

# Emergency Preparedness & Response

## 2024 Public Safety Power Shutoff (PSPS) Tabletop Exercise (TTX)

March 19, 2024




# Safety and Security Orientation

Everyone and everything is always safe

## Assign safety roles if in person

### Psychological Safety

- 
- Practice transparency and vulnerability
  - Avoid blame; learn from mistakes
  - Show care and appreciation
  - Invite new ideas from all
  - Disagree respectfully and with curiosity
  - Prioritize mental health by encouraging self-care



### Fire

- Exits, escape routes, evacuation
- Fire ext.



### Earthquake

- Drop, cover, hold



### Medical Emergency

- 911/share location
- First aid/CPR
- AED



### Security:

- Active shooter—get out, hide out, take out, call out
- Maintain situational awareness to mitigate hazards



### Ergonomics

- [Proper ergo](#)
- 30/30: move 30 secs every 30 min

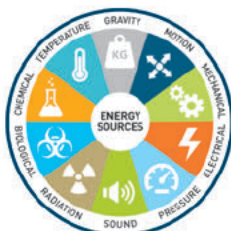


### Start When Safe



- Are you physically and mentally able to work?

 Don't report to work if testing positive for COVID-19 or have cold/flu-like symptoms 

Energy-Based Hazard Wheel



[SIF prevention field guide](#)

 On the road, off the phone 



Park in a safe location



# EP&R | PSPS Tabletop Agenda

Time	Activity	Facilitator
0830-0900	Check In	[REDACTED]
0900-0910	Safety	Safety Officer-In Person [REDACTED]
0910-0935	Welcome & Introductions/Roll Call	[REDACTED]
0935-0955	PSPS Program Update	[REDACTED]
0955-1000	Scenario Overview	[REDACTED]
1000-1030	Group Facilitated Discussion – Module 1: Readiness Posture	[REDACTED]
1030-1230	Facilitated Discussion Sessions - Modules 2-4 Breakout A: Customer/Liaison/PIO/External Partners Breakout B: PSPS Team/IT Breakout C: Command and General Staff - EOC/REC/OEC	Breakout A – [REDACTED] Breakout B – [REDACTED] Breakout C – [REDACTED]
1230-1300	Lunch	



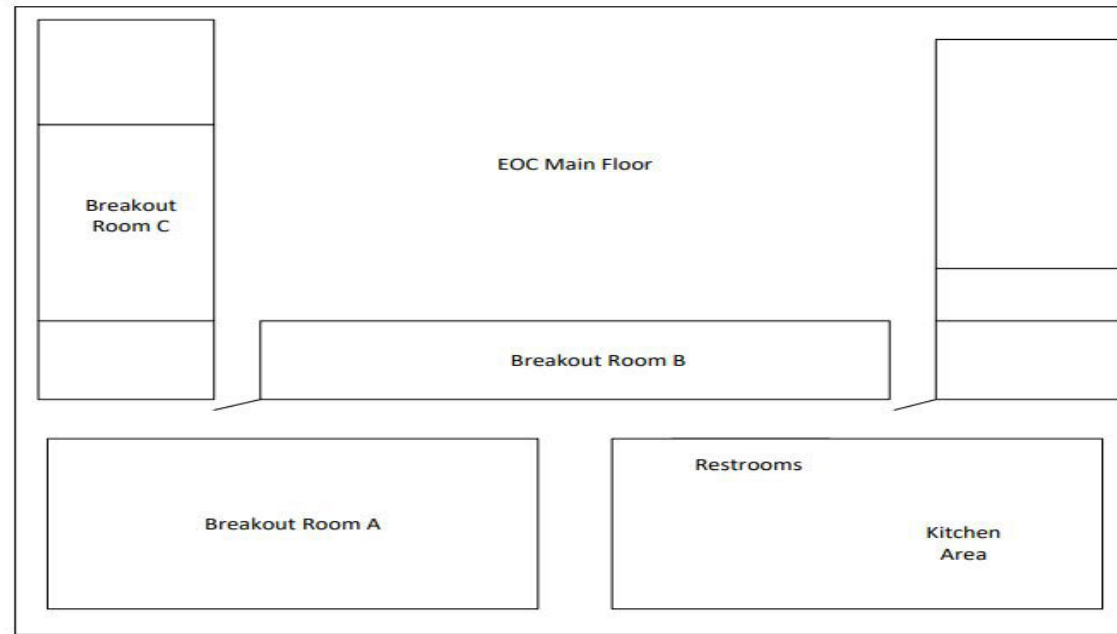
# EP&R | PSPS Tabletop Agenda

Time	Activity	Facilitator
1300-1330	Continue Facilitated Discussions on Modules 2-4 in Breakout rooms	Breakout A – [REDACTED] Breakout B – [REDACTED] Breakout C – [REDACTED]
1330-1350	<b>Cross Functional Discussion and Breakout Report Outs</b> Module 2 <ul style="list-style-type: none"><li>• EOC Activation</li><li>• Event Scoping</li><li>• Planning and Notification</li></ul>	[REDACTED]
1350-1410	Module 3 <ul style="list-style-type: none"><li>• De-energization and Notification</li><li>• Event Monitoring</li></ul>	
1410-1430	Module 4 <ul style="list-style-type: none"><li>• All-Clear</li><li>• Patrol and Restore</li><li>• Notification</li></ul>	
1430-1500	Wrap-Up, Hot Wash, Closing Remarks	[REDACTED]



# EP&R | TTX Rooms Layout

PG&E Emergency Operations Center (EOC)  
2024 PSPS Tabletop Exercise Room Diagram



Main  
Entrance

Parking Lot

# WELCOME

## 2024 Public Safety Power Shutoff Tabletop Exercise



Director, Emergency Preparedness & Response (EP&R), Strategy & Execution (S&E)



Manager, EP&R, S&E, Training & Exercises

### Lead Facilitators

#### **Group A:**



Emergency Management Specialist, EP&R, S&E, Training & Exercises

#### **Group B:**



Emergency Management Specialist, EP&R, S&E, Training & Exercises

#### **Group C:**



Emergency Management Specialist, EP&R, S&E, Training & Exercises





# EP&R | Teams Rules of Engagement

- This is a Hybrid Format Exercise. All Players will be given an opportunity to participate regardless of their location.
- Please keep your audio connection on mute when not speaking.
- Ensure your computer sound is muted if you called in from a phone to prevent feedback when speaking.
- 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 feedback on every question. Open dialogue is encouraged.
- Please turn on your video when engaging in the discussion.
- Send chat messages to the entire group for ease of monitoring.



# EP&R | Exercise Disclaimers & Expectations

## Disclaimers

- This is an Emergency Preparedness **EXERCISE**.
- All dialogue, chat messages, and graphic visual aids are intended to assist Players in mitigating the **SIMULATED** PSPS and Wildfire Events portrayed.
- While the scenario provided is plausible, in no way is the simulation intended to portray any real event. Any such similarity is purely coincidental.
- This Tabletop Exercise is an **open, low-stress, no-fault environment**.
- **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.

## Expectations

- The Exercise will accomplish the following:
  - Satisfy existing compliance requirements as defined by the California Public Utilities Commission
  - Test the ability of PG&E to prepare for, respond to, mitigate, and recover from a PSPS Event IAW the PSPS Annex to the Company Emergency Response Plan, and other relevant documents that contain PSPS-related policies and procedures.
  - All Players who are speaking should be on camera.



## Observer Guidelines

- The observer role is a controlled and limited role.
- Communication between players and observers is **not** allowed during the exercise. This includes posting messages in the chat feature of MS Teams.
- Observers may contact the Exercise Design Team if they have any questions or comments.
- All Players who are speaking shall be on camera.



# EP&R | PSPS TTX Objectives

**Objective 1 — Planning:** Implement a planning cycle according to CERP procedures, PSPS Annex, and ICS principles that use circuit information provided to conduct a PSPS and develop a restoration plan prior to receiving the "All Clear" from the Officer-in-Charge (OIC).

**Objective 2 — Operational Coordination and Communication:** Implement a response structure that effectively integrates EOC sections, 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.

**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.

**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).

**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.

**Objective 6 — 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.

# PSPS Overview

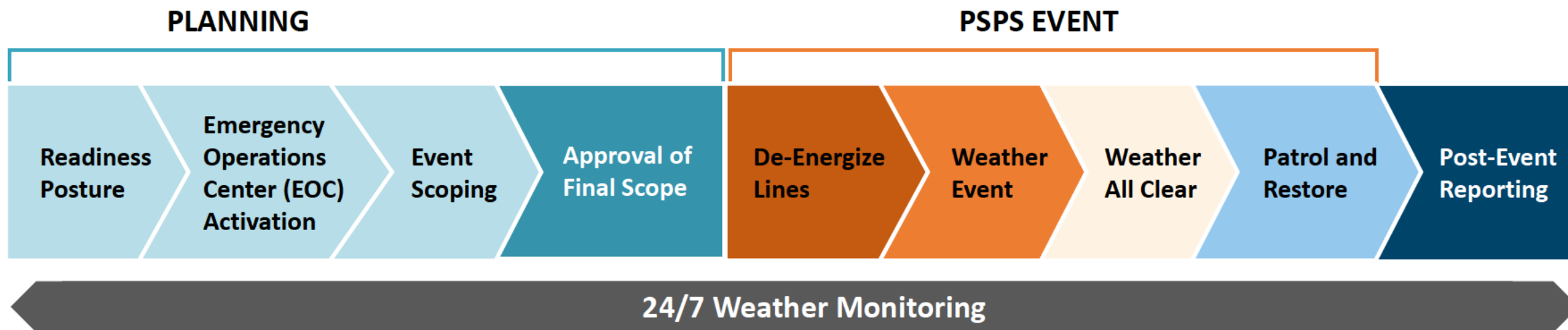


Interim Manager, PSPS PMO





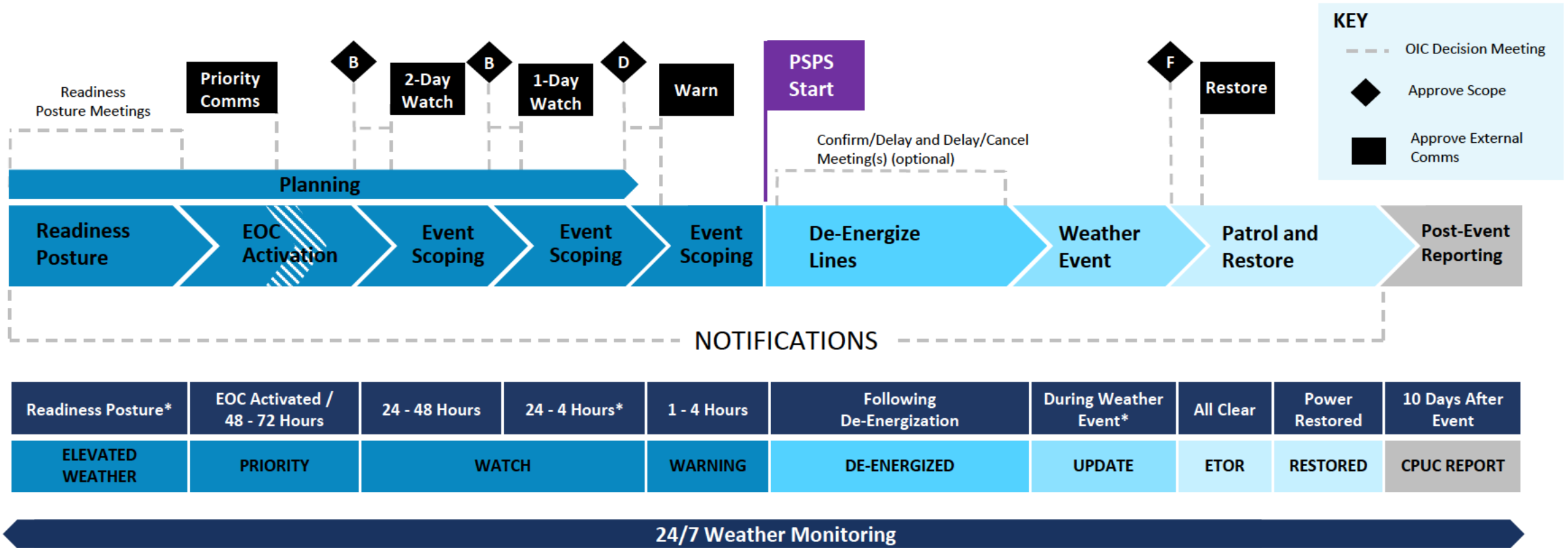
# PSPS Event Timeline





# PSPS Timeline

The below timeline provides an overview of the PSPS event phases and notification sequence based on the earliest time place.

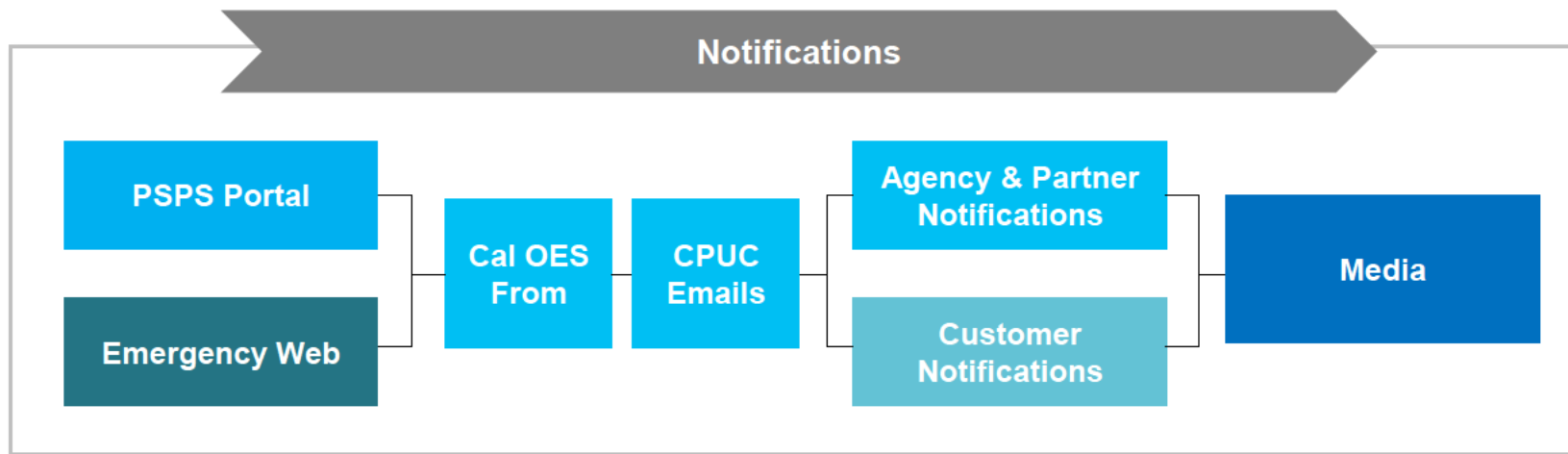


\* Indicates a NON-regulatory requirement.

Scope is developed as much as possible during Readiness Posture. Scoping performed during Event Scoping phase is an iterative process to complete refined Distribution and Transmission Scoping



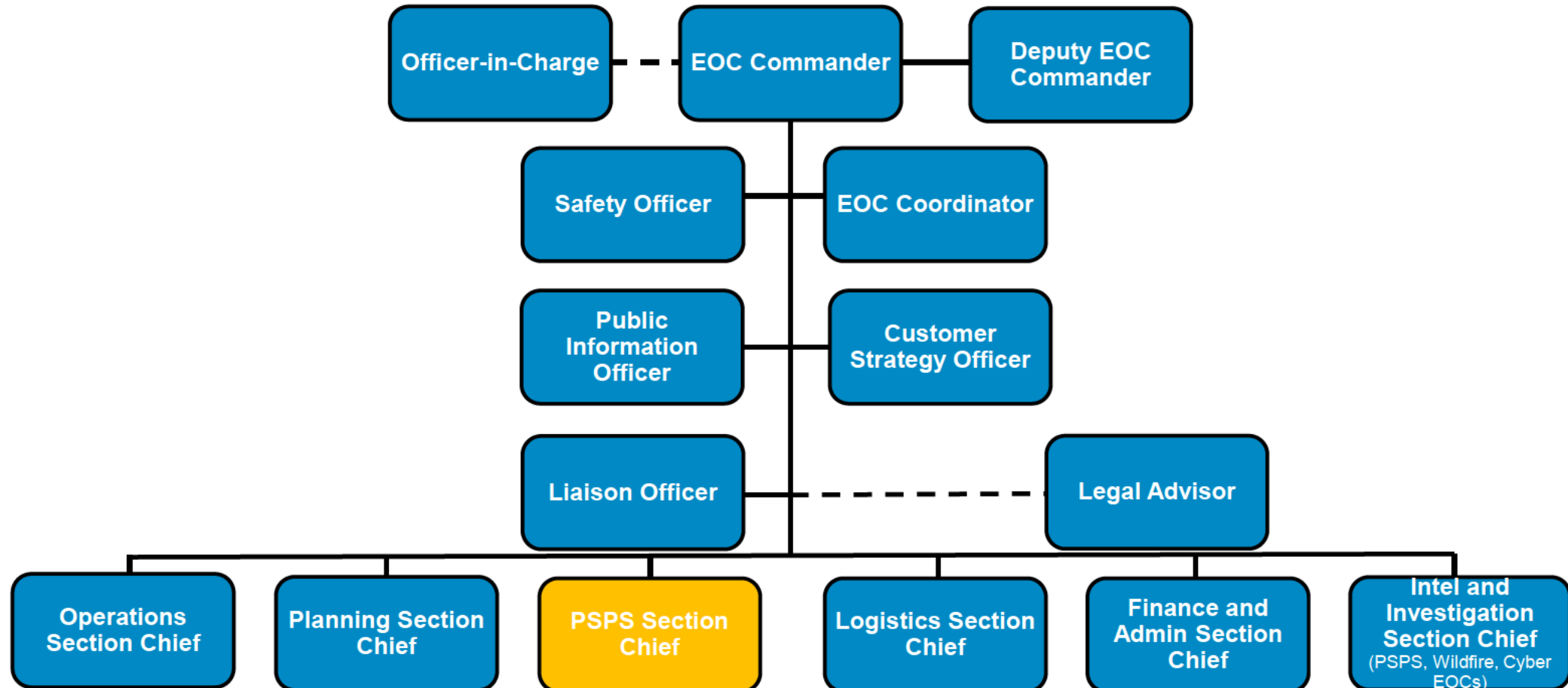
# Communications Execution Overview



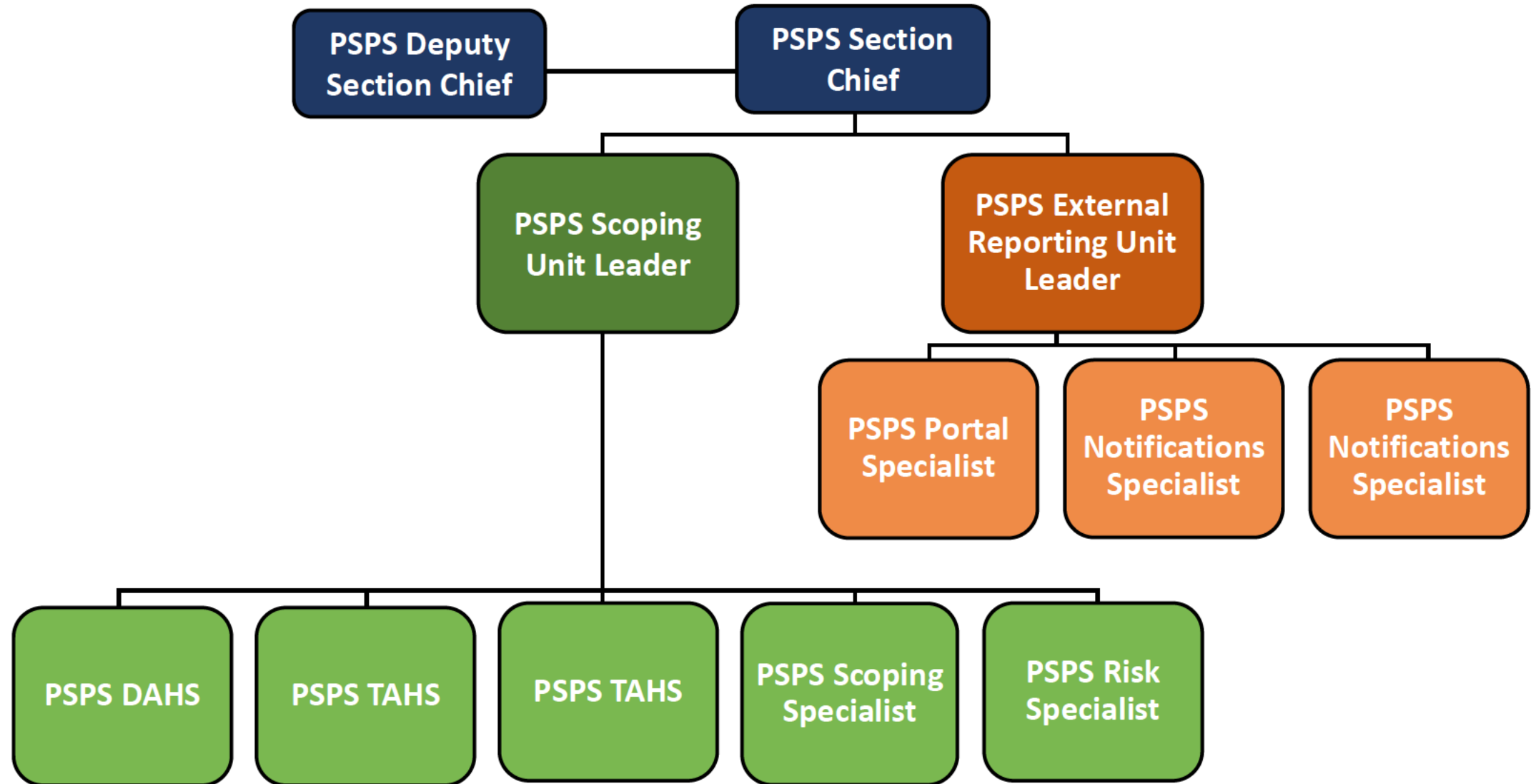
PSPS Portal Scope	Digital Strategy Scope	Liaison Scope	Customer Scope	Transmission Customer Scope	Public Information Officer Scope
<ul style="list-style-type: none"><li>• Agencies</li><li>• Public Safety partners</li><li>• Telecom customers</li><li>• Event specific updates</li></ul>	<ul style="list-style-type: none"><li>• Priority Partners: public safety partners</li><li>• Event specific updates</li><li>• Map of the event</li><li>• Address look-up tool</li><li>• Information on how to prepare</li><li>• Community Resources Center (CRC) list</li><li>• Restoration information: <a href="http://www.pge.com/psps">www.pge.com/psps</a></li></ul>	<ul style="list-style-type: none"><li>• Cal OES</li><li>• CPUC</li><li>• Governor's Office</li><li>• City, County, Tribal Governments</li><li>• CCAs</li><li>• CAL FIRE</li><li>• First Responders</li></ul>	<ul style="list-style-type: none"><li>• Public Safety Partners (CC1, TT1, TT2)</li><li>• Medical Baseline Customers</li><li>• Customers with special energy needs due to qualifying medical conditions</li><li>• General Customers (e.g., residential, businesses)</li></ul>	<ul style="list-style-type: none"><li>• Critical Facilities (e.g., water, telecommunications, hospitals)</li></ul>	<ul style="list-style-type: none"><li>• Press releases and new outlet updates</li><li>• Live media briefings</li><li>• Social media</li><li>• Media inquiry responses and interviews</li><li>• Radio spots</li></ul>

# PSPS EOC Organization Chart

**PSPS EOC Section:** This section will focus solely on supporting PSPS EOC activations.



# PSPS Section – Roles and Primary Responsibilities







# Reporting Breakdown

- Coordinate with **~45** subject matter experts across **8** workstreams.
- Draft responses to **30** questions and populate **18** data tables.
- Submit **4** files that include **~200+** pages of information.

Section	Responsible Workstream
<b>Section 1</b> – Summary and Overview	PSPS Project Management Office (PMO), Electric Incident Investigations (EII), Customer
<b>Section 2</b> – Decision Making Process	PSPS PMO, Meteorology
<b>Section 3</b> – De-energized Time, Place, Duration and Customers	PSPS PMO, Meteorology, Transmission
<b>Section 4</b> – Damages and Hazards	EII
<b>Section 5</b> – Notifications	PSPS PMO, Customer, Liaison
<b>Section 6</b> – Local and State Public Safety Partner Engagements	Customer, Liaison
<b>Section 7</b> – Complaints and Claims	Customer, Liaison
<b>Section 8</b> – Power Restoration	PSPS PMO, Emergency Field Operations
<b>Section 9</b> – Community Resource Centers	Customer
<b>Section 10</b> – Mitigation	Temporary Generation
<b>Section 11</b> – Lessons Learned	PSPS PMO, Customer, Liaison, Emergency Preparedness & Response (EP&R), Meteorology
<b>Section 12</b> – Other Relevant Information	PSPS PMO, Meteorology



# Q&A Discussion

**Questions?**

# Meteorology Scenario





# Meteorology Scenario

PG&E Meteorology is tracking variable weather conditions. A dry, offshore wind event is expected to develop Thursday, April 18<sup>th</sup>, 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 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 18<sup>th</sup> and approximately 64,600 for Friday, April 19<sup>th</sup>.

Winds will decrease below outage producing thresholds between 0700 and 0900 hours on Friday, April 19<sup>th</sup>. 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.

# Meteorology Scenario- Initial Scope

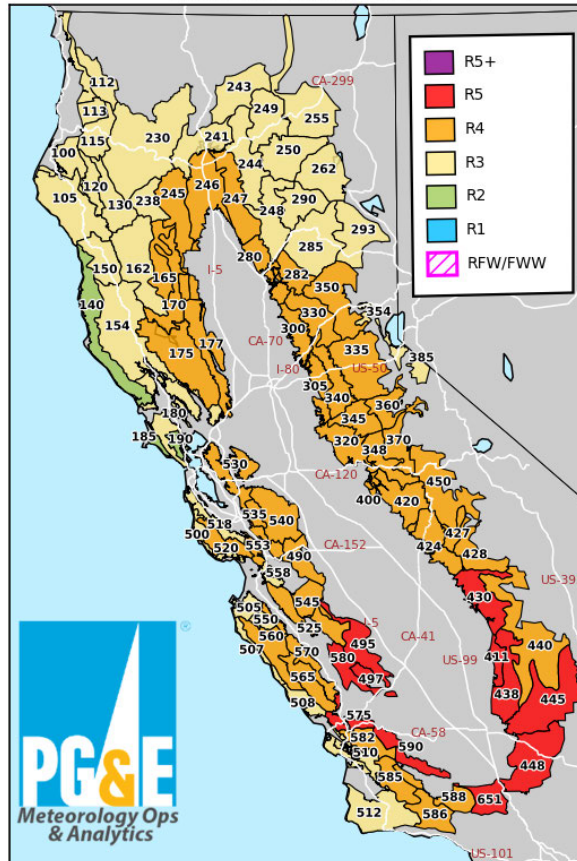
Figure 1. Initial Scope





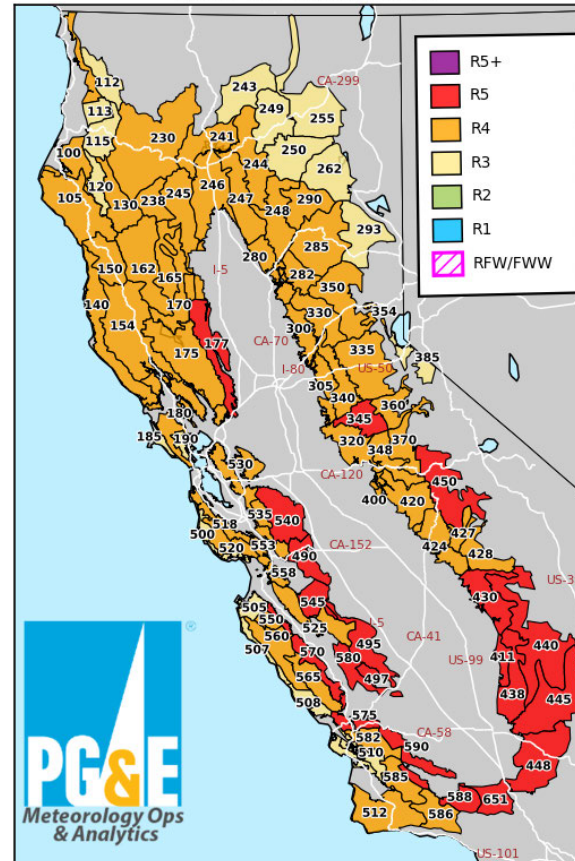
# Meteorology Scenario - FPI Indices

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



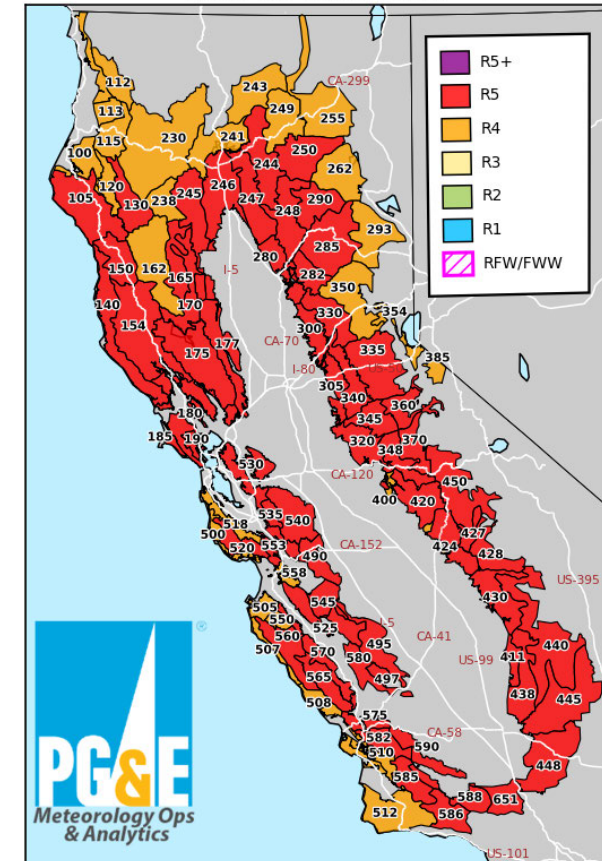
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**PG&E Utility Fire Potential Index Ratings  
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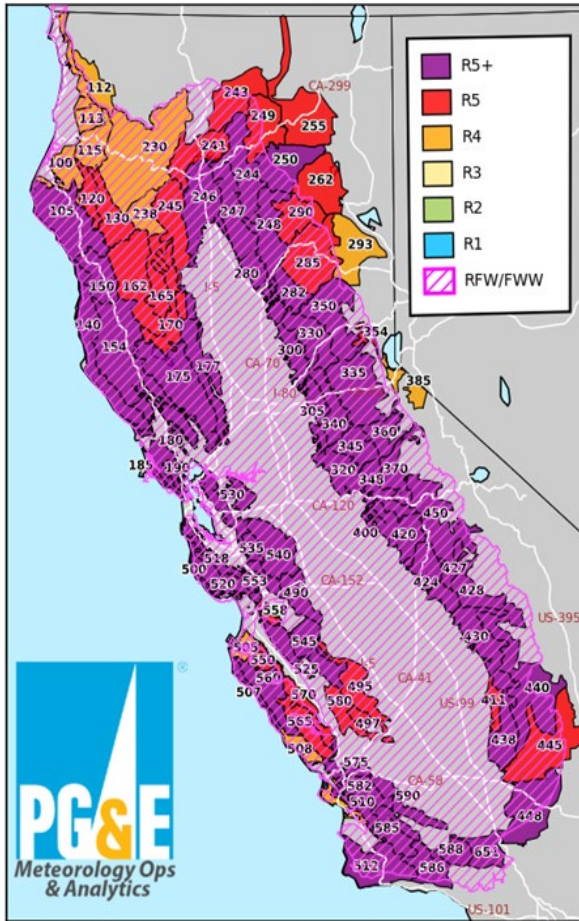


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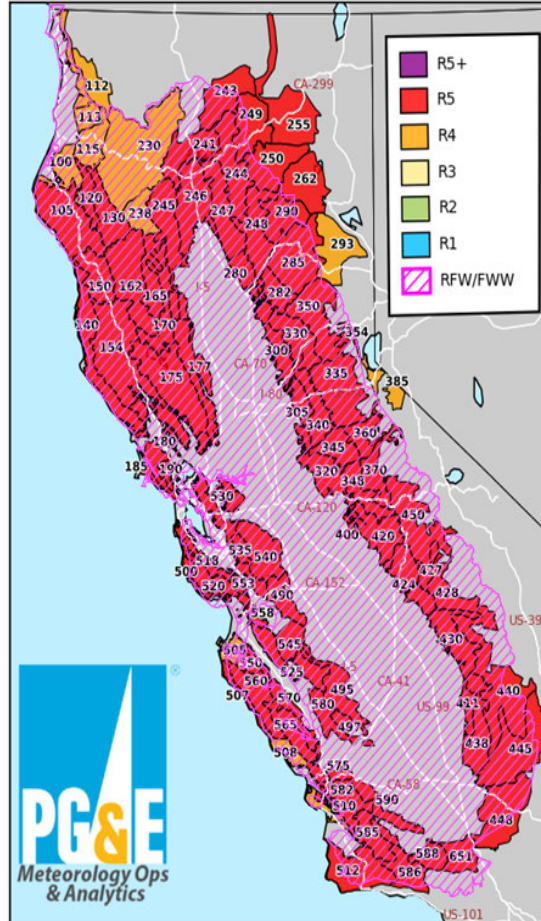
# Meteorology Scenario - FPI Indices

**PG&E Utility Fire Potential Index Ratings**  
Valid for 04/18/2024



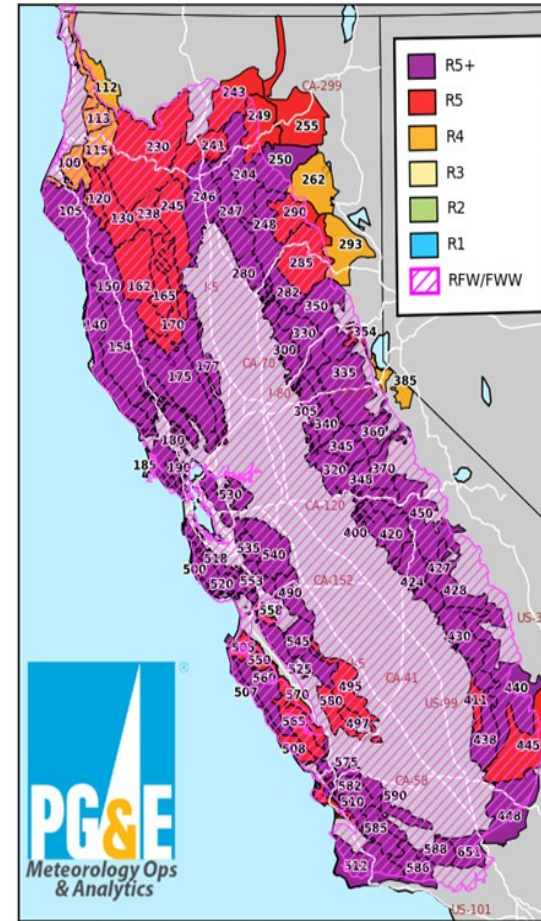
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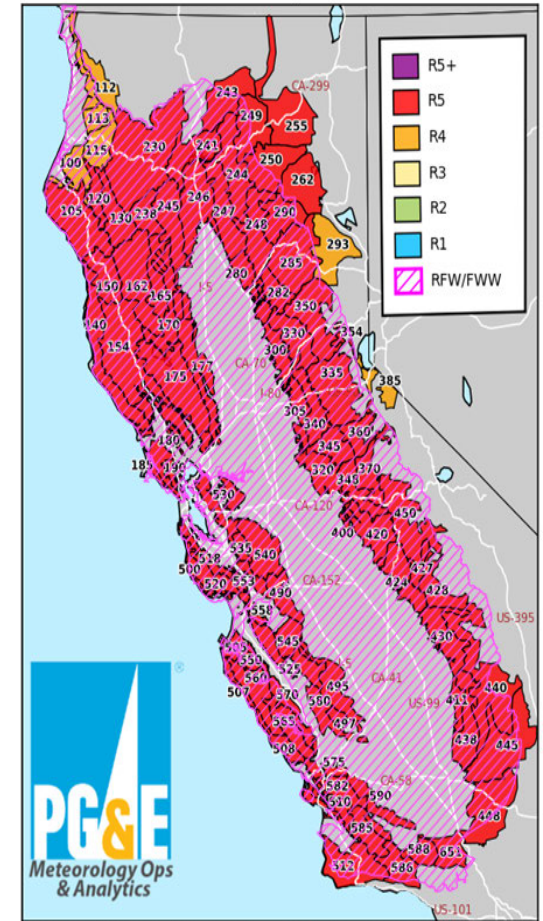
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# Q&A Discussion

Questions?



# Module 1

## EVENT IDENTIFICATION READINESS POSTURE





# Module 1 - Q&A Discussion

## Meteorology/HAWC/SIPT

1. What are the meteorological criteria that triggered the activation of Readiness Posture for this PSPS Event?
2. What technology platforms does Meteorology & Fire Science employ to understand when weather conditions might lead to PSPS conditions?
3. Have there been any changes in thresholds or other criteria since the PSPS program was created in 2018?



# Module 1 - Q&A Discussion

## **Customer/LNO/PIO**

4. What is the first indication that PG&E provides to external partners that a PSPS Event may be necessary?

## **Counties/External Partners**

5. If your county has a critical infrastructure item that needs to be escalated to PG&E's attention, to whom should you direct your concerns?

6. How does your organization decide whether to activate its EOC for a PSPS Event? Do you activate for all PSPS Events, or is there a threshold of potential outages that triggers pre-determined criteria?

## **PSPS Section**

7. What topics does the PSPS Section support during the Readiness Posture Meeting?



# Module 1 - Q&A Discussion

## Operations

8. How are the Emergency Centers (EDEC, ETEC, STOEC, GCC, DCC, RECs, OECs) notified of a potential activation?
9. How has this process changed compared to past years?

## PSPS Scoping

10. Please describe any communication PG&E may have with other entities, e.g., SCE if shared circuits are involved. When would the first notification to a partner IOU take place?

## Planning/Situation Unit

11. What activities does the Plans Section conduct during Readiness Posture?



# Module 1 - Q&A Discussion

## EOC Commander

12. EOC Commander, please outline your priorities and the Essential Elements of Information required to inform your decision-making process.

How has this process changed since 2023? What new products are in place?

## Power Generation

13. What is the process for identifying impacts to Power Generation facilities based on PSPS scope?

14. What previous events have occurred that impacted the Power Generation system?



# Q&A Discussion

Questions?

# Breakout Session A

Customer

Liaison

PIO

External Partners



# Breakout Session B

PSPS Team

IT

ETEC

EDEC





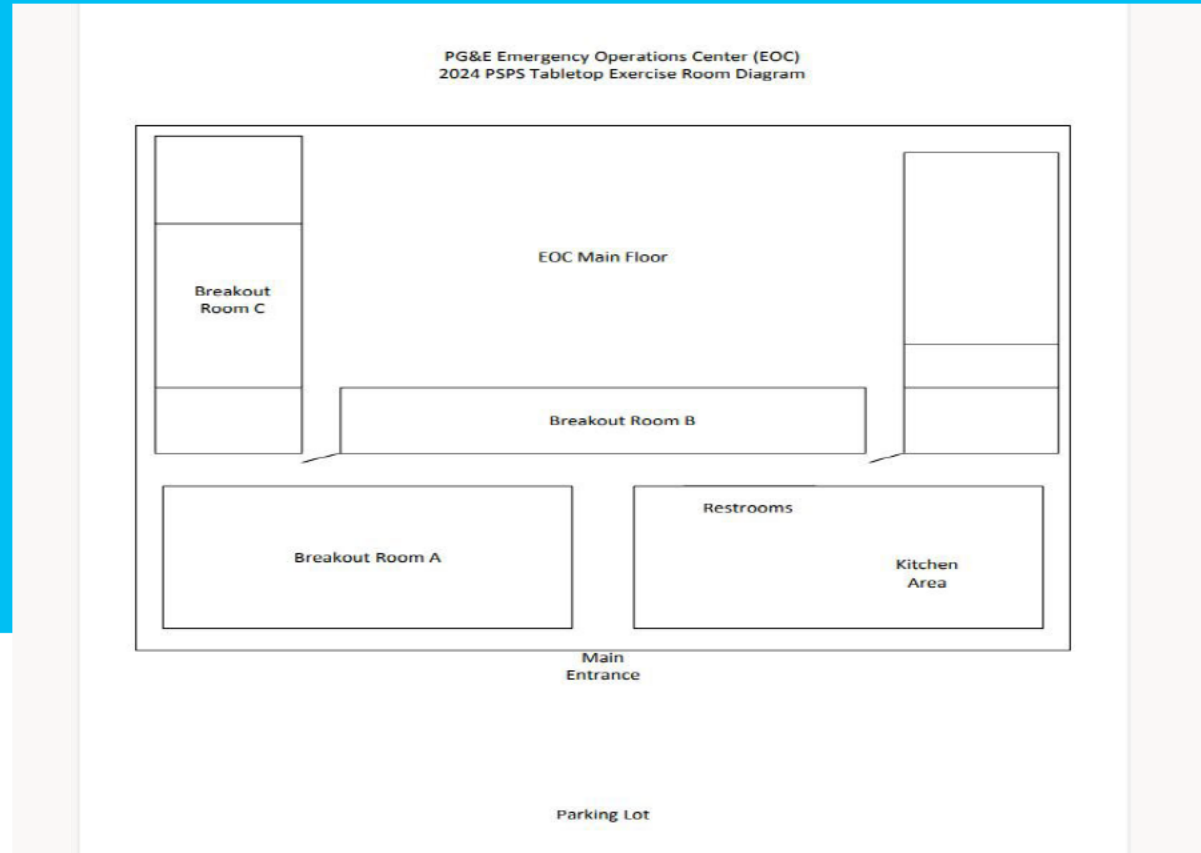
# Breakout Session C

Command Staff

EOC, REC, OEC



# Breakout Sessions Discussion in Rooms A, B, and C



# Breakout Sessions

1030-1230

1300-1330



# Lunch Break

1230-1300

**TTX will resume at 1300 in Breakout Rooms**



# Breakout Session A Report Out

## Customer Liaison PIO External Partners



# Breakout Session B Report Out

## PSPS Team

### IT

### ETEC

### EDEC



# Breakout Session C Report Out

## Command Staff

### EOC, REC, OEC



# Module 2

## EOC ACTIVATION EVENT SCOPING PLANNING AND NOTIFICATION







# Module 2 - EOC Activation, Event Scoping, Planning and Notifications

## GIS Tech Specialist

120. What is the role of the GIS Tech Specialist in a PSPS Event?

## Vegetation Management

121a. What are the parameters of permitting Vegetation Management crews to operate in the vicinity of PSPS-impacted circuits prior to de-energization?

121b. Is there a tag process to ensure vegetation removal is prioritized for potential ignition sources?

## Logistics

122. 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? How is delivery coordinated with the impacted OEC?



# Module 2 - EOC Activation, Event Scoping, Planning and Notifications

## IT

123. What actions would the IT Branch take in the event of a Telecommunications outage that could potentially last long enough to impact restoration?

# Module 3

## DE-ENERGIZATION AND NOTIFICATION EVENT MONITORING





# Module 3: De-energization and Notification, Event Monitoring

## **PSPS, Customer, Liaison, PIO, REC, OEC**

124a. What is the notification sequence following a decision made by the OIC/EOC Commander?

124b. How are each of the entities listed here informed? Please also outline the process to notify Customers and Public Safety Partners.

## **EOC Commander**

125a. How do you resolve conflicts when ad hoc meetings begin to interfere with the normal meeting cadence?

125b. Are there meetings that cannot be moved no matter the conflict?

126. How frequently do you check in with the REC and OEC level to determine their situations?



# Module 3: De-energization and Notification, Event Monitoring

## Logistics/Customer

127. What do you do if the outage impact to customers is extended, and a given CRC site is no longer available, or we need to add another CRC site to support the number of people in the community?

# Module 4

## ALL CLEAR PATROL AND RESTORE NOTIFICATION





# Module 4: All Clear, Patrol and Restore, Notification

## Finance

128. What are some of the Finance Branch's priorities during this phase?

129. How is the financial reconciliation completed post-event?

130. How are the REC and OEC echelons finances handled?

## REC/OEC

131. What is the demobilization process at the Regional and Division levels?

132. Does the REC or OEC remain open for communications following a PSPS Event?



# Module 4: All Clear, Patrol and Restore, Notification

## Aviation

133. How does the Aviation Branch de-conflict support requests at various times of year?

134. How does the Aviation Branch mitigate fluctuations in the availability of air assets based on the season?

## SIPT

135. How would you request SIPT services for damage repair taking place in a HFTD post-event, and the FPI requires EMER-4102-S precautions to be taken?



# Hot Wash





# EP&R | Hot Wash Report Outs

What Went Well (Best Practice)	Areas for Improvement (Corrective Action)
Works well and helped to better understand PSPS Response process/procedures, especially in your section or organization	Does not work well in the PSPS Response process/procedures, especially in your section or organization

# Closing Remarks



**Fill out Feedback Form**

**Thank you!**

