10-22-2022 Public Safety Power Shutoff (PSPS) Event

AFTER ACTION REPORT

Emergency Preparedness and Response

Date Published: 3/17/2023

Internal

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Introduction

The Public Safety Power Shut Off (PSPS) program includes activities supporting information gathering, decision making, and customer outreach processes when Pacific Gas and Electric (PG&E) considers proactively de energizing portions of the PG&E electric system in the interest of public safety. A PSPS Event occurs when a combination of winds and location specific factors are forecast to present a statistically high likelihood of damage or disruption to PG&E's above ground power lines, suggesting a heightened risk of a catastrophic wildfire, therefore line de-energization may be necessary.

Internal

10/22/2022 PSPS Event Incident Overview

Incident Overview

On October 16, PG&E's Meteorology Team identified a potential fire weather event in weather forecast models and notified the acting Emergency Operations Center (EOC) Commander. At 1300, on October 19, 2022, PG&E activated it's EOC for a potential PSPS and began notifying state and local Public Safety Partners. On Thursday, October 20, and Friday, October 21, based on updated meteorological forecasts, PG&E further refined the PSPS scope by notifying customers in the areas anticipated to be impacted, readied the grid to mitigate the effects of the PSPS on our customers, and prepared Community Resource Centers (CRCs). PG&E closely monitored weather conditions across 16 Time Places (TPs) that were in scope for the duration of the event, as shown in Figure 1, until ultimately canceling the de-energization of all areas in scope on Monday, October 24 as the weather conditions improved. Note no ignitions were identified for the duration of the weather event within the 16 TPs in scope.

The EOC deactivated on October 24, 2022, at 14:00 for this event.

Multiple factors led to the decision not to move forward with the de-energization of any customers. The event was forecast to be hovering around PG&E's PSPS thresholds for most of the activation period. As the event approached, models showed a slight downward trend in strength around the T-24-hour mark. This was then confirmed as PG&E's meteorologists monitored real-time conditions. Peak winds also did not materialize at the same time as the driest air and relative humidity values in real-time. Due to a combination of these factors, PG&E decided not to de-energize any of our time places.

📅 ACTIVATION DATES

10/19/2022 – 10/24/2022

🚩 LEVEL

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⚠️ THREAT/HAZARD

PSPS

👪 ACTIVATED EOC TEAMS

- Delta (Day) Charlie (Night)
- Foxtrot (Day) Echo (Night)

👷 ACTIVATED EMERGENCY CENTERS

EOC, HAWC, ETEC, MTCC, ITCC

Central Valley REC
- Stockton
- Yosemite
- Fresno
- Kern

Bay Region REC
- Diablo
- Mission
- Peninsula
- East Bay

North Valley & Sierra REC
- North Valley
- Sacramento
- Sierra

South Bay & Central Coast OEC
- De Anza
- San Jose
- Los Padres
- South
  North Coast REC

Incident Analysis

This After-Action Report (AAR) outlines some of the response strengths and identifies areas of the response needing improvement. Areas needing improvement have corrective actions identified that will be implemented through the Corrective Action Program (CAP).

The following are strengths that can be used as best practices in future events:

EOC STRENGTHS

- Precision used in selecting Time-Places was impressive and helpful to minimize customer outages.
- Technology Issues were quickly identified and resolved.
- Positive Team Morale in face of this event.
- Meteorology reviewed live outage conditions during the Confirm Cancel Delay meetings, using a web product that was used during the 2019 PSPS season.
- Electronic 214 was easy to use and much better than filling out and sending attached word document to Documentation Unit.
- Portal Publishing was smooth.
- IT Specialists were excellent.

The following are high level findings around areas needing improvement with more details depicted in the Improvement Plan section of this report:

EOC AREAS OF IMPROVEMENT
- PSPS Communication / Notification Process - newly interpreted communication notifications were not clear and did not consider implications.
- Meteorology process created challenges in EOC decision making.
- Staffing and Training gaps created challenges with new staff and with use of existing applications.
- System run time was time consuming. (Example: 20 min for Plan update and 20 min system running creating notification files.)

REC & OEC AREAS OF IMPROVEMENT

- In the OMT activation screen, there is no option for RECs to show they are in Communication Only status or to add comments.

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Conclusion

The PG&E service territory has been in extreme drought conditions with record low fuel moisture values for fall season of this year. The 10/22 PSPS event was strenuous and provided an opportunity to test PG&E's PSPS plans and protocols. From a PSPS technical perspective, the event enabled the company to continue to verify and test its PSPS Protocols and Guidance, and exercise and improve its continued practices of avoiding duplicate notifications, conducting meteorology check-ins, All-Clear Zone methodology, and other protocols.

This PSPS event presented challenges that are described in the Improvement Plan and the CPUC 10-day reports with the most common area of improvement being delayed communications and/or work processes that results in further delays of notifications or report creations. Improving the minor bottle necks will provide further stream-lined work processes for future events. The EOC's successful best practices were utilizing the virtual EOC tools to keep lines of communication constantly open and the flexibility of the team to continuously address and adapt to requests and changing event conditions.

Appendix A: Improvement Plan

The Improvement Plan is used by PG&E to identify training gaps, improve processes, and insert areas for improvements into new or current work streams utilizing the Correction Action Program (CAP). They are designed to be specific, measurable, actionable, and implemented according to deadlines. The completed CAPs will better prepare the company for the next emergency event and reduce overall risk.

Table A1: Improvement Plan

Category		Issue/Area of Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Customer Communication	1	Not Expected, Elevated, Watch and Warning terminology is confusing on the pge.com website and PSPS 7-day forecast email.	Need to move away from EOC Activation driving the status of the threat level – should be at the discretion of the EOC Commander.	EPR Response Meteorology	TBD ▇▇▇▇▇	3/20/2023	6/30/2023
External Partner Communication	2	Challenged with ability to report externally more outage data, by county and cumulative over life of the incident.	Evaluate and standardize all data to be being provided. Include all Functional Areas that share the data (Command Staff, Regional Vice Presidents, other) to gain alignment.	EPR Response	TBD	3/20/2023	6/30/2023
PSPS Process & Review; Training	3	Multiple issues arose specific to notifications and communications. Specifically: • Execution of more granular scoping over time slots made communication sequences particularly challenging, complicated, difficult to QC, and confusing. • Existing comms huddle dashboard configuration was overwhelmed by all the various communication sequences. • 2-Hr Cancellation caused issue with performing all clear and handicaps Meteorology's ability to make decisions. Playbooks have to be changed and are not ready resulting in Customer Communications not being ready.	Evaluate and align notification guidelines and processes with compliance requirements. Specially consider updating/developing: • Notification guidelines (T 72, T48, T24, T4) to align with compliance requirements. • Real time notification compliance tracker/scorecard that can be updated and reviewed during an activation.	PSPS PMO	▇▇▇▇▇	3/20/2023	4/30/2023

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Category		Issue/Area of Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
		• One of the 1-day watch sequences was delayed until around resulting in it being too close to the warning sequence. Decision was made to cancel 1-day watch sequence, which was a deviation from current processes					
Safety	6	Safety Incidents were not communicated down to field level resulting in lack of corrective safety actions being evaluated, developed, and implemented. if those activated and responding are not aware of these incidents for multiple days.	Safety Officer in EOC needs to communicate Safety Events to the field, including Regional Safety Directors and others in Safety Organization.	Safety	▓▓▓▓		COMPLETE
Training	8	The OMS/OMT website is extremely difficult to navigate. The processes needed to support outage restoration is not standardized or automated.	Standardize tools used for report production. Either increase number of people trained in these tools or provide training to those in roles using these tools.	EP&R Business Technology	▓▓▓▓ ▓▓▓▓	3/20/2023	6/30/2023
Customer Communication	9	The various shades of green and blue used to identify TPs in the Internal Sit Rep in Foundry made it difficult to determine differences in the data.	Evaluate Internal Situation Report format per Access Functional Needs and Federal 508 web content accessibility guidelines.	PSPS PMO Business Technology	▓▓▓▓▓ ▓▓▓▓	3/20/2023	6/30/23
Staffing & Training	10	Those producing documents in Planning need a list of what reports are expected and timing for such reports	Develop or train on the roadmap of what documents are due when in the PSPS internal reporting process	PSPS PMO	▓▓▓▓	4/1/2023	4/30/2023
Staffing & Training	11	Planning team could not get files fast enough to Emergency Web team, resulting in inability to meet compliance requirements for posting of information.	Develop process and/or train on roadmap of document creation and storage.	PSPS PMO	▓▓▓▓▓	4/1/2023	4/30/2023
Staffing & Training	13	Although there are multiple channels of communication (via teams), there are no guidelines to where information should be posted. Often, information gets lost or there is just too much information to read.	Develop and/or train on the roadmap of what communications are planned, scheduled, or required and where information is stored.	PSPS PMO	▓▓▓▓▓	4/1/2023	4/30/2023
Staffing & Training	14	Challenges in meeting 2-hr cancellation requirement from CPUC	Evaluate 2-hr cancellation requirement and update and/or provide training on the current process.	PSPS PMO	▓▓▓▓	4/1/2023	4/30/2023

Appendix B: Acronym List

Acronym	Meaning
AFN	Access and Functional Needs
ARCOS	Automated Roster Call Out System
CalOES	California Office of Emergency Services
CAP	Corrective Action Program
CERP	Company Emergency Response Plan
CRC	Community Resource Centers
CRESS	Corporate Real Estate Strategy & Services
DCC	Distribution Control Center
EDEC	Electric Distribution Emergency Center
EEI	Essential Elements of Information
EFS	Emergency Field Site
EP&R/SE	Emergency Preparedness & Response/Strategy & Execution
ETEC	Eclectic Transmission Emergency Center
ETOR	Estimated Time of Restoration
GCC	Grid Control Center
GIS	Geographic Information System
Gov Rel	Government Relations
HR	Human Resources
IAP	Incident Action Plan
ICS	Incident Command System
IMT	Incident Management Team
IT	Information Technology
LNO	Liaison Officer
LOG	Logistics
MA	Mutual Assistance
OEC	Operations Emergency Center
OIS	Outage Information System
OMT	Outage Management Tool
OP	Operational Period
OPS	Operations
PG&E	Pacific Gas and Electric
PMO	Project Management Office
PSPS	Public Safety Power Shutoff
QEW	Qualified Electrical Workers
REC	Regional Emergency Center
SitRep	Situation Report
SOPP	Storm Outage Prediction Project