



2024 Public Safety Power Shutoff (PSPS) and Wildfire Full Scale Exercise (FSE)

April 15-19, 2024

Controller/Evaluator/Simulator Handbook





HANDLING INSTRUCTIONS

1. The title of this document is the *2024 Public Safety Power Shutoff (PSPS) Full Scale Exercise (FSE) Series Controller/Evaluator/Simulator Handbook (C/E/S Handbook)*. The contents in this C/E/S Handbook reflect the information provided to exercise staff as of the date of publication and may be modified prior to execution at the direction of the Exercise Director.
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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 2024 Public Safety Power Shutoff (PSPS) and Wildfire Full-Scale Exercise (FSE)
Exercise Dates April 15-19, 2024 (Command and General Staff are in-person at the VERC)*
*other roles may be required as planning proceeds

Scope This FSE simulates R5-Plus weather conditions to test PG&E's ability to prepare for, respond to, and recover from a PSPS and Wildfire event in alignment with the Company Emergency Response Plan (CERP), PSPS Annex, Wildfire Annex, and functional area specific plans.

Exercise Objectives The overarching exercise objectives align to the following core capabilities:

1. **Planning**
2. **Operational Coordination and Communication**
3. **Public Information and Warning**
4. **Situational Awareness**
5. **Critical Resources**
6. **Fire Management and Suppression**
7. **Natural and Cultural Resources**

Threat/Hazard R5-Plus Weather Conditions & Wildfire Risk

Participating Functional Areas

▪ Electric Distribution	▪ Customer Care
▪ Transmission Grid Operations	▪ Human Resources
▪ Electric Transmission	▪ Marketing & Communications
▪ Electric Field Operations	▪ PSPS Technology/Operations
▪ Information Technology	▪ Meteorology
▪ Electric Incident Investigations	▪ Public Affairs
▪ Corporate Safety	▪ Temporary Generation
▪ Corporate Security	▪ Finance
▪ Corporate Real Estate Strategy and Services (CRESS)	▪ Vegetation Management
▪ Hazard Awareness & Warning Center (HAWC)	▪ Power Generation
▪ Safety and Infrastructure Protection Team (SIPT)	▪ Gas Operations
	▪ PSPS PMO
	▪ Aviation Services
	▪ Corporate Affairs
	▪ Supply Chain Logistics

Points of Contact

██████████	██████████
EP&R	EP&R
Pacific Gas and Electric	Pacific Gas and Electric
██████████	██████████
████████████████████	████████████████████



QUICK LOOK PARTICIPANT GUIDE

See page 15 for a more detailed schedule. All PG&E participants requiring access to the VERC, must submit an access request for “VERC All Gates” and “VERC General” through **MyPhysicalAccess**. This must be completed at least 1-2 days prior to the exercise.

Exercise Start Day 1, April 15 - READINESS POSTURE

- 0600 Virtual for Readiness Posture participants
- Readiness Posture participant list located in the phone book
- Anyone who wishes to participate at the VERC is welcome

Exercise Start Day 1, April 15 – EOC Activation

- 1300 for all participants
- 1230 at the VERC, in person:
 - Command and General Staff
 - Resource Unit Lead, Situation Unit Lead
 - Distribution Branch Director and Deputy Distribution Branch Director
 - Transmission Branch Director
- All other positions will participate virtually unless instructed otherwise by your Officer or Section Chief

Exercise Start Day 2-5, April 16-19

- 0600 all participants
- At the VERC, in person:
 - Command and General Staff
 - Resource Unit Lead, Situation Unit Lead
 - Distribution Branch Director and Deputy Distribution Branch Director
 - Transmission Branch Director
- All other positions will participate virtually unless instructed otherwise by your Officer or Section Chief
- April 18-19 Community Resource Center (CRC) demonstration at the VERC

Exercise End Day 5, April 19

- 1530 Section Hotwash and CES Hotwash and wrap up
- EndEx 1600 all Participants
- Hotwash for all participants directly following the end of the exercise (~1615)

Expenses

Please make your own reservations for lodging. Ensure you keep receipts of your food and room expenses, and file SAP Concur reports accordingly. All PSPS/WF FSE expenses will be charged to code **8210897**, including time cards.



GENERAL INFORMATION

PURPOSE OF THE HANDBOOK

The C/E/S Handbook provides exercise Controllers, Evaluators, and Simulators with an overview of the exercise process, including general information, rules and guidelines, and exercise outcomes. The Handbook also provides guidance specific to Controllers, Evaluators, and Simulators in carrying out their roles and responsibilities during and after the exercise.

EXERCISE OBJECTIVES AND CORE CAPABILITIES

During this exercise, PG&E will be evaluated on the exercise objectives and capabilities described below:

1. **Objective 1 — Planning:** Implement a planning cycle according to CERP procedures, PSPS Annex, and ICS principles that uses the circuit information provided to conduct a PSPS and develop a restoration plan prior to receiving the "All Clear" from the Officer-in-Charge (OIC).
2. **Objective 2 — Operational Coordination and Communication:** Implement a response structure that effectively integrates EOC sections, Functional Areas (FAs), field crews, and external partners into a cohesive team capable of successfully aligning operational activities with internal and external priorities to safely manage the PSPS event.
3. **Objective 3 — Public Information and Warning:** Communicate strategic and required messages to key audiences including PG&E personnel, the public, response partners, and customers including developing press releases, social media posts, and frequently asked questions (FAQs) for the public and delivering required notifications to California Governor's Office of Emergency Services (Cal OES), California Public Utilities Commission (CPUC), and other regulatory bodies.
4. **Objective 4 — Situational Awareness:** Support company-wide situational awareness by establishing and maintaining a common operating picture across the response organizational structure to meet the needs of relevant internal and external stakeholders impacted by PSPS (e.g., critical, medical baseline, and commercial customers).
5. **Objective 5 — Critical Resources:** Analyze the impacted area to prioritize available resources in a way that reduces physical security concerns and minimizes impacts of the shutoff to company facilities and other critical infrastructure.
6. **Objective 6 — Fire Suppression and Management:** Provide support to firefighting activities to manage and suppress fires of all types and complexities while protecting the lives, property, and the environment in the affected area.
7. **Objective 7 — Natural and Cultural Resources:** Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with applicable environmental and historic preservation laws and



executive orders.

SCENARIO AND SCOPE OVERVIEW

Initial Scope as of Monday, April 15, 2024:

PG&E Meteorology is tracking variable weather conditions. A dry, offshore wind event is expected to develop Thursday, April 18th, 2024, 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 DSO 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 56,500 customers to be impacted on Thursday, April 18th and approximately 64,600 for Friday, April 19th.

NOTE: The DSO SOPP model provides a forecast of unplanned outages for the entire territory and the estimated customer impacts are not related to those who may be de-energized due to PSPS.

Winds will decrease below outage producing thresholds between 0700 and 0900 hours on Friday, April 19th. 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 1400 Thursday and 1000 Friday in Fire Index Areas (FIA) 105, 140, 150, 154, 175, 177, 180, 185, 190, 244, 246, 247, 248, 250, 280, 282, 300, 305, 320, 330, 335, 340, 345, 348, 350, 360, 370, 400, 420, 424, 427, 428, 430, 438, 440, 448, 450, 490, 500, 507, 510, 512, 518, 520, 525, 530, 535, 540, 545, 553, 560, 575, 582, 585, 586, 588, 590, 651.

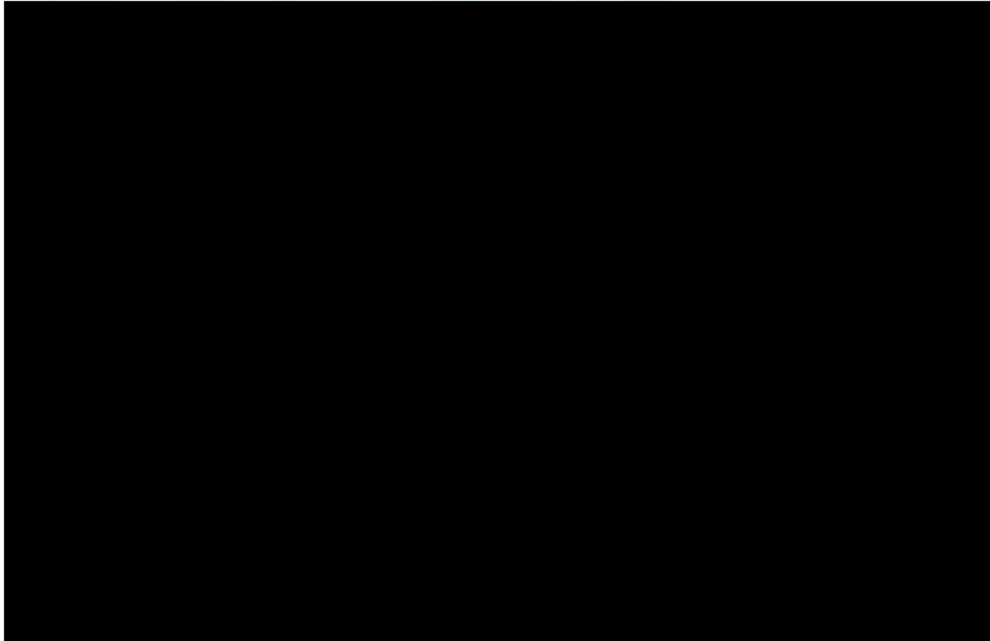


DSO SOPP Model Forecast

Issued: Wednesday, April 17, 2024 08:00

Transformer Level Outages and Above

Cat	Staffing	Qualitative Weather
Cat 1	Normal, but have a plan	Sig. Adverse weather unlikely
Cat 2	Have a plan for escalation	Adverse weather possible
Cat 3	Staffing & Timing as Directed	Adverse weather likely
Cat 4	Staffing & Timing as Directed	Extreme weather possible
Cat 5	Staffing & Timing as Directed	Extreme weather likely

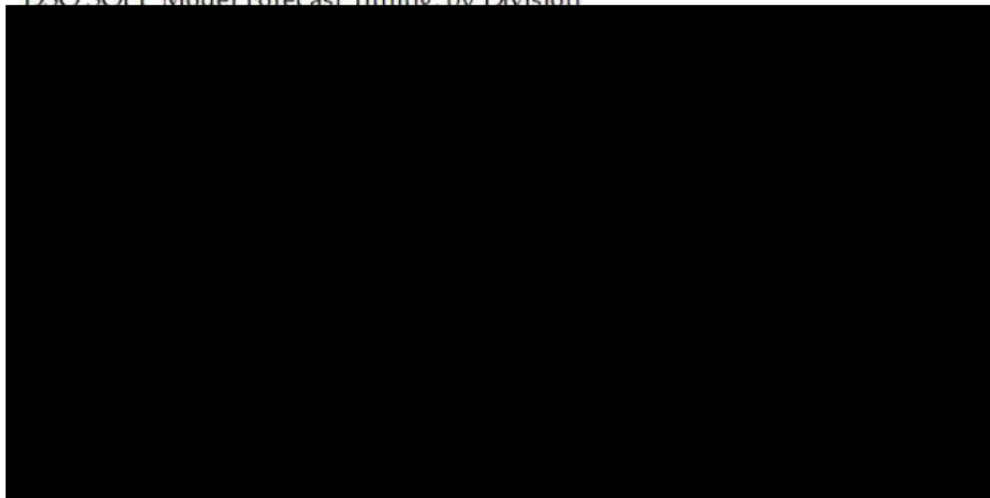


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Meteorology Operations & Analytics

Notes: SO = Sustained Outages, CESO = Customers Experiencing Sustained Outages, TM = Troublemakers, CR = Crews

DSO SOPP Model Forecast Timing, by Division



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Note: Timing reflects the risk period of outage producing weather for any division at elevated Cat 1 or above

Figure 1. Distribution System Operations Storm Outage Prediction Project (Wednesday, April 17)



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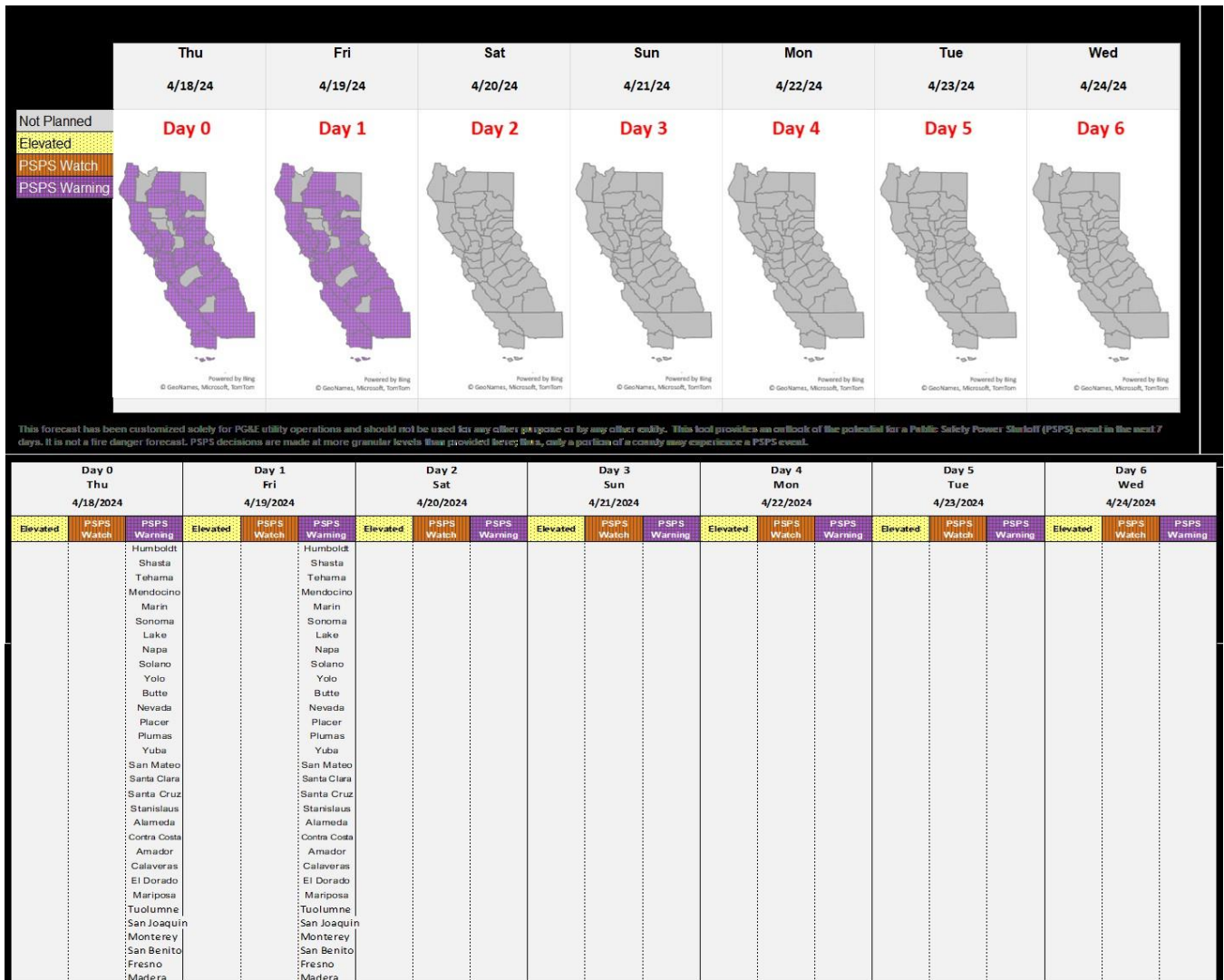


Figure 2. PSPS Potential as of Thursday, April 18 (Warning Potential)

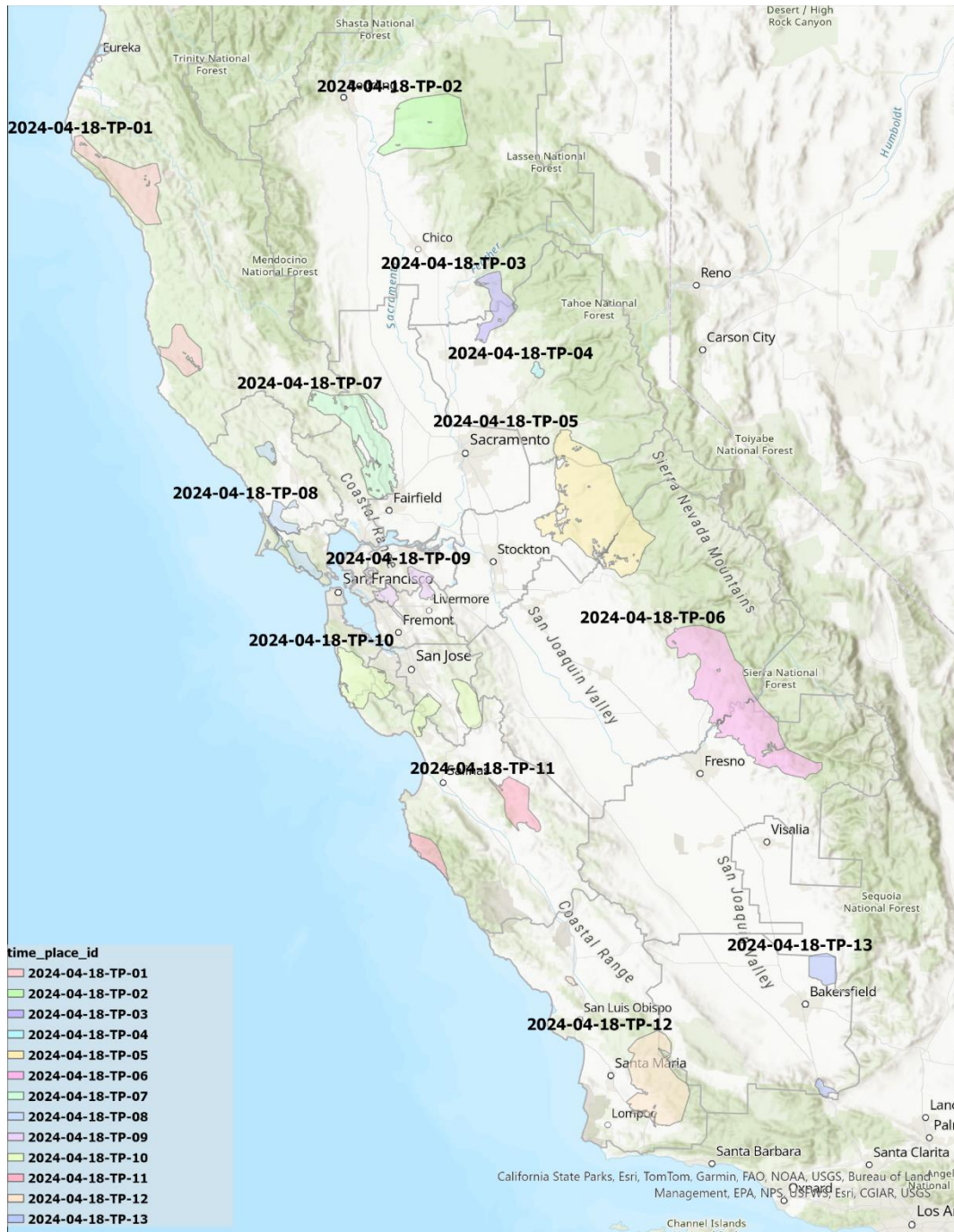
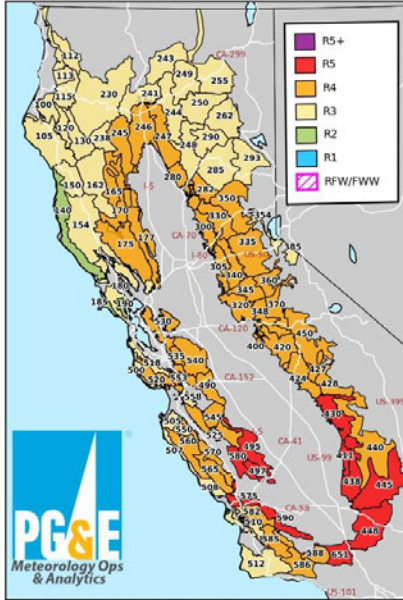


Figure 3. Weather Time Place Polygons (PSPS Scope)

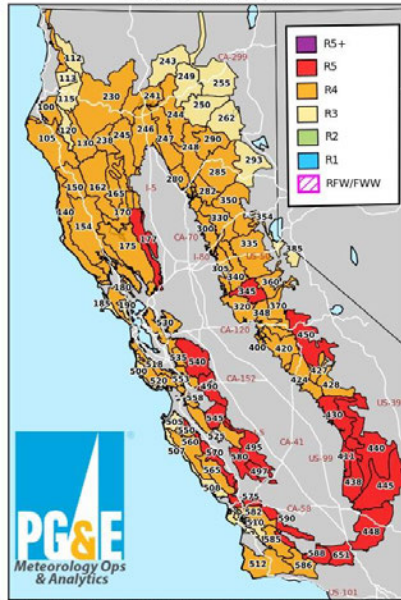


2024 Public Safety Power Shutoff (PSPS) Full Scale Exercise (FSE) Controller/Evaluator/Simulator Handbook

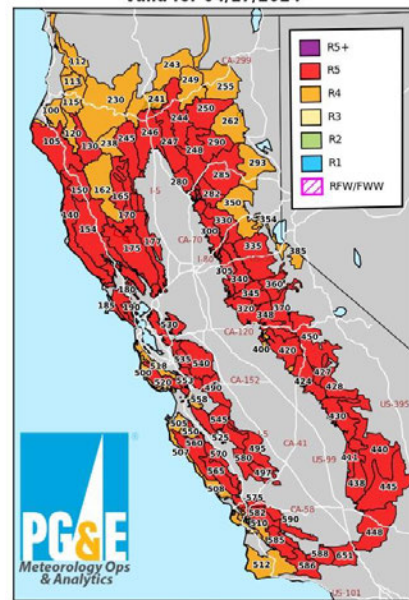
PG&E Utility Fire Potential Index Ratings
Valid for 04/15/2024



PG&E Utility Fire Potential Index Ratings
Valid for 04/16/2024



PG&E Utility Fire Potential Index Ratings
Valid for 04/17/2024



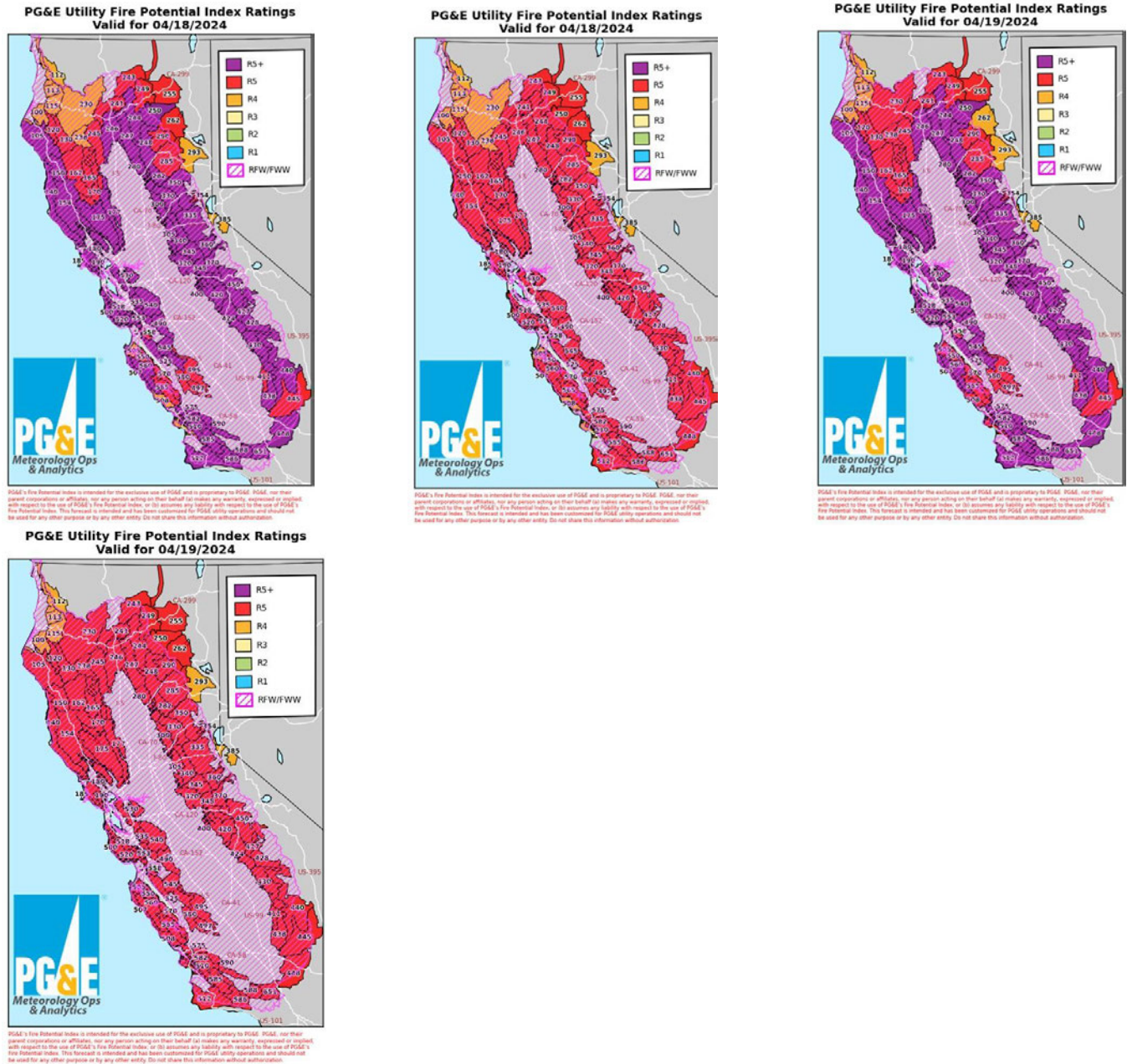


Figure 4. Fire Potential Index (FPI) Maps

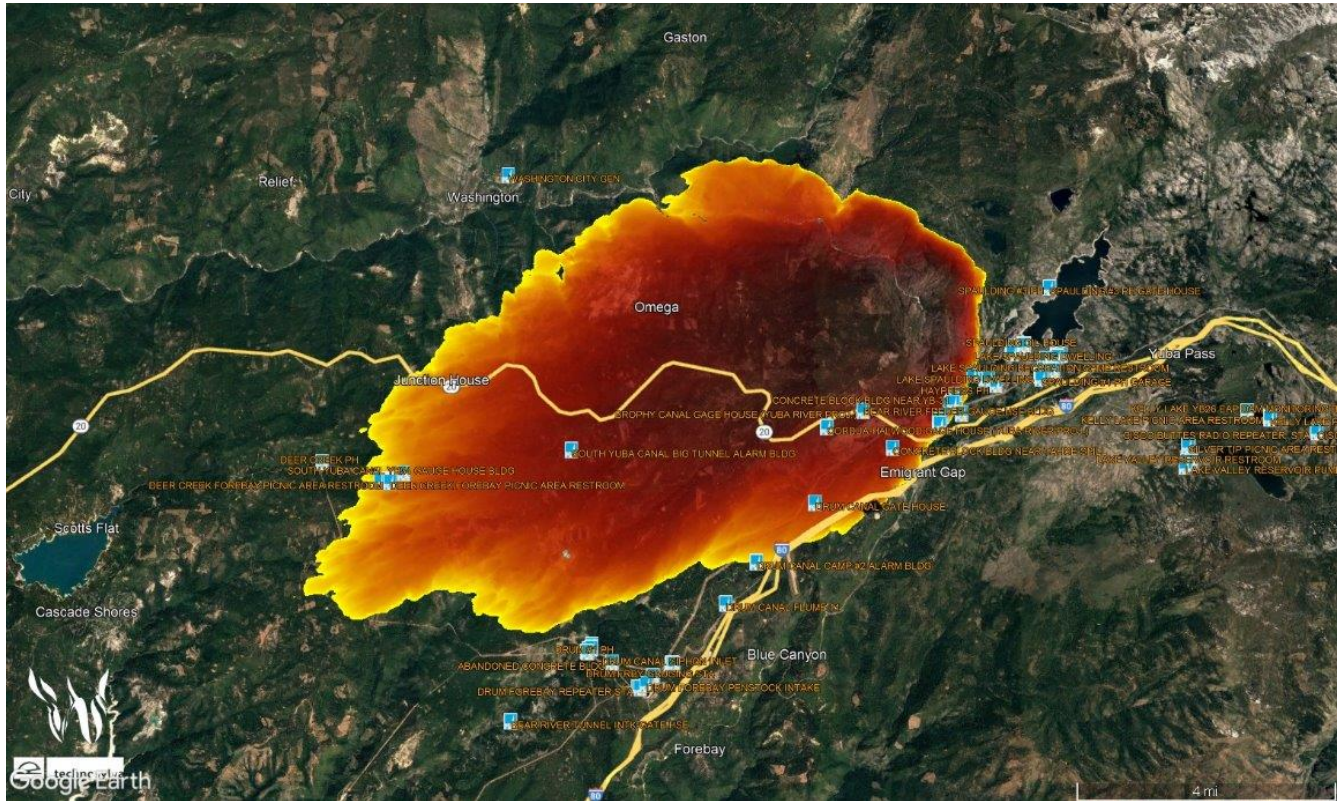


Figure 5. Bowman Wildfire

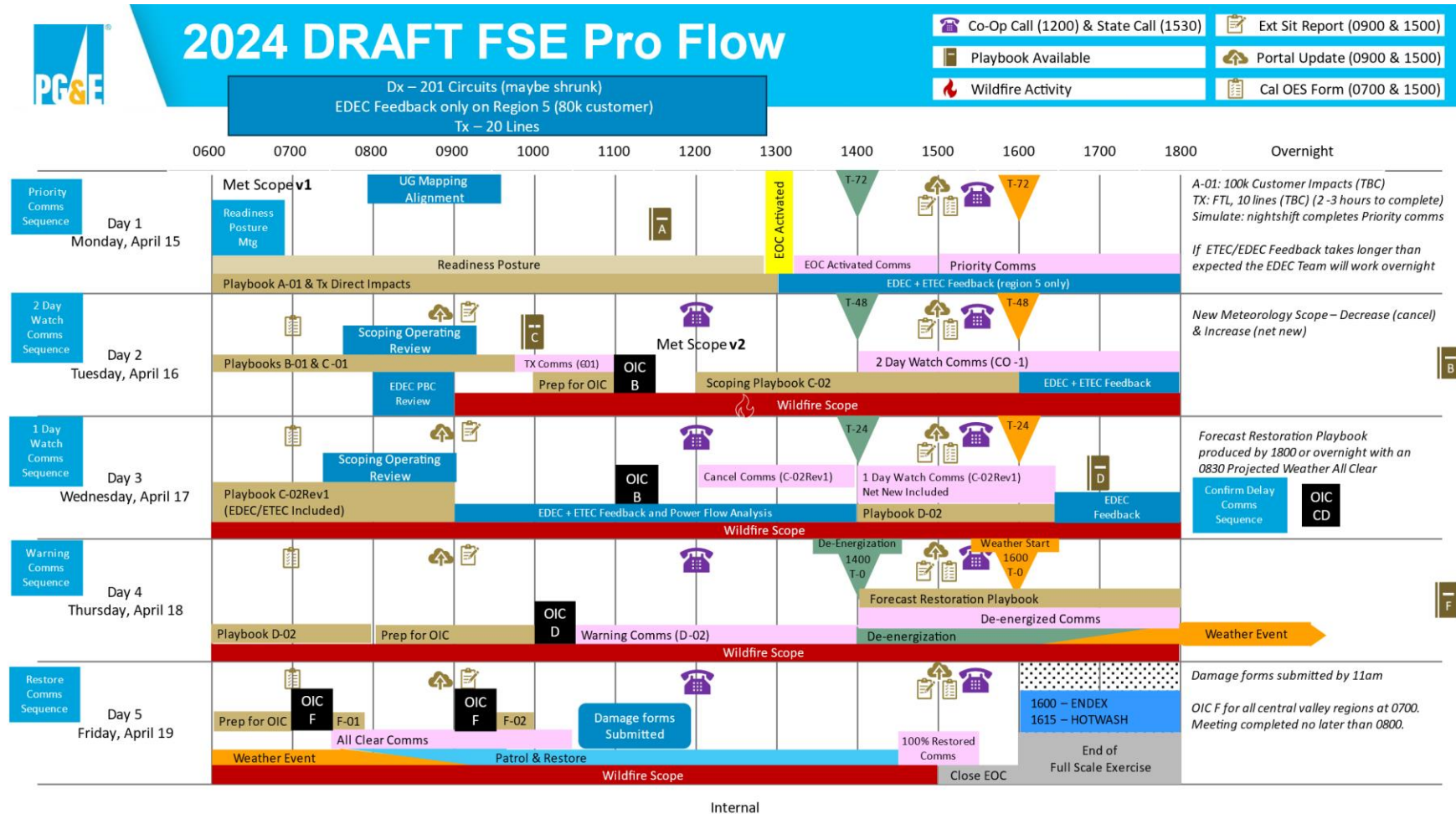


Figure 6. Procedural Flow. The Pro Flow is a guideline of how the 5-day PSPS event will unfold including the wildfire scope



EXERCISE RULES AND GUIDANCE

PARTICIPANT ROLES AND RESPONSIBILITIES

Several types of participants are involved in this exercise. Note that the term “participant” refers to all the categories listed below, not just those playing in the exercise:

- **Players.** Players are personnel who perform their regular roles and responsibilities during the exercise. Players initiate actions in response to the simulated emergency. **Players will not speak to observers during the exercise. Refer all observer questions to the observer’s point of contact (POC).**
- **Controllers.** Controllers plan and manage exercise play. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. Controllers may check in with players more frequently to capture key actions taken.
- **Simulators.** Simulators role play nonparticipating organizations or individuals. They operate out of the Simulation Cell (SimCell). Simulators function semi-independently under the supervision of a SimCell manager, enacting roles (e.g., media reporters, customers, or partnering agencies) in accordance with instructions provided in the Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and Lead Controller.
- **Evaluators.** Evaluators observe, document, and analyze performance against exercise objectives in accordance with the Exercise Evaluation Guides (EEGs).
- **Observers.** Observers view the exercise and do not play in the exercise, nor do they perform any control or evaluation functions.
- **Support Staff.** The exercise support staff includes individuals who perform administrative and MS Microsoft Teams IT support tasks during the exercise, e.g., registration, moderating, and others.

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. Exercise participants should accept that assumptions and artificialities are inherent in any exercise and should not allow these considerations to negatively impact their participation.

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, processes, and outcomes, not individuals, will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- Exercise simulation contains sufficient detail to allow Players to react to information and situations as if the simulated incident were real.
- Participating players may need to balance exercise play with real-world emergencies. If they occur, real-world emergencies take priority.

ARTIFICIALITIES

Artificialities are exercise limitations which could detract from exercise realism that participants should be aware of. During this exercise, the following artificialities apply:

- Exercise communication and coordination is limited to participating exercise organizations, and venues, listed in the Exercise Phone Book.
- The SimCell will simulate nonparticipating entities or organizations. Exercise simulation will be realistic and plausible and will contain enough detail from which Players can respond.
- Players should log in to Teams a few minutes before **STARTEX** and **RESUMEEX** and should presume to be “activated” within the simulated exercise world.
- Certain resources may purposefully be unavailable or available only in part to ensure exercise objectives can be accomplished.



EXERCISE TERMINOLOGY AND AUTHORITY

STARTEX: Start of the exercise

- Can only be called by the Exercise Director or Lead Controller.

PAUSEEX: Global or local brief suspension in play

- Global PAUSEEX is called by the Exercise Director or Lead Controller when all organization units will pause exercise operations for a short period of time or between exercise conduct days.
- Local PAUSEEX is called by the on-site Controller and communicated to the Lead Controller and Exercise Director when a localized safety issue or brief training moment is required.

RESUMEEX: Resumption of the exercise

- RESUMEEX is called by the Exercise Director or Lead Controller to resume exercise play after a short pause or to start a subsequent exercise conduct day.

ENDEX: End of the exercise

EXERCISE RULES

Exercise play will proceed in accordance with established plans and procedures. The exercise will conclude once time has run out (see Table 1. Exercise Schedule) or upon the completion of operations and the exercise objectives as determined by the Exercise Director or Lead Controller.

The following general rules govern exercise play:

- Players should report to the Exercise Environment (or their off-site exercise location) at StartEx and behave as they normally would when activated unless otherwise told.
- The Lead Controller will initiate exercise play by announcing StartEx message on the EOC Main floor.
- All non-face-to-face communications made during the exercise will begin and end with the phrase, “**This is an exercise.**” or “**EXERCISE EXERCISE EXERCISE.**”
- Players will not send communications to departments and agencies that are not participating in the exercise and should direct those inquiries to the SimCell.
- Players placing telephone calls to the SimCell must identify the organization, agency, office, or individual (and position) with whom they wish to speak.
- The Exercise Director or Lead Controller will announce any exercise suspension or termination and will instruct participants to stop-in-place safely.
- Players will comply with real-world response procedures unless otherwise directed by



Controllers.

- If an actual emergency occurs, the exercise may be paused (PauseEx) or terminated at the discretion of the Exercise Director depending on the nature of the incident.
- The Exercise Director or Lead Controller will announce resume of the exercise (ResumeEx) once the emergency or situation has been resolved.

PLAYER BRIEFING

Players will attend Player Briefings and Lead function Controllers have discretion to provide exercise participants with briefings before or after exercise conduct (See Table 1. Exercise Schedule). Exercise handouts or other materials may also be provided to orient players with the exercise.

PLAYER COMMUNICATIONS

Players will use existing and routine PG&E communication systems. The need to maintain capability for a real-world response may preclude the use of certain communication channels or systems that would usually be available for an actual emergency incident. **In no instance will exercise communication interfere with real-world emergency communications.**

The primary means of communication between the SimCell and Players is via telephone and email. An Exercise Phone Book will be distributed prior to the exercise with a list of key telephone numbers and emails relevant to the exercise. Text and MS Teams Chat will also be utilized for inject communications.

CONTROLLER/EVALUATOR/SIMULATOR COMMUNICATIONS

The principal method of information transfer for Controllers during the exercise is via a Microsoft Teams Channels and Meeting Invites. Controllers, Evaluators, and Simulators will be invited as a member to the restricted MS Teams Channels and Meeting Invites and must ensure they can log in, enabling access to the Teams channel. The controller communications network allows the Exercise Director and SimCell Manager to make and announce universal changes in exercise documentation, such as changes to the MSEL or inject releases. Controller communications will link control personnel at all exercise areas and will remain separate from player communications. In no case will controller communications interfere with or override player communications.



EXERCISE SCHEDULE

Table 1. MS Teams Exercise Participant Schedule and Location

Activity	Day 1	Day 2-4	Day 5	Meeting Link Location	Who attends?
C/E/S Daily Brief and Bridge Line	0530 RP 1230 EOC	0545	0545	Click here to join the meeting	C/E/S only
Sim Cell	0600-1800	0600-1800	0600-1600	Click here to join the meeting	C/E/S only
*STARTEX Opening Brief	0600 RP 1300 EOC	—	—	Click here to join the meeting	All
Exercise Play (WL)	0600-1800	0600-1800	0600-1600	EOC Sections Meeting Invites Emergency Coordination Center Meeting Invites	All
Morning Shift Transitions with Controller	—	0600	0600	EOC Sections Meeting Invites	P, O, C/E
*PAUSEEX	1800	1800	—	Click here to join the meeting	All
*RESUMEEX (State of the World)	—	0600	0600	Click here to join the meeting	All
Evening Shift Transitions with Controller	1730	1730	—	EOC Sections Meeting Invites	P, O, C/E
C/E/S Debrief	1745	1745	1530 (CES hotwash)	Click here to join the meeting	C/E/S only
ENDEX	—	—	1600	—	All
*Player Hotwash	—	—	1615	Click here to join the meeting	All
	WL = Working Lunch RP = Readiness Posture EOC (A) = Activation	C/E/S = Controller, Evaluator, Simulator P = Player O = Observer	*NOTE: StartEx, PauseEx, ResumEx, and Hotwash are all the same link and titled "internal player invite" when opened. This is the Main EOC floor.		



EMERGENCY OR COORDINATION CENTERS

Table 2. Emergency or Coordination Center and Corresponding Functional Areas

Functional Areas	Emergency or Coordination Center	Functional Exercise Status
Customer Care	CCECC	Staffed
EP&R Customer Care Operations	VERC EOC	Staffed
	CCECC	Staffed
	OECs	Stockton, Fresno, Yosemite, and Kern OECs Staffed All others Simulated
	REC	Central Valley Staffed All others Simulated
	GCC/ETEC	Staffed
IT	STOEC (Substation/T-Line)	Simulated
Logistics	EDEC	Staffed
IT	ITCC/ENOC	Staffed
Logistics	MTCC	Simulated
Planning	HAWC	Staffed
Facilities	FCC	Staffed



SYSTEM OPERATIONS

System Operations and/or their corresponding QA Sandbox test environment(s) will be made available during exercise play. It is the responsibility of the FA/Partner to provide access to the QA environment that is needed for exercise play and injects.

Table 3. System Operations

Owner	System	QA/Live/Simulated	Purpose
PSPS Technology	PSPS Viewer	QA	Used to develop playbooks, customer impact lists, customer notification files, transmission lists
	PSPS Portal	Live	Provides PSPS impact visibility to approved SLTT and externals
	PSPS Foundry	Live	Situation Reports and Playbooks
Customer Care	On-Track Tool	Simulated	Used to track door knock status complete/incomplete
Operations	Outage Management Tool (OMT)	QA	Electric outage monitoring and mitigation
HAWC	SIPT Viewer (Field Observation Dashboard)	Simulated	Aggregates real-time field observations from SIPT crews
	Live Incident Dashboard	Simulated	Intelligence and monitoring Situational Awareness
Resource Unit	ARCOS	QA	Resource tracking



SYSTEM COMMUNICATIONS AND NOTIFICATIONS

System Communications and/or their corresponding QA Sandbox test environments will be made available during exercise play. It is the responsibility of the Functional Area/Partner to provide access to the QA environment that is needed for exercise play and injects.

Table 4. System Communications and Notifications

Owner	System	QA/Live/Simulated	Purpose
EP&R	Everbridge	QA	Emergency mass notifications
Liaison	Quorum	Simulated	Backup notification system
Customer	Message Broadcast	Simulated	Primary notification system Will develop message but simulate delivery
Customer	Broadnet	Live	Backup notification system



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."*** The following procedures should be used in case of a real emergency during the exercise:

- Anyone made aware of a participant who is ill or injured will first advise a Controller. For all major accidents or injuries, call 911. If there is an unsafe situation, stop activity.
- The Controller who is made aware of a real emergency will initiate the broadcast ***"Real-World Emergency"*** in the SimCell virtual breakout channel, providing the following information to the Lead Controller and Exercise Director:
 - Venue/function
 - Location within the venue/function
 - Condition
 - Requirements
- The SimCell will be notified as soon as possible if a real emergency occurs. The SimCell may halt all injects as determined by the Sim Cell Manager.
- If the nature of the emergency requires a suspension of the exercise at the venue/function, all exercise activities at that facility will immediately cease. Exercise play may resume at that venue/function once the situation has been addressed.



- Exercise play at other venues/functions should not cease if one venue/function has declared a ***“Real-World Emergency”*** unless directed by the Lead Controller.
- If a real emergency occurs that affects the entire exercise, the exercise may be suspended or terminated at the discretion of the Exercise Director. The notification will be made from the SimCell.



VIRTUAL LOGISTICS AND RULES OF BEHAVIOR

The exercise will be held in-person at various locations and virtually using Microsoft (MS) Teams' Exercise Environment and Outlook Meetings. All participants will be required to use both audio and video via MS Teams to communicate with one another. The various channels represent the sections of the EOC and others during an activation for chat use only.

Important: All documentation must go into the folder structures located in TEAMS, Exercise Environment, General channel, Files tab.

Figure 4. Exercise Environment

Exercise Environment +

General Posts Files Check In/Out List v Fill | 214 Form for Grid... +2

Shown channels

- General
- Exercise Command Chat**
- Exercise Comms Huddle
- Exercise Customer Strategy Chat
- Exercise Demobilization Unit Chat
- Exercise Finance Admin Chat**
- Exercise Liaison Chat**
- Exercise Logistic Chat**
- Exercise PIO Chat**
- Exercise Planning Section Chat**
- Exercise Safety Chat**
- Exercise Support-Judy Louie (JL...)
- Restricted Exercise CES Chan...
- Restricted Exercise Planners
- Restricted Exercise Sim Cell

Name *

Enter a name or email address

You can't leave this blank.

Employee Personnel Number *

Enter value here

Event Name *

—

Emergency Center *

EOC

Please note which emergency center you are assigned to: EOC, REC, OEC etc.

Emergency ICS Position *

—

Date Time In

4/3/2024 06:40 PM

Date Time Out

Enter a date

3:30PM

Team Name *

—

Shift Inquiry

Periodically scheduled device use (e.g., mobile phone)

MS TEAMS EXERCISE ENVIRONMENT SITE USE AND ACCESS

- Internal PG&E participants with a LAN ID will have access to the Exercise Environment.
- External participants do not have access to the Exercise Environment but can join all Outlook meetings via invitations from PG&E participants.



TEAMS SITE RULES OF ENGAGEMENT AND BEST PRACTICE

Table 6. Exercise Environment Rules of Engagement and Best Practice

Rules of Engagement	Best Practices
<p>The MS Teams Exercise Environment allows for communications through meeting invites. Please observe the following rules of engagement:</p> <p>Remember to mute your MS Teams audio when not speaking.</p> <ul style="list-style-type: none">• UNMUTE yourself to speak.• VERIFY your computer sound is muted if you called in from a phone to prevent feedback when speaking.• USE the hand raise tool to get the presenter's attention.• Do not interrupt when others are speaking.• ENSURE you select "Leave" to exit the meeting space upon departure to avoid any confusion about your status in the call should an emergency at your site occur.• Treat the Exercise Environment as the Virtual EOC, meaning if you would normally have a conversation face-to-face, try finding the person you need to speak with in the appropriate meeting. <p>Reach out to Exercise control staff for any MS Teams technical issues by email or MS Teams chat.</p>	<p>MS Teams is designed for Internet audio. For the best sound and convenience, Teams joins directly from the application over the Internet.</p> <p>IF you must use phone service (e.g., those with poor bandwidth), please manually call into the meeting to join; do NOT use the Call Me feature.</p> <p>For the best sound quality and most cost-effective options, please only use the following preferred choices to join Teams meetings:</p> <ol style="list-style-type: none">1. DIAL the phone number presented in the meeting invite and enter the Conference ID # presented when prompted. IF you have a headset for your laptop or are able to use your computer's speaker and microphone:2. OPEN the Teams application on your computer, click the Calendar icon on the left navigation bar, click your meeting invite, and then click the Join button.3. If you're not in front of a computer to use the Teams desktop or web application, try using your Teams mobile app on your iPhone instead:4. OPEN the Teams mobile app, CLICK the Calendar icon on the bottom of your screen, and then CLICK the Join button associated with your meeting.

EXERCISE ORGANIZATIONAL STAFF OVERVIEW

EXERCISE CONTROL TEAM STRUCTURE

The exercise staff structure is the framework that allows exercise staff to communicate and coordinate across exercise venues, including the Simulation Cell (SimCell), to deliver and track exercise information. The staff structure for this exercise is shown below:

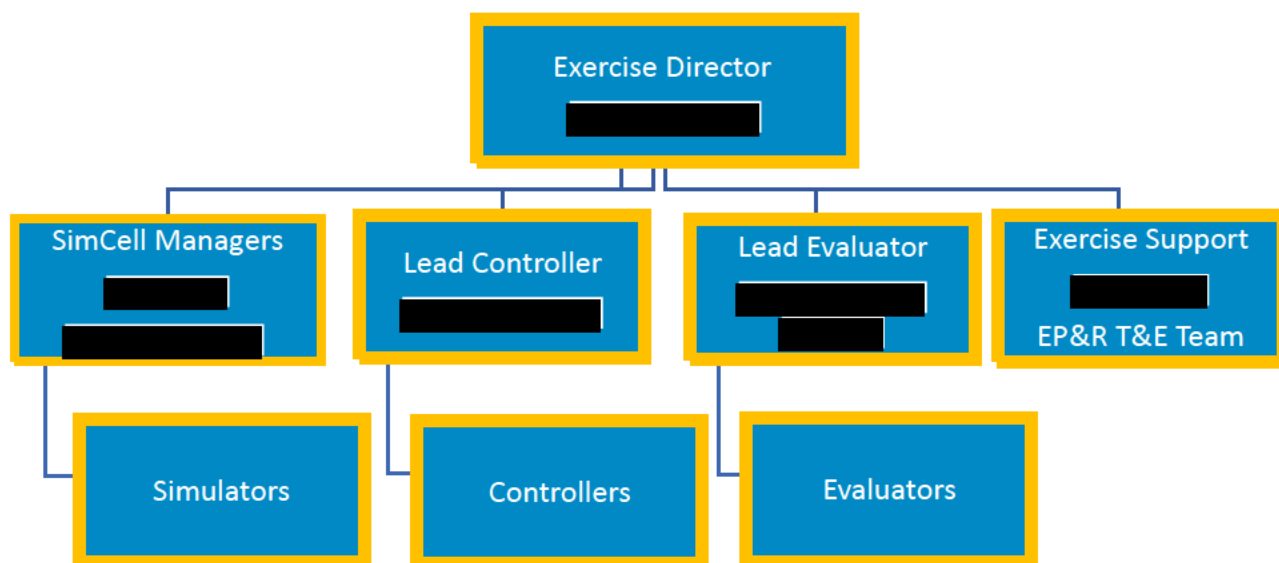


Figure 7. Exercise Control Team Structure

EXERCISE STAFF RESPONSIBILITIES

EXERCISE DIRECTOR

- Oversees all exercise functions.
- Remains in close contact with the Lead Controller throughout exercise play.
- Oversees setup and cleanup of the exercise and positioning of Controllers and Evaluators.

LEAD CONTROLLER

- Monitors exercise progress (i.e., that player activities are progressing as expected) and coordinates decisions regarding deviation or significant changes to the scenario.
- Coordinates Controllers in the virtual Exercise Environment and at off-site exercise locations.
- Ensures implementation of all designated and modified actions at the appropriate time.



- Debriefs Controllers and Evaluators after the exercise.
- Oversees exercise setup and takedown.

LEAD EVALUATOR

- Coordinates all evaluator activities and addresses evaluator questions and issues.
- Observes and documents strategic-level player actions, decisions, and discussions.
- Leads daily C/E/S huddles after exercise play.
- Leads development of After-Action Report (AAR).

SIMCELL MANAGER

- Coordinates Simulators to ensure all injects are delivered and closed out.
- Remains in close contact with the Lead Controller throughout exercise play.
- Monitors exercise progress and coordinates with Lead Controller on decisions regarding deviation or significant changes to the scenario.
- Monitors the exercise timeline.

EXERCISE SUPPORT

- Provides logistical support for EOC (VERC).
- Manages virtual exercise environment including check-in, hotwash, ICS 214 and documentation related to exercise planning and conduct.
- Provides support to Liaison with Observers at the VERC.
- Communicates and supports VERC Security and in-person check-in
- Maintains communication and works with Tech and Facilities.
- Scribes for hotwash

CONTROLLER INFORMATION AND GUIDANCE

Exercise Controllers maintain exercise scope, pace, and integrity during exercise conduct. The control structure ensures that exercise play assesses objectives in a coordinated fashion at all levels, and at all locations for the duration of the exercise. Exercise Controllers should regularly communicate with the Lead Controller and record and report any significant Player actions, decisions, and/or discussions to their player unit evaluator.



CONTROLLER INSTRUCTIONS

BEFORE THE EXERCISE

- Ensure you have access to the exercise documentation in the ***Controller/Evaluator/Simulator Teams Channel and the Sim Cell Channel*** in the Exercise Environment.
 - CES Handbook
 - MSEL
 - EEG
 - Phone Book
- Report to the exercise check-in location at the time designated in the exercise schedule and meet with the exercise staff (**C/E/S Bridge line**).
- Review appropriate emergency plans, procedures, and protocols.
- Review appropriate exercise package materials, including the objectives, scenario, injects, safety and security plans, and controller instructions.

DURING THE EXERCISE

- Avoid personal conversations with exercise Players.
- If it appears that the pace of play needs to be adjusted, please inform the Lead Controller so that they can work with the SimCell.
- Controllers should attend the meetings that their players attend.
- Report any simulation issues to the SimCell.
- Record exercise information from Players that would be directed to nonparticipating organizations.
- Observe and record exercise artificialities that interfere with exercise realism. If exercise artificialities interfere with exercise play, report it to the Lead Controller.
- Begin and end all non-face to face exercise communications with **“This is an exercise.”** or **“EXERCISE EXERCISE EXERCISE.”**
- Do not prompt Players regarding what a specific response should be, unless inject directs you to do so. Clarify information but do not provide coaching. Do not make up information.
- Report any exercise control issues to the Lead Controller.
- Do not give information to Players about scenario event progress or other participants’



methods of problem resolution. Players are expected to obtain information through their own resources.

AFTER THE EXERCISE (ENDEX AND PAUSEEX)

- Ensure that Players complete the online Hotwash Form via the link provided (which they will receive from Doc Unit or EP&R Exercise Team).
- Use the **Controller/Evaluator/Simulator (C/E/S) Bridge Line** to attend daily debriefings and Hotwashes.
- Summarize your notes from the exercise and prepare for the C/E/S Debriefing/Hotwash. Have your summary ready for the Lead Evaluator. Meet with your Evaluator(s) to ensure that your team captured all salient points from the exercise.
- On the final day of the exercise, a CES Hotwash and Player Hotwash will take place. After the Hotwash, summarize your notes and give your summary to the Lead Evaluator.

EXERCISE CONTROLLER COMMUNICATIONS

- The principal method of information transfer for Controllers during the exercise is via a MS Teams chat, Teams meeting invites, and the CES Bridge Line.
- The SimCell will report via chat which injects have been approved for release, and any changes Controllers and Evaluators may need to know.
- Controllers may reach out to the SimCell to report issues or pacing concerns to the SimCell Manager and Lead Controller.
- Controller communications will link control personnel and will remain separate from player communications.
- Controllers and Evaluators must ensure access to the **Exercise Environment C/E/S Channel** and to the **Controller/Evaluator/Simulator (C/E/S) Bridge Line**.
- The Sim Cell will report via chat of the **Teams Sim Cell Meeting Invite** which injects have been approved for release, and any changes Controllers and Evaluators may need to know.

EVALUATOR INFORMATION AND GUIDANCE

Exercise Evaluators capture performance including major decisions, actions, discussions, and materials developed during exercise conduct. They assess how well the exercise objectives were achieved. Evaluators need to coordinate with any site-specific Controllers if critical tasks, decisions, or discussions occur at an exercise location outside of the EOC. All Functional Area-specific activities will be evaluated with respect to the relevant ICS element. For this exercise, there will be three layers of evaluations, **Functional Area Evaluators** and **Specific EOC Section Evaluators**, and **Specific REC/OEC Evaluators**



Functional Area Evaluators, staffed by PG&E Functional Area representatives:

- Will document the activities of the players from their respective Functional Areas.
- Will complete an EEG.

Specific EOC Section Evaluators, staffed by EP&R personnel and ICS subject-matter experts:

- Will document the activities of the Operations, Command, Planning Sections.
- Will complete an EEG.

Specific REC/OEC Evaluators

- Will document the activities of the players from their respective RECs and OECs.
- Will complete an EEG.

EVALUATOR INSTRUCTIONS

Evaluators must observe and analyze performance against plans, policies, procedures, and practices using criteria established in the CERP, PSPS, and Wildfire Annexes, along with other plans and position guides. Evaluators document the performance using EEGs and analyze that information for later use in the AARs.

The Evaluators have specific tasks to perform and rules to follow all throughout the Exercise.

BEFORE THE EXERCISE

- Ensure you have access to the exercise documentation in the ***Controller/Evaluator/Simulator Teams Channel and the Sim Cell Channel*** in the Exercise Environment.
 - CES Handbook
 - MSEL
 - EEG
 - Phone Book
- Report to the exercise check-in location at the time designated in the exercise schedule and meet with the exercise staff (**C/E/S Bridge line**).
- Review appropriate plans, procedures, and protocols.
- Review appropriate exercise materials, including the exercise schedule and evaluator instructions.
- Review the EEGs and other supporting materials for your area of responsibility to ensure that you have a thorough understanding of the exercise objectives you are assigned to evaluate.



- Review the EEGs and other supporting materials for your area of responsibility to ensure that you have all the critical tasks in the EEG that you will be evaluating. If not, please let the Lead Evaluator know and the Planner responsible for these tasks.

DURING THE EXERCISE

- Avoid personal conversations with Players.
- Do not give information to Players about event progress or other participants' methods of problem resolution. Players are expected to obtain information through their own resources.
- Monitor and record important exercise actions during conduct using the EEGs.
 - Evaluate the actions of Players, not the Players themselves.
- Assess if the actions taken achieve the critical tasks outlined in the EEGs.
 - Focus on the process and the outcome.
- Closely monitor decisions.
 - Document when, how, and what time a decision was made or implemented.
- Coordinate with players to be included on communications occurring outside of the MS Teams where possible (e.g., email chains) and to track player movement between channels and meetings.

AFTER THE EXERCISE (ENDEX AND PAUSEEX)

- Meet with the Lead Controller/Evaluator prior to the Final Day Hotwash with your general notes.
- Use the **Controller/Evaluator/Simulator (C/E/S) Bridge Line** to attend daily debriefings/Hotwashes.
- Ensure Player/Controller notes, whiteboard drawings, etc. are collected and properly recorded.
- Connect as necessary with any relevant off-site Controllers who may have observed major discussions, decisions, or other activities.
 - Allow Players to discuss strengths and opportunities for improvement.
 - Provide context for actions and decision-making processes.
 - Do not provide corrective actions or suggestions – only record reflections.
- Email your EEGs and all notes to the Lead Evaluator at the end of the exercise.



PSPS EXERCISE CONTROLLER/EVALUATOR TEAMS CHANNEL AND SIM CELL CHANNEL

- Evaluators will be invited to the **Controller/Evaluator/Simulator (C/E/S) Bridge Line**. This is the principal method of information transfer for Controllers and Evaluators during the exercise. Because of the virtual nature, a chat stream is a more efficient way to share information than a traditional phone bridge.
- The SimCell will report via chat from the **Sim Cell Bridge Line** which injects have been approved for release, and any changes Controllers and Evaluators may need to know. You can access this Teams Channel through your Teams application or a browser window. You may want to open both for ease of access, but you can also toggle between groups.

During exercise conduct, Evaluators' main goal is to collect data that will inform the final exercise evaluation documents. EEGs are the main documents that facilitate this process.

During the exercise, Evaluators should not interact with Players in such a way that interferes with Player performance and/or results in prompting Players regarding what a specific response should be. Evaluators should generally avoid personal conversations with any Player. Evaluators should not give information to the Players regarding event progress or resolution of problems encountered by others. Players are expected to obtain information through their own resources.

EVALUATION BASICS

Effective evaluation is based on the following techniques:

- Use the EEGs to confirm that evaluation objectives are met.
- Take detailed notes concerning significant activities observed, including the time they were initiated and/or completed.
- Include specific examples of evaluation observations.
- Focus on EOC section-specific actions and critical tasks, as specified in the EEG.
- Ensure Areas for Improvement items are formatted as a problem statement with actionable objectives.

RECORDING EVENTS

Although numerous events may occur simultaneously, Evaluators do not need to record every single action. Documenting which events are important eliminates superfluous information and provides the most useful data for evaluation. Important events Evaluators should record include the following:

- Actions taken in relation to scenario events, including times completed.
- Key decisions made and the times these decisions are made.
- Deviations from plans and implementation procedures, and if they still met intended outcomes.



- Challenges or problems identified.
- Effectiveness of communications.
- Equipment used.

TYPES OF OBSERVATIONS

The Exercise Design Team will prepare the AAR and analyze the results provided by all Evaluators to develop accurate representation of the exercised plans and capabilities. Their analysis will focus on the timing of key events, decisions made, and actions taken. Potential areas you should focus on to assist in that analysis include the following:

- Timeliness of actions.
- Communication among Players and organizations.
- Command and control, including direction and coordination of field activities.
- Monitoring and assessing events.
- Creative Player problem solving, potentially beyond current plans and procedures.
- Plans or procedures that affect Player efforts.
- Direction and coordination of activities.
- Application of identified plans and policies.
- Equipment and technology issues in relation to Player efforts.

PLACEMENT AND MONITORING

Evaluators should be positioned in their respective virtual EOC section channel and meetings so they can monitor actions in the chat window and hear conversations without interfering with those activities. Certain conditions may warrant more than one evaluator in a setting or area.

ANALYSIS

Following exercise conduct, EOC Section Evaluators will use the data they collected (using their EEGs) to provide deeper analysis after having observed all of exercise conduct. The Exercise Design Team will be using the results provided by the Evaluators to prepare the After-Action Report (AAR). Therefore, all **Evaluators must electronically submit their EEGs to the Lead Evaluator within one week of the exercise.**



SIMULATOR INFORMATION AND GUIDANCE

Simulators act as trusted agents during exercise conduct due to their inside knowledge of the exercise and must not share scenario information with exercise Players or third parties prior to conduct.

Simulators are control staff personnel who role play as nonparticipating organizations or individuals. Simulators are chosen based on their expertise in the functional area(s) and their familiarity with emergency response procedures. Simulators function semi-independently under the supervision of the SimCell Manager, enacting roles in accordance with instructions provided in the scenario updates. All Simulators are ultimately accountable to the Exercise Director and SimCell Manager.

MASTER SCENARIO EVENTS LIST (MSEL)

The MSEL is the primary simulation tool for an exercise. It outlines benchmarks and injects that drive exercise play. It also details realistic input to exercise Players, as well as information expected to originate from simulated organizations (i.e., nonparticipating organizations or individuals who usually would respond to the situation). The MSEL consists of injects, which are individual exercise events. An inject includes the following pieces of information: inject time, planner organization, intended recipient, responsible party, inject type, a brief description of the event, and the expected player action. Injects will be color coded through exercise conduct to show their status.

Table 8 Inject Status Chart

Color	Meaning
Open	Inject not yet released
Approved	Inject approved for release
Out	Inject Delivered
Closed	Inject Closed (Player(s) has met expected action)
Cancelled	Inject cancelled (by SimCell Manager)
Issue	Inject issue (delayed entry, wrong recipient, etc.)

SIMULATOR COMMUNICATIONS

The primary means of communication among the SimCell and Players is via MS Teams chat, cellular phone, and email. An Exercise Phone Book will be distributed prior to the exercise with a list of key telephone numbers and emails relevant to the exercise.

SIMULATOR INSTRUCTIONS



GENERAL

- Avoid personal conversations with Players.
- Do not give information to Players about event progress or other participants' methods of problem resolution. Players are expected to obtain information through their own resources.
- Maintain control of documentation provided and do not make unauthorized copies.
- Do not share exercise design information outside of the exercise planning and exercise conduct teams.
- During the exercise, share information with Players only as directed in the exercise documentation.

BEFORE THE EXERCISE

- Ensure you have access to the exercise documentation in the ***Controller/Evaluator/Simulator Channel and the Sim Cell Channel*** in the Exercise Environment.
 - CES Handbook
 - MSEL
 - EEG
 - Phone Book
- Report to the exercise check-in location at the time designated in the exercise schedule and meet with the exercise staff (**C/E/S Bridge line**).
- Use the ***Sim Cell Bridge Line*** to join the Sim Cell to deliver injects.
- Review appropriate plans, procedures, and protocols.
- Attend required Simulator training and other briefings.
- Review appropriate exercise materials, including the exercise schedule, exercise objectives, scenario updates, and other supporting materials.

DURING THE EXERCISE

- Send injects to the appropriate Player at the appropriate time as directed by the SimCell Manager, as detailed within the MSEL.
- When delivering via email, please use “**EXERCISE EXERCISE EXERCISE**” as well as the Inject # in the subject line.



- Note the time the inject is delivered and take notes on the Player's actions.
- Respond to and document Player requests by simulating various roles.
- Update inject statuses by sending message via the chat window using the following format:
 - **Inject Line # - Status (e.g., out, closed, issue)**
- Do not release an inject without approval from the SimCell Manager.
 - This will be done via **Sim Cell Bridge Line Chat**, and displayed on MSEL; refer to Table 6
 - We may be off the planned release times on occasion, so please wait for an official release
 - Coordinate any modifications to the MSEL with the SimCell Manager.
 - Record ad hoc injects and send them to SimCell Manager.
- All questions that you cannot answer with the exercise material or from the training should be directed to the Exercise Director.
 - Maintain a log of activities on the MSEL in the "Notes" section. Many times, this log may include documentation of activities that may be missed by a Controller/Evaluator. Simulators should upload completed ICS Form(s) 214 to the designated folder in the SimCell channel.

AFTER THE EXERCISE (ENDEX AND PAUSEEX)

- Use the **Controller/Evaluator/Simulator (C/E/S) Bridge Line** to attend daily debriefings/Hotwashes.
- On the final day of the exercise, a one-hour Virtual Player Hotwash will be prompted as part of exercise play. Observe the Hotwash and take notes on findings identified by Players. Before the Hotwash, do not discuss specific issues or problems with participants. After the Hotwash, summarize your notes and prepare for the C/E/S Debriefing.
- At the end of the exercise please send all exercise notes to the Sim Cell Manager.



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