



10-29-2023 PSPS Event

PSPS After-Action Report / Improvement Plan

Publication Date: 12202023

The After-Action Report/Improvement Plan (AAR/IP) outlines strengths, as well as areas identified for improvement. Recommendations are outlined for consideration for each area for improvement.

INCIDENT OVERVIEW

Event Start Date	October 26, 2023
Operational Periods	October 29, 2022, 18:00 to October 31, 2023, 16:00
Activation Levels	Emergency Operations Center (EOC) – The event started at Level 3 and then escalated to Level 2 Department Operations Center – Electric (DOC-E) – Level 2
Weather Conditions	A moderate Santa Ana wind event developed on October 29 and continued through October 31. The SDG&E Fire Potential Index (FPI) reached an “Elevated” rating for all inland districts and OC with a maximum numeric rating of 13, indicating the potential for wind-driven fire growth should an ignition occur. Live Fuel moisture levels were above average for this time of year, resulting in an elevated, but not critical, fire weather environment. As such, the National Weather Service issued a High Wind Warning for Inland OC (in effect from October 28 at 23:00 through October 30 at 22:00) and a Wind Advisory for coastal OC and the San Diego County Valleys and Mountains (in effect from 02:00 Monday through 20:00 Tuesday). There were no Red Flag Warnings in effect for the SDG&E service territory, and the Santa Ana Wildfire Threat Index had no rating.
Cascading Hazards	Elevated wildfire risk
Customer Impact	Event’s Potential Customer Meter Impacts: 1,109
De-Energized Communities	None
Customer Notifications	3,123 detailed customer notifications
Public Safety Partner Notifications	1,030 Public Safety partner communications and 7,000 total communications were made during this Public Safety Power Shutoff Event.
External Partner Resources	211, FACT, Salvation Army, Richard Health and Associates, and Deaf Link
Community Resource Centers	Activated: None
Devices De-energized	Distribution Circuits in Scope: 11 Distribution Circuits De-energized: 0

AFTER-ACTION REVIEW PROCESS

Following the EOC activation, the OFER Division facilitated two After-Action Review (AAR) de-brief sessions on 11/06/2023 for primary responders and stakeholders. Lessons learned and corresponding corrective actions received during this process were analyzed, prioritized, and assigned during Improvement Planning sessions conducted on 11/17/2023 in collaboration with the primary event responders and stakeholders. This AAR/IP Report is intended to share event findings with broader stakeholder groups.

EXECUTIVE SUMMARY OF CONTINUOUS QUALITY IMPROVEMENT

Strengths

The following areas are strengths demonstrated during the events.

1. Cross-functional teams collaborated and pivoted quickly to find creative solutions to challenges with the Emergency Notification System (ENS) and customer notification process and still met all CPUC regulatory requirements.
2. The Emergency Management Department fostered a learning environment and supportive culture for new EOC responders.
3. There was a high perception amongst Public Safety partners and the City of San Diego regarding SDG&E's Emergency preparedness and response.
4. Collaboration of the Marketing and Communications, Customer Branch Chief, and Customer Notifications team supported a proactive media response.
5. Risk Modeling (WiNGS OPS) responders were integrated into the EOC Operations call.
6. The Access and Functional Needs team instituted a new daily call coordination procedure to ensure AFN stakeholders are coordinated and informed.
7. The first use of the Partner Portal enhancements provided real-time information to our public safety partners.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Core Capability: Operational Coordination

- 1: Public safety partners from adjacent jurisdictions outside the PSPS scope expressed frustration receiving regulatory-required PSPS notifications.

Recommendation:

- a. Meet with the adjacent jurisdictions to explain the regulatory requirements and determine if there is a better way to conduct PSPS notifications.
- 2: Process and procedures for PSPS currently do not encompass scenarios without a Red Flag Warning or when FPI is rated a 13 or lower.

Recommendation:

- a. Establish a cross-functional team to develop a process for executing PSPS without a Red Flag Warning (RFW) or when FPI is rated a 13 or lower
- 3: EOC responders were uncertain about the process and procedures for responsibilities associated with “On Call” and “On Standby” status. Group leader’s authority to manage responders’ status and the criteria for and the decision-making process for EOC activation levels.

Recommendation:

- a. Document the procedures via an EOC Con Ops document, then provide new EOC responders training on updated EOC procedures and processes.
- 4: Some EOC responders were unclear regarding who should be attending EOC “policy room” vs. “general” calls.

Recommendation:

- a. Evaluate EOC processes for assigning responders to EOC policy and general calls. Document new procedures and train EOC responders on updates.

5: The fire coordination and safety teams provided numerous briefs between the EOC and DOC-E operational cadence.

Recommendation:

- a. Add the Fire Coordination and safety input to the Joint Operations Briefing and adjust all applicable documentation within the EOC and DOC-E procedures.

6: Fire Coordination responders currently report to the EOC Planning Section Chief, DOC-E staff, and the OIC on an as-needed basis, creating challenges with unity of command.

Recommendation:

- a. Recommend formalizing the Fire Coordination responder position within the DOC-E organizational structure and act as an advisory subject matter expert to the EOC/OIC.

7: It was unclear how to utilize the Risk Modeling subject matter experts best.

Recommendation:

- a. Document the risk modeling procedures and provide appropriate training on how to utilize the risk modeling function.

8: Prior to full EOC activation (72 hrs.+), executive unity of command (responders only receiving instructions from one supervisor) needs to be improved.

Recommendation:

- a. Update PSPS Con Ops to reflect the VP of Wildfire and Climate Science's role in the activation of PSPS protocol.

9: During the PSPS activation, Northeast discovered some broken cross-arms that needed immediate replacement outside the HFTD area. Initially, ERO mentioned that they would perform the work de-energized. However, the Working Foreman leading the crew suggested that they could safely perform the work energized so customers could stay in service. When this was announced on the DOC-E open line, ERO was informed that OIC approval was required for this decision. From ERO's perspective, the request to perform the work energized is a work methods-based decision, and their crews execute such work under elevated conditions in coordination with EDO all the time, as a standard practice.

Recommendation:

a: Identify and document the separation of responsibility between DOC-E and the OICs to allow the field resources to dictate means and methods as it pertains to job scope so long as it doesn't impact fire risk or violate ESPs.

Core Capability: Public Information & Warning

1: The address lookup tool on the website needs clarifying notes to resolve potential errors in pasting addresses encountered by customers proactively.

Recommendation:

a. Add a tooltip on the SDGE website alerting customers/users to select the auto-generated address when using the address look-up tool. Explore additional ways to improve the user experience using the address lookup tool.

2: Documentation depicting which electrical circuits fed Tribal lands infrastructure was inaccurate.

Recommendation:

a. Establish a quality assurance process to ensure tools depicting electrical circuits that feed Tribal lands and Casinos are accurate and up to date.

- 3: Network shortfalls in the data centers resulted in customer notifications not being sent via email.

Recommendation:

- a. Develop new technology solutions for processing and releasing customer notifications sent via email.
- b. Document and train applicable team members on short-term technology workarounds for processing and releasing customer notifications sent via email.

- 4: Discrepancies in how ENS and GIS count "Medical Baseline, Temperature Sensitive, and Life support" customers led to inconsistent portrayal of data.

Recommendation:

- a. Align GIS and notification systems, ensuring they use the same system flags for data consistency.

- 5: Customer confusion occurred due to a lack of alignment and coordinated timing of messages between SDG&E and telco providers.

Recommendation:

- a. Meet with the telecommunications partners to develop coordinated messaging to reduce customer confusion.

- 6: The notification team could not validate the number of successful notifications sent by each communication channel within the appropriate timeline.

Recommendation:

- a. Ensure the new technology solutions can validate the number of notifications sent by each form of communication (i.e., email, voice, and text message) compared to the contact information we have in the system for each impacted customer in real-time." So, for example - if 100 customers are impacted, and

we have email addresses for 90 of those customers, we should see 90 emails go out, which is included in the business requirements for the replacement system.

IMPROVEMENT PLAN

THIS IMPROVEMENT PLAN WAS CO-DEVELOPED BY INCIDENT STAKEHOLDERS AND SDG&E EMERGENCY MANAGEMENT FOLLOWING THE EVENT.

Continuous Improvement Opportunity	Capability Element	Recommended Mitigation Activities	Responsible Parties/Point-of-Contact(s)	Target Completion Date
Public safety partners from adjacent jurisdictions outside the PSPS scope expressed frustration receiving regulatory-required PSPS notifications.	Operational Coordination	Meet with the adjacent jurisdictions to explain the regulatory requirements and determine if there is a better way to conduct PSPS notifications.	Mona Freels	Q4-2024
Process and procedures for PSPS currently do not encompass scenarios without a Red Flag Warning or low FPI.		Establish a cross-functional team to develop a process for executing PSPS without a Red Flag Warning (RFW) or low FPI.	Mona Freels	Q4-2024

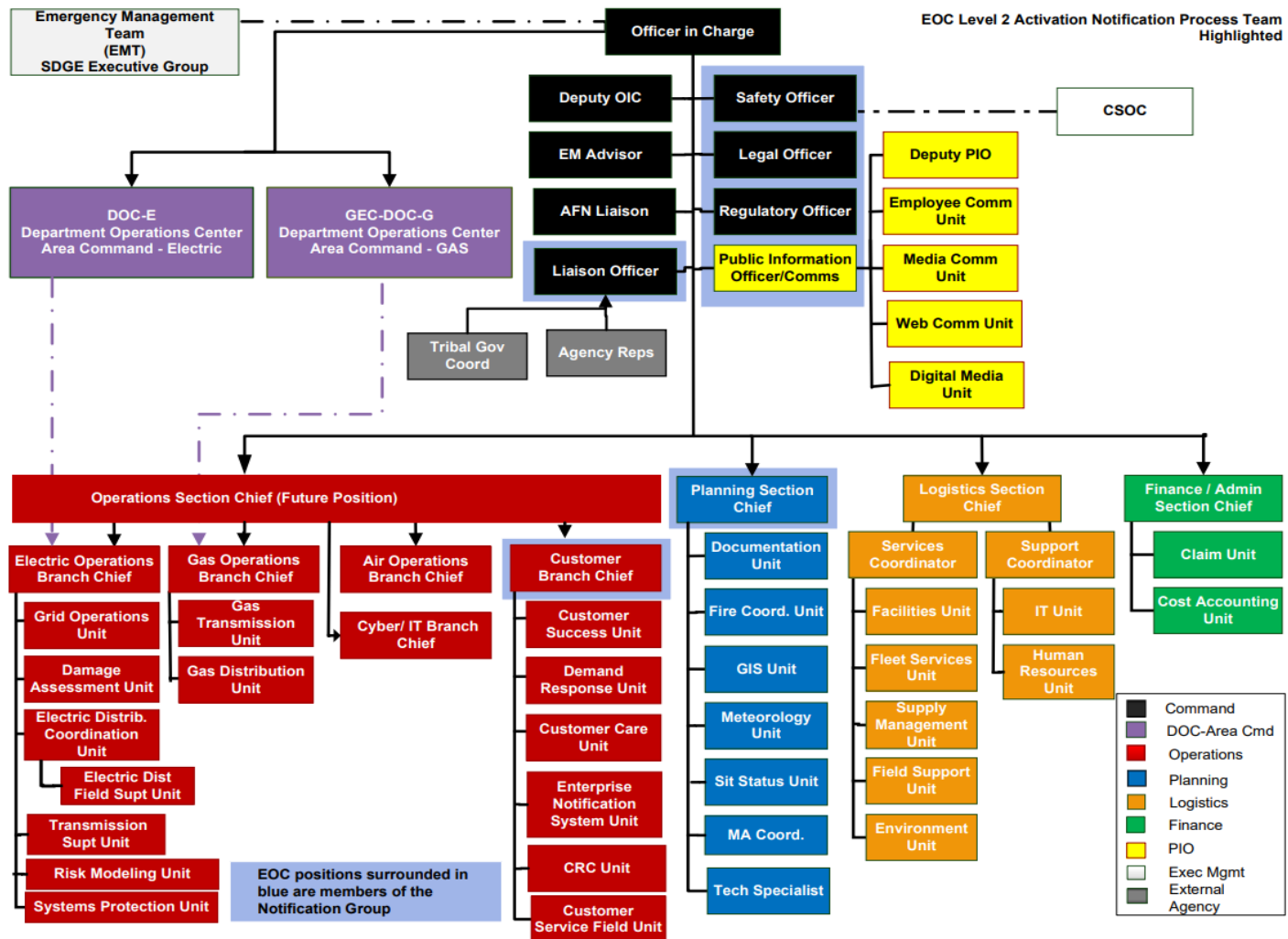
Continuous Improvement Opportunity	Capability Element	Recommended Mitigation Activities	Responsible Parties/Point-of-Contact(s)	Target Completion Date
EOC responders were uncertain about the process and procedures for responsibilities associated with “On Call” and “On Standby” status. Group leader’s authority to manage responders’ status and the criteria for and the decision-making process for EOC activation levels.	Operational Coordination	Document the procedures via an EOC Con Ops document, then provide new EOC responders training on updated EOC procedures and processes.	Jessica Kunert	Q4-2024
Some EOC responders were unclear regarding who should be attending EOC “policy room” vs. “general” calls.		Evaluate EOC processes for assigning responders to EOC policy and general calls. Document new procedures and train EOC responders on updates.	Mona Freels	Q4-2024
The fire coordination and safety teams provided numerous briefs between the EOC and DOC-E operational cadence.		Add the Fire Coordination and safety input to the Joint Operations Briefing and adjust all applicable documentation within the EOC and DOC-E procedures.	Mona Freels	Q4-2024

Continuous Improvement Opportunity	Capability Element	Recommended Mitigation Activities	Responsible Parties/Point-of-Contact(s)	Target Completion Date
Fire Coordination responders currently report to the EOC Planning Section Chief, DOC-E staff, and the OIC on an as-needed basis, creating challenges with unity of command.	Operational Coordination	Recommend formalizing the Fire Coordination responder position within the DOC-E organizational structure and act as an advisory subject matter expert to the EOC/OIC.	Mona Freels	Q4-2024
It was unclear how to utilize the Risk Modeling subject matter experts best.		Document the risk modeling procedures and provide appropriate training on how to utilize the risk modeling function.	Joaquin Sebastian Peral	Q4-2024
Prior to full EOC activation (72 hrs.+), executive unity of command (responders only receiving instructions from one supervisor) needs to be improved.		Update PSPS Con Ops to reflect the VP of Wildfire and Climate Science's role in the activation of PSPS protocol.	Mona Freels	Q4-2024
The address lookup tool on the website needs clarifying notes to resolve potential errors in pasting addresses encountered by customers proactively.		Add a tooltip on the SDGE website alerting customers/users to select the auto-generated address when using the address look-up tool. Explore additional ways to improve the user experience using the address lookup tool.	David Lawrence	Q4-2024

Continuous Improvement Opportunity	Capability Element	Recommended Mitigation Activities	Responsible Parties/Point-of-Contact(s)	Target Completion Date
Documentation depicting which electrical circuits fed Tribal lands infrastructure was inaccurate.	Public Information & Warning	Establish a quality assurance process to ensure tools depicting electrical circuits that feed Tribal lands and Casinos are accurate and up to date.	Tyson Swetek/ Vanessa Vandever	Q4-2024
Network shortfalls in the data centers resulted in customer notifications not being sent via email.		Develop new technology solutions for processing and releasing customer notifications sent via email.	Danielle Kyd/ Angela Samo	Q4-2024
Network shortfalls in the data centers resulted in customer notifications not being sent via email.		Document and train applicable team members on short-term technology workarounds for processing and releasing customer notifications sent via email.	Danielle Kyd/ Angela Samo	Q4-2024
Discrepancies in how ENS and GIS count "Medical Baseline, Temperature Sensitive, and Life support" customers led to inconsistent portrayal of data.		Align GIS and notification systems, ensuring they use the same system flags for data consistency.	Danielle Kyd/ Angela Samo	Q4-2024

Continuous Improvement Opportunity	Capability Element	Recommended Mitigation Activities	Responsible Parties/Point-of-Contact(s)	Target Completion Date
Customer confusion occurred due to a lack of alignment and coordinated timing of messages between SDG&E and telco providers.		Meet with the telecommunications partners to develop coordinated messaging to reduce customer confusion.	Bryce Tiernan	Q4-2024
The notification team could not validate the number of successful notifications sent by each communication channel within the appropriate timeline.		Ensure the new technology solutions can validate the number of notifications sent by each form of communication (i.e., email, voice, and text message) compared to the contact information we have in the system for each impacted customer in real-time." So, for example - if 100 customers are impacted, and we have email addresses for 90 of those customers, we should see 90 emails go out, which is included in the business requirements for the replacement system.	Danielle Kyd/ Angela Samo	Q4-2024

ICS Organizational Chart (207) – SDG&E EOC (San Diego, CA)



Graphic 1. ICS 207, Organizational Chart