



# **SDGE PSPS Notification Functional Exercise Event 05/24/2022**

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## **After-Action Report**

May 24 – 26 2022

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



# Exercise Overview

<b>Exercise Name</b>	Public Safety Power Shutoff (PSPS) Notification Functional Exercise (FE)
<b>Exercise Dates</b>	May 24-26, 2022
<b>Scope</b>	Virtual functional exercise, executed for two hours a day for three days via MS Teams©
<b>Purpose</b>	The exercise purpose was to test SDG&E's understanding of response notifications and reporting requirements for a PSPS event
<b>Focus Area(s)</b>	Response
<b>Capabilities</b>	<ul style="list-style-type: none"> <li>Operational Coordination</li> <li>Public Information and Warning</li> </ul>
<b>Objectives</b>	<ul style="list-style-type: none"> <li>Ensure all external notifications and communications occur throughout an Emergency Operations Center (EOC) activation for a PSPS event.</li> <li>Maintain operational coordination within the EOC and with key partners throughout a PSPS event.</li> <li>Complete all legal, regulatory, and compliance requirements throughout a PSPS event.</li> </ul>
<b>Threat or Hazard</b>	High Fire Threat District (HFTD) scenario with extreme Fire Potential Index's (FPI's)
<b>Scenario</b>	A Santa Ana wind event is expected Wednesday morning through Thursday afternoon. The National Weather Service (NWS) issued a Red Flag Warning for Inland Orange County (Zone 554) and the San Diego County Valleys and Mountains (Zones 250 & 258) to be in effect from 0800 Wednesday until 1200 Thursday. The Santa Ana Wildfire Threat Index (SAWTI) was rated as Marginal on both Wednesday and Thursday.
<b>Participants</b>	This exercise is focused on EOC Notification Group members. External partners participated as players through the notification process.
<b>Point of Contact</b>	<b>Amanda Wight</b> , Training and Exercise Specialist <a href="mailto:awight@sdgecontractor.com">awight@sdgecontractor.com</a> 630-715-3565

# Executive Summary

## Structure

SDG&E facilitated this functional exercise for two hours a day for three days, virtually, via MS Teams®. This functional exercise was designed to meet a California Public Utilities Commission (CPUC) exercise requirement and to evaluate the efficacy of shared systems with external partners, any barriers to their participation in the process, and correcting outdated contact information with those partners.

The operations-based exercise was designed to test and evaluate capabilities and functions while in a realistic, real-time environment. However, the movement of resources and personnel was largely simulated.

## Exercise Analysis

The After-Action Report (AAR) provides a detailed list of strengths and areas for improvement identified throughout the exercise and hotwash process. Each strength and area for improvement has been aligned to the most appropriate SDG&E capability.

The areas for improvement provide a statement of the improvement area, an analysis that provides sufficient detail as to why it was identified as an improvement area, recommendations, and an assigned a priority level (high, medium, low). An Improvement Plan (IP), outlined at the end of this document, assigns a point of contact for implementing the recommendation as well as a target due date for completion.

## Strengths

The following were strengths for the “Operational Coordination” and “Public Information and Warning” core capabilities.

**Strength 1:** The Notifications Teams met core exercise objectives despite real-world challenges.

The exercise included notifications to all K2 system (e.g., PSPS Application) partners to fully validate the system. The primary public safety partner notification system degraded during the exercise dates and, as a result, redundancy protocols within the Business Continuity Plan were successfully implemented. The Planning Section Chief utilized their team to communicate and operate effectively to meet core objectives despite real-world challenges outside of the exercise injects.

**Strength 2:** SDG&E took a progressive approach over the years prior by significantly increasing the scope and complexity of the exercise.

In 2021, SDG&E conducted a largely discussion-based tabletop exercise and a one-day functional exercise. Specific tasks within the Notification Group were generally out of scope due to the length of those exercises. This year's notification functional exercise significantly increased in scope and complexity. This multi-day exercise included three major phases in the notification process: (day one) 72 hours prior to the weather window arrival, (day two) the de-energization phase, (day three) and the re-energization phase. This approach facilitated more opportunities for players to exercise the capabilities, plans, systems, and processes, and the evaluators more opportunities to assess SDG&E's readiness across three days.

**Strength 3:** Effectively tested new EOC responders on position responsibilities to address the annual 40% attrition rate.

Over the three days of exercises, 62 SDG&E EOC responders participated, with many completing more than one shift. This exercise served as a strong simulation for new EOC responders of the PSPS process and allowed them to act in lead roles with access to experienced mentors across the three core notification phases. The exercise environment was also more conducive to validating processes and existing training as players observed both in-person and via MS Teams. The new members who attended the exercise will participate in future PSPS activations.

**Strength 4:** The functional exercise successfully considered a challenging scenario and put adequate stress on SDG&E's emergency management response.

SDG&E successfully exercised a multi-functional, complex set of notification processes and procedures in a realistic environment using our real-world channels of decision-making, knowledge transfer, implementation, and communication that would be used in an actual PSPS event. The three-day functional exercise format adequately stressed SDG&E's emergency management preparedness by significantly increasing the scope and complexity. Whereas the 2021 tabletop exercise involved a scenario potentially impacting eight circuits, the 2022 scenario involved 134 potential devices (*i.e.*, circuits) in scope, 65,520 total customers impacted, and 3,693 total medical baseline customers impacted. The scope represents ten times the number of devices SDG&E de-energized during the most recent real-world PSPS event in November 2021 PSPS. SDG&E designed this challenging scenario to stress our systems, and if realized in a real-world event, it would make it one of the most significant PSPS responses.

**Strength 5:** Completed updates to the partner contact lists; identified access issues based on feedback from public safety partners.

By involving external partners in the notification exercise, it created an obligation to update contact information to ensure timely and complete situational awareness and scenario involvement. The collaboration also offered opportunity for those partners to test

their access to the collaborative systems SDG&E uses for public safety partner situational awareness. The access issues discovered were not a flaw in SDG&E's platforms but were found to be the partners' firewall restrictions.

## Areas for Improvement

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

**Area for Improvement 1:** Select K2\* application functions were unavailable for the exercise.

Analysis: The system-generated e-mail function within the K2 application was degraded and unavailable for the exercise. Executing the redundant protocols met exercise objectives but resulted in minor delays.

*\*K2 is an automated system to assist with communication to public safety partners during a PSPS event. This automated system assists with identifying the appropriate partners to notify based on jurisdiction and adjacency.*

**Recommendations:** Ensure Liaison and the Planning Section Chiefs have knowledge and training in the redundant systems and protocols. Coordinate with IT to ensure the most appropriate redundant system is being utilized and known K2 notification system issues are addressed. Deconflict or update all necessary process documentation includes information on redundant protocol actions or reference to where this information can be located.

Priority: High

**Area for Improvement 2:** Segments of the PSPS notifications process were not completed in sequence.

Analysis: The unit responsible for completing the first task in the notification sequence (*i.e.*, the IOU PSPS Notification Form to CalOES) experienced minor technical issues, which delayed task completion. While working through technical issues, other units completed their notification tasks outside of the sequence protocols. Exercise players observed over the first two days of exercise play those critical tasks continued out of sequence. On the third day of exercise play, an ad hoc authorization process was implemented which resolved the issue.

**Recommendations:** Codify into documentation and training the new PSPS authorization process to coordinate and regulate the flow of notification tasks. Increase section acknowledgment and tracking of notification tasks by implementing an alternative system in which each role is aware of the proper notification sequence and status of each task. Ensure training and exercises educate key units on the appropriate notification sequencing.

Priority: High

**Area for Improvement 3:** Limited sandbox environments create challenges in replicating realism of systems in a simulated environment.

Analysis: Multiple systems and dashboards utilized during the exercise are connected to real world, live data points such as weather or time stamps. Given the limited functionality of our systems to truly simulate in a “training” or “sandbox” environment, participants had to navigate real world data that did not match the exercise scenario. This was most apparent in developing scenario data that occurred prior to each day’s StartEx, for example, time stamps of simulated de-energizations showed when the exercise design team built the simulation but did not match the exercise scenario presented.

A Geographic Information System (GIS) application critical to notification processes, SPARC GIS, does not have a sandbox environment, which limits exercise simulation opportunities. However, hard copies of GIS were used to simulate their tasks.

**Recommendation: Identify opportunities for additional Emergency Operations Center support systems to develop training environments for applicable systems to achieve more realistic exercise play.**

Priority: Low

# Appendix A: Improvement Plan

This IP is developed specifically for SDG&E as a result of this exercise. Areas for improvement have been assigned corrective actions, points of contact, and expected completion dates.

Area for Improvement	Corrective Action	SDG&E Capability	Priority Level	Point of Contact	Start Date	Completion Date
Select K2 application functions were unavailable for the exercise	Ensure Liaison and the Planning Section Chiefs have knowledge and training in the redundant systems and protocols. Coordinate with IT to ensure the most appropriate redundant system is being utilized and known K2 notification system issues are addressed. Deconflict or update all necessary process documentation includes information on redundant protocol actions or reference to where this information can be located.	Operational Coordination	High	Emergency Services Department & IT Department (TBA)	Q3 2022	In Progress
Segments of the PSPS notifications process were not completed in sequence.	Codify into documentation and training the new PSPS authorization process to coordinate and regulate the flow of notification tasks. Increase section acknowledgment and tracking of notification tasks by implementing an alternative system in which each role is aware of the proper notification sequence and status of each task. Ensure training and exercises educate key units on the appropriate notification sequencing.	Operational Coordination	High	Training and Exercise Division & IT Department (TBA)	Q3 2022	In Progress
Limited sandbox environments narrowed exercise simulation opportunities for new EOC responders in training.	Identify opportunities for additional Emergency Operations Center support systems to develop training environments for applicable systems to achieve more realistic exercise play.	Operational Coordination, Public Information & Warning	Low	Training and Exercise Division & IT Department (TBA)	TBA, projected for Q1 2023	In Progress

## Appendix B: External Partners

The following table outlines the external partners that participated in this exercise.

Last Name	First Name	Agency / Organization
Arambulo	Amy	211 Orange County
Arellano	Yazmin	City of El Cajon
Asuncion	Virgil	Orange County Sheriff's Department
Aziz	Isaac	City of Aliso Viejo
Berner	Steve	Tri-City Medical Center
Blood	Mike	Coronado Fire
Bozir	Chris	Santa Fe Irrigation District
Brown	Clem	City of Del Mar
Brown	Matthew	Moulton Niguel Water District
Brunozzi	Dominic	Olivenhain Municipal Water District
Castaneda	Jesse	City of Carlsbad
Casteran	Isabel	Fallbrook Public Utility District
Cave	Duane	Regional Public Affairs
Champlin	Jennifer	Cox Communications
Christoph	Ann	South Laguna Community Garden Park
Clark	Robert	Rincon Band of Luiseno Indians



Last Name	First Name	Agency / Organization
Collins	Teresa	City of Escondido
Coughlin	Sean	Dudek
Cunningham	Brian	Rady Children's Hospital - San Diego
Davis	Thomas	Caltrans
Dishon	Steve	South Coast Water District
Drake	Kyle	Fallbrook Public Utility District
Ertzner	Christopher	CHP - Otay Mesa CVEF
Frederick	Bill	San Marcos Fire Div. Chief
Gennawey	Elaine	City of Laguna Niguel
George	Richard	San Diego Sheriff's Department
Glasco	Beth	Barona Band of Mission Indians
Gonzalez	Emilio	Jacumba Community Service District
Gorman Brown	Terry	City of Oceanside
Gumataotao	Tony	Board Member Indian Health Council Rincon
Gutierrez	Ricardo	County of San Diego EOC
Gutierrez	Robert	Rainbow MWD
Hayes	Dan	Sweetwater Authority
Heinze	Marvin	City of Coronado
Herrera	Al	Caltrans

Last Name	First Name	Agency / Organization
Humora	Greg	City of La Mesa
Jimenez	Corina	City of Encinitas Fire Department
Joes	Victoria	City of San Diego District 1 Joe LaCava
Johnson	Kristan	Heartland Fire Communications
Johnson	Ron	SMWD
Jones-Kirk	Marie	Carlsbad Fire
Khoury	Alia	City of San Diego
Knudsen	Rob	Assemblymember Brian Maienschein's Office
Kulis	Michael	County of San Diego
Leedham	Carmen	County of San Diego
Macias	Jessica	Coronado Police Department
Mc Nally	Sylvia	SDGE
McAndrews	Thomas	Pauma Band of Mission Indians
Meathe	Craig	AT&T Construction & Engineering
Miller	Jon	Ramona Municipal Water District
Moreno	Christian	Moulton Niguel Water District
O'Loughlin	Greg	South Laguna Civic Association
Ortiz	Mitzi	City of Aliso Viejo
Osborn	Vicki	Water Emergency Response Organization of Orange County -WEROC

Last Name	First Name	Agency / Organization
Osborne	John	AT&T
Overton	Josh	AT&T
Page	Crystal	San Diego County, BOS District 3
Panec	David	CA Dept of Water Resources
Patt	Jody	Escondido Police & Fire Communications Center
Peay	Mark	COX Communications Calif, LLC
Pedrazzi	Ed	Vallecitos Water District
PETERSEN	CHRISTY	Los Tules Mutual Water Company
Peterson	DeAnna	City of Escondido- Utilities
Pierce	Harrison	City of San Diego Office of Emergency Management
Pinto	Erica	Jamul Indian Village of California
Plyler	Steven	Rincon del Diablo MWD
Ponce	Cruz	California Office of Emergency Services
Randall	Joey	Olivenhain Municipal Water District
Ransweiler	Rob	El Cajon Police Department
Robinson	Phil	City of Laguna Niguel
Robinson	Rick	Oceanside Fire Department
Rogers	DeVerna	City of Santee
Saavedra	Elissia	Vallecitos Water District
Sanchez	Alexis	Heartland Fire Communications

Last Name	First Name	Agency / Organization
Scaramella	Michael	Rancho Santa Fe Patrol
Seabloom	Lynne	Oceanside Fire Department
Sisneros	Eli	VA San Diego Health Care System
Smallwood	Syndi	Jamul Indian Village of California
Smith	Don	Vista Irrigation District
Spielberger	Jeff	Cox Communications
Stigall	Lindsey	City of San Juan Capistrano
Swaney	Steve	Heartland Fire & Rescue
Tang	Jay	Verizon Network Performance Team
Teran	Ray	Viejas Tribal Government
Thatcher	Pete	AT&T DEG Wireline
Tilton	Gary	Rady Children's Hospital - San Diego
Toman	Tom	City of San Juan Capistrano
Toth	Dean	Vallecitos Water District
Truesdale	Robert	Valley Center Municipal Water District
Tse	Simon	Caltrans
Turnbull	Susy	City of Poway
Urreola	Stacy	Naval Base Coronado Emergency Management
Valencia	Karen	Cal OES
Weigel	Mike	City Of Poway

Last Name	First Name	Agency / Organization
Wiese	Lisha	Palomar Health
Wiley	Will	City Of Poway
Wisdom	Chris	AT&T CNIO/ DEG
Worden	D Dwight	City of Del Mar
	TMC	Caltrans
	Staff Duty Officer	San Diego County OES