your County:

Customers Protected	135,155
Average Outage Size (customers)	681
Average Outage Duration (hours)	5

Steps we are taking to reduce customer impact

- Adjusting device sensitivity based on wildfire risk and disabling the safety settings when it is safe to do so
- Installing technology to quickly identify and address outage sources
- Adapting patrol methods to shorten outages

Power Outages in Your County

- > Average Outage Size: **219 customers**
- > Average Outage Duration: **3 hours**

Types of Outages

- Third-party incident
- Weather/vegetation
- PG&E operations and maintenance
- Animal interacted with equipment
- Equipment issue
- Unknown

DATA AS OF JUNE 2022
Some of the measures included in this document are contemplated as additional precautionary measures intended to further reduce the risk of wildfires. *PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2022 Pacific Gas and Electric Company. All rights reserved. All data is approximate and subject to change. 07/26/2022

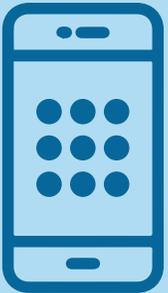
Data from April-June 2022

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

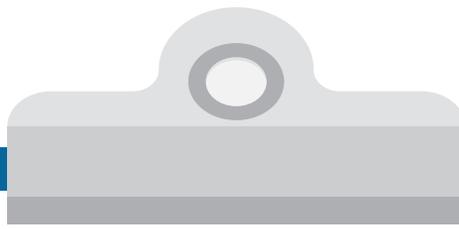
*Report is released in phases and all customers will receive this report by 8/17/22.



Insert your questions or feedback into the chat function.



Ask your question or provide your feedback verbally by unmuting your line.

- 
- A large graphic of a clipboard with a silver clip at the top and a white sheet of paper with a blue border. The text is written on the paper.
- **What safety and reliability trends did we see last quarter?**

Open Discussion/Q&A





Next Steps

- ✓ Meeting survey shared with participants to gather feedback on approach and content of Regional Working Groups
- ✓ Follow-up on items identified by local agencies/stakeholders
- ✓ Upcoming meetings
 - Weekly Portal Trainings (Beginning 8/12)
 - CERP Meetings (Q1 2023)

2022 REGIONAL WORKING GROUP CALENDAR

TIMING	TOPICS
Q4 2022 (December)	Wildfire Safety Outage Season Recap, 2023 Planning Updates

Thank You



Appendix





Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated 2022 Operational Readiness
Distribution Microgrids	Butte	Magalia	Construction Complete	Q3 2022*
	Calaveras	Arnold	Planning	Q4 2022
	El Dorado	Georgetown	Construction Complete	Q3 2022*
	El Dorado	Pollock Pines	Construction Complete	Q3 2022*
	Humboldt	Redwood Coast Airport Microgrid*****	Construction Complete	N/A
	Lake	Clearlake North	Planning	Q4 2022
	Lake	Lucerne	Construction Complete	Q4 2022
	Lake	Middletown	Construction Complete	Q3 2022*
	Napa	Angwin	Construction Complete	Q3 2022*
	Napa	Calistoga	Construction Complete	Q3 2022*
	Placer	Colfax	Construction Complete	Q4 2022*
	Placer	Foresthill	Construction Complete	Q3 2022*
	Shasta	Shingletown	Construction Complete	Q3 2022*
Tuolumne	Groveland	Construction Complete	Q4 2022	
Islanding	Calaveras**	Salt Springs Island	Operational	N/A
	Calaveras***	West Point Island	Operational	N/A
	Humboldt	Humboldt Bay Island	Operational	N/A
	Plumas	Caribou Island	Operational	N/A
	Tehama	Red Bluff Island	Operational	N/A
	Tuolumne	Spring Gap	Operational	N/A

Local work plans are subject to change and data is based on the best available information at this time.

*Temporary generation procurement and energization plan finalization targeted completion of 10/1.

**Also serves portions of Amador and Alpine Counties.

***Also serves portions of Amador County.

****Facility owned by Redwood Coast Energy Authority; PG&E owns, operates and maintains microgrid circuit.

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



Status of Planned/Upcoming Resilience Efforts – Systemwide

Program	County	Site Name/Area	Status	Estimated Completion
Remote Grids	Mariposa	Briceburg	Operational	N/A
	Mariposa	Miami Mountain	Planning	Q4 2022
	Tehama	Corning 1	Planning	Q4 2022
	Tehama	Corning 2	Planning	Q4 2022
	Mariposa	Mariposa (Slaughterhouse)	Planning	Q4 2022
	Sonoma	Pepperwood Preserve	Planning	Q4 2023
	Tehama	Manton (Wildcat)	Planning	Q4 2023
	Tehama	Manton (Shingletown Wildcat)	Planning	Q4 2023
	Tehama	Manton (Battle Creek)	Planning	Q4 2023
	Madera	Coarsegold (Melvin)	Planning	Q4 2023
	Yuba	Bangor (Ponderosa Way – Challenge)	Planning	Q4 2023
	Lake	Middletown (Anderson Spring)	Planning	Q4 2023
	Tulare	Whitaker Forest	Planning	Q4 2023
	Tuolumne	Vallecito (Forebay – Stanislaus)	Planning	Q4 2023
	Glenn	Alder Springs (Valley View)	Planning	Q3 2024
	San Luis Obispo	Carrizo Plains	Planning	Q3 2024
Marin	Inverness (Mt. Vision PRNS)	Planning	Q3 2023	

Local work plans are subject to change and data is based on the best available information at this time.

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
Braun Blasing Smith Wynne, P.C.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie
Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McClintock IP
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.

Resource Innovations

SCD Energy Solutions
San Diego Gas & Electric Company

SPURR

San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Stoel Rives LLP

Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy