

**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 NOVEMBER 19, 2022
DE-ENERGIZATION EVENT**

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Dated: **December 6, 2022**

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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 November 19, 2022 de-energization event (Attachment 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 attachments and appendices to its PSPS Post-Event Report: on.sce.com/PSPSposteventreports

Respectfully submitted,

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/s/ Elena Kilberg

By: Elena Kilberg

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December 6, 2022

Attachment A

SCE's 11.19.2022 PSPS Post-Event Report



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December 06, 2022

Leslie Palmer, Director
Safety Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

SUBJECT: SCE PSPS Post Event Report – November 18, 2022 to November 20, 2022

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/high threat event initiated on November 16, 2022 and concluded on November 20, 2022.

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:

/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
November 19, 2022**

**Filed with: The California Public Utilities Commission
Submitted to: Director of the Safety and Enforcement Division
Dated: December 6, 2022**

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Introduction

SCE submits this post-event report to address the PSPS event that started on November 16, 2022 at 2:00 pm and ended on November 20, 2022 at 10:05 am in Los Angeles and Ventura counties; 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 5,373 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 10-business-day filing deadline for the report. However, some of the information and data may be preliminary and not fully validated, or not available at all for inclusion in the post-event 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 November 16, 2022 SCE’s meteorologists identified the potential for dangerous fire weather conditions starting on Wednesday, November 19, 2022 in northern portions of Los Angeles and Ventura counties. 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 communication, the GACC indicated agreement with SCE’s forecast of elevated fire weather.

In response to this forecasted fire weather, SCE activated its PSPS dedicated Incident Management Team (IMT) on Wednesday, November 16th at 2:00 pm to manage this event. On November 16th, SCE began sending advance notifications of potential PSPS to Public Safety Partners, Critical Facilities and Infrastructure customers, and other customers in scope. During the Period of Concern for this event, due to rapidly escalating wind conditions and elevated FPI levels, SCE had to de-energize customers on two circuits in Ventura County that were not originally in scope for this event. As a result, a majority of customers impacted during this event did not receive advance notifications of de-energization.³ Ultimately, SCE de-energized 5,373 customers in Los Angeles and Ventura counties during the Period of Concern based on observed fire weather conditions. This PSPS event concluded on November 20, 2022 when the last of the de-energized customers were restored by 9:55 am.

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 Summary⁴

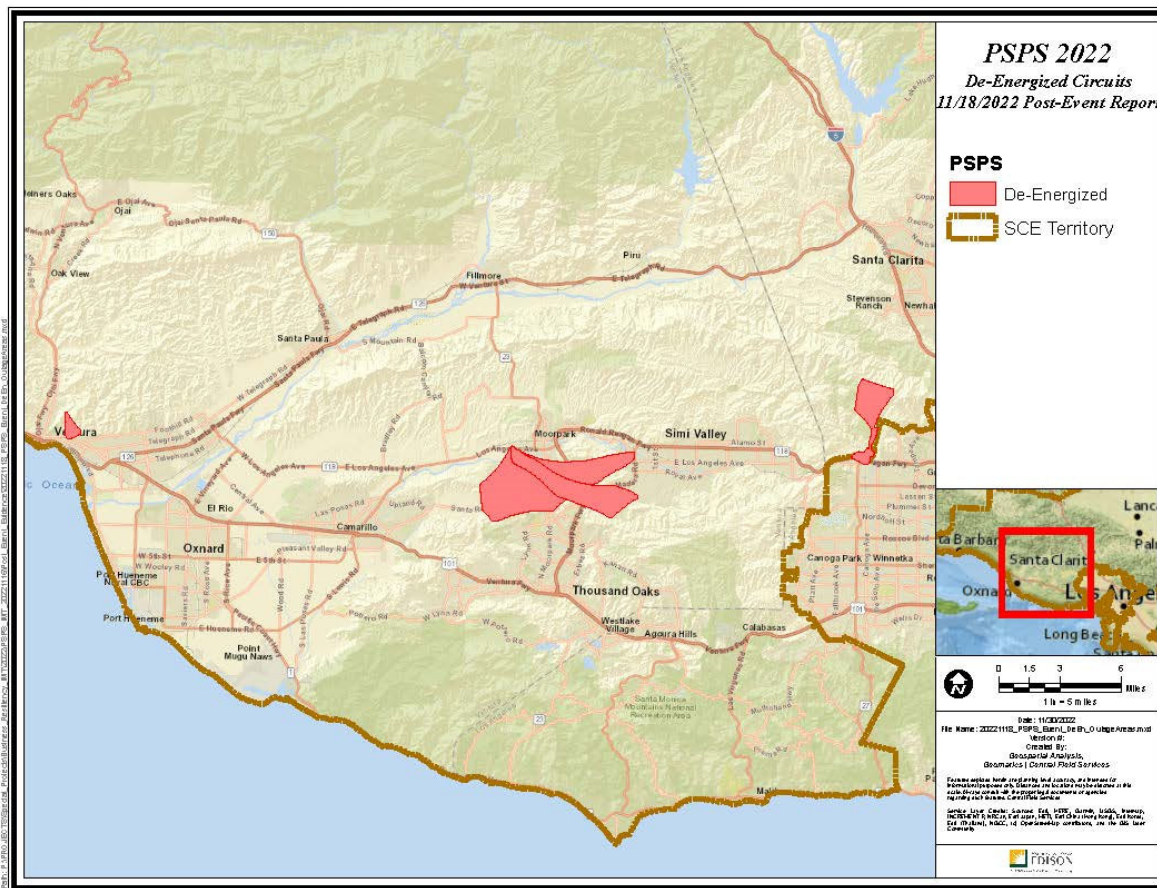
PSPS Event Summary										
Total Customers			De-energized				Number of Circuits			Damage Count
PSPS Notified	De-energized	Cancelled	MBL Customers	Number of Counties	Number of Tribes	Critical Facilities and Infrastructure	Transmission De-energized	Distribution Circuits in Scope	Distribution De-energized	
16959	5373	16139	177	2	0	122	0	14	4	0

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 See Attachment C – Data Event Workbook for additional details related to missed notifications during this event.

⁴ “PSPS Notified” metric in Table 1 reflects the total number of unique customers that were sent a pre-event notification during the PSPS event. “Cancelled” metric in Table 1 reflects the total number of unique customers that were notified regarding the PSPS event, but not ultimately de-energized (regardless of whether they received a cancellation notice). For this PSPS event, 4,712 of the 5,373 de-energized customers could not be notified prior to de-energization due to sudden onset of fire weather conditions and (in some cases) lack of customer contact information or customer unenrolling from PSPS notifications. Please see Section 5 of this report regarding missed notifications and cancellation notice metrics.

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.⁵

Table 2: Factors Considered in De-Energization

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	
BRENNAN	31	27.9	29.42	46	41.4	45.59	12	12.94	56.309404
ENERGY_5	31	38	49.47	46	55.1	66.56	12	12.88	346.65796
MORGANSTEIN	31	27.9	29.42	46	41.4	45.59	12	12.97	92.805275
RICARDO_2	31	31.509	38.99	46	43.443	55.6	12	13.83	12.180057

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.⁶ These thresholds are set for each of the circuits in SCE-designated high fire risk areas (HFRAs) 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.
- 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)

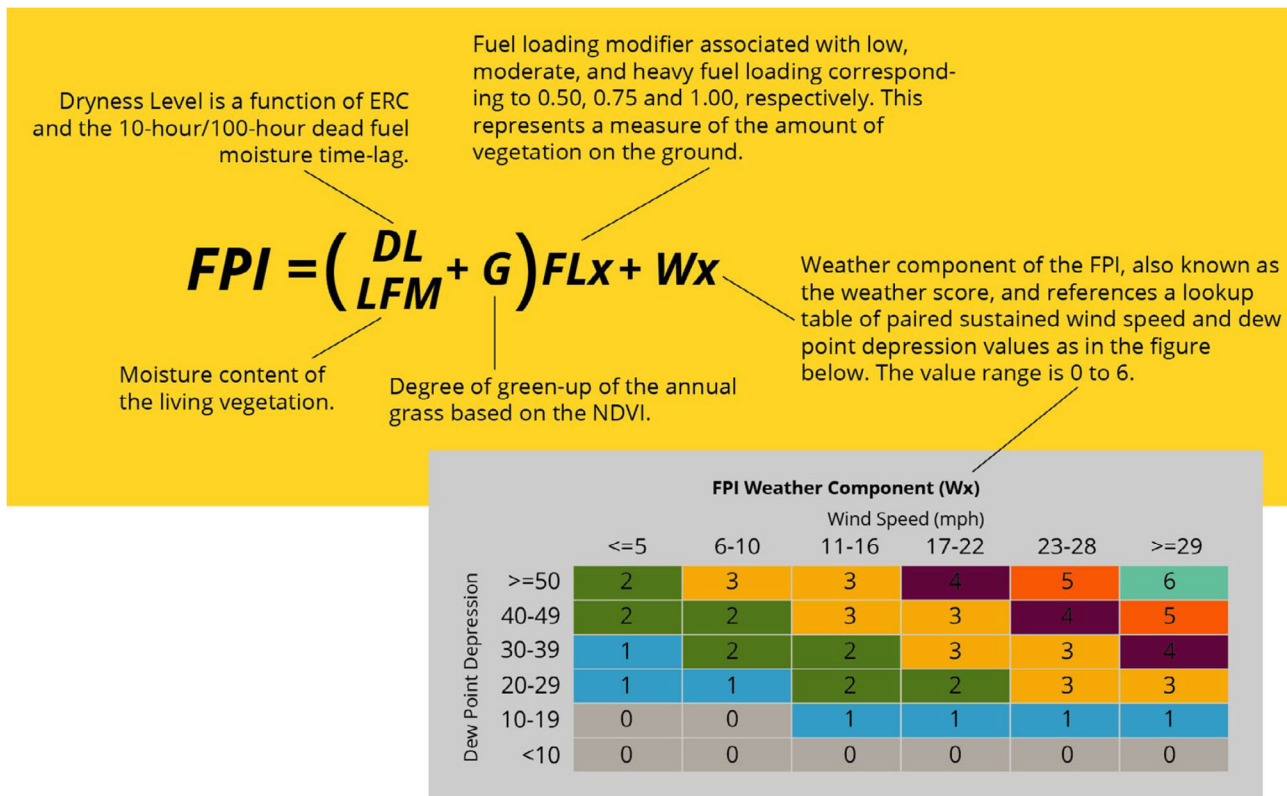
⁵SCE calculates a Fire Potential Index (FPI) rating for each circuit in scope for de-energization. FPI inputs include wind speed, dewpoint depression (which is a measure of how dry the air is), and various fuel moisture parameters, as detailed in Section 2-2 of this report. Other variables, such as temperature 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. 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+).

⁶ SCE’s detailed technical paper, Quantitative and Qualitative Factors for PSPS Decision-Making, can be found at <https://energized.edison.com/pmps-decision-making> and in Attachment C of this report.

within the flaming front at the head of a fire ... reflects the contribution of all live and dead fuels to potential fire intensity.”⁷

- 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.”⁸

Visual 1. Fire Potential Index Equation⁹



SCE has set the FPI at 13 for most areas and most events based on a risk analysis of historical fire data.¹⁰ The following details exceptions in which the FPI threshold will continue to be set at 12:

⁷U.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.

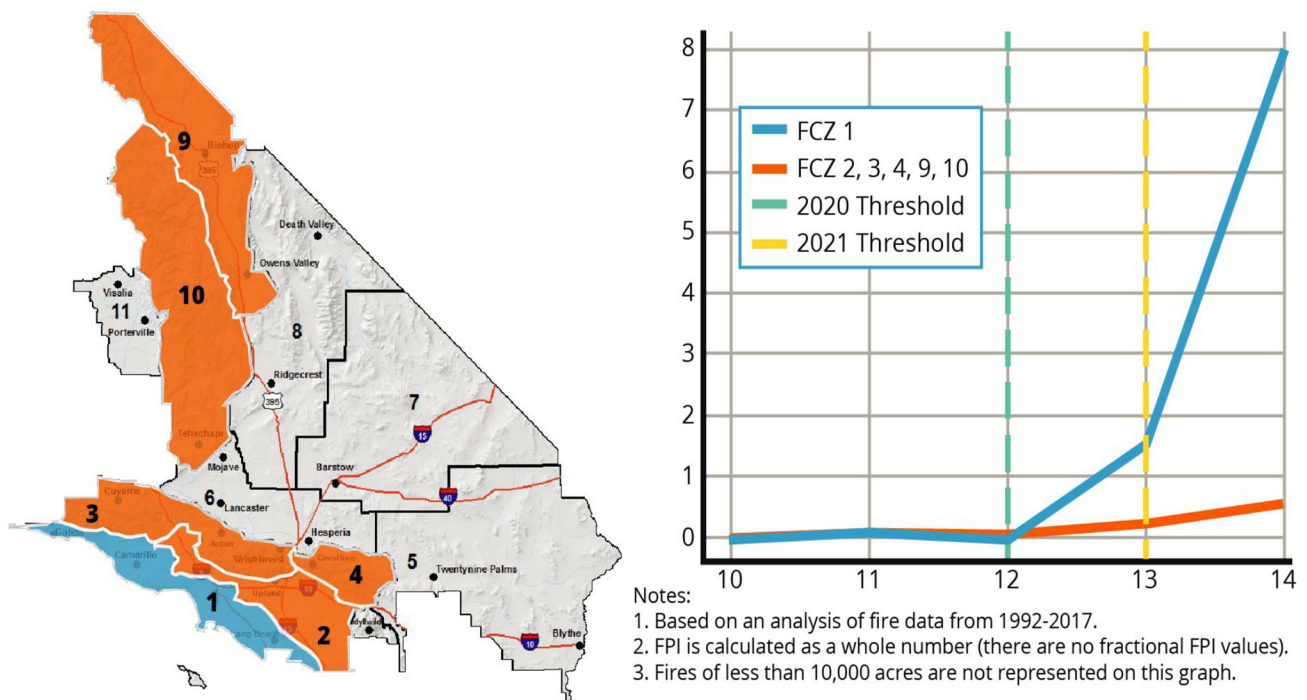
⁸ U.S. Department of the Interior. n.d. Landsat Normalized Difference Vegetation Index. Accessed April 14, 2021. https://www.usgs.gov/core-science-systems/nli/landsat/landsat-normalized-difference-vegetation-index?qt-science_support_page_related_con=0#qt-science_support_page_related_con.

⁹ 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.

¹⁰ 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.

- 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.¹¹

Visual 2. Probability of Wind-Driven Fires at 10,000 Acres at FPI 12 and 13¹²



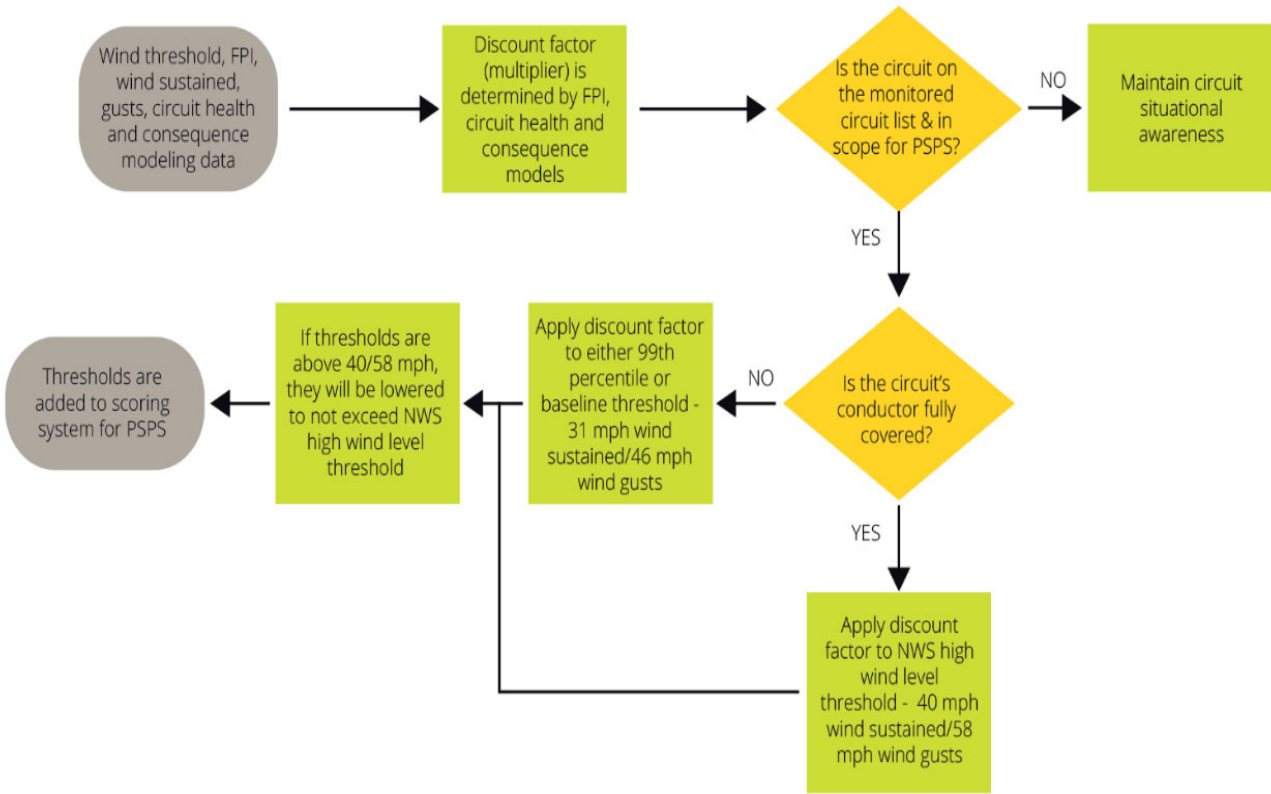
For each PSPS event, every circuit also has a de-energization threshold. De-energization thresholds are determined separately for each circuit to prioritize circuits for de-energization based on the specific risks of the event. This is particularly important for large events where many circuits must be evaluated simultaneously. There are a handful of circuits that have legacy thresholds below the National Weather Service advisory level because they have a history of local circuit outages at lower wind speeds.

De-energization thresholds account for circuit health, including any issues identified through patrols, and are also informed by a consequence score for each specific HFRA. 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.

¹¹ SCE’s 2022 Wildfire Mitigation Plan Update dated February 18, 2022.

¹² Based on back cast FPI calculation.

Visual 3. PSPS Decision-Making Flowchart/Diagram



If actual conditions suggest greater 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 National Weather Service 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 (Continued in Attachment C)

Circuit Thresholds					
Circuit	FPI Threshold Rating	Wind Speed Activation Thresholds		De-Energization Thresholds	
		Sustained Wind	Gust Wind	Sustained Wind	Gust Wind
ACADEMY	12	31	46	33	45
ANTON	12	31	46	31	46
BIG ROCK	12	31	46	31	46
BRENNAN	12	31	46	27.9	41.4
CASSIDY	12	31	46	32	46

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

- Wind: Wind gusts of 35-to-55 MPH with isolated gusts to 70 MPH were forecast for portions of Ventura and Los Angeles counties during this event. Peak observed winds speeds were 58 MPH sustained and 82 MPH gusts during this event for areas being monitored.
- Relative humidity: Relative humidity during this event was forecast to be between 5% and 15% across portions of Los Angeles and Ventura counties. Observed relative humidity ranged from 12% to 15% during this event. As discussed in Section 2-2, relative humidity is one of many variables that informs 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.

- Coordination with the GACC regarding the potential for elevated fire weather 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 and Ventura Counties.
- 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.
- Relative humidity levels. Relative humidity levels in the areas of concern for this PSPS event ranged from 12% to 15%.
- Observed weather parameters for this PSPS event, to include wind speeds and Fire Potential Index ratings for the circuits in scope relative to the preset thresholds for this event. De-energization thresholds were reached or exceeded for the de-energized circuits 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.
- National Weather Service-issued watches and warnings for areas of concern in the SCE service area. There was a Wind Advisory, High Wind Warning, and a Red Flag Warning at various times for portions of Los Angeles and Ventura Counties during this PSPS event.

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 day on Saturday, November 19th due to decreasing wind speeds in the forecast.
- Observed wind speeds and FPI ratings. Observed wind and FPI ratings for most areas no longer met de-energization threshold criteria as of 3:00 pm on November 19th.

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.¹³ 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 FireCast¹⁴ 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:

¹³ 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.

¹⁴ 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. ¹⁵ 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. ¹⁶	SCE conservatively assumes \$250 ¹⁷ 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 based on a Value of Lost Load (VoLL), which is a widely accepted

¹⁵ 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.

¹⁶ 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.

¹⁷ 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
		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.¹⁸ 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 are greater than 1, meaning that the wildfire risk exceeded PSPS risk for all circuits in scope. These results were presented to the Incident Commanders in advance of de-energization to inform PSPS decision-

¹⁸ 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

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
ACADEMY	714	2142	1.13404624	1440	1870.2	165	598	0.000149894	0.016477622	109.928295
ANTON	301	903	1.21134165	1440	4947.9	394	850	0.000063548	0.039150162	616.0680538
BIG ROCK	3171	9513	1.15464204	1440	6437.2	647	1694	0.000666711	0.064574396	96.85514348
BRENNAN	2492	7476	1.13875084	1440	2384.7	294	796	0.000523341	0.029469001	56.30940427
CASSIDY	1296	3888	1.07162154	1440	5587.9	199	498	0.000270833	0.020340504	75.10345453

For this de-energization event, the results of the In-Event PSPS Risk Comparison Tool supported SCE’s decision to de-energize, indicating that all circuits in scope for potential de-energization during this event¹⁹ 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).²⁰ In addition, SCE has implemented operational practices including enhanced inspections, vegetation management, and fire climate zone operating restrictions²¹ 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.²² 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.

¹⁹ The table showing the results of the PSPS Risk vs. Benefit Comparison Tool includes ratios for all circuits on the monitored circuit list for this event, all of which indicate the benefit of wildfire avoidance (achieved through PSPS or other mitigation measures) exceeded PSPS risk. As noted above, the results of the Risk vs. Benefit Comparison Tool are among many quantitative and qualitative factors considered by SCE in its PSPS decision-making process.

²⁰ 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 2022 Wildfire Mitigation Plan Update, initiative SH-6.

²¹ 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.

²² In this event, 12 circuits in scope had either fully or partially installed covered conductor and thus higher windspeed thresholds. Of these 12 fully or partially covered circuits, only one had to be de-energized during this PSPS event.

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 find 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 impacts 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.

In this event, SCE determined that based on weather forecast data, fire weather modeling information, and results of the In-Event Risk Comparison Tool, these precautionary measures alone would not sufficiently reduce the risk to public safety, and PSPS was necessary for some of the circuits in scope.

Starting with the initial weather (wind and relative humidity) and fuel moisture forecasts for the period of concern, SCE also began evaluating its current system configurations for downstream circuits: that is, circuits receiving power from another circuit that was forecast to exceed de-energization thresholds. SCE also sought to identify any circuit segment or subset of customers that could safely be transferred from a circuit that was expected to exceed thresholds to another adjacent circuit that was not. Ultimately, SCE was able to transfer approximately 5,465 customers on 5 circuits to adjacent circuits to avoid de-energization.

During the Period of Concern, four circuits were meeting FPI criteria for de-energization at the time the wind thresholds were exceeded. Therefore, SCE ultimately de-energized 5,373 customers. 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 remotely activated its Emergency Operations Center on Wednesday, November 16, 2022 at 2:00 pm and ended for all circuits in scope on November 20, 2022 at 9:55 am by which time service was restored to all de-energized customers. This event encompassed impacted circuits in Los Angeles and Ventura counties. See 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/time²³
- 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-energized²⁴
- Residential customers de-energized
- Commercial/Industrial customers de-energized
- Medical Baseline (MBL) customers de-energized
- AFN other than MBL customers de-energized²⁵

²³ 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.

²⁴ 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 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.

²⁵ 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

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
VENTURA	BRENNAN	11/19/2022	1055	11/19/2022	1510	11/19/2022	1659	T3	Distribution
LOS ANGELES	ENERGY_5	11/19/2022	813	11/19/2022	2134	11/20/2022	955	T3	Distribution
VENTURA	MORGANSTEIN	11/19/2022	1055	11/19/2022	1509	11/19/2022	1707	T3	Distribution
VENTURA	RICARDO_2	11/19/2022	1102	11/19/2022	1240	11/19/2022	1717	Non HFRA, T3, T2	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
VENTURA	BRENNAN	2203	48	62	241	2492	T3	0
LOS ANGELES	ENERGY_5	262	25	21	46	333	T3	0
VENTURA	MORGANSTEIN	1761	84	86	171	2016	T3	0
VENTURA	RICARDO_2	466	12	8	54	532	Non HFRA, T3, T2	0

with a focus on identifying AFN customers particularly vulnerable during PSPS events. Currently, SCE reports on impacted AFN customers who have self-certified as sensitive (not enrolled in SCE's MBL or Critical Care programs). SCE also reports on impacted customers that provide shelter to the homeless population, as these entities are included among critical facilities and infrastructure. SCE will endeavor to provide more complete data on impacted AFN customers in the annual post-season report.

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.**

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.

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 community²⁶, 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 notifications, SCE directs potentially impacted customers to www.sce.com/pmps 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. Please see the table below for a description of the types of notices provided during this de-energization event.

Notification Descriptions		
Type of Notification	Recipients	Description
Advanced Initial or Initial	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).	Initial notification of potential PSPS event when circuits are first identified for potential de-energization (72-48 hours before potential de-energization)
Initial or Update	Other Customers (including multi-family building account holders).	Initial notification of potential PSPS event (48-24 hours before potential de-energization).

²⁶SCE 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 or family members of customers with AFN) to sign up for PSPS alerts for specific addresses.

Notification Descriptions		
Type of Notification	Recipients	Description
Update	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).	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 (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 (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
	Other Customers (including multi-family building account holders).	
Continued Shutoff	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). Customers (including multi-family building account holders).	Status update to customers impacted by an overnight de-energization.
Patrol and Inspect	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).	Inspection/patrols of de-energized circuits for PSPS restoration has begun and power will be restored shortly.
Prepare to Restore	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).	

Notification Descriptions		
Type of Notification	Recipients	Description
	Other Customers (including multi-family building account holders).	
Restore	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). Other Customers (including multi-family building account holders).	Power has been restored.
Event Avoided-All Clear²⁷	Critical Facilities & Infrastructure (including Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers). Other Customers (including multi-family building account holders).	PSPS event cancelled-no de-energization expected.

²⁷ SCE makes every effort to notify customers, public safety partners, and other impacted entities within two hours of a decision to cancel an anticipated de-energization event or to remove from scope. When the period of concern is over for a circuit or a circuit segment originally in scope and after the circuit is removed from the Monitored Circuit List, SCE sends an “Event Avoided-All Clear” cancellation notification to impacted entities and customers that had been notified of a potential de-energization, but not de-energized. Because weather conditions can change unexpectedly, SCE is not always able to make a final decision that notified customers will not experience de-energization until an “All Clear” declaration has been issued for all circuits in scope for the PSPS event.

Notification Descriptions		
Type of Notification	Recipients	Description
Event-Concluded- All Clear	<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>	PSPS event is concluded, and no further de-energization expected.

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 efforts to notify public safety partners, local/tribal governments, critical facilities and infrastructure entities, and other 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/tribal governments, public safety partners, 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 notification 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” 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 Notification

Positive Notification					
Category	Total Number of Customers	Timing of Attempts	Notification Attempts	Successful Positive Notification	Who Made the Notification
Medical Baseline	196	Daily	196	196	SCE
Self-Certified Sensitive	28	Daily	28	28	SCE

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.

Table 9: Breakdown of Notification Failures below details missed notifications during this PSPS event. See also subsection 6 below for an explanation on how the notification failures will be corrected.

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.	5	Not forecasted in scope by 48 hours before de-energization.
	Entities who did not receive 1–4-hour imminent notification.	5	Rapidly escalating weather conditions that required immediate de-energization
	Entities who did not receive any notifications before de-energization.	5	Rapidly escalating weather conditions that required immediate de-energization
	Entities who were not notified immediately before re-energization.	0	
	Entities who did not receive cancellation notification within two hours of the decision to cancel.	0	
Critical Facilities and Infrastructure	Facilities who did not receive 48–72-hour advance notification.	88	Rapidly escalating weather conditions that required immediate de-energization and 4 unenrollments
	Facilities who did not receive 1-4 hour of imminent notifications.	88	Rapidly escalating weather conditions that required immediate de-energization and 4 unenrollments
	Facilities who did not receive any notifications before de-energization.	88	Rapidly escalating weather conditions that required immediate de-energization and 4 unenrollments
	Facilities who were not notified at de-energization initiation.	4	Missing customer contact information and/or customers opting out of PSPS notifications
	Facilities who were not notified immediately before re-energization.	4	
	Facilities who were not notified when re-energization is complete.	4	
	Facilities who did not receive cancellation notification within two hours of the decision to cancel.	66	Complexity of segment level de-energizations intended to minimize customer impacts.
All other affected customers	Customers who did not receive 24–48-hour advance notifications.	4624	Rapidly escalating weather conditions that required immediate de-energization and 116 unenrollments
	Customers who did not receive 1–4-hour imminent notifications.	5146	Rapidly escalating weather conditions required immediate de-energization. 116 customers not enrolled
	Customers who did not receive any notifications before de-energization.	4624	Rapidly escalating weather conditions that required immediate de-energization and 116 unenrollments
	Customers who were not notified at de-energization initiation.	116	Missing customer contact information and/or customers opting out of PSPS notifications
	Customers who were not notified immediately before re-energization.	116	
	Customers who were not notified when re-energization is complete.	116	
	Customers who did not receive cancellation notification within two hours of the decision to cancel.	3679	Complexity of segment level de-energizations intended to minimize customer impacts.

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

As discussed above, it was not possible to provide advance notice of potential de-energization to 4712 de-energized customers during this event. That was due to sudden onset of stronger-than-expected winds in the vicinity of circuits that were not forecasted to exceed de-energization thresholds and thus were not in scope for potential de-energization prior to the period of concern. SCE is continuing to expand its machine learning modelling capabilities to further enhance the accuracy of its forecasts. While machine learning will continue to improve models, weather forecasting will always be subject to uncertainty, especially at a granular level.

SCE is actively enrolling customers that reside in High Fire Risk Areas to receive emergency notifications. A notification enhancement originally scheduled to be implemented in October 2022, now scheduled for December 2022, will help ensure all HFRA customers will be enrolled in emergency notifications prior to PSPS events. This enhancement will also prevent customers from un-enrolling from the emergency notification preference. SCE is also assessing alternative methods to obtain missing customer contact information via call center scripts, direct mailers, and other sources. While the number of customers without contact information is relatively minimal, SCE remains committed to making all reasonable efforts to provide notifications to customers affected during PSPS events.

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

Missed/Insufficient Notice:

- 5 Public Safety Partners could not be notified in advance of de-energization due to a sudden onset of fire weather conditions impacting circuits that were not forecast to be in scope prior to the period of concern.
- 4,712 customers could not be notified in advance of de-energization due to a sudden onset of fire weather conditions impacting circuits that were not forecasted to be in scope prior to the period of concern.
- 522 customers received advanced notification but did not receive imminent notification of de-energization. SCE was unable to send the imminent notification before de-energization due to rapidly escalating weather conditions that required immediate de-energization.
- 3,745 customers were not sent cancellation notifications within two hours of the decision to cancel or remove from scope due to the complexity of segment level de-energizations intended to minimize customer impacts.
- 120 de-energized customers could not be provided any notifications due to missing contact information or opting out of PSPS Notifications.

Incorrect Notification:

- 5 customers received notices in error during this event because they were incorrectly mapped to a circuit(s) on the monitored circuit list. SCE is in the process of making the necessary mapping corrections to its records for these 5 customers.

Cancelled Notifications:

- 12,394 customers were sent cancellation notices during this event. These customers were initially in scope for de-energization based on weather forecasts but were ultimately not de-energized

based on actual observed weather conditions during the Period of Concern.

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: PSPS 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 PSPS 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 PSPS 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: PSPS 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 PSPS event and during a PSPS 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 PSPS event. SCE also made this information available to customers at www.sce.com/pssp 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 to correct this issue.

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

SCE submitted the CalOES Notification form via the State Dashboard beginning on November 16, 2022 at 4:01 pm. SCE conducted daily operational briefings with State and local public safety partners, as well as critical infrastructure entities, for the duration of this PSPS event to provide critical incident updates and a forum for resolving issues. Table 10: Public Safety Partners Contacted in Attachment C: PSPS 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.

SCE provided notification of this PSPS high-threat event to the 211 California Networks, Regional Centers, Independent Living Centers, and American Red Cross chapters that serve their respective counties. SCE contacted the Community-Based Organizations (CBOs) serving Los Angeles and Ventura County on November 16th to alert them to potential PSPS outages in those areas. SCE also provided 24-hour contact information to these agencies if they needed to escalate any unidentified community issues.

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 20 mobile generators for use by critical facilities and infrastructure customers during PSPS events, as needed.

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 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 high-threat 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 high-threat 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 high-threat 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 high-threat event.

Any questions related to the information under this item may be directed to SCE at the following e-mail address: SCEBCDCustomersupport@sce.com.²⁸

²⁸ 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 65 reported complaints and 1 claim 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

Count and Nature of Complaints Received	
Nature of Complaints	Number of Complaints
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, including delays in restoring power, scope of PSPS and dynamic of weather conditions.	5
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern	1
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, REST/DAM sites (as applicable)	2
Outreach/Assistance Including, but not limited to complaints regarding community resource centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS	1
General PPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PPS-related complaints that do not fall into any other category.	56
Total	65

Table 13: Count and Type of Claims Received

Count and Type of Claims Received	
Description of Claims	Number of Claims
Food loss only	2
Property Damage	0
Food loss and property damage	0
Evacuation Cost	0
Business Interruption / Economic Loss	0
Unspecified	0
Total	2

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. All circuit restoration during this event was guided by safety considerations, including safety risks associated with patrolling certain circuits at night.

2,492 customers on the Brennan circuit were re-energized on November 19th at 4:59 pm. 2,548 customers on the Morganstein and Ricardo circuits were restored at 5:07 pm and 5:17 pm on November 19th. An additional 304 customers on the Energy circuit were restored on November 19th at 9:07 pm. One de-energized segment of the Energy circuit required air patrol during daylight hours prior to being restored. These remaining 29 customers were restored at 9:55 am on November 20th.

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.

N/A. There were no circuits that 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

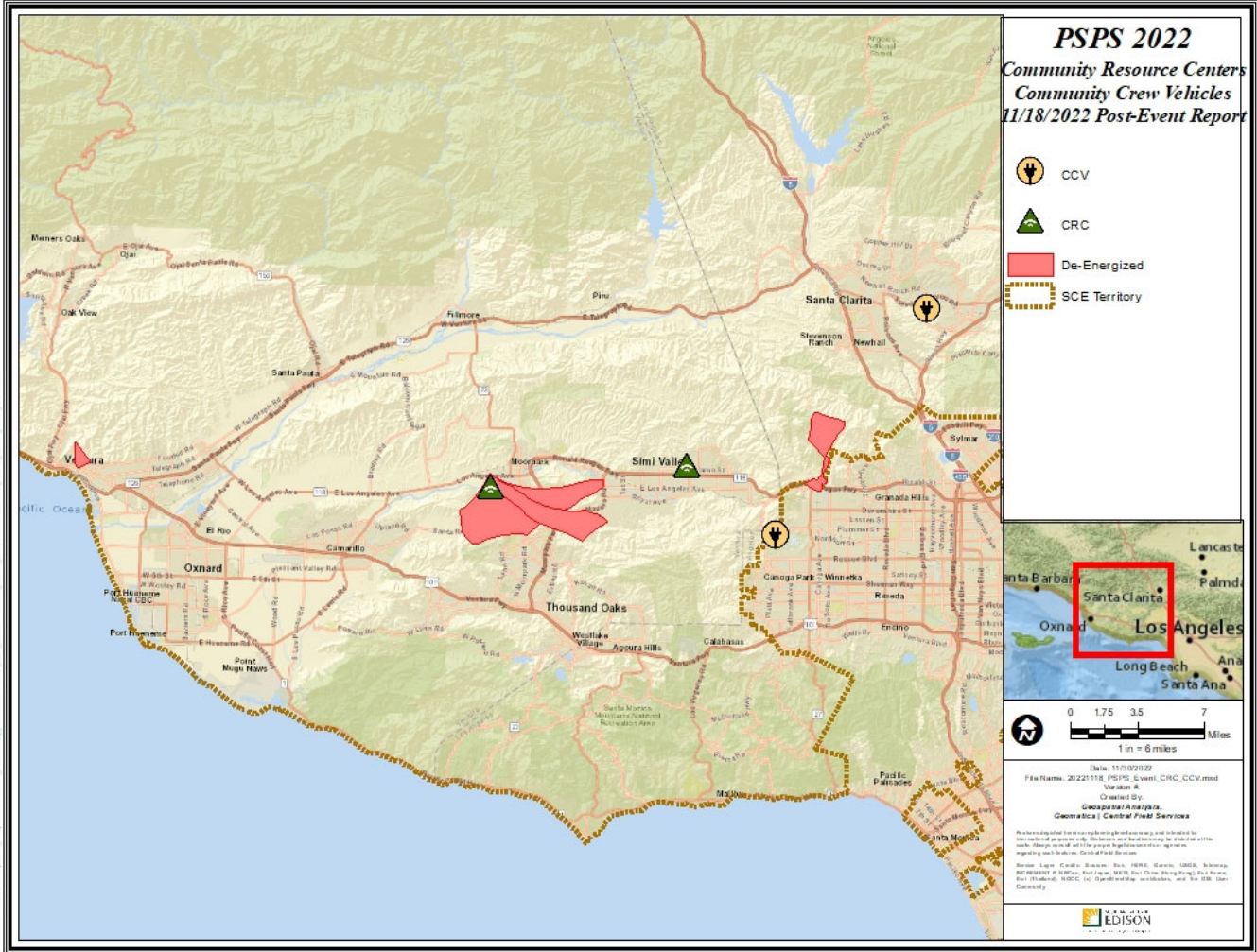
Community Resource Centers				
Address	Location Type	Describe the assistance available	Hours of Operation (Date / Time)	Number of Visitors
Chatsworth Lake Church parking lot 23449 Lake Manor Dr. Chatsworth, CA 91311	CCV	Small portable device charging (such as a cell phone, laptop, and small medical devices), seasonal heating and cooling, ice vouchers or ice, water, snacks, blankets, and wood as needed, and customer resiliency kits	11/18/2022: 6 PM - 10 PM 11/19/2022: 8AM - 10 PM 11/20/2022: 8 AM - 10:30 AM	52
The Centre Pointe 20970 Centre Pointe Pkwy Santa Clarita, CA 91350 (parking lot)	CCV	Small portable device charging (such as a cell phone, laptop, and small medical devices), seasonal heating and cooling, ice vouchers or ice, water, snacks, blankets, and wood as needed, and customer resiliency kits	11/18/2022: 6 PM - 10 PM 11/19/2022: 8 AM - 6 PM	0
Arroyo Vista Recreation Center 4550 Tierra Rejada Rd. Moorpark, CA 93021	CRC - Indoor	Small portable device charging (such as a cell phone, laptop, and small medical devices), seasonal heating and cooling, ice vouchers or ice, water, snacks, blankets, and wood as needed, and customer resiliency kits	11/18/2022: 6 PM - 10 PM 11/19/2022: 8 AM - 10 PM	20
Simi Valley Senior Center 3900 Avenida Simi Simi Valley, CA 93036	CRC - Indoor	Small portable device charging (such as a cell phone, laptop, and small medical devices), seasonal heating and cooling, ice vouchers or ice, water, snacks, blankets, and wood as needed, and customer resiliency kits	11/18/2022: 6 PM - 10 PM 11/19/2022: 8 AM - 6 PM	24

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

SCE deployed staff to provide community assistance to a total of four CRC and CCV locations in Los Angeles and Ventura counties during this event. Most locations were de-mobilized on November 19th with all locations de-mobilized by November 20th at 10:30 am.

SCE sometimes deviates from the CRC normal hours of operation of 8am to 10pm during PSPS events to either follow the period of concern more closely and provide appropriate customer support to best meet the needs of the community or when circuits had been re-energized and customer support is no longer necessary. In this event, some CRCs and CCVs closed by 6pm on November 19th because these sites were serving areas that had been re-energized and customer support was no longer necessary.

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



Section 10. Mitigation to Reduce Impact

1. Mitigation actions and impacts (both waterfall graph and map) 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 identify sectionalization devices that could reduce the number of potentially de-energized customers. In addition, SCE transferred over 5,400 customers to adjacent circuits not in scope pursuant to the then-current forecast, thereby maintaining service to these customers during the event.

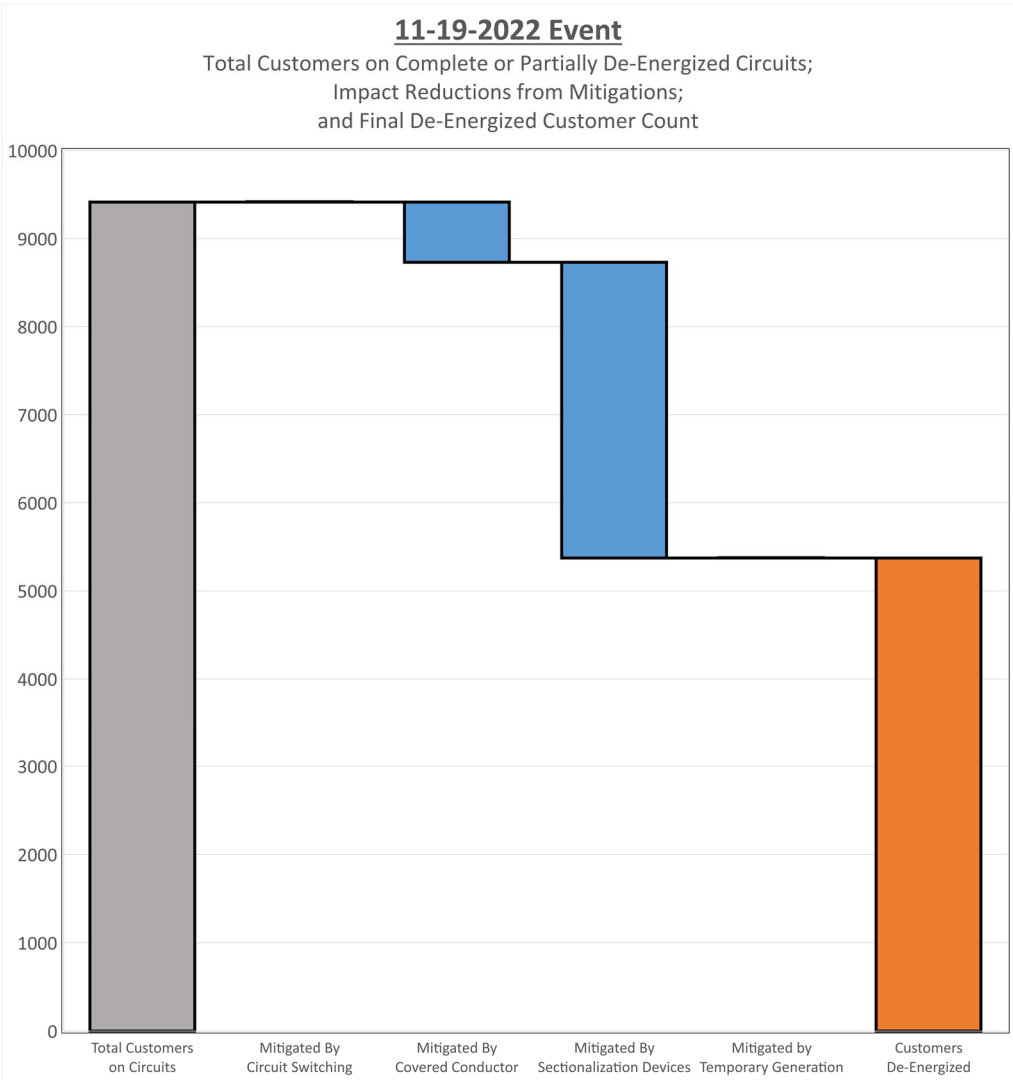
In addition, the replacement of bare wire with covered conductor allowed SCE to raise windspeed thresholds and thus reduced potential de-energization impacts to customers on portions of the following 12 circuits:

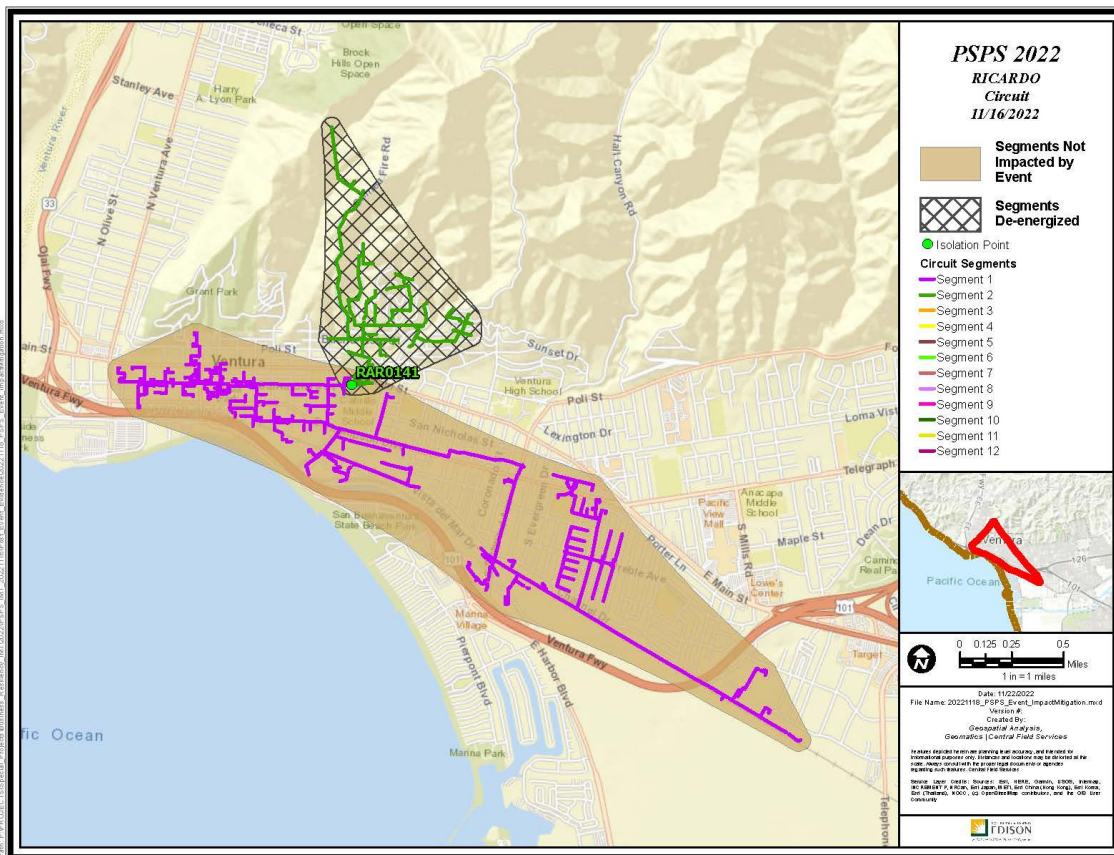
- Anton
- Big Rock
- Bouquet
- Cassidy
- Enchanted
- Energy
- Guitar
- Hillfield
- Rainbow
- Sand Canyon
- Tapo
- Zone

Absent mitigation, and under the same weather conditions, it may have been necessary to de-energize nearly 9,500 customers²⁹. For many of these customers, we were able to keep the entire circuits or segments of circuits energized through mitigations such as sectionalization and covered conductor. With these mitigations in place, SCE was able to limit de-energizations to 5,373 customers. (See waterfall graph below showing customer impact of mitigation efforts on circuits in scope for this event).

The waterfall graph and maps below illustrate the impacts of SCE's above-described mitigation measures where covered conductor and/or sectionalization devices were successfully deployed to limit the scope of de-energization. Circuits that were mitigated and avoided de-energizations altogether are not included in the waterfall graph below.

²⁹ 9,500 represents the number of customers on circuits that were subject to de-energization during the Period of Concern.





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 are adequate and correctly applied in the areas in scope as detailed in Attachment B - Quantitative and Qualitative Factors in PSPS Decision-Making Technical Paper.

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

SCE has identified the following lesson(s) learned.

Lessons Learned		
Issue	Discussion	Resolution
GIS map layering on external briefing decks was not clear.	GIS map provided in External Briefing decks did not clearly delineate de-energized area vs. monitored area. De-energized area layer was hidden under the monitored area.	GIS layer sequence updated to make de-energized areas stand out above the monitored areas for greater clarity.
External alerts to some Public Safety Partners suggested updated data was available on the Public Safety Partner Portal when it had not yet been posted.	Delay between e-mail sent and data updates on SCE’s Public Safety Partner Portal.	Update alert release to coincide with data being posted on external platforms such as the Public Safety Partner Portal.

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. Six participants completed SCE's engagement survey; of those six, all rated the engagement with SCE as positive.

Attachment A-Public Safety Partner and Customer Notification Scripts

Initial (72-hour) LNO Notification

Description:

Sent one time per county, preferably 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

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

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/pmps will reflect this information today.

We have set up an incident management team for this event including in-house meteorologists, fire scientists, liaison and public information officers, and other technical staff.

Recommended Language to Share with the Public: *SCE is forecasting dangerous wind-driven fire conditions starting in the next three days and might need to shut off power during this time. For more information, visit sce.com/PSPS.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at [sce.com/PSPS](https://www.sce.com/PSPS) starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at [sce.com/outages](https://www.sce.com/outages).

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: [sce.com/maps](https://www.sce.com/maps).

Weather conditions: [sce.com/fireweather](https://www.sce.com/fireweather).

Post-PSPS reports: [sce.com/psps](https://www.sce.com/psps).

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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.

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.**

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: [sce.com/pspsalerts](https://www.sce.com/pspsalerts).

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 Notice for PSPS Event in [County Name].

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 updated 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/psps 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/psps.

Recommended Language to Share with the Public: *SCE is forecasting dangerous wind-driven fire conditions and might need to shut off power. For more information, visit sce.com/PSPS.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at sce.com/PSPS starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at sce.com/outages.

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: sce.com/maps.

Weather conditions: sce.com/fireweather.

Post-PSPS reports: sce.com/psps.

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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.

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.**

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

Non-PSPS outages: sce.com/outages

Update customer contact information: sce.com/pspsalerts.

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

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.

Note: as of 5/15/2021 we still don't have a way to eliminate duplicate notifications when a circuit crosses county lines – all jurisdictions are included with each notification sent for a circuit.

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:

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).

Recommended Language to Share with the Public: *Due to current weather conditions increasing the risk of wildfires, SCE may shut off power on specific circuits within the next 4 hours to protect public safety. Visit [sce.com/PSPS](https://www.sce.com/PSPS) for more information about the shutoffs and SCE's available customer care options.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at [sce.com/PSPS](https://www.sce.com/PSPS) starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a

weather-related or repair outage in the same area. These are mapped and listed at [sce.com/outages](https://www.sce.com/outages).

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: [sce.com/maps](https://www.sce.com/maps).

Weather conditions: [sce.com/fireweather](https://www.sce.com/fireweather).

Post-PSPS reports: [sce.com/psp](https://www.sce.com/psp).

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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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.

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.**

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: [sce.com/pspsalerts](https://www.sce.com/pspsalerts).

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 Shutoff Notice for PSPS Event on [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: *If entered in Pega*

Incorporated City of: [Incorporated City]

Unincorporated County Area: [unincorporated area description]

SCE is notifying customers who are being shut off. The map on sce.com/pmps are being updated to reflect the current PSPS outages. [Information about Community Resource Centers and Community Crew Vehicles is available at sce.com/pmps.](#)

When weather conditions improve, crews will inspect and repair the lines and restore power. Typically power is restored 3 to 8 hours after the end of the weather event.

Recommended Language to Share with the Public: *Power has been shut off as part of public safety power shutoffs in our area. Please remember that all non-working traffic lights should be considered 4-way stop signs. Visit sce.com/PSPS for more information about the shutoffs and SCE's available customer care options.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at sce.com/PSPS starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at sce.com/outages.

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: [sce.com/maps](https://www.sce.com/maps).

Weather conditions: [sce.com/fireweather](https://www.sce.com/fireweather).

Post-PSPS reports: [sce.com/psps](https://www.sce.com/psps).

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

First Responders and Emergency Managers:

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Email: Business Resiliency Duty Manager/emergencies: BusinessResiliencyDutyManager@sce.com--

Only monitored during emergency activations.

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.**

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: [sce.com/pspsalerts](https://www.sce.com/pspsalerts).

Patrol and Inspection (formerly: imminent re-en)

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:

SCE is inspecting [CIRCUIT NAME] Circuit in [COUNTY NAME] for PSPS restoration.

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 Pega*

Incorporated City: [incorporated city]

Unincorporated County Area: [unincorporated area description]

Typically, power is restored in 3-8 hours. Exceptions include circuits in remote areas and circuits that have sustained significant damage.

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

Recommended Language to Share with the Public: *SCE is inspecting its lines and, in most cases, will restore power within 3-8 hours. Exceptions include circuits in remote areas and circuits that have sustained significant damage. Please remember to treat all traffic lights that are out as 4-way stops. Visit sce.com/PSPS for more information.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at sce.com/PSPS starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at sce.com/outages.

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: sce.com/maps.

Weather conditions: sce.com/fireweather.

Post-PSPS reports: sce.com/psp.

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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.

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.

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

Non-PSPS outages: sce.com/outages

Update customer contact information: sce.com/pspsalerts.

Restore Notification (formerly: RE-ENERGIZE)

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 Pega*

Incorporated City: [incorporated city]

Unincorporated County Area: [unincorporated area description]

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

Recommended Language to Share with the Public: *SCE has restored power that was shut off during the PSPS event. Visit [sce.com/PSPS](https://www.sce.com/PSPS) for more information. If your power is out, visit [sce.com/outages](https://www.sce.com/outages).*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at [sce.com/PSPS](https://www.sce.com/PSPS) starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at [sce.com/outages](https://www.sce.com/outages).

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: [sce.com/maps](https://www.sce.com/maps).

Weather conditions: [sce.com/fireweather](https://www.sce.com/fireweather).

Post-PSPS reports: [sce.com/psps](https://www.sce.com/psps).

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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.

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.**

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

Non-PSPS outages: sce.com/outages

Update customer contact information: sce.com/pspsalerts.

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 finally 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:

Power has been restored to all customers in [county name.] 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.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at [sce.com/PSPS](https://www.sce.com/PSPS) starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at [sce.com/outages](https://www.sce.com/outages).

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: [sce.com/maps](https://www.sce.com/maps).

Weather conditions: [sce.com/fireweather](https://www.sce.com/fireweather).

Post-PSPS reports: [sce.com/psps](https://www.sce.com/psps).

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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.

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.**

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

Non-PSPS outages: sce.com/outages

Update customer contact information: sce.com/pspsalerts.

Example 2: Use when most circuits have been restored but one or more circuit remains de-energized. Note: this is not a county-specific "all clear." When the POC has passed but some circuits remain out, most typically because of 1) delays in patrol (for example requiring air-ops), 2) significant repairs required, or 3) access prohibited by fire crews. Those circuits may be transitioned to Operations and closed out from a PSPS standpoint. That information is included in the Event Concluded notification, indicating power is not fully restored for that circuit(s). **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 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:

Recommended Language to Share with the Public: *The public safety power shutoff in your area has concluded, however some customers remain without power. If your power is still out, please visit sce.com/outages for more information.*

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 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 will have new periods of concern or other changed status. Definitions are on the second tab of the spreadsheet. Please email SCELiaisonOfficer@sce.com with concerns or questions about the spreadsheet.

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

Online outage information: Information and maps are available at sce.com/PSPS starting three days before the forecasted start date. If an outage does not appear on the PSPS map, it might be a weather-related or repair outage in the same area. These are mapped and listed at sce.com/outages.

For More Information:

[Public Safety Partner Portal](#) (available June 1, 2021)

PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers: sce.com/maps.

Weather conditions: sce.com/fireweather.

Post-PSPS reports: sce.com/psps.

REST service (web-based password-protected access to GIS layers), contact: SCERestInfo@sce.com

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

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--
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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.**

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

Non-PSPS outages: sce.com/outages

Update customer contact information: sce.com/pspsalerts.

PSPS Variable Notification Templates-Customers

1 | Initial Notification

TEXT/SMS

SCE Safety Outage Alert: High winds and fire conditions are forecasted in your area 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. We'll keep you updated so you know whether your power will be shut off. Visit sce.com/pssp for the latest information. For downed power lines, call 911. View in more languages: www.sce.com/PSPSInitial Please reply with 1 to confirm receipt of this message.

VOICE

Important SCE safety outage alert. To continue in English, press 1. [Spanish press 2], all other languages press 3.... High winds and fire conditions are forecasted in your area 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. We'll keep you updated so you know whether your power will be shut off. Visit [sce dot com slash pssp](https://sce.com/pssp) for the latest information. If you see a downed power line call 911.

EMAIL

Subject: SCE Safety Outage Initial Notification: 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](#)

Important Safety Message from Southern California Edison:

High winds and dangerous fire conditions are forecasted in your area 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. We'll keep you updated so you know whether your power will be shut off.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

- For the latest updates, outage map, and information about customer care services, visit sce.com/psps.
- 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| Imminent Shutdown
PSPS EXPECTED 1-4 HOURS BEFORE SHUTOFF

TEXT/SMS

SCE Safety Outage Alert: It's likely we will need to 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'll keep you updated and notify you again at the time of shutoff if we need to shut off your power. Weather could affect shutoff timing and wind-related outages may also occur. Thanks for your patience. Visit sce.com/pmps for the latest information and availability of community resources. For downed power lines, call 911. View in more languages: www.sce.com/PSPSExpected
Please reply with 1 to confirm receipt of this message.

VOICE

Important SCE safety outage alert. To continue in English, press 1. [Spanish press 2], all other languages press 3.... It's likely we will need to turn 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'll keep you updated and notify you again at the time of shutoff if we need to turn off your power. Weather could affect shutoff timing and wind-related outages may also occur. Thank you for your patience. Visit [sce dot com slash pmps](http://sce.com/pmps) for the latest information and availability of community resources. If you see a downed power line call 911.

EMAIL

Subject: SCE Safety Outage Alert: Expected 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](#)

Important Safety Message from Southern California Edison:

It's likely we will need to turn 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 continue working to reduce the number of customers affected. We'll keep you updated and notify you again at the time of shutoff if we need to turn off your power. Weather could affect shutoff timing and wind-related outages may also occur.

We understand this is inconvenient. 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 the latest updates, outage map, and availability of community resources, visit sce.com/psps.

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

5 | De-Energized

SMS/TEXT

SCE Start of Shutoff Alert: We are temporarily shutting off your power due to high risk of wind-driven wildfire in your area. These conditions could last through **^End Day of week^ ^morning/ afternoon/ evening^**. We will restore your power as soon as it's safe. Restoration typically takes 3-8 hours but could take longer if there is damage in your area. Remember to turn off or unplug appliances or equipment that may start automatically when power is restored. Thanks for your patience. Visit 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/PSPShutoff Please reply with 1 to confirm receipt of this message.

VOICE

Important SCE safety outage alert. To continue in English, press 1. [Spanish press 2], all other languages press 3.... We are temporarily shutting off your power due to high risk of wind-driven wildfire in your area. These conditions could last through **^End Day of week^ ^morning/ afternoon/ evening^**. We will restore your power as soon as it's safe. Restoration typically takes 3 to 8 hours but could take longer if there is damage in your area. Remember to turn off or unplug appliances or equipment that may start automatically when power is restored. Thank you for your patience. Visit [sce dot com slash psp](http://sce.com/psp)s for the latest information and availability of community resources. If you see a downed power line call 911.

EMAIL

Subject: SCE Safety Outage Alert: Start of 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](#)

Important Safety Message from Southern California Edison:

We are temporarily shutting off your power due to high risk of wind-driven wildfire in your area. These conditions could last through **^End Day of week^ ^morning/ afternoon/ evening^**. We will restore your power as soon as it's safe. Restoration typically takes 3-8 hours but could take longer if there is damage in your area. Please remember to turn off or unplug appliances or equipment that may start automatically when power is restored. We will update you as conditions change.

This alert applies to the following address(es):

Customer Address

Service Account
Meter Number
Rate

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

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

We understand this is inconvenient. We appreciate your continued patience as we work to keep your community safe.

7 | PREPARING TO RE-ENERGIZE (IMMINENT RESTORATION)

SMS/TEXT

SCE PSPS Safe Restoration Alert: We're working to restore power in your area now that winds have died down. This typically takes 3-8 hours but could take longer if there is damage in your area. We will alert you again when your power comes back on. Please turn off or unplug appliances or equipment that may start automatically when power is restored and inspect your property for downed power lines. Visit sce.com/psps for the latest information and availability of community resources. For downed power lines, call 911. Thank you for your patience as we work to keep your community safe. View in more languages: www.sce.com/PSPSPrepRestore Please reply with 1 to confirm receipt of this message.

VOICE

Important SCE safe restoration alert. To continue in English, press 1. [Spanish press 2], all other languages press 3... We're working to restore power in your area now that winds have died down. This process typically takes 3 to 8 hours but could take longer if there is damage in your area. We will alert you again when your power comes back on. Please turn off or unplug appliances or equipment that may start automatically when power is restored and inspect your property for downed power lines. If you see a downed power line stay away and call 911. For more information on the restoration process and availability of community resources, please visit [sce dot com slash psps](http://sce.com/psps). Thank you for your patience as we work to keep your community safe.

EMAIL

Subject: SCE PSPS Safe Restoration Alert: Power will be Restored Soon
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](#)

Important Safety Message from Southern California Edison:

We're working to restore power in your area now that winds have died down. This process typically takes 3-8 hours but could take longer if there is damage in your area. We will alert you again when your power comes back on. Please turn off or unplug appliances or equipment that may start automatically when power is restored 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.

This alert applies to the following address(es):

Customer Address

Service Account

Meter Number

Rate

For more information on SCE's restoration process and availability of community resources, please visit sce.com/psps.

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.

9-A | PSPS ENDED - RESTORED & ALL CLEAR [NO MORE RISK OF PSPS]

SMS/TEXT

SCE PSPS Safe Restoration Alert: We were able to restore power in your area and end this Public Safety Power Shutoff due to improved weather conditions. If your power is still off, please call 1-800-611-1911 or visit sce.com/outage. We understand that safety outages are inconvenient and thank you for your patience. View in more languages: www.sce.com/PSPSEnded Please reply with 1 to confirm receipt of this message. Please reply with 1 to confirm receipt of this message.

VOICE

Important SCE safe restoration alert... To continue in English, press 1. [Spanish press 2], all other languages press 3.... We were able to restore power in your area and end this 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](http://sce.com/outage). We understand that safety outages are inconvenient and thank you for your patience.

EMAIL

Subject: SCE PSPS Safe Restoration Alert: 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](#)

Important Safety Message from Southern California Edison:

We were able to restore power in your area and end this Public Safety Power Shutoff due to improved weather conditions. If your power is still off, please call 1-800-611-1911 or visit 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.

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?

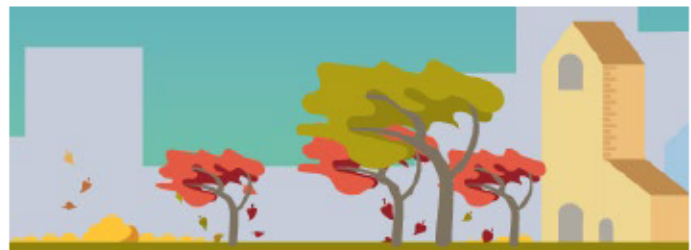
-5 DAYS FORECASTING

-3 DAYS FORECASTING

-2 DAYS FORECASTING

**DAY OF THE
PSPS EVENT**

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.

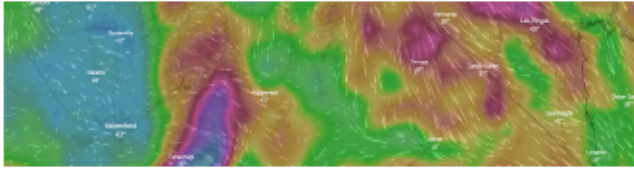


-5 DAYS FORECASTING

-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

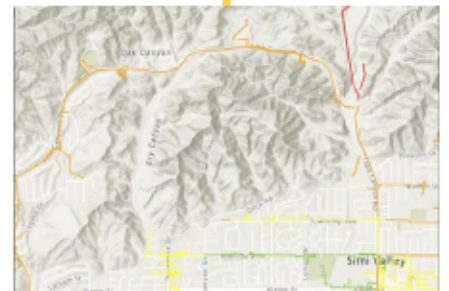
If the weather report is inconclusive, we will wait for additional weather reports or field assessments before we notify customers. We confer with the National Geographic Area Coordination Center (GACC) about fire danger risk.

! 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.

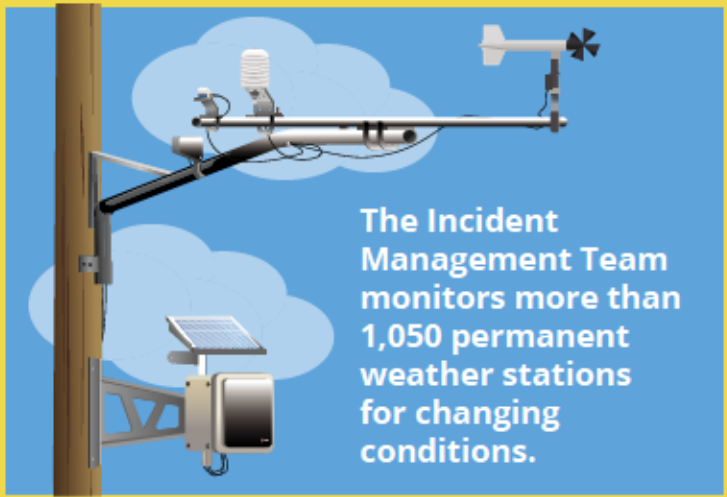
-5 DAYS FORECASTING

-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

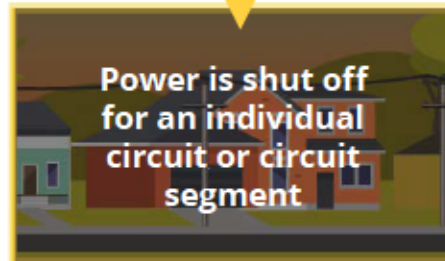
Recommendation:

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

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 6th day of December 2022 in La Canada, California

DocuSigned by:

F364FA6A2912409...

Shinjini Manon
Vice President,
Asset Management & Wildfire Safety

Appendix A

11.19.2022 PSPS Post-Event Report Data

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