

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking to Examine
Electric Utility De-Energization of Power
Lines in Dangerous Conditions.

Rulemaking 18-12-005

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) PUBLIC SAFETY
POWER SHUTOFF POST-EVENT REPORT FOR JULY 11, 2023
DE-ENERGIZATION EVENT**

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Dated: July 27, 2023

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In compliance with California Public Utilities Commission Public Safety Power Shutoff (PSPS) Order Instituting Rulemaking Phase 1 Decision (D.) 19-05-042, Phase 2 D.20-05-051, Phase 3 D.21-06-034 and PSPS Order Instituting Investigation D.21-06-014, Southern California Edison Company (SCE) hereby submits its PSPS Post-Event Report for the July 11, 2023 de-energization event (Appendix A hereto). Pursuant to the October 14, 2021 email ruling of ALJ Valerie Kao, SCE hereby provides the following link to access and download the PSPS Post-Event Report and attachments: on.sce.com/PSPSposteventreports.

Respectfully submitted,

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/s/ Elena Kilberg

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July 27, 2023

Appendix A

SCE's 7.11.2023 PSPS Post-Event Report



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July 27, 2023

Leslie Palmer, Director
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SUBJECT: SCE PSPS Post Event Report – July 9, 2023, to July 13, 2023

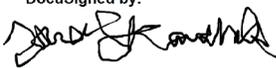
Dear Director Palmer:

As required by Resolution ESRB-8 and in accordance with Ordering Paragraph 1 of California Public Utilities Commission (CPUC) Decision (D.) 19-05-042, Southern California Edison Company (SCE) respectfully submits a compliance report for the de-energization event initiated on July 9 and concluded on July 13.

This report has been verified by an SCE officer in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

If you have any questions, please do not hesitate to call.

Sincerely,

DocuSigned by:

F6F6EFD6173452...
/s/ Tara Kaushik

Tara Kaushik
Managing Director, Regulatory Relations

cc: ESRB_CompplianceFilings@cpuc.ca.gov

**Southern California Edison
Public Safety Power Shutoff (PSPS) Post-Event Report
July 11, 2023**

**Filed with: The California Public Utilities Commission
Submitted to: Director of the Safety and Enforcement Division
Dated: July 27, 2023**

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Introduction

SCE submits this post-event report to address the de-energization event that started on July 9, 2023 at 12:00 pm and ended on July 13, 2023 at 8:23 am in Los Angeles County, and to demonstrate its compliance with California Public Utilities Commission’s (CPUC or Commission) PSPS guidelines including Resolution ESRB-8, PSPS Order Instituting Rulemaking (OIR) Phase 1 (Decision (D.) 19-05-042), Phase 2 (D.20-05-051), Phase 3 (D.21-06-034) and PSPS Order Instituting Investigation (OII) (D.21-06-014).¹ Five customers were de-energized during this event. This report explains SCE’s decision to call, sustain, and conclude the de-energization event, and provides detailed information to facilitate the Commission’s evaluation of SCE’s compliance with applicable PSPS guidelines.

SCE appreciates that proactive de-energizations pose significant challenges and hardships for our customers and the public safety partners that provide vital services to the affected communities. SCE’s decision to activate its PSPS protocol is based on careful consideration and weighing of multiple factors, including forecasted weather, fuel conditions, infrastructure vulnerabilities, and potential impacts of PSPS on public safety partners and the communities we serve.

SCE remains committed to continuously improving its PSPS processes and welcomes input from its customers, public safety partners, community representatives, and local governments on ways we can work together to minimize the impact of PSPS events on all stakeholders.

¹ This PSPS post-event report is based on the best information and data available as of the filing deadline for the report. SCE continues to gather, analyze, and validate some of the underlying data, and will supplement this report with updated information, as needed, in its annual post-season report. See D.21-06-014, Ordering Paragraph 66, p. 305 (directing SCE to “provide aggregate data . . . in an annual report, including aggregate data that may not have been available at the time the utility filed the 10-day post-event report”).

Section 1. Executive Summary

1. Brief description of the PSPS event starting from the time when the utility’s Emergency Operation Center is activated until service to all customers have been restored.

On July 9th, SCE’s meteorologists identified the potential for dangerous fire weather conditions due to a strong ridge of high pressure and a warmer, dry airmass accompanied by locally breezy onshore winds from the southwest across the Southern California Mountain areas and deserts. The dry air and breezy winds would create localized areas of elevated fire weather conditions across the Los Angeles County Mountains for the period of concern starting on July 9, 2023, through July 13, 2023, in portions of Los Angeles County. Given this forecast, SCE’s meteorology and fire science experts consulted the Geographic Area Coordination Center (GACC)² for forecast alignment to evaluate potential fire weather impacts. During this consultation, the GACC indicated agreement with SCE’s forecast of elevated fire weather for Los Angeles County.

In response to this forecasted fire weather, SCE activated its dedicated PSPS Incident Management Team (IMT) on July 9, 2023, at 12:00 pm to manage this event and began sending advance notifications of potential PSPS to Public Safety Partners, Critical Facilities and Infrastructure customers, and other customers in scope. Ultimately, SCE de-energized five commercial/industrial customers in Los Angeles County on July 11th during the Period of Concern based on observed fire weather conditions. This PSPS event concluded on July 13th at 8:23 am when all de-energized customers were restored.

2. A table including the maximum number of customers notified and actually de-energized; number of counties de-energized; number of tribes de-energized; number of Medical Baseline customers de-energized; number of transmission and distribution circuits de-energized; damage/hazard count; number of critical facilities and infrastructure de-energized.

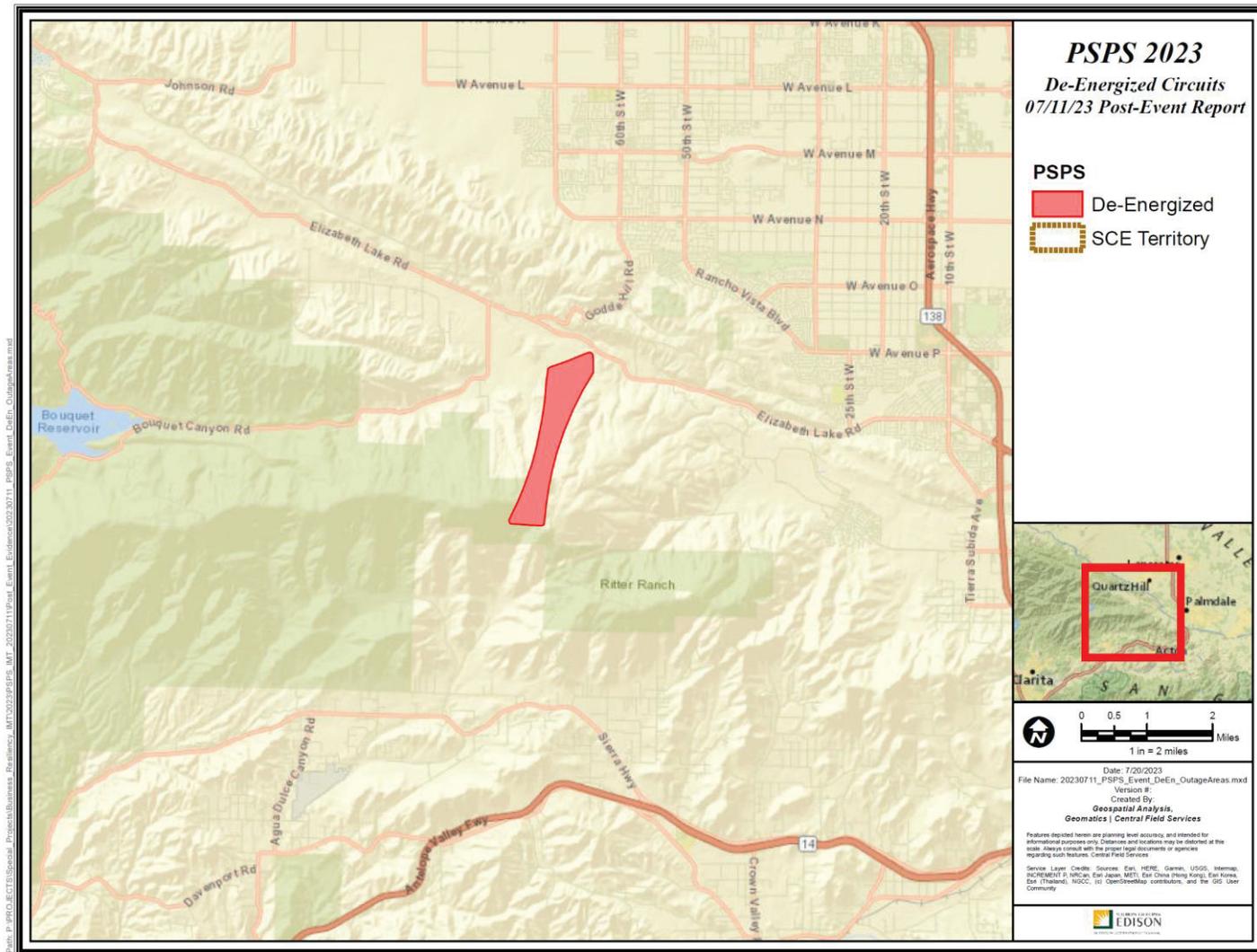
Table 1: PSPS Event Summary³

PSPS Event Summary										
Total Customers			De-energized				Number of Circuits			Damage/Hazard Count
PSPS Notified	De-energized	Cancelled	MBL Customers	Number of Counties	Number of Tribes	Critical Facilities and Infrastructure	Transmission De-energized	Distribution Circuits in Scope	Distribution Circuits De-energized	
5	5	N/A	N/A	1	N/A	2	N/A	1	1	N/A

² The GACC is the physical location of an interagency, regional operation center for the effective coordination, mobilization, and demobilization of federal state and local wildland fire agencies through logistical coordination of resources throughout the geographic area, as well as with other geographic areas.

³ PSPS Notified” metric in Table 1 reflects the total number of unique customers that were sent a pre-event notification of potential de-energization during the PSPS event. “Cancelled” metric in Table 1 reflects the total number of unique customers that were sent a pre-event notification of potential de-energization, but not ultimately de-energized (regardless of whether those customers received a cancellation notice).

3. A PDF map depicting the de-energized area(s)



Section 2. Decision-Making Process

1. A table showing factors considered in the decision to shut off power for each circuit de-energized, including sustained and gust wind speeds, temperature, humidity, and moisture in the vicinity of the de-energized circuits.⁴

Table 2: Factors Considered in Decision to De-Energize

Factors Considered in De-Energization									
Circuit De-energized	Sustained Wind Speed			Gust Wind Speed			Fire Potential Index (FPI)		Firecast Output Ratio
	Activation Threshold	De-energization Threshold	Actual	Activation Threshold	De-energization Threshold	Actual	Threshold	Actual	
HUCKLEBERRY_3	31	31	31.32	46	46	36.9	12	12.85	2374.0694

2. Decision criteria and detailed thresholds leading to de-energization including the latest forecasted weather parameters versus actual weather. Also include a PSPS decision-making diagram(s)/flowchart(s) or equivalent along with narrative description.

SCE uses preset thresholds for dangerous wind conditions that create increased fire potential (including wind speeds, humidity, fuel moisture levels and other factors as the basis for PSPS decision-making, as described in SCE’s technical paper).⁵ De-energization thresholds are determined separately for each circuit to prioritize circuits for de-energization based on the specific risks of the event. This is particularly important for large events where many circuits must be evaluated simultaneously.

These thresholds are set for each of the circuits in SCE-designated high fire risk areas (HFRA) and are continuously reviewed to calibrate the risk of significant events against the potential for harm to customers from the loss of power.

All circuits have an activation threshold, defined by the Fire Potential Index (FPI) and the wind speed at which they are considered at risk. Activation thresholds are computed for each circuit for the season.

FPI is calculated using the following inputs:

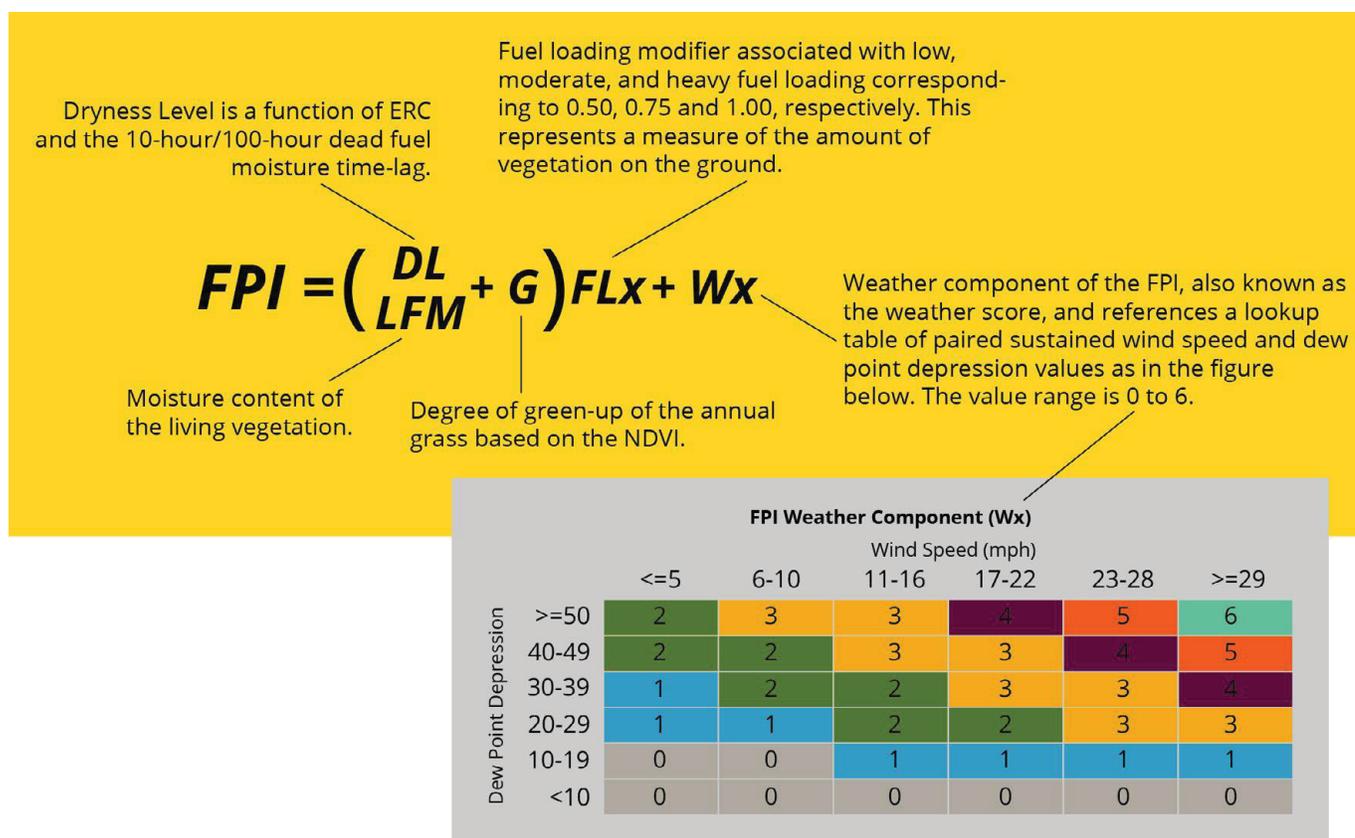
- Wind speed—Sustained wind velocity at 6 meters above ground level.

⁴SCE calculates a Fire Potential Index (FPI) rating for each circuit in scope for de-energization. FPI estimates the likelihood of a spark turning into a major wildfire. FPI uses a whole-number scale with a range from 1 to 17; categorized as normal (1-11), elevated (12-14) and extreme (15+). FPI inputs include wind speed, dewpoint depression (which is a measure of how dry the air is), and various fuel moisture parameters, as detailed in Section 2-2 of this report. Other variables, such as temperature and humidity, while potential contributors to fire spread, are not direct inputs into the FPI calculation. Temperature and humidity are accounted for indirectly through the inclusion of dewpoint depression in the FPI rating. Because temperature, humidity, and moisture are not distinct “factors considered” in SCE’s de-energization decisions, they are not reported separately, but are reflected in the actual FPI rating for each de-energized circuit, as shown in Table 2.

⁵ SCE’s detailed technical paper, Quantitative and Qualitative Factors for PSPS Decision-Making, can be found at <https://energized.edison.com/psps-decision-making> and in Attachment B of this report.

- Dew point depression—The dryness of the air as represented by the difference between air temperature and dew point temperature at 2 meters above ground level.
- Energy release component (ERC) — “The available energy (BTU) per unit area (square foot) within the flaming front at the head of a fire ... reflects the contribution of all live and dead fuels to potential fire intensity.”⁶
- 10-hour dead fuel moisture—A measure of the amount of moisture in ¼-inch diameter dead fuels, such as small twigs and sticks.
- 100-hour dead fuel moisture—A measure of the amount of moisture in 1- to 3-inch diameter dead fuels, i.e., dead, woody material such as small branches.
- Live fuel moisture—A measure of the amount of moisture in living vegetation.
- Normalized Difference Vegetation Index (NDVI)— “... used to quantify vegetation greenness and is useful in understanding vegetation density and assessing changes in plant health.”⁷

Visual 1. Fire Potential Index Equation⁸



⁶U.S. Department of Agriculture. n.d. “Energy Release Component (ERC) Fact Sheet.” Forest Service. Accessed April 14, 2021. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5339121.pdf.

⁷ U.S. Department of the Interior. n.d. Landsat Normalized Difference Vegetation Index. Accessed April 14, 2021. https://www.usgs.gov/core-science-systems/nli/landsat/landsat-normalized-difference-vegetation-index?qt-science_support_page_related_con=0#qt-science_support_page_related_con.

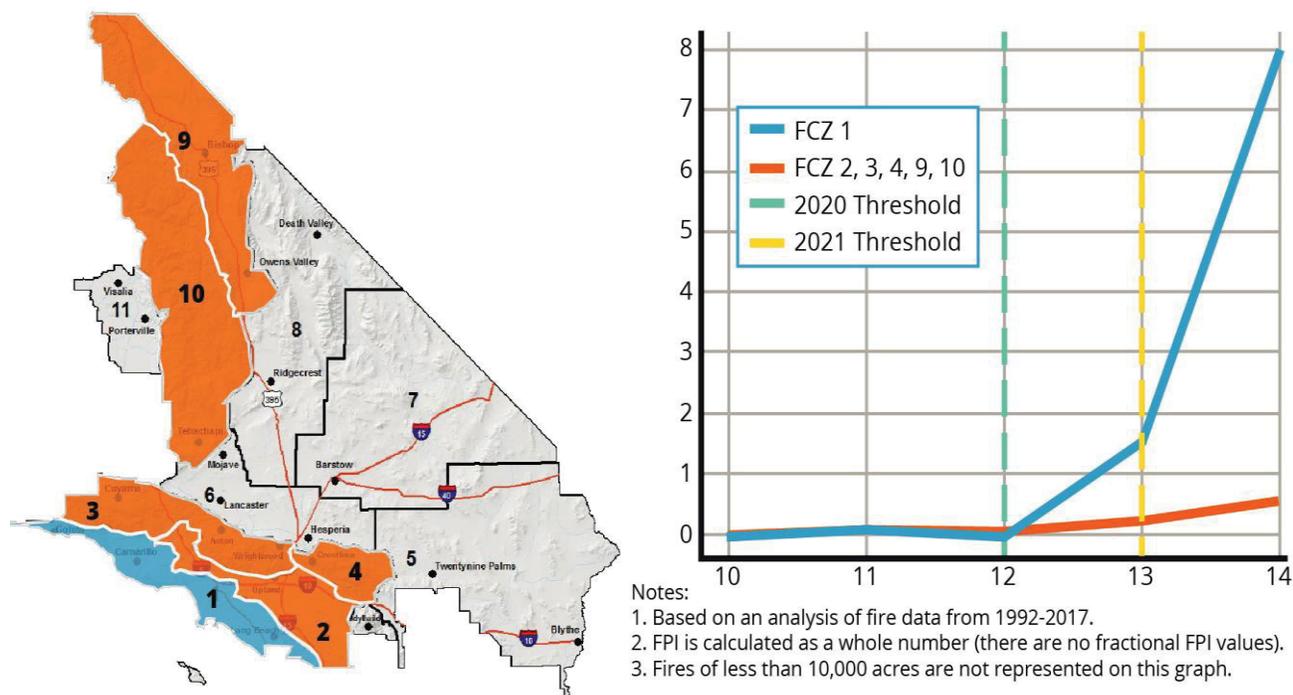
⁸ Fire Potential Index adapted from San Diego Gas & Electric (https://www.sdge.com/sites/default/files/regulatory/SDGE_Fire_Prevention_Plan_2018.pdf, pages 25-27) and modified to serve SCE’s needs, including the insertion of the Live Fuel Moisture variable.

Previously, SCE set the activation threshold at the FPI of 12. Starting on September 1, 2021, SCE has set the FPI at 13 for most areas and most events based on a risk analysis of historical fire data.⁹ The following details exceptions in which the FPI threshold will continue to be set at 12:

- Fire Climate Zone 1 (FCZ1) (Coastal region) — The threshold for FCZ1 is staying at 12 because probability calculations indicated a significantly higher ignition risk factor at an FPI threshold of 13 for this FCZ than for the other FCZs (2, 3, 4, 9, and 10).
- Geographic Area Coordination Center (GACC) preparedness level of 4 or 5 — The GACC coordinates multiple federal and state agencies to track and manage regional fire resources. It provides a daily fire preparedness level on a score of 1-5. A high score signals that there could be resource issues in responding to a fire.
- Circuits located in an active Fire Science Area of Concern (AOC) — AOCs are areas within FCZs that are at high risk for fire with significant community impact. This designation is based on factors that are common to FPI as well as egress, fire history, and fire consequence. Further details about AOCs can be found in SCE’s Wildfire Mitigation Plan.¹⁰

For this event on the Huckleberry Circuit, the FPI threshold was set at 13 for most of the circuit, with the exception of one segment in an active AOC that was set at 12. As such, as described above, the FPI threshold for this event was set at 12.

Visual 2. Probability of Wind-Driven Fires at 10,000 Acres at FPI 12 and 13¹¹



For each PSPS event, every circuit also has a de-energization threshold. De-energization thresholds are

⁹ Short, Karen C. 2017. Spatial wildfire occurrence data for the United States, 1992-2015 [FPA_FOD_20170508]. 4th Edition. Fort Collins, CO: Forest Service Research Data Archive <https://doi.org/10.2737/RDS-2013-0009.4> Supplemented with 2016-2017 ignition data supplied directly by CalFIRE via email.

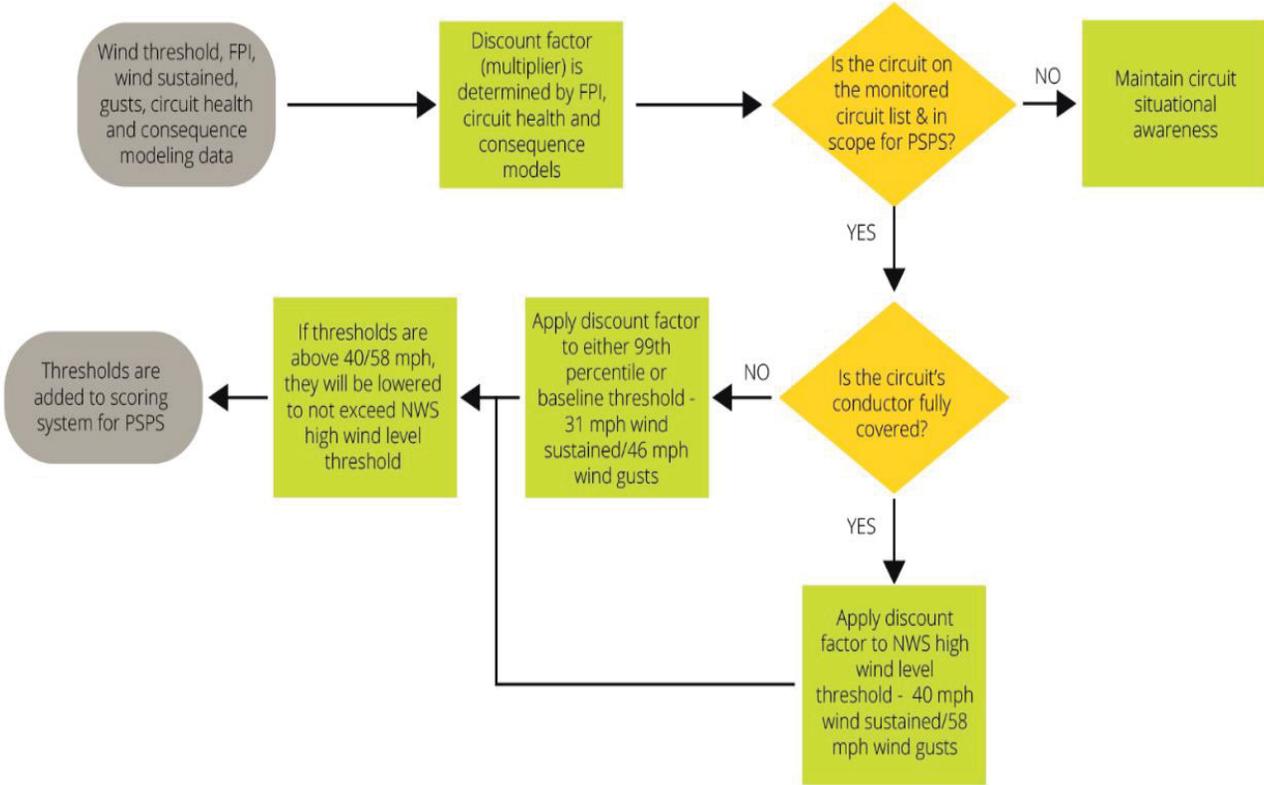
¹⁰ SCE’s 2022 Wildfire Mitigation Plan Update dated February 18, 2023.

¹¹ Based on back cast FPI calculation.

determined separately for each circuit to prioritize circuits for de-energization based on the specific risks of the event. This is particularly important for large events where many circuits must be evaluated simultaneously.

De-energization thresholds account for circuit health, including any issues identified through patrols, and are also informed by a consequence score for each specific high fire risk area. The consequence score estimates the impact of an ignition on communities. The higher the score, the greater the risk to a particular location from wildfires. SCE’s process for calculating de-energization thresholds is outlined below.

Visual 3. PSPS Decision-Making Flowchart/Diagram



If actual conditions suggest more risk, or in large-scale events when many circuits are under consideration for shutoffs, the de-energization thresholds may be lowered (discounted), meaning power on a circuit will be turned off at lower wind speeds. This step prioritizes the circuits that represent the highest risk to be evaluated for de-energization before circuits at lower risk. Conversely, de-energization thresholds are raised for segments or circuits that have had covered conductor installed. The de-energization threshold for segments with covered conductor is 40 mph sustained/58 mph gusts, which aligns with the NWS high wind warning level for windspeeds at which infrastructure damage may occur.

The thresholds for the circuits in scope for potential de-energization during this event were set as follows:

Table 3: Circuit Thresholds

Circuit Thresholds					
Circuit	FPI Threshold Rating	Wind Speed Activation Thresholds		De-Energization Thresholds	
		Sustained Wind	Gust Wind	Sustained Wind	Gust Wind
HUCKLEBERRY 3	12	31	46	31	46

Forecasted versus actual weather parameters for this event were as follows:

- Wind: Sustained winds of 28 to 34 mph with gusts of 35 to 45 mph were forecast for Los Angeles County during this event. Peak observed wind speeds in areas of concern were 33 mph sustained and 39 mph gusts during this event.
- Relative humidity: Relative humidity during this event was forecast to be between 5% and 15% across Los Angeles County concurrent with the strong winds. Actual observed relative humidity ranged from 5% to 15% during this event. As discussed in Section 2-1 above, relative humidity is one of many variables that inform SCE’s FPI ratings.

3. A thorough and detailed description of the quantitative and qualitative factors SCE considered in calling, sustaining, or curtailing each de-energization event including any fire risk or PSPS risk modeling results, and a specification of the factors that led to the conclusion of the de-energization event.

SCE’s PSPS decisions are based on quantitative analyses while accounting for qualitative factors such as societal and emergency management impacts. SCE utilizes proactive de-energization as a measure of last resort when all other alternatives to de-energization have been exhausted. The decision to de-energize customers during this PSPS event was based on considering and weighing the quantitative and qualitative factors detailed below:

- Consultation with the GACC regarding the potential for elevated fire weather conditions within the SCE service territory during the Period of Concern. The GACC agreed with SCE’s forecast of elevated fire weather potential for Los Angeles County.
- Ongoing assessments before the Period of Concern from SCE’s in-house meteorologists using high-resolution weather models to determine the potential scope of the PSPS event, as well as real time weather data from SCE weather stations and publicly available weather stations during the Period of Concern to inform actual de-energization decisions.
- Fire spread modeling to identify areas having the greatest potential for significant fire activity. Results of this modeling by SCE identified the potential for fire in the five thousand (5,000) to ten thousand (10,000)-acre range in the areas of concern during the Period of Concern.
- Observed weather parameters for this PSPS event, including wind speeds and FPI ratings for the circuits in scope relative to the preset thresholds for this event. De-energization thresholds were reached or exceeded for one circuit during this event as detailed in Table 2: Factors Considered in De-Energization in Section 2-1. See also Section 2-2 for additional details.

SCE considered the following factors when deciding to conclude this de-energization event:

- Weather modeling for the areas of concern. SCE’s meteorologists indicated elevated fire weather conditions would continue to abate below wind and FPI thresholds throughout the night on July 12 due to forecasted decreasing wind speeds and FPI.
 - Observed wind speeds and FPI ratings. Observed wind and FPI ratings for all areas no longer met de-energization threshold criteria as of 8:13 pm on July 12th.
4. **An explanation of how the utility determined that the benefit of de-energization outweighed potential public safety risks, and analysis of the risks of de-energization against not de-energizing. The utility must identify and quantify customer, resident, and the general public risks and harms from de-energization and clearly explain risk models, risk assessment processes, and how the power disruptions to customers, residents, and the general public is weighed against the benefits of a proactive de-energization.**

SCE assesses and compares potential public safety risks associated with proactive de-energization (PSPS risk) and simulated wildfire risk (PSPS benefit in avoiding a wildfire) for all circuits in scope for the Period of Concern, using its PSPS In-Event Risk Comparison Tool.¹² Inputs into this Tool include, among others, in-event weather, and wildfire simulation models, as well as circuit specific data. The results of the analysis are displayed in the Central Data Platform and used by Incident Commanders to inform de-energization decisions, in conjunction with other relevant quantitative and qualitative factors described in Section 2 of this report. Incident Commanders consider the output of the Tool to assess the risk versus the benefit of de-energization on a circuit-by circuit basis.

The comparative PSPS and wildfire risk estimates are based on the following circuit-specific criteria and information:

- **PSPS Risk:** Customers served, estimated population, and the relative ranking of the circuits in scope by the percentage of Access and Functional Needs (AFN) and Non-Residential Critical Infrastructure (NRCI) customers.
- **Wildfire Risk:** Wildfire simulations (using Technosylva FireCast¹³ modeling) for potential ignitions based on dynamic, in-event weather and wind conditions in proximity to the circuits in scope for de-energization. These conditions are used to determine the extent of an estimated fire footprint (or fire shed). Within that fire shed, the risk of a wildfire is calculated based on the number of structures, population, and acres potentially threatened within the impacted area.

This information is used to calculate potential Safety, Financial, and Reliability impacts (or attributes) of: (1) a wildfire and (2) a proactive de-energization event, as summarized in the table below:

¹² SCE will continue to refine the PSPS In-Event Risk Comparison Tool based on real-time experience, additional data, modeling enhancements, and ongoing benchmarking with other IOUs. Estimates and assumptions described herein are based on risk models reflecting current industry best practices (such as FireCast) and are subject to being updated as the modeling improves.

¹³ Technosylva is a suite of wildfire simulation models or tools. While relying on a similar underlying fire propagation engine, each model is designed to support a unique use case. FireCast is specifically designed to forecast ignition risk associated with electric utility assets over a 3-day horizon based on expected short-term weather conditions.

Risk Attribute	Wildfire Consequences	PSPS Consequences
Safety	SCE calculates the estimated number of fatalities and serious injuries based on a forecast of impacted population within the Technosylva wildfire consequence simulation. This number, in turn, is converted into the Safety index.	SCE leverages epidemiological studies and information drawn from past widespread power outage events including the 2003 Northeast Blackout, the 2011 Southwest Blackout, and the IOUs' 2019 PSPS post-event reports. ¹⁴ The resulting estimates of fatalities and serious injuries per customer minutes interrupted (CMI) are intended to approximate potential safety consequences due to the power outage, such as illnesses resulting from food spoilage or exacerbation of existing underlying health conditions. SCE enhanced the PSPS safety attribute through the application of a circuit-specific AFN/NRCI multiplier. This multiplier represents the relative ranking of each circuit based on the number of AFN and NRCI customers on the circuit.
Reliability	SCE assumes 24 hours without power per customer on each circuit in scope due to wildfire. This duration was used to maintain consistency with Technosylva 24-hour fire propagation simulation, as well as the PSPS impact duration.	SCE estimates the total customer minutes interrupted (CMI) due to proactive de-energization on a circuit. It is the product of the number of customers on a circuit and the total number of minutes of estimated interruption. SCE assumes 1,440 CMI per customer (24 hours x 60 minutes) to represent de-energization over a 24-hour period.
Financial	SCE calculates the financial impact of wildfire by assigning a dollar value to the buildings and acres within the fire shed potentially threatened by wildfire. For buildings, SCE uses a system average replacement value assumption. For acres, SCE uses assumed costs of suppression and restoration. ¹⁵	SCE conservatively assumes \$250 ¹⁶ per customer, per de-energization event to quantify potential financial losses for the purpose of comparing PSPS risk to wildfire risk. The figure represents potential customer losses, such as lost revenue/income, food spoilage, cost of alternative accommodations, and equipment/property damage. This value is

¹⁴ See, e.g., Anderson, G.B., Bell, M.B (2012). Lights Out: Impact of the August 2003 Power Outage on Mortality in New York, NY, *Epidemiology* 23(2) 189-193. doi: 10.1097/EDE.0b013e318245c61c.

¹⁵ Suppression costs are based on a five-year average of California's reported wildfire suppression costs from 2016-2020. Restoration costs are assumed to be \$1,227/acre based on research papers published by the Bureau of Land Management.

¹⁶ SCE utilizes \$250 per customer, per de-energization event to approximate potential financial losses on average, recognizing that some customers may experience no financial impact, while other customers' losses may exceed \$250. The \$250 value is a conservative assumption used for the limited purpose of estimating the potential financial consequences of PSPS as one of many inputs into SCE's PSPS In-Event Risk Comparison Tool. It is not an acknowledgment that any given customer has or will incur losses in this amount, and SCE reserves the right to argue otherwise in litigation and other claim resolution contexts, as well as in CPUC regulatory proceedings.

Risk Attribute	Wildfire Consequences	PSPS Consequences
		based on a Value of Lost Load (VoLL), which is a widely accepted industry methodology to estimate a customer’s willingness to accept compensation for service interruption. VoLL is dependent on many factors, including the type of customer, the duration of the outage, the time of year, the number of interruptions a customer has experienced. SCE’s VoLL estimate is consistent with academic and internal studies to estimate VoLL for a single-family residential customer for a 24-hour period.

SCE quantifies the resulting PSPS risks and wildfire risks using natural unit consequences for each risk type or attribute—structures impacted, acres burned, customer minutes interrupted, serious injuries and fatalities, etc. “Safety” risk is expressed as an index, “Reliability” risk is measured in terms of customer minutes interrupted (CMI), and “Financial” risk is measured in dollar amounts.

SCE then applies a Multi-Attribute Risk Score (MARS) framework to convert these natural unit consequences to unitless risk scores—one score for PSPS risks and one score for wildfire risks.¹⁷ These risk scores are compared to each other by dividing the wildfire risk score (*i.e.*, the potential benefit of PSPS) by the PSPS risk score (*i.e.*, the potential public harm of PSPS), yielding a benefit/risk ratio for each circuit in scope of the PSPS event. If the resulting ratio is equal to 1, the risks are equivalent. If the ratio is greater than one, the wildfire risk exceeds the PSPS risk (the higher the resulting number, the more the wildfire risk outweighs the PSPS risk). If the ratio is less than 1, the PSPS risk outweighs the wildfire risk.

The table below displays circuit-specific inputs—such as the number of customers on a circuit, AFN/NRCI multiplier, number of acres and buildings potentially threatened—which are used to calculate the PSPS and wildfire risk scores (shown in columns titled “PSPS Risk” and “Wildfire Risk”) and drive the final output of the Tool. These risk scores are then compared in the last column (highlighted in yellow) titled “FireCast Output Ratio,” which shows the ratios of wildfire risk (corresponding to potential benefit of PSPS) to PSPS risk (corresponding to potential public harm from PSPS) for each circuit in scope. All ratios in the “FireCast Output Ratio” column for are greater than 1, meaning that the wildfire risk exceeded PSPS risk for all circuits in scope. These results were

¹⁷ MARS is SCE’s version of Multi-Attribute Value Function (MAVF). The MAVF was developed as part of the Safety Model Assessment (S-MAP) proceeding and is used in the utilities’ 2018 Risk Assessment Mitigation Phase (RAMP) Report (I.18-11006, pp. 1-28) filings to compare risks and mitigation alternatives. SCE has improved its MARS framework since first developing it for the 2018 RAMP. SCE MARS 2.0 attributes, units, weights, ranges, and scales are shown below, and are further described in SCE’s 2022 RAMP report See A.21-05-13, Chapter 2 – Risk Model and RSE Methodology.

Attribute	Unit	Weight	Range	Scaling
Safety	Index	50%	0 – 100	Linear
Reliability	CMI	25%	0 – 2 billion	Linear
Financial	\$	25%	0 – 5 billion	Linear

presented to the Incident Commanders in advance of de-energization to inform PSPS decision-making.

Table 4: PSPS Risk vs. Benefit Comparison Tool (Continued in Attachment C)

PSPS Risk vs. Benefit Comparison Tool										
Circuit	All Customers	Population	AFN/NRCI Multiplier	24 Hour CMI (24 x 60)	Firecast Acres	Firecast Buildings	Firecast Population	PSPS Risk (24 hr Impact-PSPS Model)	Wildfire Risk (24hr Impact-PSPS Model)	Firecast Output Ratio
HUCKLEBERRY	179	537	1.15265303	1440	12121	899	1067	0.00003762975	0.089335625	2374.0694

For this de-energization event, the results of the PSPS Risk vs. Benefit Comparison Tool supported SCE’s decision to de-energize, indicating that the circuit in scope for potential de-energization during this event¹⁸ had a PSPS benefit/risk ratio greater than 1. Thus, the estimated benefit of PSPS outweighed the estimated risk of PSPS for this event.

5. Explanation of alternatives to de-energization and other wildfire mitigation measures in de-energized areas; PSPS last resort analysis.

SCE deploys a suite of wildfire mitigation measures aimed at reducing the probability of ignitions associated with electrical infrastructure in high fire risk areas without resorting to PSPS. These activities include grid hardening measures such as installation of covered conductor, repair or replacement of equipment on poles (e.g., crossarms, transformers), and installation of protective devices (e.g., fast acting fuses).¹⁹ In addition, SCE has implemented operational practices including enhanced inspections, vegetation management, and fire climate zone operating restrictions²⁰ in high fire risk areas. Certain protective measures such as fast curve settings and fire climate zone operating restrictions are applied to a majority of high fire risk circuits and are typically in effect for the duration of the fire season; others such as covered conductor are permanent and in place year-round. SCE’s PSPS windspeed thresholds account for circuits or isolatable circuit segments that are fully hardened with covered conductor, thereby potentially limiting the duration and number of customers affected by PSPS during fire weather events.²¹ However, during severe fire weather conditions (dry and windy), there is a heightened risk of ignitions primarily due to wind-driven foreign objects or airborne vegetation coming into contact with SCE’s equipment. Under these circumstances, the deployment of the above-described less disruptive measures may not sufficiently mitigate wildfire and public safety risk, and PSPS is necessary as a last resort mitigation measure to prevent ignitions that may lead to significant wildfires.

¹⁸ As noted above, the results of the PSPS Risk vs. Benefit Tool are among many quantitative and qualitative factors considered by SCE in its PSPS decision-making process.

¹⁹ Fast curve settings reduce fault energy release by increasing the speed with which a protective relay reacts to most fault currents. Fast curve settings can reduce heating, arcing, and sparking for many faults compared to conventional protection equipment settings. More details are in SCE’s 2023-2025 Wildfire Mitigation Plan, initiative SH-6.

²⁰ SCE’s System Operating Bulletin No. 322 includes provisions for enabling fast curve settings on distribution line reclosers and circuit breakers, recloser blocking, line patrols and requirements for personnel to be physically present when operating air-break switching devices.

²¹ In this event, the circuit segment in scope for de-energization had only partially installed covered conductor, so the windspeed thresholds for that segment were set at 31 mph sustained and 46 mph gust.

Leading up to and during a PSPS event, SCE utilizes real-time weather station data and, if available, information from field observers on the ground for enhanced situational awareness to forecast and monitor prevailing environmental conditions (e.g., wind gusts) that can lead to potential damage from airborne vegetation or flying debris, to inform de-energization decisions. For circuits that are in scope, SCE also conducts pre-patrols and visually inspects the entire length of each circuit or circuit segment to identify any imminent hazards or equipment vulnerabilities that require immediate remediation and provide additional up-to-date intelligence on field conditions. If such concerns are discovered on a circuit in scope, they are addressed before the impending wind event, if possible.

SCE makes every effort to limit the scope, duration, and impact of PSPS for as many customers as possible. This includes adjusting wind speed thresholds higher for circuits or segments that have covered conductor installed and leveraging sectionalization equipment to switch some customers to adjacent circuits not impacted by PSPS or otherwise remove them from scope. Starting with the initial weather (wind and relative humidity) and fuel moisture forecasts for the Period of Concern, SCE evaluates its current system configurations for downstream circuits, i.e., circuits receiving power from another circuit that is forecast to exceed de-energization thresholds. Where possible, SCE seeks to identify any circuit segment or subset of customers that could safely be transferred from a circuit that is expected to exceed thresholds to another adjacent circuit that is not in scope during the Period of Concern. Since the Huckleberry circuit segment in scope for this event serves a remote mountaintop and does not have any connection to adjacent circuits, SCE was unable to transfer any customers on the Huckleberry circuit to any adjacent circuits for mitigation of potential customer impacts during de-energization.

During the Period of Concern, a portion of the Huckleberry circuit met FPI criteria for de-energization when the wind thresholds were exceeded. Therefore, SCE ultimately de-energized five customers on this circuit. See Section 10 for additional details regarding SCE's mitigation efforts for this event.

Section 3. De-Energized Time, Place, Duration and Customers

1. The summary of time, place, and duration of the event, broken down by phase if applicable.

This PSPS event began when SCE activated its Emergency Operations Center on July 9, 2023, at 12:00 pm and ended for all circuits in scope on July 13, 2023, at 8:23 am by which time service was restored to all de-energized customers. This event impacted one circuit in Los Angeles County. *See also* Section 1-1 above for additional information.

2. A zipped geodatabase file that includes PSPS event polygons of de-energized areas. The file should include items that are required in Section 3.3.

A zipped geodatabase file that includes all information in Section 3-3 is included with this filing.

3. A list of circuits de-energized, with the following information for each circuit. This information should be provided in both a PDF and excel spreadsheet.

The following table details the specified information for each circuit de-energized during this PSPS event and has also been included in the required PSPS Event Data Workbook filed with this report.

- County
- De-energization date/time
- Restoration date/time
- “All Clear” declaration date/time²²
- General Order (GO) 95, Rule 21.2-D Zone 1, Tier 2, or Tier 3 classification or non-High Fire Threat District
- Total customers de-energized²³
- Residential customers de-energized
- Commercial/Industrial customers de-energized
- Medical Baseline (MBL) customers de-energized
- AFN other than MBL customers de-energized²⁴

²² SCE understands “All Clear” declaration date/time for each circuit in scope to refer to: (1) approval by the Incident Commander to begin patrols and restoration of power for any de-energized circuit or circuit segment, or (2) a final decision to remove a circuit or circuit segment from scope after the Period of Concern is over for that circuit or segment on the monitored circuit list that was not de-energized during the PSPS event.

²³ Whenever possible, SCE employs circuit-switching operations and/or sectionalization devices to minimize the number of customers in scope for proactive de-energization. As a result, some customers on a circuit in scope may briefly lose power while SCE switches them to an energized adjacent circuit or when SCE uses sectionalization devices to isolate portions of a circuit that can remain safely energized from de-energized segments of that same circuit or an adjacent circuit. The reported count of “total customers de-energized” does not include customers who may experience a brief (30 minutes or less) power interruption during such switching and/or sectionalization operations, but who are not otherwise impacted by the proactive de-energization.

²⁴ SCE maintains extensive data on customer populations that are included in the AFN definition referenced in CPUC decisions,

- Other Customers
- Distribution or transmission classification

Table 5: Circuits De-Energized ²⁵

Circuits De-Energized									
County	Circuit Name	De-energization Date	De-energization Time (2400)	All Clear Declaration Date	All Clear Declaration Time (2400)	Restoration Date	Restoration Time (2400)	GO 95, Tier HFTD Tier(s) 1,2,3	Distribution / Transmission Classification
LOS ANGELES	HUCKLEBERRY_3	7/11/2023	18:34	7/12/2023	20:29	7/13/2023	8:23	T3	Distribution
Circuits De-Energized (cont.)									
County	Circuit Name	Residential Customers De-energized	Commercial / Industrial customers De-energized	Medical Baseline customers De-energized	AFN other than MBL customers De-energized	Total customers De-energized	GO 95, Tier HFTD Tier(s) 1,2,3	Other Customers	
LOS ANGELES	HUCKLEBERRY_3	0	5	0	0	5	T3	0	

with a focus on identifying AFN customers particularly vulnerable during PSPS events. In addition to AFN customers who have self-certified as sensitive (not enrolled in the MBL program), SCE identifies and tracks for PSPS reporting purposes the following categories of “AFN other than MBL customers”: senior citizens (65 and older), hearing-impaired, vision-impaired (communications provided in large font or Braille), income-qualified (enrolled in CARE or FERA), and non-English speakers. SCE also reports on impacted customers that provide shelter to the homeless population, as these entities are included among critical facilities and infrastructure.

²⁵ The sum of (i) residential customers de-energized, (ii) commercial/industrial customers de-energized, and (iii) other customers equals the total number of customers de-energized per circuit for this event. The count of “Residential Customers De-energized” includes sub-categories of “Medical Baseline customers De-energized” and “AFN other than MBL customers De-energized.”

Section 4. Damage and Hazards to Overhead Facilities

- 1. Description of all found wind-related damages or hazards to the utility's overhead facilities in the areas where power is shut off.**

N/A. No wind-related damages or hazards were identified related to this event.

- 2. A table showing circuit name and structure identifier (if applicable) for each damage or hazard, county that each damage or hazard is located in, whether the damage or hazard is in a High Fire Threat District (HFTD) or non-HFTD and the type of damage/hazard.²⁶**

Table 6: Damage and Hazards

N/A. No wind-related damages or hazards were identified related to this event.

- 3. A zipped geodatabase file that includes the PSPS event damage and hazard points. The file should include fields that are in the table above.**

N/A. No wind-related damages or hazards were identified related to this event.

- 4. A PDF map identifying the location of each damage or hazard.**

N/A. No wind-related damages or hazards were identified related to this event.

²⁶ Hazards are conditions discovered during restoration patrolling or operations that might have caused damages or posed an electrical arcing or ignition risk had PSPS not been executed.

Section 5. Notification

1. A description of the notice to public safety partners, local/tribal governments, paratransit agencies that may serve all the known transit or paratransit dependent persons that may need access to a community resource center, multi-family building account holders/building managers in the AFN community,²⁷ and all customers, including the means by which utilities provide notice to customers of the locations/hours/services available for CRCs, and where to access electricity during the hours the CRC is closed.

SCE includes paratransit agencies that may be de-energized in its PSPS notifications and classifies these agencies overall as critical facilities and infrastructure to ensure they receive priority notifications. All multi-family building SCE account holders receive customer notifications. In its customer notification, SCE directs potentially impacted customers to www.sce.com/psps for information related to the location, hours, and services available at Community Resource Centers. Instructions on where customers can access electricity during the hours the centers are closed have been made available on the SCE website.

Notification Descriptions		
Type of Notification	Recipients	Description ²⁸
Initial	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	Initial notification of potential PSPS event (48-24 hours before potential de-energization).
	Other Customers (including multi-family building account holders).	

²⁷SCE notifies multi-family building account holders in the ordinary course along with other customers of record in scope for a potential de-energization. SCE does not currently have a way to identify which multi-family building account holders have residents in their buildings who may be members of the AFN community. SCE conducts PSPS-related outreach via flyers and trade publications to increase awareness of PSPS among building/property managers who are not account holders. SCE also instituted an address-level alert program, which allows non-SCE account holders (such as building/property managers) to sign up for PSPS alerts for specific addresses.

²⁸SCE makes every effort to adhere to the notification timelines required by the CPUC. However, notifications may be delayed in some circumstances due to the sudden onset of dangerous fire weather that was not forecasted or when such weather conditions manifest earlier than predicted by the forecast.

Notification Descriptions		
Type of Notification	Recipients	Description ²⁸
Update	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	PSPS event status update notification to alert for any changes or additions/deletions to current scope (timing varies and may also occur daily). Update notice to Public Safety Partners may also serve as cancellation notice if circuits are removed from scope.
	Other Customers (including multi-family building account holders).	
Expected Shutoff	Public Safety Partners and all Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	Power shutoff expected soon (1-4 hours before potential de-energization).
	Other Customers (including multi-family building account holders).	
Shutoff	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	Power has been shut off (when de-energization is initiated).

Notification Descriptions		
Type of Notification	Recipients	Description ²⁸
	Other Customers (including multi-family building account holders).	
Prepare to Restore	<p>Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).</p> <p>Other Customers (including multi-family building account holders).</p>	Inspection/patrols of de-energized circuits for PSPS restoration has begun and power will be restored shortly.
Restored	<p>Public Safety Partners and Critical Facilities & Infrastructure (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).</p> <p>Other Customers (including multi-family building account holders).</p>	Power has been restored.
Event Concluded- All Clear	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers,	PSPS event is concluded, and no further de-energization expected.

Notification Descriptions		
Type of Notification	Recipients	Description ²⁸
	CBOs and paratransit agencies serving the AFN community). Other Customers (including multi-family building account holders).	

2. Notification timeline including prior to de-energization, initiation, restoration, and cancellation, if applicable. The timeline should include the required minimum timeline and approximate time notifications were sent.

Throughout the PSPS event, SCE made significant effort to notify public safety partners, local governments, critical facilities and infrastructure, and customers in accordance with the minimum timelines set forth by the CPUC weather and other factors permitting. Table 07: Notification Timeline in Attachment C: PSPS Event Data Workbook describes the notifications SCE sent for this event, including approximate time notifications were sent to local governments, public safety partners, critical facilities and infrastructure, and other customers prior to potential de-energization and after the decision to cancel the de-energization or remove from scope.

3. For those customers where positive or affirmative notification²⁹ was attempted, use the following table to report the accounting of the customers (which tariff and/or access and functional needs population designation), the number of notification attempts made, the timing of attempts, who made the notification attempt (utility or public safety partner) and the number of customers for whom positive notification was achieved. “Notification attempts made”³⁰ and “Successful positive notification” must include the unique number of customer counts. When the actual notification attempts made is less than the number of customers that need positive notifications, the utilities must explain the reason. In addition, the utilities must explain the reason of any unsuccessful positive notifications.

Table 8: Positive Notification³¹

N/A. There were no Medical Baseline customers or other customers with Access and Functional Needs de-energized during this event.

²⁹ The “Successful Positive Notification” metric reflects the number of MBL and Self-Certified customers – both In Scope and De-energized – who were successfully notified of the PSPS event.

³⁰ The “Notification Attempts” metric includes all pre-event notices sent to MBL and Self-Certified customers in scope (e.g. advance notice, update notice, imminent notice), as well as follow-up notification attempts (e.g. phone calls, door knocks) for those MBL and Self-Certified customers who could not be reached with the initial attempt.

³¹ The “Total Number of Customers” metric reflects the total number of MBL and Self-Certified customers in scope for the PSPS event. Although SCE attempts to notify all MBL and Self-Certified customers in scope, only customers who are ultimately de-energized “need” positive pre-event PSPS notifications.

4. A copy or scripts of all notifications with a list of all languages that each type of notification was provided in, the timing of notifications, the methods of notifications and who made the notifications (utility or public safety partners).

Scripts of all notifications that SCE sends are attached hereto in Attachment A: Public Safety Partner/Customer Notification Scripts. SCE performs all primary customer notifications and encourages public safety partners to amplify PSPS messages on their platforms as appropriate. SCE offers all notifications in the following languages: English, Spanish, Cantonese, Mandarin, Vietnamese, Tagalog, and Korean. Khmer, Armenian, Farsi, Arabic, Japanese, Russian, Punjabi, Thai, Hmong, Portuguese, Hindi, French, German, Mixteco (indigenous - spoken only), Zapoteco (indigenous - spoken only), and Purapecha (indigenous - spoken only).

5. If the utility fails to provide notifications according to the minimum timelines set forth in D.19-05-042 and D.21-06-034, use the following table to report a breakdown of the notification failure and an explanation of what caused the failure.

Throughout the PSPS event, SCE made significant effort to notify public safety partners, local government, critical facilities and infrastructure, and customers in accordance with the minimum timelines set forth by the CPUC in PSPS Phase 1 Guidelines (D.19-05-042), weather and other factors permitting. As shown in the following table, there were no missed notifications during the event.

Table 9: Breakdown of Notification Failure

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
Public Safety Partners excluding Critical Facilities and Infrastructure	Entities who did not receive 48-to 72-hour advance notification.	0	N/A
	Entities who did not receive 1-4-hour imminent notification.	0	N/A
	Entities who did not receive any notifications before de-energization.	0	N/A
	Entities who were not notified immediately before re-energization.	0	N/A
	Entities who did not receive cancellation notification within two hours of the decision to cancel.	N/A	N/A
Critical Facilities and Infrastructure	Facilities who did not receive 48-72-hour advance notification.	0	N/A
	Facilities who did not receive 1-4 hour of imminent notifications.	0	N/A

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
	Facilities who did not receive any notifications before de-energization.	0	N/A
	Facilities who were not notified at de-energization initiation.	0	N/A
	Facilities who were not notified immediately before re-energization.	0	N/A
	Facilities who were not notified when re-energization is complete.	0	N/A
	Facilities who did not receive cancellation notification within two hours of the decision to cancel.	N/A	N/A
All other affected customers	Customers who did not receive 24-48-hour advance notifications.	0	N/A
	Customers who did not receive 1-4-hour imminent notifications.	0	N/A
	Customers who did not receive any notifications before de-energization.	0	N/A
	Customers who were not notified at de-energization initiation.	0	N/A
	Customers who were not notified immediately before re-energization.	0	N/A
	Customers who were not notified when re-energization is complete.	0	N/A
	Customers who did not receive cancellation notification within two hours of the decision to cancel.	N/A	N/A

6. Explain how the utility will correct the notification failures.

N/A. SCE did not have any notification failures for this event.

7. Enumerate and explain the cause of any false communications citing the sources of changing data.

N/A. SCE did not have any false communications for this event.

Section 6. Local and State Public Safety Partner Engagement

- 1. List the organization names of public safety partners including, but not limited to, local governments, tribal representatives, first responders, emergency management, and critical facilities and infrastructure the utility contacted prior to de-energization, the date and time on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in CPUC General Order 95, Rule 21.2-D.**

Please see Table 10: Public Safety Partners Contacted in Attachment C: PPS Event Data Workbook for a list of local public safety partners that received notifications related to this event.

- 2. List the names of all entities invited to the utility's Emergency Operations Center for a PPS event, the method used to make this invitation, and whether a different form of communication was preferred by any entity invited to the utility's emergency operation center.**

SCE extends a daily invitation for agency representatives to its Emergency Operations Center (currently virtual only) during agency coordination calls with public safety partners and critical infrastructure providers, as applicable during PPS events. SCE also shares daily situational reports from these calls with all impacted public safety partners and critical infrastructure providers that includes contact information for requesting/receiving an agency representative to the Emergency Operations Center. Please see Table 11: Entities Invited to the Emergency Operations Center in Attachment C: PPS Event Data Workbook for a list of agencies invited to the daily coordination calls.

- 3. A statement verifying the availability to public safety partners of accurate and timely geospatial information, and real time updates to the GIS shapefiles in preparation for an imminent PPS event and during a PPS event.**

SCE provided geospatial information and real-time updates to GIS shapefiles via the SCE Representational State Transfer Service (REST) to public safety partners before and during the PPS event. SCE also made this information available to customers at www.sce.com/psps and provided this information to public safety partners on its Public Safety Partner Portal (Portal). SCE is aware of a current automation system limitation in which the Portal tabular format data does not match the graphical format and is working on an enhancement to address this current limitation.

- 4. A description and evaluation of engagement with local and state public safety partners in providing advanced outreach and notification during the PPS event.**

SCE submitted the CalOES Notification form via the State Dashboard beginning on July 10, 2:31pm. SCE conducted daily operational briefings with State and local public safety partners, as well as critical infrastructure entities, for the duration of this PPS event to provide critical incident updates and a forum for resolving issues. See Table 10: Public Safety Partners Contacted in Attachment C: PPS Event Data Workbook details a list of local public safety partners that received notifications related to this event. Please also see Section 12 below regarding the feedback received through SCE's public safety partner engagement survey.

5. Specific engagement with local communities regarding the notification and support provided to the AFN community.

N/A. Given that there were no residential customers impacted by this de-energization event, additional engagement with and support of the Access and Functional Needs community was not needed.

6. Provide the following information on backup power (including mobile backup power) with the name and email address of a utility contact for customers for each of the following topics:

a) Description of the backup generators available for critical facility and infrastructure customers before and during the PSPS.

SCE maintains a total of 13 mobile generators for use by critical facilities and infrastructure customers during PSPS events, as needed. SCE has contracts with vendors to lease additional units during emergency events when the need arises for our critical care customers.

b) The capacity and estimated maximum duration of operation of the backup generators available for critical facility and infrastructure customers before and during the PSPS.

The generators SCE maintains for PSPS events are rated at 20-500 KW and have an estimated maximum duration of operation of 24-36 hours with a continuous fuel plan to ensure there is no interruption of power while the generators are deployed for usage.

c) The total number of backup generators provided to critical facility and infrastructure customer's site immediately before and during the PSPS.

N/A. No critical facilities or infrastructure customers requested backup generation as such. SCE did not deploy any backup generation to critical facility and infrastructure customers during this event.

d) How the utility deployed this backup generation to the critical facility and infrastructure customer's site.

N/A. No critical facilities and infrastructure customers requested backup generation; as such, SCE did not deploy any back-up generation to critical facility and infrastructure customers during this event.

e) An explanation of how the utility prioritized how to distribute available backup generation.

N/A. No critical facilities and infrastructure customers requested backup generation; as such, SCE did not deploy any back-up generation to critical facility and infrastructure customers during this event.

f) Identify the critical facility and infrastructure customers that received backup

generation.

N/A. No critical facilities and infrastructure customers requested backup generation; as such, SCE did not deploy any back-up generation to critical facility and infrastructure customers during this event.

Any questions related to the information under this item may be directed to SCE at the following e-mail address: SCEBCDCustomersupport@sce.com.³²

³² Although there is no designated contact person for questions, this e-mail inbox is monitored by SCE's Business Customer Division.

Section 7. Complaints and Claims

- 1. The number and nature of complaints received as the result of the de-energization event and claims that are filed against the utility because of de-energization. The utility must completely report all the informal and formal complaints, meaning any expression of grief, pain, or dissatisfaction, from various sources, filed either with CPUC or received by the utility as a result of the PSPS event.**

There were zero reported complaints and zero claims associated with this PSPS event. SCE will include any complaints or claims related to this PSPS event received after the filing of date of this report in its annual post-season report.

Table 12: Count and Nature of Complaints Received

N/A. Zero complaints were received for this event.

Table 13: Count and Type of Claims Received

N/A. Zero claims received for this event.

Section 8. Power Restoration Timeline

1. A detailed explanation of the steps the utility took to restore power, including the timeline for power restoration, broken down by phase if applicable.

SCE began the re-energization process after fire weather conditions subsided, there was no further threat of fire weather forecasted for the areas of concern, and the Incident Commander approved restoration operations. SCE had pre-positioned qualified restoration personnel to reduce restoration patrol times and customer outage duration. All circuit restoration during this event was guided by safety considerations, including safety risks associated with patrolling certain circuits at night.

The All-Clear declaration was given by the Incident Commander at 8:29 pm on July 12th. Before the Huckleberry circuit could be re-energized, an air patrol was required during daylight hours. Due to advanced planning by the Operations section, all flight plans had been scheduled shortly after activation to expedite patrols as soon as it was safe to do so. At daylight on July 13th, weather conditions allowed for air patrol and once the patrol was complete, the five customers on the Huckleberry circuit were re-energized by 8:23 am.

2. For any circuits that require more than 24 hours to restore, the utility shall use the following table to explain why it was unable to restore each circuit within this timeframe.

Table 14: Circuits Requiring More Than 24 Hours to Restore

N/A. No circuits required more than 24 hours to restore.

Section 9. Community Resource Centers

- Using the following table, report information including the address of each location during a de-energization event, the location (in a building, a trailer, etc.), the assistance available at each location, the days, and hours that it was open, and attendance (i.e., number of visitors).

Table 15: Community Resource Centers

Community Resource Centers				
Address	Location Type	Describe the assistance available	Hours of Operations ¹ (Date / Time)	Number of Visitors
N/A	N/A	N/A	N/A	N/A

- Any deviations and explanations from the CRC requirement including operation hours, ADA accessibility, and equipment.

N/A. CRCs were not deployed for this event because only five commercial customers, and no residential customers, were in scope.

- A map identifying the location of each CRC and the de-energized areas

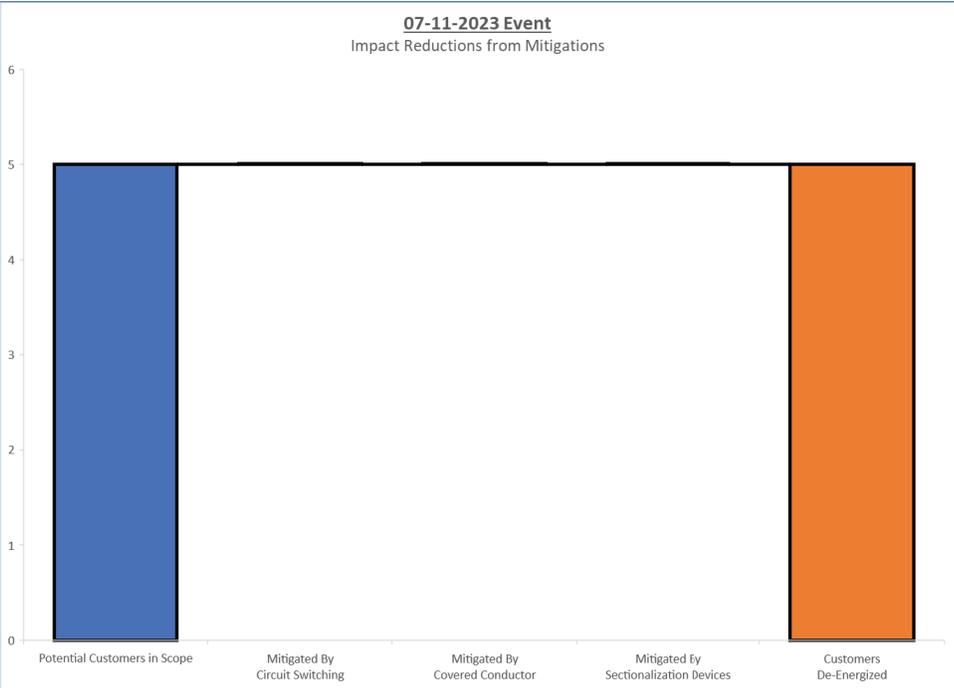
N/A. There were no CRCs deployed for this event.

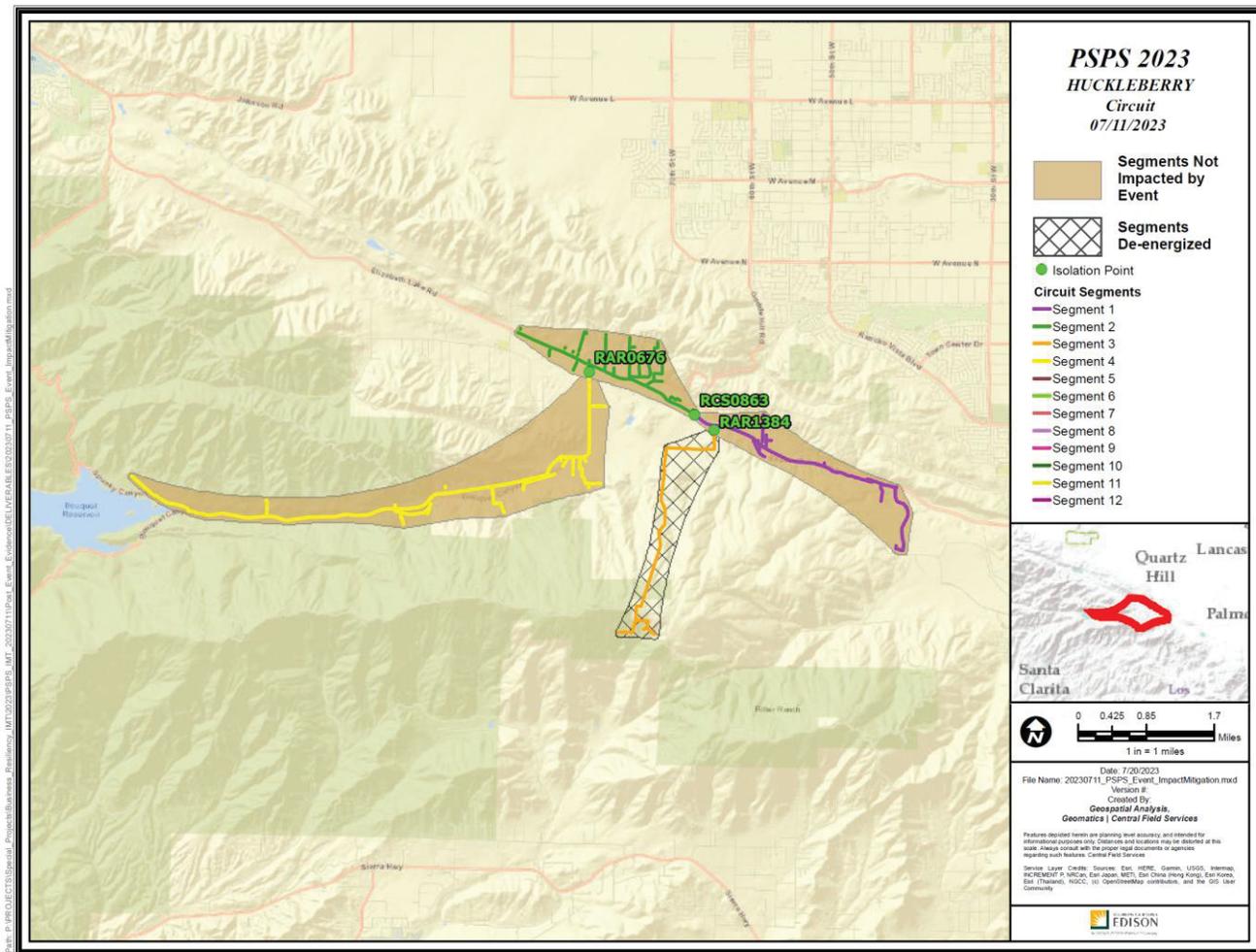
Section 10. Mitigation to Reduce Impact

1. Mitigation actions and impacts including: sectionalization devices, temporary generation, microgrids, permanent backup generation, transmission switching, covered conductor, and any other grid hardening that mitigated the impact of the event

Prior to the period of concern, SCE used circuit playbooks to review options for circuit switching (transferring customers to an adjacent circuit) that could reduce the number of customers in scope for potential de-energization. Due to the location of the in-scope portion of Huckleberry circuit, transferring customers to an adjacent circuit was not an option. In communicating with the customers in scope for this event, SCE was informed that all 5 customers had their own methods of temporary backup generation should they be de-energized.

The waterfall graph below illustrates total customers in-scope and total customers de-energized. The map below illustrates the use of a sectionalization device to isolate the in-scope area to one circuit segment.





Section 11. Lessons Learned

1. Threshold analysis and the results of the utility’s examination of whether its thresholds are adequate and correctly applied in the de-energized areas.

SCE believes our thresholds were adequate and correctly applied in the de-energized area during this PSPS event, as detailed in Attachment B - Quantitative and Qualitative Factors in PSPS Decision-Making Technical Paper for this event. However, in the days following the event and in preparation for another forecasted weather event impacting the same circuit, SCE deployed a new weather station on the Huckleberry circuit and armed with the additional data, was able to safely raise windspeed de-energization thresholds (to 40 mph sustained/58 mph gust) for a small section of the de-energized circuit segment where covered conductor is installed. Based on a detailed review by SCE Fire Science, Weather Services, and Operations experts, SCE determined that additional segmentation of the Huckleberry circuit could reduce future PSPS impacts to customers located on that covered portion of the circuit segment.

2. Any lessons learned that will lead to future improvement for the utility.

Lessons Learned		
Issue	Discussion	Resolution
Restoration customer counts not displaying in the Common Operating Picture, an internal dashboard used by SCE for high-level event awareness.	The re-energized section of an internal display failed to show the restoration count of the five customers as intended.	This item is in the process of being corrected through bug fix request submission, which will allow for the correct display of restoration customer counts.
When exporting the Modified Period of Concern, inaccurate time zone was displayed.	An internal manual report export feature for the Period of Concern displayed incorrect time zone.	A change request was issued, and the development team modified the time zone in the export feature to reflect PST. The change has been implemented and the issue resolved.

Section 12. Other Relevant Information

1. This section includes any other relevant information determined by the utility.

SCE has instituted an engagement survey process to capture feedback from State and County public safety partners and critical infrastructure customers during PSPS events. SCE encourages these stakeholders to provide survey feedback in daily coordination calls and emails links to the engagement survey once the event has concluded. Two Public Safety Partner completed SCE's engagement survey and rated the engagement with SCE as excellent.

Attachment A-Public Safety Partner and Customer Notification Scripts

SCE LNO Notification Template Text/Format

Liaison Officer (LNO) notifications are sent by circuit and/or county and based on circuits listed on SCE's Monitored Circuit List (MCL). LNO notifications begin 72 hours before the period of concern, when possible. LNO notifications differ from SCE customer notifications in terms of timing, message content, frequency, and audience.

There are seven unique LNO notification templates:

Advanced Initial notification (72 hours out--if possible) is sent at the start of the incident for each impacted county and includes the activation's first LNO spreadsheet. *

Initial/Update notifications are typically sent daily with an attached LNO spreadsheet after each weather report/period of concern (POC) generated by Operations. Spreadsheet includes all clear designation

Expected Shutoff (Imminent 1-4) (previously imminent de-energization) sent, as needed, during PSPS events. No attachments. *

PSPS Shutoff (previously de-energization) sent, as needed, during PSPS events. No attachments.

Preparation for Restoration sent, as needed, during PSPS events. No attachments. *

Restored notifications sent, as needed, during PSPS events. No attachments.

Event Concluded notification is sent at the end of the incident for each county that had one or more circuits potentially impacted by PSPS

MCL letting officials know the power is restored (or restored with noted exceptions), and the event is concluded.

LNO notifications are sent to the following stakeholder groups. Contacts are either mapped to specific circuits or are included based on their County-level affiliation.

1. City/County/Tribal Officials

1. Public Safety Partners, including CalFire and other emergency contacts
2. CCA Administrators
3. State and Federal Legislative District Offices
4. 211 Operators
5. Independent Living Centers
6. Other stakeholders with longer range emergency planning responsibilities

Template language for all notifications (after notification language)

Message cadence: The SCE Liaison Officer provides a rolling three-day advance warning of potential PSPS events, when possible, and sends update notifications every day. We will also notify you with time-sensitive shutoff and restoration information at the circuit level. Sudden weather changes may impact SCE's ability to provide advanced notice: a shutoff could occur sooner than anticipated.

Spreadsheet content: All circuits currently on the watch list in your county are listed in the attached spreadsheet. As we get closer to the event and the weather forecast becomes more exact, additional circuits could be added or removed from our watch lists. Circuits marked *Updated Period of Concern* in the Circuit Notification Status column have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with any questions about the spreadsheet.

Weather forecasting: SCE's forecasting relies on in-house meteorologists and fire scientists. SCE may notify for a potential PSPS independently of any Red Flag Warnings being declared by the National Weather Service, and weather forecasts on radio and television may provide different information.

Online outage information: Visit [sce.com/outages](https://www.sce.com/outages) starting three days before the forecast start date for information about PSPS areas and timing, as well as information about all other outages in the SCE service area. Starting up to seven days out from a forecast PSPS event, a weather outlook (at the county level) is available at [sce.com/weather-awareness](https://www.sce.com/weather-awareness).

For More Information:

1. www.sce.com/psps
2. Maps showing PSPS boundaries - Check Outage Status ([sce.com](https://www.sce.com))
3. [sce.com/fireweather](https://www.sce.com/fireweather) for weather conditions: .
4. [Public Safety Partner Portal](#) (for registered users) / email publicsafetyportal@sce.com to request access
5. REST service (web-based password-protected access to GIS layers) / email SCERestInfo@sce.com to request access
6. [Sce.com/wildfire](https://www.sce.com/wildfire) for information on customer programs and other resources
7. De-energization and restoration policies: [sce.com/pspsdecisionmaking](https://www.sce.com/pspsdecisionmaking)

Our Emergency Operations Center is open and our IMT is activated. Contact information is provided below.

SCE Contact Information for Public Officials only (Please DO NOT share with the public)

8. **First Responders and Emergency Managers:**

- Phone: Business Resiliency Duty Manager 24/7 hotline: **(800) 674-4478**
 - Email: Business Resiliency Duty Manager/emergencies: BusinessResiliencyDutyManager@sce.com-- Only monitored during emergency activations.
9. Government/tribal officials:
- Phone: Liaison (government relations) 24/7 hotline: **800-737-9811**. Only monitored during emergency activations.
 - Email: SCELiaisonOfficer@sce.com. **Note: Only monitored during emergency activations.**
10. Access and Functional Needs issues:
- Phone: AFN Liaison Officer 24/7 hotline: **888-588-5552**. Only monitored during emergency activations.
 - Email: AFNIMT@sce.com. **Note: Only monitored during emergency activations.**

SCE Contact Information for the Public: (Please DO share this information via web and social media).

- Outage-specific customer service issues: 800-611-1911
- Billing and service inquiries: 800-684-8123
- PSPS event status: [sce.com/PSPS](https://www.sce.com/PSPS)
- Non-PSPS outages: [sce.com/outages](https://www.sce.com/outages)
- Update customer contact information: www.sce.com/pspsalerts
- Information on customer programs and other resources [sce.com/wildfire](https://www.sce.com/wildfire)

Advanced Initial (72-hour) LNO Notification (Advances Initial)

Description:

Sent one time per county, starting 72 hours in advance of a possible PSPS event, when possible, alerting contacts that our weather specialists forecast potential extreme weather ahead. Includes the Situational Awareness (SA) spreadsheet with information about weather event timing and circuits and locations that could be impacted. Sent to all impacted jurisdictions and other LNO contacts, grouped by county.

Notification Subject Line and Message

Advanced Initial Notice for PSPS Event in COUNTY NAME on [start POC DATE].

COMMENTS:

Public Safety Power Shutoff initial notification for official use: Due to projected fire weather conditions, we may need to shut off power in high fire risk areas in COUNTY NAME. Please refer to the attached spreadsheet for status and periods of concern for specific circuits.

We are working to reduce the number of customers affected and weather patterns might change, so **not all circuits on the watch list will have their power shut off.**

Customers on the affected circuits will be notified starting two days before the forecasted start date, however the maps on [sce.com/psps](https://www.sce.com/psps) will reflect this information today.

We have opened our virtual Emergency Operations Center and set up an incident management team for this event including in-house meteorologists, fire scientists, liaison and public information officers, and other technical staff. Contact information is provided below.

Recommended Language to Share with the Public: SCE has informed us they may be

calling for a Public Safety Power Shutoff impacting (insert organization name) on (insert date). SCE will notify all customers who may be affected, including Critical Care and Medical Baseline customers. For more info: sce.com/pmps

Updated Conditions (Update) Notification

Description:

Sent once daily after the Initial Notification to provide updates as the period of concern approaches. Includes the Situational Awareness (SA) spreadsheet with information about weather event timing and circuits and locations that could be/are impacted. Sent to all impacted jurisdictions, grouped by county.

Notification Subject Line and Message:

SCE Update/Initial Notice for PSPS Event in [County Name].

COMMENTS:

Public Safety Power Shut-Off update notification for official use: We are providing ongoing information and periods of concern for PSPS circuits in [County Name], based on updated weather reports. A complete list, including both the forecasted start and end times for all circuits is attached.

Customers on the affected circuits are being notified if they are within two days of the period of concern, or if there has been a change to their status. The map on sce.com/pmps is being continually updated to reflect current status.

Information about Community Resource Centers and Community Crew Vehicles will be available one day in advance of the period of concern at sce.com/pmps.

Recommended Language to Share with the Public: SCE has informed us there may be a Public Safety Power Shutoff impacting (insert organization name) on (insert date). SCE will notify all customers who may be affected, including Critical Care and Medical Baseline customers. For more info: sce.com/pmps

Expected De-Energize Notification (previously: Imminent De-Energization) (PSPS Expected)

Description:

Sent up to 4 hours in advance of expected power shut off, when possible, for specific circuit(s). No spreadsheet attachment, all content is on the body of the notification. Sent to all impacted jurisdictions.

Notification Subject Line and Message:

SCE Expected Shutoff Notice for PSPS Event in County Name.

Public Safety Power Shutoff update notification for official use: SCE may need to shut off power in the next 4 hours to reduce the risk of wildfire ignition. Areas that may be impacted include:

- **Circuit:** [CIRCUIT name]
- **County:**
- **Segment:** [if listed]
- **Incorporated City of:**
- **Unincorporated County Area:**
- **COMMENTS:**

Shutoffs may occur earlier or later depending on actual weather conditions.

This notice expires after 4 hours; however, the listed circuit(s) will remain on the watch list and will be subject to PSPS until the conclusion of this weather event.

Customers on the affected circuits are being notified. Information about Community Resource Centers and Community Crew Vehicles is available at [sce.com/psps](https://www.sce.com/psps).

Our virtual Emergency Operations Center is open and our IMT is activated. Contact information is provided below.

Recommended Language to Share with the Public: SCE has informed us they are likely to call a Public Safety Power Shutoff impacting (insert organization name) within the next four hours.

SCE will notify all customers who may be affected. For more info: sce.com/psps

PSPS Shutoff Notification (De-energization notification)

Description:

Sent after a PSPS power shut off has been authorized for specific circuit(s). No spreadsheet attachment, all content is on the body of the notification. In 2021 these no longer include the official date/time of the de-energization. Sent to all impacted jurisdictions, grouped by County.

Notification Subject Line and Message:

SCE PSPS Shutoff Notice for [CIRCUIT NAME] Circuit in [COUNTY NAME].

Public Safety Power Shutoff update notification for official use: SCE is shutting off power to reduce the risk of wildfire ignition.

Impacted circuits and locations are:

- Circuit: [CIRCUIT name]
- County: [COUNTY NAME].
- Segment:
- Incorporated City of: [Incorporated City]
- Unincorporated County Area: [unincorporated area description]
- Comment:

SCE is notifying customers who are being shut off. The map on sce.com/psps is

being updated to reflect the current PSPS outages. Information about Community Resource Centers and Community Crew Vehicles is available at [sce.com/psps](https://www.sce.com/psps)

When the weather improves, crews will inspect and repair the lines and restore. Typically this can take up to 8 hours. Updates to restoration information will be posted on www.sce.com/psps and on the Public Safety Partner Portal.

Our virtual Emergency Operations Center is open and our IMT is activated. Contact information is provided below.

Recommended Language to Share with the Public: SCE has begun a Public Safety Power Shutoff. SCE notified customers who may be affected, including Critical Care and Medical Baseline customers. For more information visit [sce.com/psps](https://www.sce.com/psps)

(Preparation for Restoration)

Description:

Sent once inspections are underway and with 1-hour advance notice of expected power restoration, when possible, for specific circuit(s). No spreadsheet attachment, all content is on the body of the notification. Sent to all impacted jurisdictions, grouped by County.

Notification Subject Line and Message:

Preparation for Restoration [CIRCUIT NAME] Circuit in [COUNTY NAME]

Public Safety Power Shutoff update notification for official use: Our crews are inspecting the following circuits or circuit segments to restore power as soon as it is safe to do so:

- Circuit: [CIRCUIT name]
- Segment(s): if entered in Foundry
- Incorporated City: [incorporated city]
- Unincorporated County Area: [unincorporated area description]

○ Comments:

Typically, power is restored within 8 hours. Exceptions include circuits in remote areas and circuits that have sustained significant damage. Any updates to restoration information will be posted on www.sce.com/psps and the Public Safety Partner Portal.

SCE is notifying customers. The map on sce.com/psps will be updated to reflect the current status.

SCE has opened its virtual Emergency Operations Center. Contact information is provided below.

Recommended Language to Share with the Public: SCE has begun patrolling circuits for damage before turning the power back on. It typically takes up to 8 hrs to restore power once the patrol begins. Restoration can be delayed if damage is found, or aerial patrol is needed. For more info visit sce.com/psps

Restore Notification (formerly: RE-ENERGIZE) Restoration Notification

Description:

Sent after a PSPS re-energization has occurred for specific circuit(s). No spreadsheet attachment, all content is on the body of the notification. Sent to all impacted jurisdictions, grouped by County.

Notification Subject Line and Message:

Important: SCE Restoration Notice for PSPS Event on [CIRCUIT NAME] Circuit in [COUNTY NAME].

Public Safety Power Shutoff update notification for official use:
SCE crews have restored power on the following circuit or circuit segments:

- Circuit: [CIRCUIT name]
- Segment(s): *if entered in Foundry*
- Incorporated City: [incorporated city]
- Unincorporated County Area: [unincorporated area description]
- **Comment:**

SCE is also notifying customers that power has been turned back on.

SCE's virtual Emergency Operations Center will be closing when all customers are restored. Contact information is provided below.

Recommended Language to Share with the Public: SCE has begun turning power back on to circuits. Some areas may be restored sooner than others. For more info visit sce.com/psps

Event Concluded Notification

*Example 1: Use when **ALL** circuits have been restored. If any remain off, use Example 2, below. **Note: this is not a county-specific "all clear."** The automation system figures out all the jurisdictions that were notified during a specific activation and sends to each of them a final event all-clear.. **This is a single last activity performed at the end of the activation that includes all involved in the activation that the event is over. DO NOT send this notification while a PSPS activation is still in progress -- it will incorrectly tell ALL jurisdictions that the event is over!***

Notification Subject Line and Message:

SCE PSPS Event Concluded in [COUNTY NAME].

Public Safety Power Shutoff update notification for official use:

If customers were de-energized, power has been restored and the PSPS event has concluded.

Recommended Language to Share with the Public: *The public safety power shutoff in your area has concluded. If your power is still out, please visit [sce.com/outages](https://www.sce.com/outages) for more information.*

Any circuit that was identified for potential PSPS is All Clear and will not be de-energized for this event

Notification Subject Line and Message:

SCE PSPS Event Concluded Notice for [COUNTY NAME].

Public Safety Power Shutoff update notification for official use:

The PSPS event has concluded, however some customers in [county name] remain without power.

Repairs and restoration for these customers will be handled by SCE's regular grid operations:

- Circuit:
- **Segments:**
- **Incorporated City of:**
- **Unincorporated County Area:**
- **Reason for continued outage:**

Cancelation no longer in scope

Description:

Sent within two hours after a circuit no longer in scope for PSPS

Notification Subject Line and Message:

PSPS Cancellation for circuit(s) in County Name.

Public Safety Power Shutoff update notification for official use: Due to improved conditions SCE is no longer planning to shut off power in the next for the circuit listed below.

- Circuit: [CIRCUIT name]
- **County:**
- **Segment: [if listed]**
- **Incorporated City of:**
- **Unincorporated County Area:**

*Language to share with the public: Some customers in our area are no longer in scope for public safety power shutoffs. Check sce.com/outages for more information. **Cancellation no longer in scope***

Description:

Sent 2 withing two hours after a circuit no longer in scope for immediate PSPS but remains in scope

Notification Subject Line and Message:

PSPS Cancellation for the circuit(s) County Name.

Public Safety Power Shutoff update notification for official use: Due to improved conditions SCE is no longer planning to shut off power for the circuit listed below.

SCE PSPS Update: However, because high winds are still forecast through ^End Day of week^

^morning/afternoon/evening^ we might have to shut off power again.

- Circuit: [CIRCUIT name]
- **County:**
- **Segment: [if listed]**
- **Incorporated City of:**
- **Unincorporated County Area:**

Shutoffs may occur earlier or later depending on actual weather conditions.

This notice expires after 4 hours; however, the listed circuit(s) will remain on the watch list and will be subject to PSPS until the conclusion of this weather event.

SCE has opened its Emergency Operations Center. Contact information is provided below.

Customers on the affected circuits are being notified. Information about Community Resource Centers and Community Crew Vehicles is available at [sce.com/psps](https://www.sce.com/psps).

2 | Initial Notification [48 HOURS BEFORE] ALERT

TEXT/SMS

SCE PSPS Alert: High winds and fire conditions are forecast from **^Day of week^ ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may have to shut off your power to decrease risk. We are working to reduce the number of customers affected and will keep you updated. Visit [sce.com/psps](https://www.sce.com/psps) for the latest information. For downed power lines, call 911. View in more languages: www.sce.com/PSPSInitial

VOICE

SCE Public Safety Power Shutoff Alert. To continue in English, press 1. [Spanish press 2], all other languages press 3.... High winds and fire conditions are forecast from **^Day of week^ ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may have to shut off your power to decrease risk of dangerous wildfires. We are working to reduce the number of customers affected and will keep you updated. Visit [sce dot com slash psps](https://www.sce.com/psps) for the latest information. If you see a downed power line call 911.

EMAIL

Subject: SCE Public Safety Power Shutoff Alert

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

[한국어](#)

[中文](#)

[TIẾNG VIỆT](#)

[TAGALOG](#)

1-800-441-2233

1-800-628-3061

1-800-843-8343

1-800-327-3031

1-800-655-4555

[MORE LANGUAGES](#)

High winds and dangerous fire conditions are forecast from **^Day of week^ ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may have to shut off your power to decrease risk of dangerous wildfires. We are working to reduce the number of customers whose power will be shutoff and will keep you updated. For the latest updates, outage map, and information about customer care services, visit [sce.com/psps](https://www.sce.com/psps).

Thank you for your patience as we work to keep your community safe!

This alert applies to the following address(es):

Customer Address

Service Account
Meter Number
Rate

- For information about preparing for a power outage, visit [sce.com/safety/family/emergency-tips](https://www.sce.com/safety/family/emergency-tips).
- REMEMBER: If you see a downed power line call 911 first, and then notify SCE at 1-800-611-1911.

3 | Update Notification [24 HOURS BEFORE] WARNING

TEXT/SMS

SCE PSPS Warning: High winds and fire conditions are forecast from ^Day of week^ ^morning/afternoon/evening^ through ^End Day of week^ ^morning/afternoon/evening^. We may have to shut off your power to decrease risk of wildfires. We are working to reduce the number of customers affected and will keep you updated. Visit [sce.com/psps](https://www.sce.com/psps) for the latest information and availability of community resources. For downed power lines, call 911. View in more languages: www.sce.com/PSPSUpdate

VOICE

SCE Public Safety Power Shutoff warning. To continue in English, press 1. [Spanish press 2], all other languages press 3.... High winds and dangerous fire conditions are forecast from ^Day of week^ ^morning/afternoon/evening^ through ^End Day of week^ ^morning/afternoon/evening^. We may have to shut off your power to decrease risk of wildfires. We are working to reduce the number of customers whose power will be shutoff and will keep you updated. Visit [sce dot com slash psps](https://www.sce.com/psps) for the latest information and availability of community resources. If you see a downed power line call 911.

EMAIL

Subject: SCE Public Safety Power Shutoff (PSPS) Warning

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

High winds and dangerous fire conditions are forecast from ^Day of week^ ^morning/afternoon/evening^ through ^End day of week^ ^morning/afternoon/evening^. We may have to shut off your power to decrease risk of dangerous wildfires. We are working to reduce the number of customers whose power will be shut off and will keep you updated.

For the latest updates, outage map, and availability of community resources, visit sce.com/psps.

This alert applies to the following address(es):

Customer Address
Service Account
Meter Number
Rate

- For information about preparing for a power outage, visit sce.com/safety/family/emergency-tips.
- REMEMBER: If you see a downed power line, call 911 first, and then notify SCE at 1-800-611-1911.

Thank you for your patience as we work to keep your community safe!

4 | PSPS EVENT ALL-CLEAR | AVOIDED

(SENT AT ANY TIME WHEN CUSTOMER IS PERMANENTLY OUT OF SCOPE)

TEXT/SMS

SCE PSPS All-Clear: Due to improved weather, we did not shut off your power. We understand that planning around outages is inconvenient. Thanks for your patience as we work to keep our communities safe. If your power is off, please call 1-800-611-1911 or visit sce.com/psps. View in more languages: www.sce.com/PSPSAllClear

VOICE

SCE PSPS All-clear: To continue in English, press 1. [Spanish press 2], all other languages press 3.... Due to improved weather, we did not shut off your power. We understand that planning around outages is inconvenient. Thank you for your patience as we work to keep our communities safe. If your power is off, please call 1-800-611-1911 or visit [sce dot com slash psps](https://sce.com/psps).

EMAIL

Subject: SCE Public Safety Power Shutoff (PSPS) All-clear

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

Due to improved weather, we did not shut off your power. We understand that planning around outages is inconvenient. Thank you for your patience as we work to keep our communities safe.

This alert applies to the following address(es):

Customer Address
Service Account
Meter Number

Rate

If power is off, please call 1-800-611-1911 or visit [sce.com/psps](https://www.sce.com/psps).

For more information about PSPS and wildfire safety, please visit [sce.com/psps](https://www.sce.com/psps).

5 | PSPS EXPECTED 1-4 HOURS BEFORE SHUTOFF WARNING

TEXT/SMS

SCE PSPS Expected: It's likely we will shut off your power in the next 4 hours due to wind-driven fire conditions. Conditions could last through **^End Day of week^ ^morning /afternoon /evening^**. We will notify you again if we shut power off. Weather could affect shutoff timing and wind-related outages may also occur. Visit [sce.com/psps](https://www.sce.com/psps) for the latest information and availability of community resources. For downed power lines, call 911. Thanks for your patience. View in more languages: www.sce.com/PSPSExpected

VOICE

SCE PSPS Expected. To continue in English, press 1. [Spanish press 2], all other languages press 3.... It's likely we will shut off your power in the next 4 hours due to wind-driven fire conditions in your area. Conditions could last through **^End Day of week^ ^morning /afternoon /evening^**. We will notify you again if we shut off your power. Weather could affect shutoff timing and wind-related outages may also occur. Visit [sce dot com slash psps](https://www.sce.com/psps) for the latest information and availability of community resources. If you see a downed power line, call 911. Thank you for your patience.

EMAIL

Subject: SCE Public Safety Power Shutoff (PSPS) Expected

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

It's likely we will shut off your power in the next 4 hours due to wind-driven fire conditions. Conditions could last through **^End Day of week^ ^morning /afternoon /evening^**. We are working to reduce the number of customers affected. Weather could also affect shutoff timing and wind-related outages may occur. We will notify you again if we shut off your power. For the latest updates, outage map, and availability of community resources, visit [sce.com/psps](https://www.sce.com/psps).

We appreciate your patience as we work to keep your community safe.

This alert applies to the following address(es):

Customer Address
Service Account
Meter Number
Rate

- For information about preparing for a power outage, visit [sce.com/safety/family/emergency-tips](https://www.sce.com/safety/family/emergency-tips)
- REMEMBER: If you see a downed power line, call 911 first, and then notify SCE at 1-800-611-1911.

Thank you again for your continued patience as we work to keep your community safe!

6 | PSPS SHUTOFF (SENT AT AUTHORIZATION TO DE-ENERGIZE)

SMS/TEXT

SCE PSPS Shutoff: We are shutting off your power due to wind-driven wildfire risk. High winds are forecast through **^End Day of week^ ^morning/ afternoon/ evening^**. When weather improves, we will inspect our lines for damage before we restore power. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Visit [sce.com/pmps](https://www.sce.com/pmps) for the most up to date info on restoration timing and SCE community resources in your area. Remember to turn off/unplug appliances or equipment that could restart automatically. For downed power lines, call 911. Thanks for your patience. View in more languages: www.sce.com/PSPSShutoff

VOICE

SCE PSPS shutoff. To continue in English, press 1. [Spanish press 2], all other languages press 3.... We are shutting off your power due to current wind-driven wildfire risk. High winds are forecast through **^End Day of week^ ^morning/ afternoon/ evening^**. When the weather improves, we will inspect our lines for damage before we restore power. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Remember to turn off or unplug appliances or equipment that could restart automatically. Visit [sce dot com slash pmps](https://www.sce.com/pmps) for the latest information on restoration timing and SCE community resources in your neighborhood. If you see a downed power line, call 911. Thank you for your patience.

EMAIL

Subject: SCE Public Safety Power Shutoff (PSPS)

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

We are shutting off your power due to current high risk of wind-driven wildfire. High winds are forecast to last through **^End Day of week^ ^morning/ afternoon/ evening^**. When the weather improves, we will inspect our lines for damage before we restore power. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. We will update you as conditions change. Please remember to turn off or unplug appliances or equipment that may start automatically when power is restored.

Please visit sce.com/psps for the most up to date information, including outage map and restoration information, and availability of SCE community resources.

REMEMBER: If you see a downed power line, call 911 first, and then notify SCE at 1-800-611-1911. We understand this shutoff is inconvenient. We appreciate your continued patience as we work to keep your community safe.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

7 | CONTINUED SHUTOFF - NEXT DAY SHUTOFF UPDATE (SENT IN THE AM TO OVERNIGHT OUTAGES)

SMS/TEXT

SCE Continued PSPS Shutoff: Thank you for your continued patience during this Public Safety Power Shutoff. High winds could continue through **^End Day of week^ ^morning /afternoon/ evening^**. Before we restore power, we will inspect our lines for damage. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Visit sce.com/psps for the latest info on restoration and SCE community resources in your area. For downed power lines, call 911. View in more languages: www.sce.com/PSPSContinuedShutoff

VOICE

SCE Continued PSPS. To continue in English, press 1. [Spanish press 2], all other languages press 3.... Thank you for your continued patience during this Public Safety Power Shutoff. High winds are forecast to continue through **^End Day of week^ ^morning /afternoon/ evening^**. Before we restore power, we will inspect our lines for damage. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Visit [sce dot com slash psps](https://sce.com/psps) for

the latest information on restoration and availability of community resources in your area. For downed power lines, call 911.

EMAIL

Subject: SCE Continued Public Safety Power Shutoff (PSPS)

From: do_not_reply@scewebsiteservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

Thank you for your continued patience during this Public Safety Power Shutoff. Wind-driven fire conditions could last through **^End Day of week^ ^morning /afternoon/ evening^**. When the weather improves, we will inspect our lines for damage before we restore power. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Visit sce.com/psps for the latest information on restoration and SCE community resources in your area. We understand that any outage is an inconvenience. Thank you again for your continued patience as we work to keep your community safe!

REMEMBER: If you see a downed power line, call 911 first, and then notify SCE at 1-800-611-1911.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

8 | PREPARE FOR RESTORATION

SMS/TEXT

SCE PSPS Update: Winds have died down and we are starting to inspect our lines for damage. Restoration is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or find damage. For updated restoration estimates in your area and for location of SCE community resources visit sce.com/psps. Please turn off/unplug appliances or equipment that could restart automatically and inspect your property for downed power lines. Call 911 if you find a downed line. We will alert you again when we restore power. View in more languages: www.sce.com/PSPSPrepRestore

VOICE

SCE PSPS Update. To continue in English, press 1. [Spanish press 2], all other languages press 3.... Winds have died down and we are starting to inspect our lines for damage. Restoration is expected to take up to 8 hours but could be delayed if we need daylight for safe inspections or if we find damage. Please turn off or unplug any appliances or equipment that could restart automatically and inspect your property for downed power lines. Call 911 if you find a downed line. We will alert you again when we restore power. For updated restoration estimates in your area, and for location of SCE community resources visit [sce dot com slash psps](http://sce.com/psps)

EMAIL

Subject: SCE Public Safety Power Shutoff Update

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

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1-800-628-3061

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1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

Winds have died down and we are starting to inspect our lines for damage. Restoration is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. For updated restoration estimates in your area, and for location of SCE community resources visit sce.com/psps. We will alert you again when your power comes back on. Please turn off or unplug any appliances or equipment that could restart automatically and inspect your property for downed power lines. If you see a downed power line, stay away and call 911 first, then report it to SCE at 1-800-611-1911.

We understand that Public Safety Power Shutoff events can be disruptive and thank you for your patience as we work to keep your community safe.

This alert applies to the following address(es):

Customer Address
Service Account
Meter Number
Rate

SMS/TEXT

SCE PSPS Ended: We have restored power in your area and ended the Public Safety Power Shutoff. If your power is still off, please call 1-800-611-1911 or visit [sce.com/outage](https://www.sce.com/outage). We know that safety outages are inconvenient and thank you for your patience. View in more languages: www.sce.com/PSPSEnded

VOICE

SCE PSPS Ended... To continue in English, press 1. [Spanish press 2], all other languages press 3.... We have restored power in your area and ended the Public Safety Power Shutoff due to improved weather conditions. If your power is still off, please call 1-800-611-1911 or visit sce dot com slash outage. We understand that safety outages are inconvenient and thank you for your patience.

EMAIL

Subject: SCE Public Safety Power Shutoff Ended: All Power Restored

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

1-800-628-3061

[中文](#)

1-800-843-8343

[TIẾNG VIỆT](#)

1-800-327-3031

[TAGALOG](#)

1-800-655-4555

[MORE LANGUAGES](#)

We have restored power and ended the Public Safety Power Shutoff in your area due to improved weather conditions. If your power is still off, please call 1-800-611-1911 or visit [sce.com/outage](https://www.sce.com/outage). We understand that safety outages are inconvenient and thank you for your patience.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

For more information about PSPS and wildfire safety, please visit [sce.com/psps](https://www.sce.com/psps).

SMS/TEXT

SCE PSPS Update: Winds have improved enough for us to restore power in your area. However, because high winds are still forecast through **^End Day of week^ ^morning/afternoon/evening^** we might have to shut off power again. We will update you as weather conditions change. If your power is still off, please call 1-800-611-1911 or visit sce.com/psps. Thanks for your patience. View in more languages: www.sce.com/PSPSNotAllClear

VOICE

SCE PSPS Update: To continue in English, press 1. [Spanish press 2], all other languages press 3... Winds have improved enough for us to restore power in your area. However, because high winds are still forecast through **^End Day of week^ ^morning/afternoon/evening^** we may have to shut off your power again. We will keep you updated as weather conditions change. We understand that PSPS outages are inconvenient and thank you for your patience. If your power is still off, please call 1-800-611-1911 or visit [sce dot com slash psps](http://sce.com/psps).

EMAIL

Subject: SCE Public Safety Power Shutoff Update: Power restored; PSPS still in effect

From: do_not_reply@scewebservices.com

Southern California Edison

For more information on PSPS in your preferred language, click below:

[ESPAÑOL](#)

1-800-441-2233

[한국어](#)

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Winds have improved enough for us to restore power in your area. However, because high winds are still forecast through **^End Day of week^ ^morning/afternoon/evening^** we may have to shut off your power again. We will keep you updated as weather conditions change. If your power is still off, please call 1-800-611-1911 or visit sce.com/psps.

We understand that safety outages are inconvenient and thank you for your continued patience.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

For more information about PSPS and wildfire safety, please visit [sce.com/psps](https://www.sce.com/psps).

Attachment B-Quantitative and Qualitative Factors in PSPS Decision-Making Technical Paper

PUBLIC SAFETY POWER SHUTOFF:

DECISION-MAKING

**PUBLIC SAFETY POWER SHUTOFFS
ARE A TOOL OF LAST RESORT TO
PROTECT OUR COMMUNITIES
FROM THE THREAT OF WILDFIRE.**



**FOR EACH
PSPS**

1 IS THIS SHUTOFF NEEDED TO PROTECT PUBLIC SAFETY?

2 CAN WE SAFELY REDUCE THE NUMBER OF CUSTOMERS WHO LOSE POWER?



We consider PSPS when weather and fire experts forecast dangerous conditions, including strong winds, very dry vegetation and low humidity. Combined, these create the risk that flying debris or other damage to our wires and equipment could cause a fire with the potential to spread rapidly.

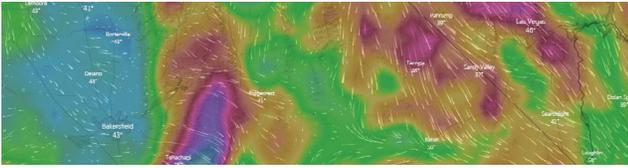


-5 DAYS FORECASTING

-3 DAYS FORECASTING

-2 DAYS FORECASTING

DAY OF THE
PSPS EVENT



Our meteorologists and fire scientists continue to review weather conditions, using both internal and external weather models and National Weather Service forecasts, alerts and warnings.



The PSPS Incident Management Team develops a list of circuits that could be impacted. We speak with county offices of emergency management to discuss any public safety issues.



The team is led by an incident commander. Incident commanders undergo continual training for this role and are responsible for all shutoff decisions.

! DECISION POINT

If the weather report is inconclusive, we will wait for additional weather reports or field assessments before we notify customers. We confer with the National Geographic Area Coordination Center (GACC) about fire danger risk.

! DECISION POINT

The PSPS Incident Management Team reviews options for supplying customers with power from different circuits to keep them energized.



Field crews look for factors that could increase the risk of fire such as existing damage or other hazards to poles and wires.



-5 DAYS FORECASTING

-3 DAYS FORECASTING

-2 DAYS FORECASTING

DAY OF THE
PSPS EVENT

DECISION POINT

The Incident Management Team looks at twice-daily weather reports to see if the weather pattern has shifted. As the forecast becomes more precise, we update the list of circuits that might be impacted. If the weather pattern has weakened, or shifted outside of high fire risk areas, we will cancel the event.



We notify customers. We try to visit our Critical Care and Medical Baseline customers who rely on life-saving medical equipment to confirm they have been informed about the event.

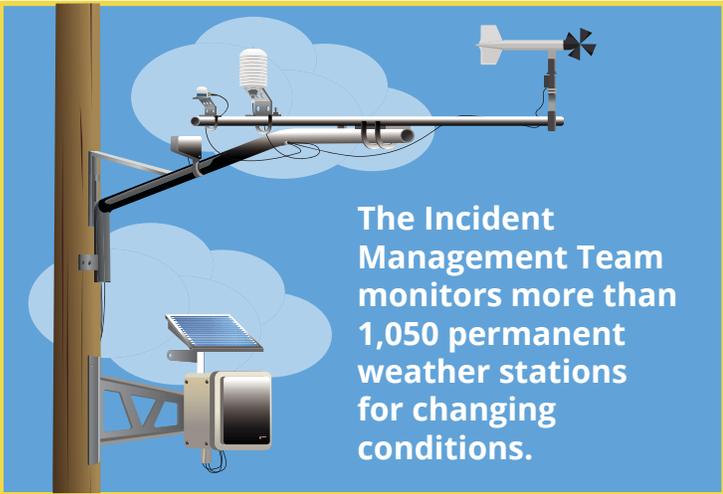
-5 DAYS FORECASTING

-3 DAYS FORECASTING

-2 DAYS FORECASTING

DAY OF THE
PSPS EVENT

3-6 Hours: Before the winds are forecasted to hit peak speeds, the Incident Management Team begins monitoring conditions. A team, including experts in grid operations, meteorology and fire science, advise the incident commander, who will make the final decisions to shut off power.



The Incident Management Team monitors more than 1,050 permanent weather stations for changing conditions.



As the winds increase, field crews provide mobile weather station reports and report flying debris or other hazards.

-5 DAYS FORECASTING

-3 DAYS FORECASTING

-2 DAYS FORECASTING

DAY OF THE
PSPS EVENT



DECISION POINT

Weather:

Every 10 minutes, weather station readings are updated for each circuit. Meteorologists identify weather trends that could slow or speed up decision-making.



DECISION POINT

Grid Operations:

The team looks for opportunities to turn off individual segments of a circuit to keep the rest of the circuit powered.



DECISION POINT

Recommendation:

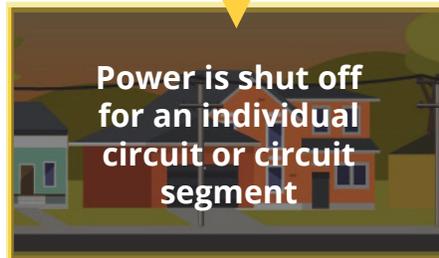
The lead PSPS operator recommends shutting off power to a circuit or segment when wind speeds are about to hit or exceed our predetermined threshold for unsafe conditions, or field crews advise of an urgent hazard in the field.



DECISION POINT

Authorization:

The incident commander reviews the recommendation and asks follow-up questions, if necessary, before approving the decision.



AS THE WINDS DIE DOWN,
POWER IS RESTORED TO
ALL CUSTOMERS

When dangerous winds diminish, field crews inspect the lines that had been shut off. Usually, this is done by crews in utility trucks. If there is no damage to the lines, electricity will be restored immediately. The average time for restoration in 2020 was five to six hours, excluding lines that were damaged or required air or foot patrol. Some of these patrols will take longer because they must be done in daylight hours.

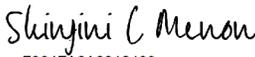
Attachment C-PSPS Event Data Workbook

This Attachment C will be filed via mixed media with the Commission's Docket office and can be accessed at: on.sce.com/PSPSpостeventreports

Officer Verification

I am an officer of the applicant corporation herein and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing document are true.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 26th day of July 2023 in La Canada, California

DocuSigned by:

F364FA6A2912409... _____

Shinjini Manon

Vice President,

Asset Management & Wildfire Safety