Agenda

A. Welcome
B. Introductions
C. Understanding
D. Assessment
E. Mitigation
F. Preparedness
G. Next Steps
Introductions

➢ Name
➢ Organization
Public Safety Power Shutoff Plan
- History of the Plan
- Criteria for Implementation
- Tiers and Scope
- Notifications
- Outage Period
- Complications

How many of these did you know?
Understanding: History of the Plan

➢ A Response to the large fires of the recent past
➢ Statewide effort
➢ An attempt to reduce the likelihood of PG&E caused fires
➢ Involves shutting off the power to selected neighborhoods
Understanding: Criteria for Implementation

➢ No Single Factor, but .......

➢ **Red Flag Warning**: issued by the National Weather Service

➢ **Low Humidity Levels**: generally 20% and below

➢ **High Winds**: generally above 25 mph and gusts over 45 mph

➢ **Moisture Content**: condition of dry fuels and live vegetation

➢ **Ground Truth**: real-time observations by PG&E’s Wildfire Safety Operations Center and field observations by PG&E crews
Understanding: Tiers and Scope

Tier 3 (Extreme) – Red Areas
Tier 2 (Elevated) – Gold Areas
Tier 1 – All other areas
Understanding: Interactive Map

https://ia.cpuc.ca.gov/firemap/
Understanding: PG&E Notifications

Timing:
- 48 Hours prior to shutoff
- 24 hours prior to shutoff
- Just prior to shutoff
- During the outage
- Upon restoration

Methods:
- Customer
  - Phone
  - Texts
  - E-mails
- Public
  - Website
  - Social Media
  - Local News
  - Public Safety Partners
Understanding: Local Agency Notifications

- Alert Marin
- Nixle
- Media Releases
- Sign Boards
- Social Media
- Local Partners

Goals:
- Initial Alert: 48 hours prior (approx.)
- Second Alert: 24 hours prior (approx.)
- Third Alert: Just prior to Shutoff
- Alerts during Shutoff
- Alerts at Restoration
- Alert affected residents
- Describe local response and resources
Understanding: Outage Periods

➢ Outage Event Period based on weather criteria
➢ Restoration Period start depends on weather criteria and line inspection
➢ **ALL** lines in affected area need to be visually inspected before re-energizing
➢ Timelines:
  ➢ Outage Event: Length depends on on-going weather conditions
  ➢ Restoration: 2 to 4 days, estimated

➢ **Total Shutoff Time = Event Period + Restoration Period**
Understanding PG&E's Electric System

PG&E's electric system is designed and built to deliver safe, reliable power to customers in Northern and Central California. PG&E produces or buys power from a mix of conventional and renewable generating sources, which travel through our electric transmission and distribution systems to reach our customers.

1. **PG&E-owned generators**
   PG&E's electricity is generated by many producers. The process starts with a diverse mix of generating sources. PG&E's generating plants make electricity by hydropower, gas-fired steam, and nuclear energy.

2. **Independent generators**
   PG&E acquires electricity from over 400 plants owned by independent power producers or qualified facilities, and sold to PG&E for resale to our customers.

3. **Out-of-state generators**
   We also buy electricity for our customers from sources outside of PG&E's area, which is transmitted across several states.

4. **Transmission system**
   Electricity is carried over the bulk electric grid, a “network” of high-voltage transmission lines that connect power plants to substations, and link our system to neighboring ones.

5. **Substations**
   Substations are critical junctions and switching points in the electric system, connecting the transmission system to the distribution one. Substations use transformers to lower the voltage of electricity.

6. **Distribution system**
   The distribution system links the transmission system and most customers. It includes: main or “primary” lines and lower voltage or “secondary” lines, which deliver electricity either overhead or underground; distribution transformers, which lower voltage to usage levels; and switching equipment to permit the lines to be connected together in various combinations and patterns.

7. **Individual services**
   Individual services or “drops” connect the distribution system to the customer — industrial, commercial, agricultural or residential.
Understanding: Complications

➢ What if Severe Weather returns during the Restoration Period?
➢ Shutoff includes Transmission and Distribution Lines
➢ What if you are in a Tier 1 area but the power lines serving your area come thru affected Tier 2 and Tier 3 areas?
Assessment

How does electricity support your operations?

➢ Lighting
➢ Cooling
➢ Computers
➢ Point of Sale
➢ Telephones
➢ Refrigeration
➢ Security Systems
➢ Gas Pumps
➢ ATM’s

➢ Community Impacts
➢ Traffic Lights
➢ Cell Sites
➢ Street Lights

➢ Other Thoughts?

How many of these will affect you?
Mitigation

What can you do to prevent or minimize impacts?

- Generators
- Batteries
- Solar, Wind/Water Turbine
- Moving or Adjusting Operations

What do you have now?
Preparedness

➢ Develop a Plan
➢ Test your Plan and Equipment
➢ Train your Staff
➢ Coordinate with Partners and Vendors
➢ Sign up for Alert Marin and Nixle

How many of these are you doing?
## Preparedness: Develop a Plan

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Assigned</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Public Education</strong></td>
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<tr>
<td></td>
<td>1A Develop Public Education Campaign</td>
<td>Tubbs/Welch/Pearce</td>
<td>06/15/19</td>
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<td>1B Conduct Public Education Campaign</td>
<td>Padilla/Chambers/Walsh/TFD</td>
<td>06/30/19</td>
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<td></td>
<td>1C Develop Media Release Templates for: Initial Warning, Event Start, Event On-going, Event End</td>
<td>Padilla/Chambers/Walsh/TFD</td>
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<td><strong>Staff Education</strong></td>
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<td>2A Develop Staff Awareness Plan *</td>
<td>Peterson / TFD</td>
<td>06/15/19</td>
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<td></td>
<td>2B Conduct /Disseminate Staff Awareness Plan</td>
<td>M. Barnes</td>
<td>06/30/19</td>
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<td>2C Develop Continuity of Operations Plan</td>
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<td>2D Train Staff on continuity of Operations Plan</td>
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<td>3</td>
<td><strong>Resource Sites</strong></td>
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<td>3A Develop Resource Sites Description *</td>
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<td>3B Identify Potential Resource Sites *</td>
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<td>3C Identify Resource Site staffing *</td>
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<td>3D Identify/Acquire Resource Site resources *</td>
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<td><strong>Plans</strong></td>
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<td>4A Develop Security/Safety Plan for affected neighborhoods *</td>
<td>Fraass + MCSO / Piombo / TFD</td>
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<td>4B Develop Public Warning Plan and Alternatives *</td>
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<td>4C Develop AFN Assessment and Response Plan *</td>
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<td>4D Develop Transportation Plan and Identify Resources *</td>
<td>Local LE + DPW</td>
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<td><strong>City / District Preparedness</strong></td>
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<td>5A Conduct City Generator Tests</td>
<td>Sausalito DPW/Mills / TFD</td>
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<td>5B Conduct District Generator Tests</td>
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<td>5C Verify City Refueling Process for Generators *</td>
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<td>5D Verify District Refueling Process for Generators *</td>
<td>Pasquale / TFD</td>
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<td>5E Verify City Gas Pump Power needs</td>
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<td>5F Verify District Gas Pump Power needs</td>
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<td>5G Identify Sources for Portable Generators/Contracts</td>
<td>Pasquale / TFD</td>
<td>06/30/19</td>
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<td>5H Review/Update City Facility Prep – Food, Water, etc.</td>
<td>Fraass / Sigmund / TFD</td>
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<td>5I Review/Update District Facility Prep – Food, Water, etc. *</td>
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<td>5J Develop EOC Action Plan *</td>
<td>McKinley / TFD</td>
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<td><strong>Operational Area Coordination</strong></td>
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<td>6A Marin OES for an Op Area Meeting (05/09/19 1000-1200)</td>
<td>M. Barnes</td>
<td>06/30/19</td>
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<td>6B Coordinate JIC/JIS with Op Area</td>
<td>M. Barnes</td>
<td>06/30/19</td>
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<td>7</td>
<td><strong>Southern Marin Area Coordination</strong></td>
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<td>7A Identify Area Partners</td>
<td>Tubbs/Welch/Pearce</td>
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<td>7B Conduct Area Workshop</td>
<td>Jeffries/Tubbs/Welch/Pearce</td>
<td>06/24/19</td>
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<td>8</td>
<td><strong>Public Safety Power Shutoff Playbook</strong></td>
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<td>8A Develop Draft *</td>
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<td>8B Approved Final Version *</td>
<td>Tubbs / Welch / Pearce</td>
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Preparedness: Develop a Plan

➢ Playbook Example
➢ Explain: Describe the threat and expected impacts
➢ Develop your Plays: #1 – Notified, #2 – Event Start, #3 – Restoration
➢ Contact Information: Public Safety, Vendors, Partners, Public Warning
➢ Staff Education Plan
➢ Customer/Client Education Plan
➢ Resources: Generators, Other Power, Transportation

Play #1: Initial Notification thru 1 hour prior to event
Play #2: Event -1 to Event +12
Play #3: E + 12 to E + 24
Play #4: E + 24 to E + 48
Play #5: E + 48 to E + 96
Play #6: E + 96 plus
Play #7: Notification of Restoration thru Restoration
Play #8: Post Restoration
Preparedness: Test your Plan and Equipment

- Start simple
  - Sit down with your staff and walk thru your plan, ask for feedback
  - Make adjustments
  - Walk thru it again, until the bugs are worked out
  - How long will batteries and UPS supplies work? Try it!
  - Don’t assume, test it!
- If you have generators, how long can you run on a tank of fuel?
  - Where are you getting additional fuel?
  - If installing generators, consult with an electrician
- If you think you have it all solved, try running your operations for a couple of hours with the electricity shutoff.
- As you find issues, revise your plan
Preparedness: Coordinate with Partners and Vendors

- Network with similar businesses
  - How can you support each other?
- Are their opportunities with your neighbors?
- How will this affect your vendor relationships?
- Timing and frequency of deliveries
- Work these decisions into your plan
Preparedness:
Sign up for Alert Marin and Nixle

- **Alert Marin:**
  - [https://member.everbridge.net/index/453003085612554#/signup](https://member.everbridge.net/index/453003085612554#/signup)
  - Call, Text, E-Mail and a Smart phone application to receive alerts
  - Landline numbers are already included
  - Cell, VOIP, Text and Email require free registration

- **Nixle:**
  - [https://local.nixle.com/sausalito-police-department/](https://local.nixle.com/sausalito-police-department/) Or
  - Select agencies you want to send you alerts
  - Free registration, but you must register
Next Steps

➢ Get AMP’d
➢ Assessment
➢ Mitigation
➢ Preparedness

➢ Email group for attendees with updates

➢ Other ideas?
Closing Comments

THANK YOU FOR JOINING US