



2023 Public Safety Power Shutoff (PSPS) Tabletop Exercise (TTX)

June 14, 2023

Exercise Evaluation Guide (EEG)





HANDLING INSTRUCTIONS

1. The title of this document is the **2023 Public Safety Power Shutoff PSPS Exercise Evaluation Guide (EEG)**. The contents in this EEG reflect the information provided to the exercise evaluators as of the date of publication and may be modified prior to execution at the direction of the Exercise Director.
2. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. This document is for OFFICIAL USE ONLY and should be handled as sensitive information. Reproduction of this document, in whole or in part, is prohibited without prior approval from Pacific Gas & Electric Company (PG&E).
3. At a minimum, the attached materials will be disseminated strictly on a need-to-know basis and, when unattended, will be stored in a locked container or area that offers sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
4. For more information on this exercise, please consult the Exercise Director:

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Emergency Preparedness and Response (EP&R)
Pacific Gas and Electric Company

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EXERCISE OVERVIEW

Exercise Name	2023 Public Safety Power Shutoff (PSPS) Tabletop Exercise (TTX)
Exercise Dates	Wednesday, June 14, 2023
Location	Virtual (MS Teams)
Scenario	<p>The scenario is aimed at discussing the various stages of the PSPS Procedural Flow (ProFlow) process with internal Lines of Business and External Agencies.</p> <p>This PSPS TTX simulates R5-Plus weather conditions to test PG&E's ability to prepare for, respond to, and recover from a PSPS event.</p>
Event Scope	The TTX aims to help PG&E response teams apply the PSPS specific knowledge provided by the training series in a realistic scenario.
Relevant Plans	<ul style="list-style-type: none">• Company Emergency Response Plan (CERP)• 2023 Public Safety Power Shut-Off (PSPS) Annex• Other Functional Area Specific Plans
Exercise Objectives	<p>The overarching exercise objectives align to the following core capabilities:</p> <ol style="list-style-type: none">1. Planning2. Operational Coordination and Communication3. Public Information and Warning4. Situational Awareness5. Critical Resources6. Natural and Cultural Resources
Threat/Hazard	A PSPS event will impact PG&E's service territory. R5-Plus Weather Conditions.

Agenda

1000-1015	Welcome, Safety, Introductions, Orientation to the Exercise
1015-1045	Module 1: Overview of 2023 PSPS Annex and 10 Day Report
1045-1200	Module 2: Readiness Posture, Event Scoping, Planning & Notification
1200-1230	Lunch
1230-1300	Module 3: De-energization and Notification
1300-1430	Module 4: All Clear, Patrol & Restore, Notification & Damage Documentation
1430-1500	Hot Wash, Closing Remarks



Participating Functional Areas	<ul style="list-style-type: none">▪ Electric Distribution▪ Electric Transmission▪ Electric Field Operations▪ Information Technology▪ Electric Incident Investigations▪ Corporate Safety▪ Corporate Real Estate Strategy and Services (CRESS)▪ Hazard Awareness & Warning Center (HAWC)▪ Safety and Infrastructure Protection Team (SIPT)▪ REC/OEC	<ul style="list-style-type: none">▪ Customer Care▪ Human Resources▪ Marketing & Communications▪ PSPS Technology/Operations▪ Meteorology▪ Temporary Generation▪ Finance▪ Vegetation Management▪ Power Generation▪ PSPS PMO▪ Aviation Services▪ Corporate Affairs▪ Supply Chain Logistics
Points of Contact	<div>████████████████████</div> <div>EP&R</div> <div>Pacific Gas and Electric</div> <div>████████████████</div> <div>██</div>	<div>████████████████████</div> <div>EP&R</div> <div>Pacific Gas and Electric</div> <div>████████████████</div> <div>██</div>

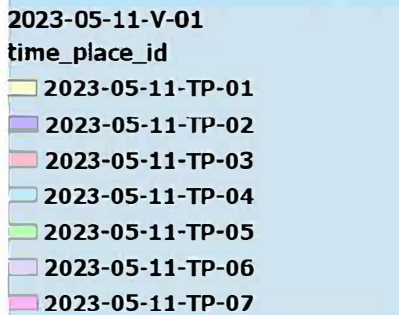


SCENARIO AND SCOPE OVERVIEW

PG&E Meteorology is tracking variable weather conditions. A dry, offshore wind event is expected to develop Thursday, May 11th, 2023, with increasing winds during the late morning timeframe, before reaching peak intensity Thursday evening. Wind speeds are expected to be highly variable, reaching 25 – 35 mph with gusts 45 – 55+ mph across elevated terrain. The Meteorology Services team will implement a Distribution System Operations (DSO) Storm Outage Prediction Project (SOPP) model to determine the severity of the incident.

The SOPP is used to predict the daily outage volume and resources needed to respond to weather events. DSO SOPP Model is projecting a Cat 2 system total wind event, with Cat 3 outage totals possible for some divisions, indicating that significant adverse weather is possible. The DSO SOPP model is showing the potential for up to 28,000 customers to be impacted on Thursday, May 11th and approximately 23,400 for Friday, May 12th.

Winds will decrease below outage producing thresholds between 0700 and 0900 hours on Friday, May 12th. DSO SOPP model and derivate products show typical resource requirement for a wind event; no resources have been added to account for increased patrolling needs. Given the extremely dry conditions, Extreme-Plus fire danger is expected between 1200 Thursday and 1200 Friday in Fire Index Areas (FIA) 100, 105, 120, 130, 150, 154, 170, 175, 177, 180, 244, 245, 246, 248, 280, 282, 285, 290, 420, 438, 445, 448, 530, 651.



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Figure 2. By Divisions

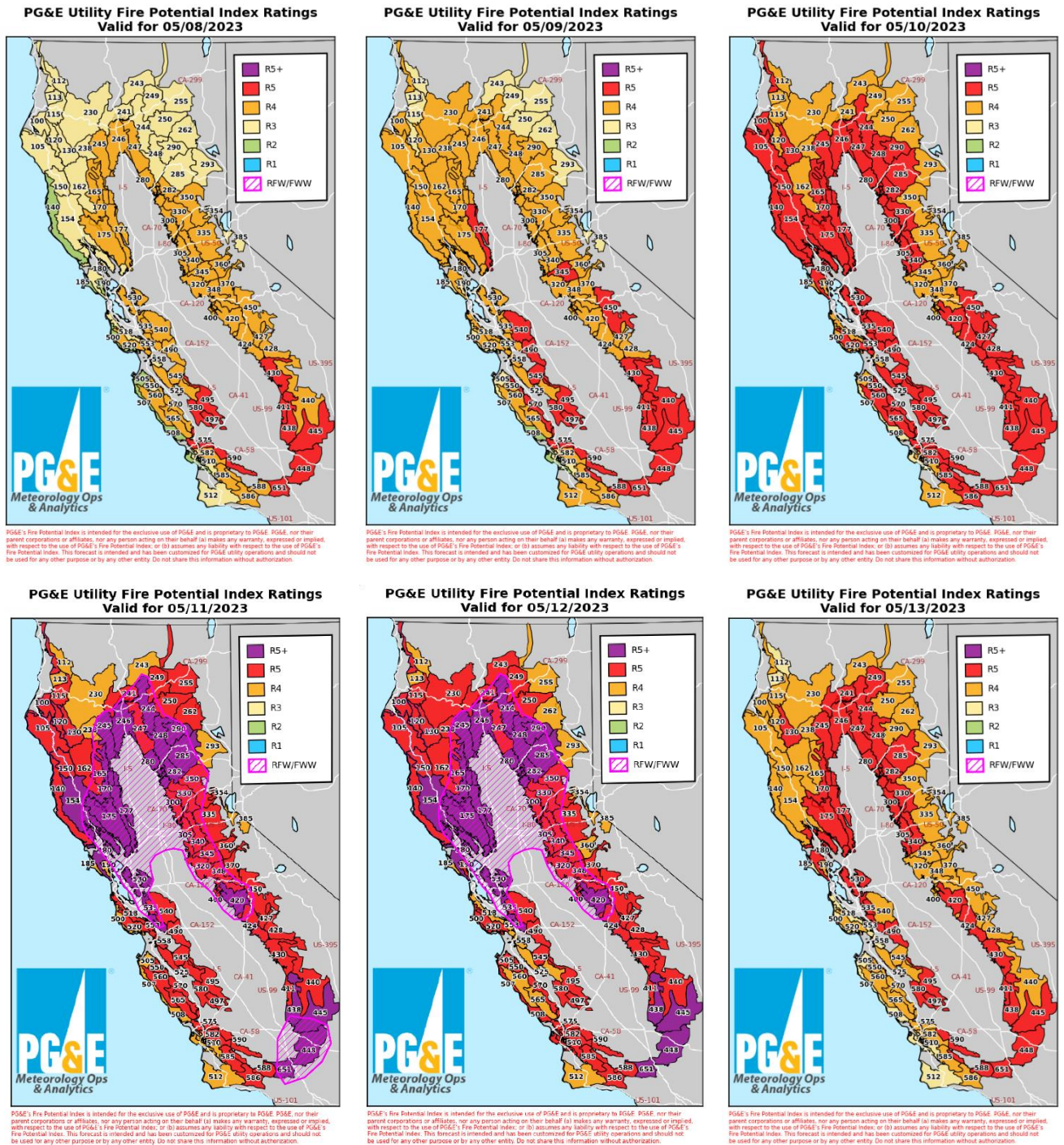


Figure 3. Fire Potential Index (FPI)
Maps

EXERCISE EVALUATION GUIDELINES

This event will incorporate a scenario-based format that is informed and guided by exercise objectives. The modules support achievement of the exercise objectives by initiating discussions, facilitating decision-making, and examining appropriate response outcomes based on the exercise scenario.

Participants will be acting in their real-world roles for their organizations when considering the scenario, offering observations, and discussing strategic and tactical decisions. This approach allows the discussion to focus on situations within a moving timeline and for participants to contribute to the discussion from the perspective of their role in this scenario. The facilitator will ensure that the scenario moves along at an appropriate pace and that all participants have an opportunity to contribute.

The PG&E Wildfire TTX will be held in an **open, low-stress, no-fault, and non-attribution environment**. Varying viewpoints and disagreements are expected. **Decisions are not precedent-setting and may not reflect your organization's final position on an issue.** The exercise is exploratory and serves to identify issues, as well as multiple options and possible solutions.

EXERCISE ASSUMPTIONS AND ARTIFICIALITIES

In any exercise, assumptions and artificialities may be necessary to complete exercise play in the time allotted and/or account for logistical limitations. Such assumptions and artificialities are inherent in any exercise and are intended to augment, rather than distract from the scenario.

ASSUMPTIONS

Assumptions constitute the implied factual foundation for the exercise, and as such are assumed to be present before the exercise starts. The following general assumptions apply to the exercise:

- The exercise will be conducted in a no-fault environment wherein systems and processes, not individuals, will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- There is no "hidden agenda" nor are there any trick questions.

ARTIFICIALITIES

The scenario assumes certain player actions throughout each of the modules so players should first discuss the actions stipulated by the scenario; however, players are welcome to engage in "what if" discussions of alternative scenario conditions.



EXERCISE RULES

Exercise play will proceed in accordance with established plans and procedures. The exercise will conclude once time has run out or upon the completion of the exercise objectives as determined by the Facilitator.

The following general rules govern exercise play:

- Players should join the Microsoft Teams meeting before the Welcome time (0900).
- The Facilitator will announce any exercise suspension or termination and will instruct participants to stop-in-place.
- Players will comply with real-world response procedures unless otherwise directed by the Facilitator.
 - If an actual emergency occurs, the exercise may be suspended or terminated at the discretion of EP&R leadership and the Exercise Director, depending on the nature of the incident.
 - The Facilitator will announce restart of the exercise once the emergency or situation has been resolved.

SAFETY

Safety is an integral part of the exercise process, and a responsibility of all participating organizations to conduct an exercise of this magnitude as safely as possible.

GENERAL

Exercise participant safety takes priority over exercise events. Although the organizations involved in this exercise come from various functional areas, they share the basic responsibility for ensuring a safe environment for all personnel involved in the exercise.

Professional health and safety ethics should guide all participants to operate in their assigned roles in the safest manner possible. The following general requirements apply to the exercise:

- Participants will be responsible for their own and each other's safety during the exercise. It is the responsibility of everyone associated with the exercise to stop play if, in their opinion, a real safety problem exists. Once the problem is corrected, exercise play can resume.
- All organizations will comply with their respective environmental, health, and safety plans and procedures, as well as the appropriate federal, state, and local environmental health and safety regulations.



ACCIDENT REPORTING AND REAL EMERGENCIES

For an emergency that requires assistance, the phrase to use is “**Real-World Emergency.**” If a real emergency occurs that affects the entire exercise, the exercise may be suspended or terminated at the discretion of the Exercise Director.

VIRTUAL PLATFORM COORDINATION

LOCATION

This exercise will be hosted in a Microsoft Teams Meeting Environment. EP&R has provided meeting details and a Teams meeting link in advance.

RULES OF BEHAVIOR

- Active participation is encouraged, and questions are welcome throughout the exercise.
- This is a no-fault learning environment: there are no wrong answers or bad questions.
- Please keep your audio on mute when not speaking.
- **Only players** will need to keep their video on.
- Please do not interrupt when others are speaking.
- Use the hand raise tool to get the facilitator’s attention.
- Each player will be given the opportunity to provide input.
- If you are unable or miss an opportunity to share, please write your message in the Teams chat for the entire group for ease of monitoring.
- The TTX will not be recorded, but chat messages may be archived for review as part of the evaluation process.

EXERCISE EVALUATION

The goal of exercise evaluation is to validate strengths and find areas of improvement in PG&E’s capability to identify, respond to, and recover from a threats or hazards that puts company assets, reputation, or safety at risk. The evaluation will assess how well players achieve the exercise objectives.

This is accomplished by:

- Observing the exercise and collecting supporting data



- Analyzing the data to compare performance against expected outcomes
- Determining what changes need to be made to the procedures, plans, staffing, equipment, communications, organizations, and interagency coordination to ensure expected outcomes

Exercise evaluation will be based upon an assessment of player performance. The following documents provide the foundation for evaluating the TTX.

AFTER ACTION REPORT

The After-Action Report (AAR) will be organized by exercise objective. The AAR will identify specific observations and issues as well as recommendations for resolving them.



MODULE 2 – READINESS POSTURE, EVENT SCOPING, PLANNING & NOTIFICATION

M2 Discussion Questions	
Met/HAWC/SIPT	<p>M2Q1.</p> <ul style="list-style-type: none">a. What are the meteorological criteria that triggered the activation of Readiness Posture for this PSPS Event?b. How are these weather patterns monitored in the HAWC and the SIPT?c. How has this changed for 2023?
Customer	<p>M2Q2.</p> <p>Please explain how the Customer Strategy Officer would respond to a request from a critical infrastructure customer who is asking whether this potential PSPS event will impact their organization.</p>
PSPS	<p>M2Q3.</p> <p>Who is the key POC for any PSPS process or scoping related information?</p>
All	<p>M2Q4.</p> <p>Name 3 key objectives you need to achieve during Readiness Posture?</p>
EOC Commander	<p>M2Q5.</p> <ul style="list-style-type: none">a. EOC Commander, please outline your priorities and the Essential Elements of Information required to inform your decision-making process.b. How has this process changed since 2022?



Operations	M2Q6. a. How are the Emergency Centers (EDEC, ETEC, STOEC, GCC, DCC, REC, OEC) notified of a potential activation? b. How has this process changed compared to past years?
HR	M2Q7. Why is impacted coworker analysis only conducted by exception during a PSPS event unlike during an HR natural hazard emergency response?
PSPS Scoping	M2Q8. Please describe any communication PG&E may have with other entities, e.g., SCE if shared circuits are involved.
Temp Gen	M2Q9. a. How does the Temp Gen Branch determine which pre-planned sites to energize? b. How does this vary by type of site, i.e., substation microgrid, distribution microgrid, pre-planned backup power support, such as hospital?
Logs	M2Q10. What are the requirements to approve land acquisition for CRC and other Emergency Field Sites?
Finance	M2Q11. a. Please talk about the main Finance activities and objectives at this stage of the event. b. Can you comment on cost recovery, e.g., how are PSPS costs recovered.



Planning/Sit Unit	M2Q12. a. What actions do REC/OECs take to activate?
EOC Command	M2Q13. a. In which meeting does the EOC Commander approve Warning notifications? b. What are the key changes in the decision-making process in 2023?
GIS Tech Specialist	M2Q14. What is the role of the GIS Tech Specialist in a PSPS Event?
All	M2Q15. Who would field crews work with to ensure compliance with requirements for protection of cultural, natural, and historical resources/sites?
Counties	M2Q16. If a county has a critical infrastructure item that needs to be escalated to PG&E's attention, to whom should you direct your concerns?
PIO	M2Q17. What are the different processes of communicating with Transmission Customers in the event they are impacted by a PSPS Event affecting PG&E's assets?
Power Gen	M2Q18. What is the process for identifying impacts to Power Generation facilities based on PSPS scope?



MODULE 3 – DE-ENERGIZATION AND NOTIFICATION

M3 Discussion Questions (by Functional Area)	
PIO	M3Q1. a. Describe the steps the PIO team takes to prepare notifications for media and internal stakeholders. b. How does PIO coordinate with Customer and Liaison sections to ensure alignment in external messaging?
IT	M3Q2. a. Once de-energization occurs what are the key activities that IT would be involved in? b. Once de-energization occurs, describe the actions the IT Branch leaders would be involved in.
Veg Mgt	M3Q3. What are the parameters of permitting Vegetation Management crews to operate in the vicinity of PSPS-impacted circuits during de-energization?
Counties/PSP	M3Q4. If a public safety partner needs to check on potential changes in scope of the PSPS where can you find that information?
Power Gen Safety	M3Q5. a. Can PSPS de-energization result in public safety impacts due to changes in water flows in the hydroelectric system? b. Explain the types of impacts and how they are mitigated.



Logs	M3Q6. You have been notified that a key piece of switching equipment in the field is defective and is a critical component of the de-energization process. From materials standpoint what do you do?
	M3Q7. How is crew safety managed in the field during de-energization while preparing for patrol and restoration?
Plans/Sit Unit	M3Q8 What changes have occurred in the Planning Section, specifically in the Situation Unit, according to the 2023 PSSP Annex?



MODULE 4 – ALL CLEAR, PATROL & RESTORE, NOTIFICATIONS & DAMAGE DOCUMENTATION

M4 Discussion Questions (by Functional Area)	
PSPS Team Operations	M4Q1. a. Who will be inputting All Clear Zones in the PSIP Restoration tab following an All-Clear Meeting? b. How will this information be communicated to the PSPS Scoping Specialist?
IT	M4Q2. Once the all-clear is given, describe the IT Branch's priorities and key activities.
Logs/Customer	M4Q3. What do you do if the outage impact to customers is extended, and the CRC site is no longer available, or we need another CRC site?
Finance	M4Q4. What are some of the Finance Branch's priorities during this phase?
I&I	M4Q5. Briefly describe the damage documentation process from data collection to reporting.
Veg Mgt	M4Q6. What type of resources does Vegetation Management have available to support restoration and how are they requested?



ETEC	<p>M4Q7.</p> <p>a. In an event, where all lines in scope are de-energized, how actually involved is ETEC in the (All Clear, Patrol & Restoration) during a PSPS?</p> <p>b. What happens in ETEC during this time?</p>
I&I	<p>M4Q8.</p> <p>How is damage reported at a division level to ensure timely restoration and mitigation?</p>
SIPT	<p>M4Q9.</p> <p>What does SIPT do to support patrol and restoration?</p>
PSPS	<p>M4Q10</p> <p>What should we do if the restoration playbook is missing All Clear Zones?</p>
<p>Tribal Liaison</p> <p>Operations</p>	<p>M4Q11.</p> <p>A member of a Tribal Board of Supervisors calls and wants to know how much damage has occurred to their portion of the electrical grid. They also request coordination to ensure that historical and culturally sensitive areas of their nation are not disturbed. How would PG&E support this effort?</p>
I&I	<p>M4Q12.</p> <p>To which section does the I&I section communicate discrepancies identified as requiring 'Ops Review' by an I&I Data Analyst?</p>



REC/OEC	M4Q13. How is the “All-Clear” message communicated to Notification and OMT Hawks to minimize cascading delay and expedite restoration?
PSPS	M4Q14. Why would a device in the Restoration Playbook be marked as Patrol Not Required?
I&I	M4Q15 How are qualified damages and hazards reported into a system of record the ensure timely reporting to regulators?
REC/OEC	M4Q16. OEC has a PSPS outage that is not expected to be restored in the next 24 hours. What actions should be taken?



ACRONYMS

This acronym list is a combination of commonly used terms by this document, PG&E and FEMA.

AAR	After-Action Report
C/E/S	Controller/Evaluator/Simulator
Cal OES	California Governor's Office of Emergency Services
CCECC	Customer Contact Emergency Coordination Center
CERP	Company Emergency Response Plan
CFILC	California Foundation for Independent Living Centers
CPUC	California Public Utilities Commission
CRESS	Corporate Real Estate Strategy and Services
CSO	Customer Strategy Officer
CWSP	Community Wildfire Safety Program
DCC	Distribution Control Center
DSO	Distribution System Operations
EDEC	Electric Distribution Emergency Center
EEG	Exercise Evaluation Guide
EndEx	End of Exercise
EOC	Emergency Operations Center
EP&R	Emergency Preparedness and Response
ETEC	Electric Transmission Emergency Center
ExPlan	Exercise Plan
FA	Functional Area
FAQ	Frequently Asked Question
FCC	Facility Coordination Center
FE	Functional Exercise
FEMA	Federal Emergency Management Agency
FIA	Fire Index Areas
FIN	Finance & Administration Section
FSE	Full Scale Exercise
GCC	Grid Control Center
HAWC	Hazard Awareness and Warning Center
HRCC	Human Resources Coordination Center
HSEEP	Homeland Security Exercise and Evaluation Program
I&I	Intelligence & Investigation Section
ICS	Incident Command System
ITCC	Information Technology Coordination Center
LNO	Liaison Officer
LOG	Logistics Section
MSEL	Master Scenario Events List
MTCC	Materials and Transportation Coordination Center



OIC	Officer-in-Charge
OPS	Operations Section
PauseEx	Pause Exercise
PG&E	Pacific Gas & Electric
PIO	Public Information Officer
PLANS	Planning Section
PMO	Project Management Office
PSPS	Public Safety Power Shutoff
QLR	Quick Look Report
QRG	Quick Reference Guide
REC	Regional Emergency Center
ResumeEx	Resume Exercise
SimCell	Simulation Cell
SIPT	Safety and Infrastructure Protection Teams
SLTT	State, Local, Tribal, and Territorial
SO	Safety Officer
SOPP	Storm Outage Prediction Project