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December 01, 2023

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

**SUBJECT: SCE PSPS Post Event Report – October 26, 2023, to November 02, 2023**

Dear Director Palmer:

As required by Resolution ESRB-8 and in accordance with Ordering Paragraph 1 of California Public Utilities Commission (CPUC) Decision (D.) 19-05-042, Southern California Edison Company (SCE) respectfully submits a compliance report for the de-energization event initiated on **October 26<sup>th</sup>** and concluded on **November 2<sup>nd</sup>**.

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:

*Marissa Blunski*

DDF576B774674B8...  
/s/ *Marissa Blunski*

Marissa Blunski  
Regulatory Affairs Principal Manager

cc: [ESRB\\_CompplianceFilings@cpuc.ca.gov](mailto:ESRB_CompplianceFilings@cpuc.ca.gov)

**Southern California Edison  
Public Safety Power Shutoff (PSPS) Post-Event Report  
October 29, 2023**

**Filed with: The California Public Utilities Commission  
Submitted to: Director of the Safety and Enforcement Division  
Dated: December 01, 2023**

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## Introduction

SCE submits this post-event report to address the de-energization event that started on October 29, 2023 at 06:31 am and ended on November 2, 2023 at 9:08 am in Kern, Los Angeles, Orange, Riverside, San Bernardino, 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).<sup>1</sup> 25,504 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 recognizes 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.

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<sup>1</sup> This PSPS post-event report is based on the best information and data available as of the extended filing deadline for the report. SCE continues to gather, analyze, and validate some of the underlying data, and will supplement this report with updated information, as needed, in its annual post-season report. See D.21-06-014, Ordering Paragraph 66, p. 305 (directing SCE to "provide aggregate data . . . in an annual report").

## 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 October 26, 2023, SCE's meteorologists identified the potential for dangerous fire weather conditions due to moderate to strong Santa Ana winds beginning on October 29, 2023, in portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The dry air and strong winds would create widespread areas of elevated fire weather conditions across Santa Ana wind-prone mountains, valleys, and passes for the Period of Concern starting on October 29, 2023, through November 1, 2023, in portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. Given this forecast, SCE's meteorology and fire science experts consulted the Geographic Area Coordination Center (GACC)<sup>2</sup> for forecast alignment to evaluate potential fire weather impacts. During this consultation, the GACC indicated agreement with SCE's forecast of elevated fire weather for Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The National Weather Service (NWS) also issued Red Flag and High Wind Warnings for portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties for the same time period.

In response to this forecasted fire weather, SCE activated its dedicated PSPS Incident Management Team (IMT) on October 26, 2023, at 12:30 pm to manage this event and began sending advance notifications of potential PSPS to Public Safety Partners, Critical Facilities and Infrastructure customers, and other customers in scope. On October 27<sup>th</sup>, SCE's meteorologists identified additional fire weather concerns for Kern County, and the NWS issued additional Fire Weather Watches for that area. On the evening of October 31<sup>st</sup>, the Period of Concern was extended into November 1, 2023, based on observed wind conditions on two circuit segments in Los Angeles County. Ultimately, SCE de-energized 25,504 customers in Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties during the Period of Concern based on observed fire weather conditions. This PSPS event concluded on November 2, 2023, at 9:08 am after all de-energized customers were restored; the IMT de-mobilized at 11:00am on November 2, 2023.

This event was the largest in scope and duration that SCE has experienced since 2021 and was the first large event managed with its newly implemented Central Data Platform (CDP). The size and complexity of this event strained the new CDP tool and caused some functionality failures and IT malfunctions. This technology issues contributed to missed notifications and errors/discrepancies in external-facing maps and customer metrics. Management of the event was complicated by circuits going in and out of scope due to volatility and duration of high winds, abnormal circuit configurations, and SCE's detailed operational protocols to minimize PSPS scope. SCE is conducting a detailed examination and will prioritize efforts to remediate these issues.

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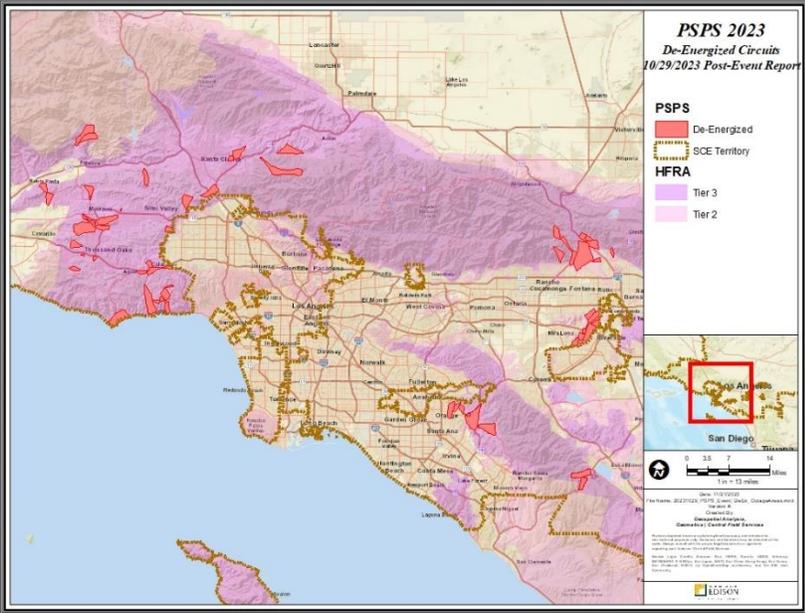
<sup>2</sup> The GACC is the physical location of an interagency, regional operation center for the effective coordination, mobilization, and demobilization of federal state and local wildland fire agencies through logistical coordination of resources throughout the geographic area, as well as with other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

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 Summary<sup>3</sup>

PSPS Event Summary										
Total Customers			De-energized				Number of Circuits			Damage/Hazard Count
PSPS Notified	De-energized	Cancelled	MBL Customers	Number of Counties	Number of Tribes	Critical Facilities and Infrastructure	Transmission De-energized	Distribution Circuits in Scope	Distribution Circuits De-energized	
202274	25504	179446	588	6	0	660	0	186	41	3

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



<sup>3</sup> “PSPS Notified” metric in Table 1 reflects the total number of unique customers that were sent a pre-event notification of potential de-energization during the PSPS event. “Cancelled” metric in Table 1 reflects the total number of unique customers that were sent a pre-event notification of potential de-energization, but not ultimately de-energized (regardless of whether those customers received a cancellation notice). (i.e. the notices were sent, but not successfully delivered). Please see Section 5 of this report regarding missed notifications and cancellation notice metrics.

## 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.<sup>4</sup>

**Table 2: Factors Considered in Decision to De-Energization<sup>5</sup> (Continued in Attachment C)**

Factors Considered in Decision to 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	
ACADEMY	31	29.83	31.75	46	42.72	45.45	12	13.80	50582.0575
ACOSTA_6	31	38.00	35.88	46	55.09	51.73	13	12.27	289583.2221
ANGUS_3, 4	31	29.45	30.24	46	43.70	53.56	12	12.69	44829.77962
ANTON_5, 8	31	36.00	42.39	46	52.20	62.98	12	13.75	173525.1299
ARABIA_2	31	31.41	31.00	41	40.79	50.42	12	12.40	21849.69637

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).<sup>6</sup> 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—such as this event-- where many circuits must be evaluated simultaneously. In addition, escalating weather conditions and operational complexities are considered when making de-energization decisions.

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

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

<sup>5</sup> Actual sustained and gust wind speeds in Table 2 are recorded at the time the decision was made to begin the de-energization process and do not reflect peak wind and gust speeds observed during the Period of Concern.

<sup>6</sup> SCE’s detailed technical paper, Quantitative and Qualitative Factors for PSPS Decision-Making, can be found at [download.newsroom.edison.com/create\\_memory\\_file/?f\\_id=609d61cbb3aed37d0f3d5f6a&content\\_verified=True](https://download.newsroom.edison.com/create_memory_file/?f_id=609d61cbb3aed37d0f3d5f6a&content_verified=True) and in Attachment B of this report.

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) within the flaming front at the head of a fire ... reflects the contribution of all live and dead fuels to potential fire intensity.”<sup>7</sup>
- 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.”<sup>8</sup>

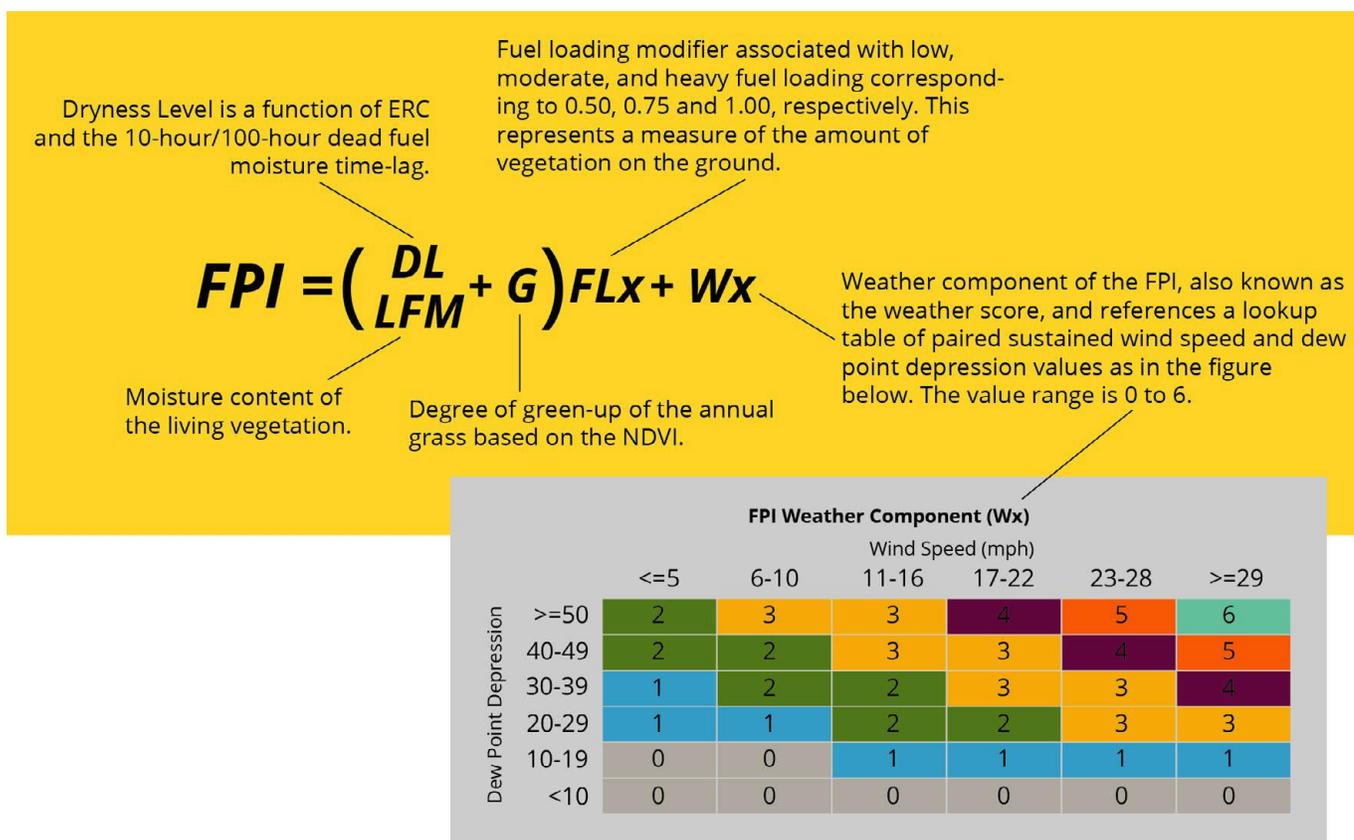
#### Visual 1. Fire Potential Index Equation<sup>9</sup>

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<sup>7</sup>U.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](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5339121.pdf).

<sup>8</sup> 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](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).

<sup>9</sup> Fire Potential Index adapted from San Diego Gas & Electric ([https://www.sdge.com/sites/default/files/regulatory/SDGE\\_Fire\\_Prevention\\_Plan\\_2018.pdf](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.



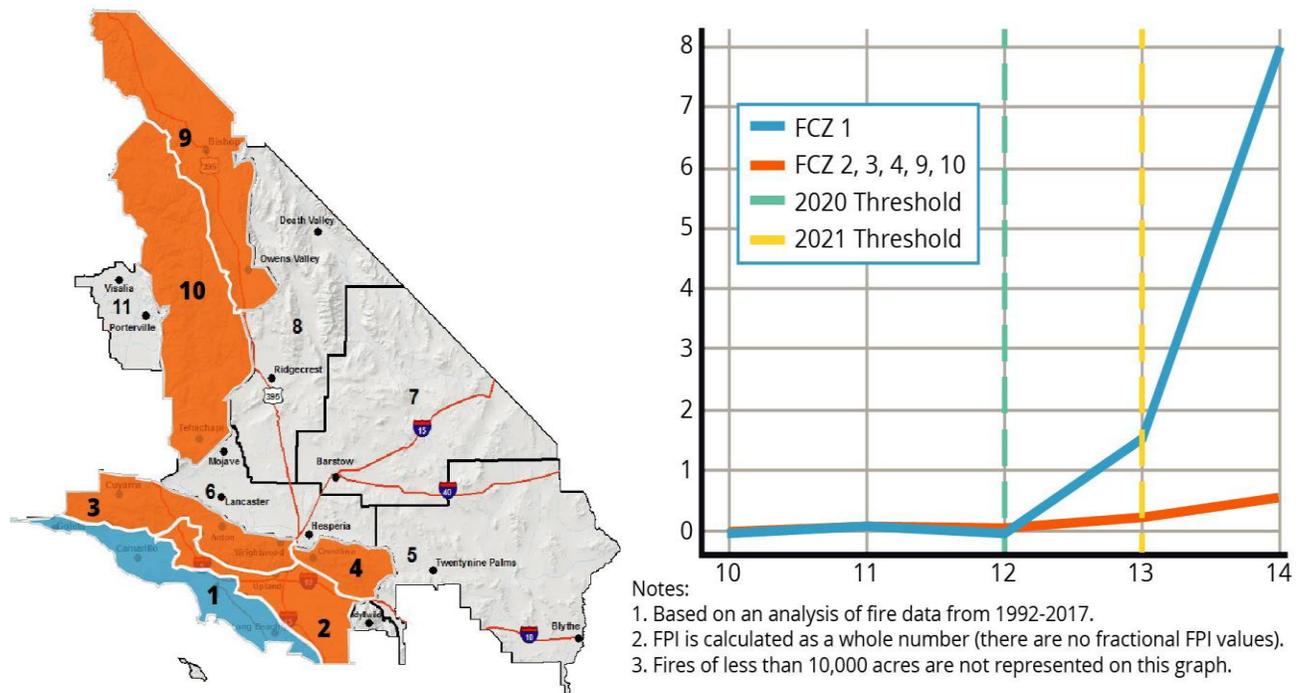
Initially, SCE set the FPI threshold to 12 for all circuits in SCE’s high fire risk areas. Starting on Sept. 1, 2021, SCE raised the FPI to 13 for most areas and most events based on a risk analysis of historical fire data.<sup>10</sup> Exceptions where the FPI threshold continued to be set at 12 include:

- 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). (Figure 2)
- Geographic Area Coordination Center (GACC) preparedness level of 4 or 5 — The GACC coordinates multiple federal, state, and regional fire suppression resources. It provides daily fire preparedness levels on a scale of 1-5. A high score signals that there is significant resource drawdown which could negatively impact fire response.
- 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 part of FPI, as well as egress, fire history and fire consequence. Further details about AOCs can be found in SCE’s Wildfire Mitigation Plan.<sup>11</sup>

<sup>10</sup> 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.

<sup>11</sup> SCE’s 2022 Wildfire Mitigation Plan Update dated February 18, 2023.

Visual 2. Probability of Wind-Driven Fires at 10,000 Acres at FPI 12 and 13<sup>12</sup>



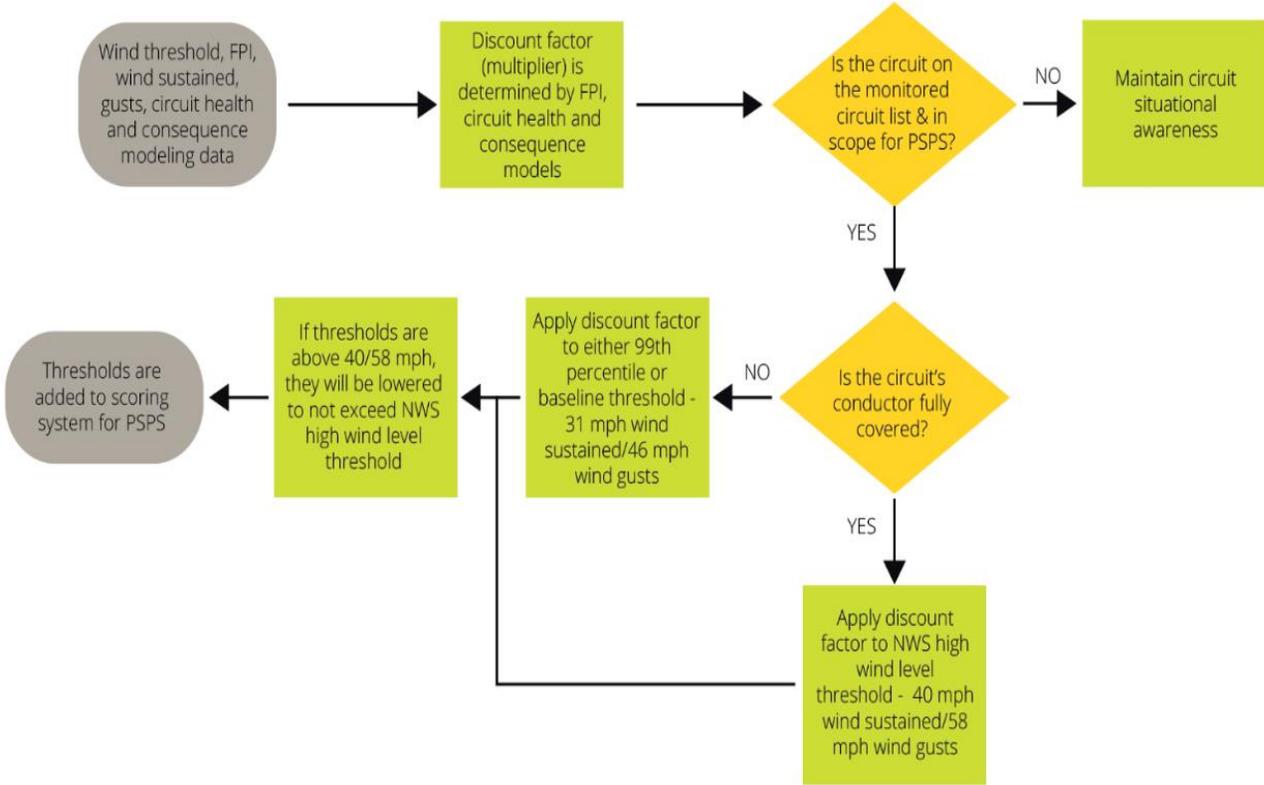
In 2023, SCE identified certain remote and isolated areas (less than 1% of SCE’s high fire risk area) where an FPI threshold of 11 may be appropriate to mitigate additional fire risk created by unique factors such as extremely limited egress and constrained fire suppression capability. SCE does not anticipate a significant increase in PSPS events as a result of lowering the FPI threshold in these areas.

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 NWS 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 high fire risk area. The consequence score estimates the impact of an ignition on communities. The higher the score, the greater the risk to a particular location from wildfires. SCE’s process for calculating de-energization thresholds is outlined below.

<sup>12</sup> Based on back cast FPI calculation.

Visual 3. PSPS Decision-Making Flowchart/Diagram



If actual conditions suggest more risk, or in large-scale events when many circuits are under consideration for shutoffs, the de-energization thresholds may be lowered (discounted), meaning power on a circuit will be turned off at lower wind speeds. This step prioritizes the circuits that represent the highest risk to be evaluated for de-energization before circuits at lower risk. During the large-scale and dynamic October 29, 2023, PSPS event, the Incident Commander, in consultation with Operations and SCE meteorologists, authorized de-energization on some circuits prior to observed windspeeds and/or FPI exceeding thresholds based on the potential threat posed by rapidly escalating fire weather conditions and event complexities (size of the event, many circuits approaching threshold simultaneously).

Conversely, de-energization thresholds are raised for segments or circuits that have had covered conductor installed. The de-energization threshold for segments with covered conductor is 40 mph sustained/58 mph gusts, which aligns with the NWS high wind warning level for windspeeds at which infrastructure damage may occur.

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

**Table 3: Circuit Thresholds (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
ANGUS	12	31	46	31.00	46.00
ATENTO	12	31	46	40.00	58.00
BIG ROCK	12	31	46	40.00	58.00
BRENNAN	12	31	46	31.00	46.00
CASSIDY	12	31	46	38.00	55.10

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

- Wind: Wind gusts of 45 to 65 mph were forecast for Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties during this event, with isolated areas of higher gusts up to 90 mph. Peak observed wind speeds were 76 mph sustained and 104 mph gusts in areas being monitored.
  - Relative humidity: Relative humidity during this event was forecast to be between 5% and 15% across Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties concurrent with the strong winds. Actual observed relative humidity ranged from 1% to 11% during this event. As discussed in Section 2-1 above, relative humidity is just one of many variables that inform SCE’s FPI ratings.
- 3. A thorough and detailed description of the quantitative and qualitative factors SCE considered in calling, sustaining, or curtailing each de-energization event including any fire risk or PSPS risk modeling results, and a specification of the factors that led to the conclusion of the de-energization event.**

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

- Consultation with the GACC regarding the potential for elevated fire weather within the SCE service territory during the Period of Concern. The GACC agreed with SCE’s forecast of elevated fire weather potential for Kern, Los Angeles, Orange, Riverside, San Bernardino, 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 one-to-five thousand (1,000 to 5,000)-acre range with scattered ten thousand (10,000)-acre fire potential in the areas of

concern during the Period of Concern.

- Observed weather parameters for this PSPS event, including wind speeds and FPI ratings for the circuits in scope relative to the preset thresholds for this event. De-energization thresholds were approached or exceeded for 41 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 specific to this event.
- National Weather Service-issued watches and warnings for areas of concern in SCE service territory. There were Red Flag Warnings and High Wind Warnings for Kern, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties issued 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 morning on November 1, 2023, due to forecasted and observed decreasing wind speeds and FPI.
- Observed wind speeds and FPI ratings. Observed wind and FPI ratings for all circuits in scope no longer met de-energization threshold criteria as of 2:20 PM on October 31, 2023. However, as noted above, the Period of Concern was extended until November 1, 2023, for some areas, and circuits in those areas continued to be monitored. No additional de-energizations were necessary after October 31, and Period of Concern for the event expired on/at 9:00 AM on November 1, 2023, for portions of Los Angeles County.
- The PSPS event concluded on November 2, 2023, at 9:08 am after all de-energized customers were restored.

**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.<sup>13</sup> 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

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<sup>13</sup> 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.

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 FireCast<sup>14</sup> 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:

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<sup>14</sup> 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
<b>Safety</b>	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. <sup>14</sup> 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.
<b>Reliability</b>	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.
<b>Financial</b>	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. <sup>15</sup>	SCE conservatively assumes \$250 <sup>16</sup> 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 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.<sup>15</sup> These risk scores are compared to each other by dividing the wildfire risk score (*i.e.*, the potential benefit of PSPS) by the PSPS risk score (*i.e.*, the potential public harm of PSPS), yielding a benefit/risk ratio for each circuit in scope of the PSPS event. If the resulting ratio is equal to 1, the risks are equivalent. If the ratio is greater than one, the wildfire risk exceeds the PSPS risk (the higher the resulting number, the more the wildfire risk outweighs the PSPS risk). If the ratio is less than 1, the PSPS risk outweighs the wildfire risk.

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

<sup>15</sup> 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

**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	
ABACUS	2110	6330	1.09706427	1440	662.98	99	455	0.000441765	0.010135634	22.9435	
ACADEMY	61	183	1.13404624	1440	1355.5	107	320	0.000012806	0.010618993	830.0574	
ACOSTA	1291	3873	1.24804107	1440	5899.9	620	2362	0.000273290	0.061301476	225.1589	
ACRES	2237	6711	1.20166571	1440	3708.7	153	548	0.000471952	0.01579336	33.4639	
AGATE	4212	12636	1.12606206	1440	1113.5	116	454	0.000883733	0.012228562	13.8374	

For this de-energization event, the results of the PSPS Risk vs. Benefit Comparison Tool supported SCE’s decision to de-energize, indicating that all circuits in scope for potential de-energization during this event<sup>16</sup> 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).<sup>17</sup> In addition, SCE has implemented operational practices including enhanced inspections, vegetation management, and fire climate zone operating restrictions<sup>18</sup> 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.<sup>19</sup> 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

<sup>16</sup> 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 Tool are among many quantitative and qualitative factors considered by SCE in its PSPS decision-making process. Although the ratios shown for the circuits in scope supported a potential de-energization for all circuits in scope, SCE ultimately needed to de-energize 41 circuits based on actual conditions during the Period of Concern.

<sup>17</sup> 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.

<sup>18</sup> 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.

<sup>19</sup> In this event, 59 circuits in scope for potential de-energization had either fully or partially installed covered conductor and thus higher windspeed thresholds. Of these 59 fully or partially covered circuits, only 16 had to be de-energized during this PSPS event.

that may lead to significant wildfires.

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

SCE makes every effort to limit the scope, duration, and impact of PSPS for as many customers as possible. This includes adjusting wind speed thresholds higher for circuits or segments that have covered conductor installed and leveraging sectionalization equipment to switch some customers to adjacent circuits not impacted by PSPS or otherwise remove them from scope. Starting with the initial weather (wind and relative humidity) and fuel moisture forecasts for the Period of Concern, SCE evaluates its current system configurations for downstream circuits, i.e., circuits receiving power from another circuit that is forecast to exceed de-energization thresholds. SCE seeks to identify any circuit segment or subset of customers that could safely be transferred from a circuit that is expected to exceed thresholds to another adjacent circuit that is not. Ahead of the Period of Concern for this event, SCE was able to transfer approximately 13,540 customers on 14 circuits to adjacent circuits to mitigate any potential impacts if de-energization became necessary.

Based on weather data, fire weather modeling information, and results of the PSPS Risk vs. Benefit Tool Comparison Tool, SCE determined that the above-described precautionary measures alone would not sufficiently reduce the risk to public safety during the October 29, 2023 event, and PSPS was necessary for some of the circuits and customers in scope. During the Period of Concern, 41 circuits met FPI criteria for de-energization at the time the wind thresholds were exceeded. Therefore, SCE ultimately de-energized 25,504 customers on these circuits. See Section 10 for additional details regarding SCE's mitigation efforts for this event.

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

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

This PSPS event began when SCE activated its Emergency Operations Center on October 26, 2023, at 12:30 pm and ended for all circuits in scope on November 2, 2023, at 9:08 am by which time service was restored to all de-energized customers. This event encompassed de-energized circuits in Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. See, also Section 1-1 above for additional information.

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

A zipped geodatabase file that includes all information in Section 3.3 is included with this filing.

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

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

- County
- De-energization date/time
- Restoration date/time
- “All Clear” declaration date/time<sup>20</sup>
- 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-energized<sup>21</sup>
- Residential customers de-energized
- Commercial/Industrial customers de-energized
- Medical Baseline (MBL) customers de-energized
- AFN other than MBL customers de-energized<sup>22</sup>
- Other Customers
- Distribution or transmission classification

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<sup>20</sup> 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.

<sup>21</sup> 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.

<sup>22</sup> SCE maintains extensive data on customer populations that are included in the AFN definition referenced in CPUC decisions, with a focus on identifying AFN customers particularly vulnerable during PSPS events. In addition to AFN customers who have self-certified as sensitive (not enrolled in the MBL program), SCE identifies and tracks for PSPS reporting purposes the following categories of “AFN other than MBL customers”: senior citizens (65 and older), hearing-impaired, vision-impaired (communications provided in large font or Braille), income-qualified (enrolled in CARE or FERA), and non-English speakers. SCE also reports on impacted customers that provide shelter to the homeless population, as these entities are included among critical facilities and infrastructure.

**Table 5: Circuits De-Energized** <sup>23</sup>

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	ACADEMY	10/29/2023	11:53	10/30/2023	17:00	10/30/2023	18:23	T3	Distribution
SAN BERNARDINO	ACOSTA_6	10/30/2023	12:11	10/30/2023	16:04	10/30/2023	16:52	Non HFRA, T3, T2	Distribution
SAN BERNARDINO	ANGUS_3, 4	10/29/2023	7:43	10/30/2023	14:13	10/30/2023	15:38	Non HFRA, T3, T2	Distribution
VENTURA	ANTON_5, 8	10/29/2023	9:14	10/30/2023	14:00	10/30/2023	17:47	T3	Distribution
ORANGE	ARABIA_2	10/29/2023	7:42	10/29/2023	16:43	10/29/2023	17:01	Non HFRA, 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	ACADEMY	47	14	0	0	61	T3	0
SAN BERNARDINO	ACOSTA_6	0	5	0	0	5	Non HFRA, T3, T2	0
SAN BERNARDINO	ANGUS_3, 4	57	0	1	0	57	Non HFRA, T3, T2	0
VENTURA	ANTON_5, 8	43	8	2	5	51	T3	0
ORANGE	ARABIA_2	817	22	27	69	839	Non HFRA, T2	0

## 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.

Several instances of wind-related damages and potential hazards to distribution circuit structures and associated line hardware were found during restoration patrols for this event, as detailed in the table below.

### 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.<sup>24</sup>

<sup>23</sup> The sum of (i) residential customers de-energized, (ii) commercial/industrial customers de-energized, and (iii) other customers equals the total number of customers de-energized per circuit for this event. The count of "Residential Customers De-energized" includes sub-categories of "Medical Baseline customers De-energized" and "AFN other than MBL customers De-energized."

<sup>24</sup> Hazards are conditions discovered during restoration patrolling or operations that might have caused damages or posed an electrical arcing or ignition risk had PSPS not been executed.

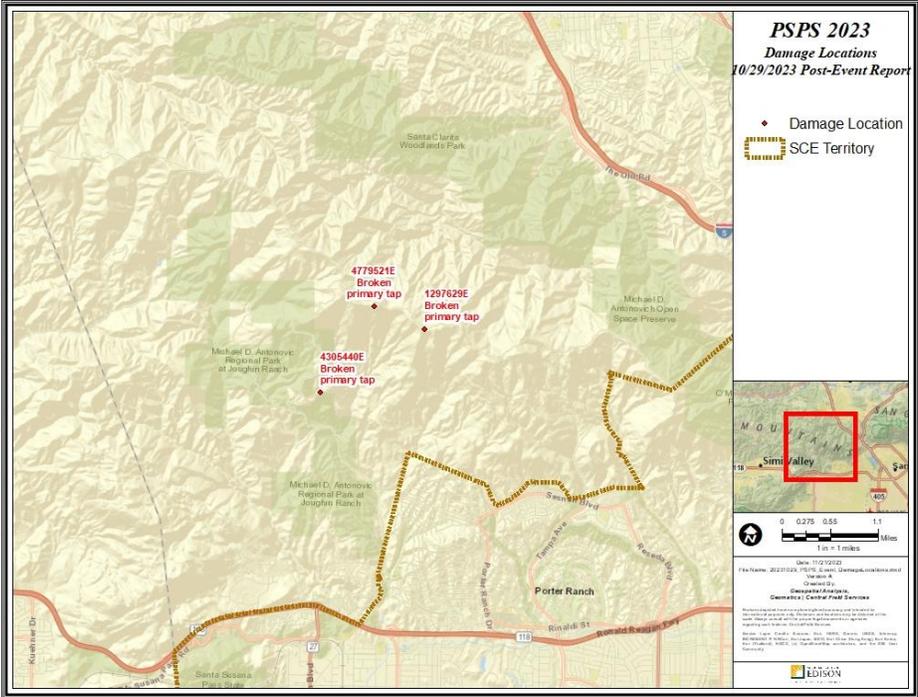
**Table 6: Damage and Hazards**

Damage and Hazards				
Circuit Name	County	Structure Identifier	Tier 2/3 or Non-HFTD	Type and Description of Damage
Energy	Los Angeles	1297629E	Tier 3	Broken primary tap
Energy	Los Angeles	4305440E	Tier 3	Broken primary tap
Energy	Los Angeles	4779521E	Tier 3	Broken primary tap

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.

A zipped geodatabase file that provides all information in Section 3.3 is included with this filing.

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



## Section 5. Notification

- 1. A description of the notice to public safety partners, local/tribal governments, paratransit agencies that may serve all the known transit or paratransit dependent persons that may need access to a community resource center, multi-family building account holders/building managers in the AFN community<sup>25</sup>, and all customers, including the means by which utilities provide notice to customers of the locations/hours/services available for CRCs, and where to access electricity during the hours the CRC is closed.**

SCE includes paratransit agencies that may be de-energized in its PSPS notifications and classifies these agencies overall as critical facilities and infrastructure to ensure they receive priority notifications. All multi-family building SCE account holders receive customer notifications. In its customer notification, SCE directs potentially impacted customers to [www.sce.com/psps](http://www.sce.com/psps) for information related to the location, hours, and services available at Community Resource Centers. Instructions on where customers can access electricity during the hours the centers are closed have been made available on the SCE website. 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 <sup>26</sup>
<b>Advance Initial-or Initial</b>	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	Initial notification of potential PSPS event when circuits are first identified for potential de-energization (72-48 hours before potential de-energization)

<sup>25</sup> SCE notifies multi-family building account holders in the ordinary course along with other customers of record in scope for a potential de-energization. SCE does not currently have a way to identify which multi-family building account holders have residents in their buildings who may be members of the AFN community. SCE conducts PSPS-related outreach via flyers and trade publications to increase awareness of PSPS among building/property managers who are not account holders. SCE also instituted an address-level alert program, which allows non-SCE account holders (such as building/property managers) to sign up for PSPS alerts for specific addresses.

<sup>26</sup> SCE makes every effort to adhere to the notification timelines required by the CPUC. However, notifications may be delayed in some circumstances due to the sudden onset of dangerous fire weather that was not forecasted or when such weather conditions manifest earlier than predicted by the forecast.

Notification Descriptions		
Type of Notification	Recipients	Description <sup>26</sup>
	Other Customers (including multi-family building account holders).	Initial notification of potential PSPS event (48-24 hours before potential de-energization).
<b>Update</b>	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	PSPS event status update notification to alert for any changes or additions/deletions to current scope (timing varies and may also occur daily). Update notice to Public Safety Partners may also serve as cancellation notice if circuits are removed from scope.
	Other Customers (including multi-family building account holders).	
<b>Expected Shutoff</b>	Public Safety Partners and all Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).	Power shutoff expected soon (1-4 hours before potential de-energization).
	Other Customers (including multi-family building account holders).	
<b>Shutoff</b>	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and	Power has been shut off (when de-energization is initiated).

Notification Descriptions		
Type of Notification	Recipients	Description <sup>26</sup>
	<p>telecommunications providers, CBOs and paratransit agencies serving the AFN community).</p> <p>Other Customers (including multi-family building account holders).</p>	
<b>Prepare to Restore</b>	<p>Public Safety Partners and Critical Facilities &amp; Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).</p> <p>Other Customers (including multi-family building account holders).</p>	<p>Inspection/patrols of de-energized circuits for PSPS restoration has begun and power will be restored shortly.</p>
<b>Restored</b>	<p>Public Safety Partners and Critical Facilities &amp; 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>	<p>Power has been restored.</p>

Notification Descriptions		
Type of Notification	Recipients	Description <sup>26</sup>
<b>Restored-Not All Clear</b>	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers, CBOs and paratransit agencies serving the AFN community).  Other Customers (including multi-family building account holders).	Power has been temporarily restored, PSPS risk still remains
<b>Event Avoided-All Clear<sup>27</sup></b>	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.
<b>Event Concluded-All Clear</b>	Public Safety Partners and Critical Facilities & Infrastructure Customers (including local and Tribal governments, Community Choice Aggregators, hospitals, water/wastewater and telecommunications providers,	PSPS event is concluded, and no further de-energization expected.

<sup>27</sup> 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 <sup>26</sup>
	CBOs and paratransit agencies serving the AFN community).  Other Customers (including multi-family building account holders).	

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

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

**3. For those customers where positive or affirmative 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**

<b>Positive Notification</b>					
<b>Category</b>	<b>Total Number of Customers<sup>28</sup></b>	<b>Timing of Attempts</b>	<b>Notification Attempts<sup>29</sup></b>	<b>Successful Positive Notification<sup>30</sup></b>	<b>Who made the notification</b>
<b>Medical Baseline</b>	5600	DAILY	5808	5593	SCE
<b>Self-Certified</b>	296	DAILY	338	296	SCE

Seven Medical Baseline customers were not successfully contacted during this event, but these customers were not ultimately de-energized.

**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.**

<sup>28</sup> The “Total Number of Customers” metric reflects the total number of MBL and Self-Certified customers in scope for the PSPS event. Although SCE attempts to notify all MBL and Self-Certified customers in scope, only customers who are ultimately de-energized “need” positive pre-event PSPS notifications.

<sup>29</sup> The “Notification Attempts” metric reflects the count of MBL and Self-Certified customers – both in scope and de-energized – whom SCE attempted to notify prior to de-energization. Notification attempts include secondary verification by Consumer Affairs and escalated contact attempts, up to and including door rings, if necessary, to confirm successful delivery of notifications to Medical Baseline and Self-Certified customers.

<sup>30</sup> The “Successful Positive Notification” metric reflects the number of unique MBL and Self-Certified customers – both in scope and de-energized – who were successfully notified of the PSPS event prior to de-energization.

**Table 9: Breakdown of Notification Failure**

<b>Breakdown of Notification Failures</b>			
<b>Notifications sent to</b>	<b>Notification Failure Description</b>	<b>Number of Entities or Customer Counts</b>	<b>Explanation</b>
<b>Public Safety Partners excluding Critical Facilities and Infrastructure</b>	<b>Entities who did not receive 48-to 72-hour advance notification.</b>	7	System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below) <ul style="list-style-type: none"> <li>• Notifications were sent outside the 48–72-hour window</li> </ul>
	<b>Entities who did not receive 1–4-hour imminent notification.</b>	18	System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below) <ul style="list-style-type: none"> <li>• Notifications were sent outside the 1–4-hour window</li> </ul>
	<b>Entities who did not receive any notifications before de-energization.</b>	5	System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)
	<b>Entities who were not notified immediately before re-energization.</b>	20	Notifications were sent to these entities using the most up-to-date contact information on file, but were not delivered for unknown reasons
	<b>Entities who did not receive cancellation notification within two hours of the decision to cancel.</b>	109	System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below) <ul style="list-style-type: none"> <li>• 59 notifications were sent outside the 2-hour window</li> <li>• 50 notifications were not sent</li> </ul>
<b>Critical Facilities and Infrastructure</b>	<b>Facilities who did not receive 48–72-hour advance notification.</b>	75	System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below) <ul style="list-style-type: none"> <li>• 21 notifications were</li> </ul>

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
			<p>sent outside the 48–72-hour window</p> <ul style="list-style-type: none"> <li>53 notifications were not sent</li> </ul> <p>1 notification was sent using the most up-to-date contact information on file, but was not delivered for unknown reasons</p>
	<b>Facilities who did not receive 1-4 hour of imminent notifications.</b>	382	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>240 notifications were sent outside the 1–4-hour window</li> <li>136 notifications were not sent</li> </ul> <p>6 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	<b>Facilities who did not receive any notifications before de-energization.</b>	11	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p>
	<b>Facilities who were not notified at de-energization initiation.</b>	107	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>101 notifications were not sent</li> </ul> <p>6 notifications were sent using the most up-to-date contact</p>

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
			information on file, but were not delivered for unknown reasons
	<b>Facilities who were not notified immediately before re-energization.</b>	120	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>8 notifications were sent after restoration was complete</li> <li>111 notifications were not sent</li> </ul> <p>1 notification was sent using the most up-to-date contact information on file, but was not delivered for unknown reasons</p>
	<b>Facilities who were not notified when re-energization is complete.</b>	113	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>101 notifications were not sent</li> </ul> <p>12 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	<b>Facilities who did not receive cancellation notification within two hours of the decision to cancel.</b>	130	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below.)</p> <ul style="list-style-type: none"> <li>70 notifications were sent outside the 2-hour window</li> <li>20 notifications were not sent</li> </ul>

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
			40 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons
All other affected customers	Customers who did not receive 24-48-hour advance notifications.	5200	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>• 1883 notifications were sent outside the 24-48-hour window</li> <li>• 2900 notifications were not sent</li> </ul> <p>417 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	Customers who did not receive 1-4-hour imminent notifications.	11908	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>• 8366 notifications were sent outside the 1-4-hour window</li> <li>• 58 notifications were received after de-energization</li> <li>• 3211 notifications were not sent</li> </ul> <p>273 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	Customers who did not receive any notifications before de-energization.	2435	System/operational failure (please see detailed

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
			<p>explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>• 98 notifications were received after de-energization</li> <li>• 417 notifications were not sent</li> </ul> <p>1920 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	<b>Customers who were not notified at de-energization initiation.</b>	6180	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>• 4062 notifications were not sent</li> </ul> <p>2118 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	<b>Customers who were not notified immediately before re-energization.</b>	7452	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>• 343 notifications were sent after re-energization</li> <li>• 5093 notifications were not sent</li> </ul> <p>2016 notifications were sent using the most up-to-date contact information on file,</p>

Breakdown of Notification Failures			
Notifications sent to	Notification Failure Description	Number of Entities or Customer Counts	Explanation
			but were not delivered for unknown reasons
	<b>Customers who were not notified when re-energization is complete.</b>	5910	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>4065 notifications were not sent</li> </ul> <p>1845 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>
	<b>Customers who did not receive cancellation notification within two hours of the decision to cancel.</b>	6896	<p>System/operational failure (please see detailed explanation in Section 5-6 and Lessons Learned below)</p> <ul style="list-style-type: none"> <li>1928 notifications were sent outside the 2-hour window</li> <li>1066 notifications were not sent</li> </ul> <p>3902 notifications were sent using the most up-to-date contact information on file, but were not delivered for unknown reasons</p>

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

CDP functionality failures and unexpected IT malfunctions caused missed notifications across all notification types for customers. The PSPS Notification Specialists had to rely on unfamiliar and cumbersome manual processes to override system errors. This strained available staffing resources,

who were not able to meet the high notification demand associated with a large complex event, as described in Section 3, while relying on manual processes.

Less complex system issues that can be quickly remediated are currently being addressed to mitigate reoccurrence in potential future PSPS events. For example, SCE improved the capacity and performance of the CDP application to meet the data demands of large PSPS events. SCE also corrected programming errors that caused circuits to be incorrectly included in event scope. Upon the completion of the 2023 PSPS season, SCE will conduct extensive examination and root cause analysis to remediate larger and more complex system issues. Additionally, SCE will conduct end-to-end stress testing of operational systems using worst-case events from prior years to validate system corrections. SCE plans to continue conducting year-round system testing and drills with increased scope, complexity and situations requiring the use of back-up processes to maintain readiness and identify potential system issues ahead of real-world activations. SCE will use these system tests and drills to validate resolution of identified issues.

For notifications sent but not received due to delivery failure, SCE is working with its notification vendors to determine what caused the delivery failures (e.g., invalid contact information, server errors, customer blocked SCE as sender) and will work to minimize these notification issues in the future. SCE remains committed to making all reasonable efforts to provide notifications to all customers affected during PSPS events.

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

### Missed/Insufficient Notification:

Please see Table 9 and sub-section 6 above for information on missed or insufficient notification during this event.

### Incorrect Notification:

- SCE is aware of two incorrect notifications sent during this event. When issuing cancellation notifications to Los Angeles and San Bernardino counties, SCE inadvertently provided these counties with incorrect circuit information.

### Cancellation Notification:

- SCE sent cancellation notices to 179,386 customers that were notified of potential de-energization but not ultimately de-energized during this event. SCE notifies customers on circuits in scope for potential de-energization ahead of the Period of Concern based on its assessment of the likelihood that winds will exceed PSPS thresholds. De-energization was not necessary for these customers because forecast fire weather conditions did not materialize in those areas, and the customers were notified of the cancellation after being removed from scope.

## 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 customers. This 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/psps](http://www.sce.com/psps) and provided this information to public safety partners on its Public Safety Partner Portal (Portal).

However, maps and customer metrics provided via REST Service, on the Portal, and on [sce.com](http://sce.com) contained errors and discrepancies. The causes of these data errors and associated remediations are addressed in Section 11-Lessons Learned.

SCE worked closely with individual Public Safety Partners throughout the event to resolve any issues or concerns specific to their jurisdictions, including clarifying any inconsistencies in geospatial information.

**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 October 26, 2023, at 9:35 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. See 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.

During this event, some local and state agencies and telecommunication providers expressed frustration with errors and inconsistencies in the geospatial information and metrics that were provided via the public safety partner portal, the REST service and the CalOES form. These issues are being addressed as after actions and recorded in the lessons learned table (Section 11).

Impacted State and County emergency management agencies and critical infrastructure customers are polled at the close of each event to provide feedback. Only two partners, out of 658 polled, responded to this survey. Of the two respondents, one rated the engagement as average and the other as good.

**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, Orange, Riverside, San Bernardino, and Ventura Counties on October 26, 2023, to alert them to potential PSPS outages in those areas. SCE also provided 24-hour contact information to these agencies to use to escalate issues. Similarly, SCE contacted the CBOs serving Kern County on October 27, 2023. In partnership with the CBOs in each area of concern, SCE offered services to customers. These CBOs offered warm meal delivery or restaurant vouchers, food support, and temporary accommodations to affected customers. Other needs were supported through our new in-event battery loan pilot that is available to affected customers with access and functional needs.

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

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

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

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

N/A. No critical facilities or infrastructure customers requested backup generation as such SCE did not deploy any backup generation to critical facility and infrastructure customers during this 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](mailto:SCEBCDCustomersupport@sce.com).<sup>31</sup>

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<sup>31</sup> 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 224 reported complaints and 38 claims associated with this PSPS event. SCE will include any complaints or claims related to this PSPS event received after the filing of date of this report in its annual post-season report.

**Table 12: Count and Nature of Complaints Received**

Count and Nature of Complaints Received	
Nature of Complaints	Number of
<b>PSPS Frequency/Duration</b> 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.	16
<b>Safety/Health Concern</b> 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	8
<b>Communications/Notifications</b> 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)	12
<b>Outreach/Assistance</b> 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	4
<b>General PSPS Dissatisfaction/Other</b> Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	184
<b>Total</b>	<b>224</b>

**Table 13: Count and Type of Claims Received**

Count and Type of Claims Received	
Description of Claims	Number of Claims
<b>Food loss only</b>	34
<b>Property Damage</b>	0
<b>Food loss and property damage</b>	0
<b>Evacuation Cost</b>	0
<b>Business Interruption / Economic Loss</b>	4
<b>Unspecified</b>	0
<b>Total</b>	<b>38</b>

## Section 8. Power Restoration Timeline

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

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

16,597 customers on the Arabia, Brennan, Coventry, Crummer, Flabob, Fleetwood, Galena, Hillfield, Iran, Larch, Limonite, Milo, Morganstein, Naylor, Nepal, Patriot and Winnebago circuits were re-energized on Sunday, October 29<sup>th</sup> by 11:32 pm. Customers on these circuits benefited from rapid completion of restoration patrols that were initiated before the All-Clear declaration was issued based on a recommendation from Operations and support from the Incident Commander, given observed improvement in weather conditions. The pre-placement of patrol aircraft near the impacted circuits enabled SCE to take advantage of the remaining afternoon daylight on October 29<sup>th</sup> to begin patrols as fire weather conditions were subsiding below de-energization thresholds in an effort to get customers restored that same evening. The Angus and Calgrove circuits were initially released for air patrol and restoration by the Incident Commander on October 29<sup>th</sup> but a sudden increase in winds made patrols unsafe, which delayed restoration until air patrol could be safely conducted during the daylight hours. After the unsafe wind conditions subsided, 57 customers on the Angus circuit were restored the afternoon of Monday, October 30<sup>th</sup> and 27 customers on the Calgrove were restored on Tuesday, October 31<sup>st</sup>.

3,814 customers on the Academy, Acosta, Anton, Balcom, Cuthbert, Enchanted, Highball, Horntoad, Limited, Plateau, Rainbow, Sebastian, Serra, and Taiwan circuits were re-energized by 6:23 pm on Monday, October 30<sup>th</sup> after authorization to patrol and restore was declared by the Incident Commander (with first load up at 12:08 am). The Sand Canyon circuit was initially released for air patrol and restoration by the Incident Commander on October 30<sup>th</sup> but a sudden increase in winds made patrols unsafe, which delayed restoration of 59 customers until air patrol could be safely conducted during the daylight hours. After the unsafe wind condition subsided, customers on the Sand Canyon circuit were restored on Tuesday, October 31<sup>st</sup>.

4,264 customers on the Calstate, Chevelle, Firebird, Guitar, Nicholas, and Northpark circuits were re-energized by 3:03 pm on Tuesday October 31<sup>st</sup>, after authorization to patrol and restore was declared by the Incident Commander (with first load up at 12:13 am). The Energy circuit was initially released for patrol and restoration by the Incident Commander on October 31<sup>st</sup> and SCE restored 657 customers, but damage found during restoration patrol delayed restoring the remaining 29 customers until 9:08 am on Thursday, November 2<sup>nd</sup>.

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

**Table 14: Circuits Requiring More Than 24 Hours to Restore**

Circuits Requiring more than 24 hours to restore	
Circuit Name	Reason the utility was unable to restore the circuit within 24 hours
ENERGY	Damage on Energy circuit found at structure 1297629E; unable to re-energize the circuit until damage was repaired.
SAND CANYON	Patrol required day light hours, circuit was initially released, air patrol couldn't be completed and deemed unsafe to patrol due to morning winds exceeding activation thresholds.
ANGUS	Patrol required day light hours, circuit was initially released, but before patrol could begin, winds exceeded thresholds and delayed patrols until the weather conditions subsided.
CALGROVE	Patrol required day light hours, circuit was initially released, but before patrol could begin, winds exceeded thresholds and delayed patrols until the weather conditions subsided.

Section 9. Community Resource Centers

1. 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**

<b>Community Resource Centers Center Address</b>				
<b>Address</b>	<b>Location Type</b>	<b>Describe the assistance available</b>	<b>Hours of Operations<sup>1</sup> (Date / Time)</b>	<b>Number of Visitors</b>
Acton Community Center 3748 Nickels St. Acton, CA 93510	CRC	Small portable device charging (such as a cell phone, laptop, and small medical devices), 2.5-gallon water containers, seasonal heating and cooling, ice vouchers or ice, water, snacks, blankets, and wood as needed, and customer resiliency kits.	10/29/2023 - 10/30/2023 8AM - 10PM  10/31/2023 8AM - 7PM	31
Las Palmas Park 505 S Huntington St. San Fernando, CA 91340	CRC	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.	10/29/2023 - 10/30/2023 8AM - 10PM  10/31/2023 8AM - 7PM	1
Mayor's Discovery Park 1800 Foothill Blvd. La Canada, CA 91011	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.	10/29/2023 8AM - 10PM  Relocated Staff to Lanterman Auditorium	7
Lanterman Auditorium 4491 Cornishon Ave. La Canada, 91011	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.	10/30/2023 8AM - 10PM  10/31/2023 8AM - 7PM  Replacement site for Mayor's Discovery Park - this site offered coverage from winds	4

<p>El Modena High School 3920 E. Spring St. Orange, CA 92869</p>	<p>CCV</p>	<p>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.</p>	<p>10/29/2023 8AM - 10PM</p> <p>Site closed due to high winds; staff relocated to Residence Inn</p>	<p>219</p>
<p>Residence Inn Irvine 2855 Main St. Irvine, CA 92614</p>	<p>CRC</p>	<p>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.</p>	<p>10/30/2023 Noon - 10PM</p> <p>10/31/2023 8AM - 2PM</p> <p>Opened to replace El Modena HS Site</p>	<p>2</p>
<p>Library of the Canyons 7531 E. Santiago Canyon Rd. Silverado, CA 92676</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 - 10/30/2023 8AM - 10PM</p> <p>10/31/2023 8AM - 2PM</p> <p>Started out as a CCV - moved indoors to protect staff against high wind gusts</p>	<p>25</p>
<p>Holiday Inn &amp; Suites 1864 Oak Valley Village Cir Beaumont, CA 92223</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 - 10/30/2023 8AM - 10PM</p> <p>10/23/2023 8AM - 7PM</p>	<p>0</p>
<p>Jessie Turner Health &amp; Fitness Community Center 15556 Summit Ave. Fontana, CA 92336</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 - 10/30/2023 8AM - 10PM</p> <p>10/23/2023 8AM - 7PM</p>	<p>54</p>

<p>Rudy C. Hernandez          Community Center          222 N. Lugo Ave.          San Bernardino,          CA 92411</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023          12:30 PM - 10PM</p> <p>10/30/2023          8AM - 10PM</p> <p>10/31/2023          8AM - 7PM</p> <p>Opened to replace CSUSB sites - wind gusts too strong to keep site open</p>	<p>5</p>
<p>Arroyo Vista          Recreation Center          4550 Tierra Rejada Rd.          Moorpark, CA          93021</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 -          10/30/2023          8AM - 10PM</p> <p>10/31/2023          8AM - 7PM</p>	<p>18</p>
<p>Thousand Oaks          Inn          75 W. Thousand Oaks Blvd.          Thousand Oaks,          CA 91360</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 -          10/30/2023          8AM - 10PM</p> <p>10/31/2023          8AM - 7PM</p>	<p>3</p>
<p>Fillmore Active          Adult &amp;          Community Center          533 Santa Clara St.          Fillmore, CA 93015</p>	<p>CRC</p>	<p>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.</p>	<p>10/29/2023 -          10/30/2023          8AM - 10PM</p> <p>10/31/2023          8AM - 7PM</p>	<p>954</p>

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

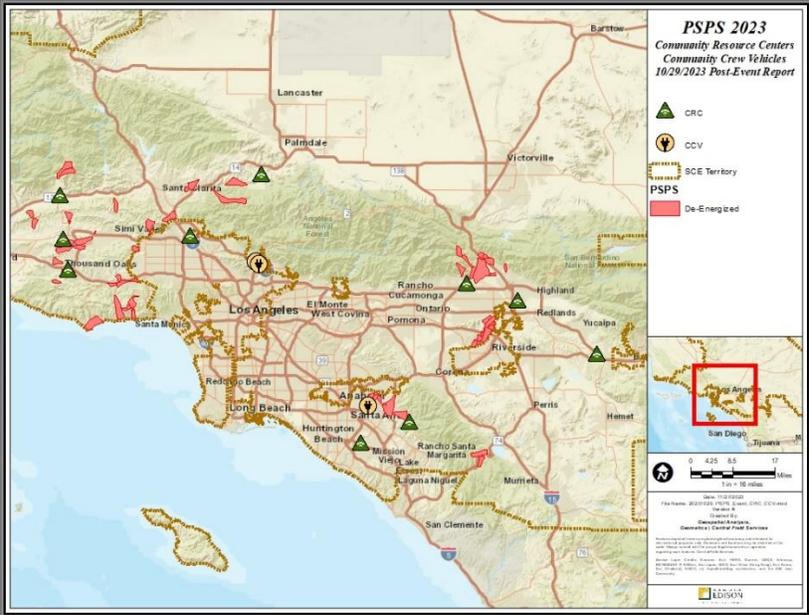
SCE deployed staff to provide community assistance to 11 locations in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties during this event. Four of the 11 sites were outdoor Community Crew Vehicles (CCVs); the other seven were Community Resource Centers (CRCs). High wind conditions resulted in the relocation of several of SCE's CCV locations.

Wind gusts at three outdoor locations were 55 mph or greater. On October 29<sup>th</sup>, SCE initially deployed a CCV to the Cal State University San Bernardino parking and quickly realized the 75 mph wind gusts were dangerous for SCE Customers and field staff. This site was closed and relocated to the Rudy C. Hernandez Community Center in the City of San Bernardino where SCE staff was ready to service customers starting at 12:30 PM on October 29<sup>th</sup>, the first day of the PSPS event. Similar wind gust conditions were present at the Library of the Canyons CCV site; SCE's Customer Care Supervisor staff worked with Orange County's Emergency Management Manager to secure space within the Library avoiding a change in location for this site. SCE field staff, and customers, were experiencing wind gusts of 55 mph at the Mayor's Discovery Park in Los Angeles County and El Modena High School in Orange County. SCE managed to redeploy staff at both CCV locations to sites offering more protection against the wind. The CCV at Mayor's Discovery Park was relocated to the Lanterman Auditorium parking lot. While the site continued to be an outdoor site, several buildings at this location offered protection from the wind. The staff at El Modena High school was relocated to Residence Inn Irvine. The sites at Mayor's Discovery Park and El Modena High School remained opened from 8:00 am to 10:00 pm on October 29, 2023. The noon opening time at the Residence Inn Irvine CRC was driven by the need to prepare a conference room at the hotel for CRC setup.

SCE closed the sites in Orange County at 2:00 pm and remaining sites (Los Angeles, Riverside, San Bernardino and Ventura Counties) at 7:00 pm on October 31, 2023, because the monitored circuits in those areas had been removed from scope and all residential customer load had been restored.

On November 1 and 2, 2023, CRC/CCV resources were not deployed to Los Angeles County because all residential customer load had been restored and only commercial customers remained de-energized on these two days.

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 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 circuit switching that could reduce the number of customers in scope for potential de-energization. SCE transferred approximately 13,540 customers from 14 circuits on the monitored circuit list to adjacent circuits not in scope pursuant to the then-current forecast, thereby maintaining service to these customers throughout the event.

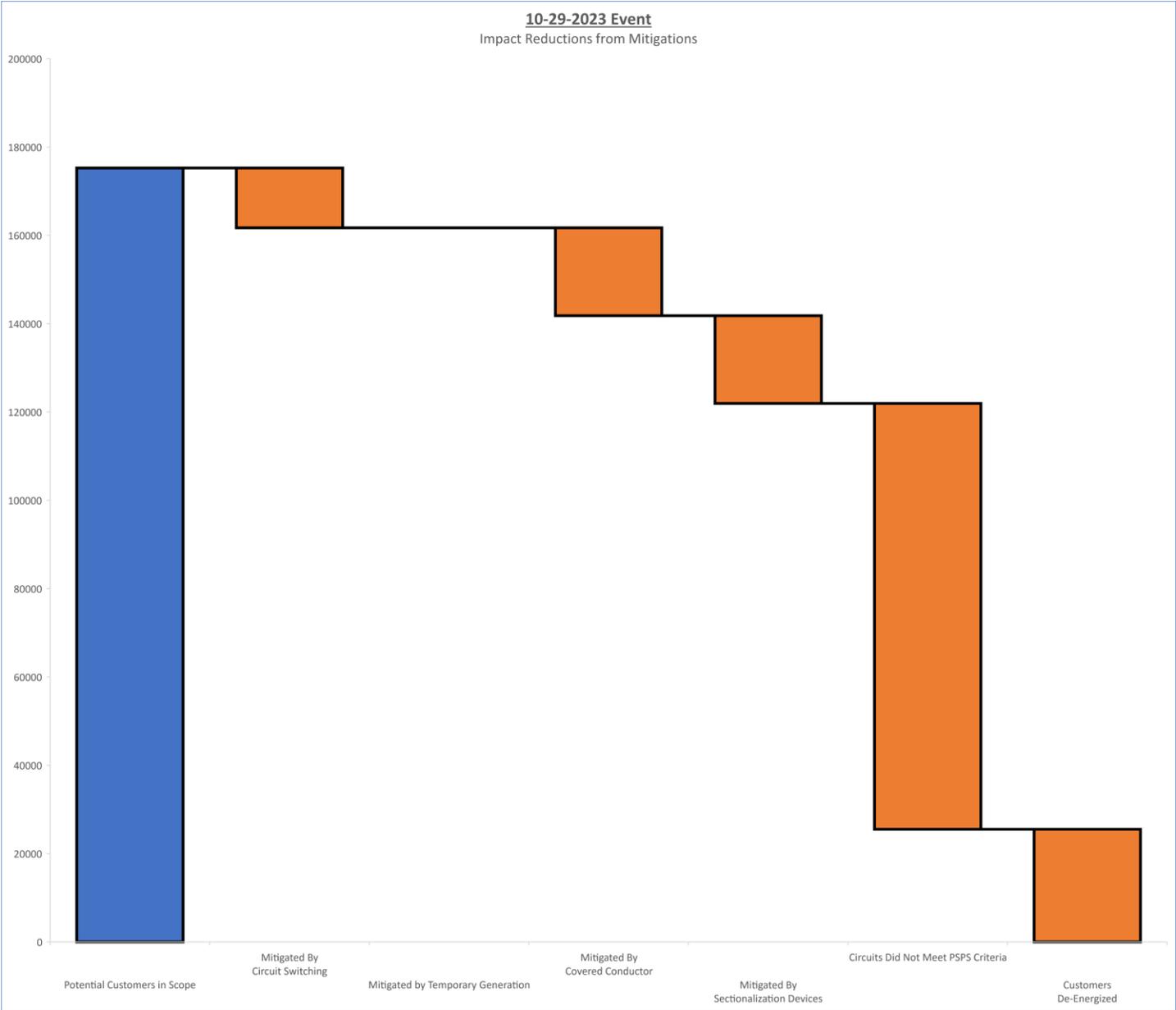
In addition, the replacement of bare wire with covered conductor allowed SCE to raise windspeed thresholds and thus reduced potential de-energization impacts on portions of 59 circuits. SCE was able to keep the power on for some customers on circuits that were ultimately de-energized because of covered conductor and the use of sectionalization devices. With the above-discussed mitigations in place, SCE was able to limit de-energization to 25,504 customers.

SCE also deployed six temporary generators. One generator was deployed to a Medical Baseline customer and the remainder were deployed to SCE Customer Outreach deployments.

The waterfall graphs and maps below illustrate the impacts of SCE's mitigation measures over the course of the PSPS event where circuit switching, temporary generation, covered conductor, and/or sectionalization devices were successfully deployed to limit the scope of potential or actual de-energization.<sup>32</sup> The waterfall graph does not include information for transmission or sub transmission lines.

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<sup>32</sup> "Circuits Did Not Meet Criteria" in the waterfall graph denotes customers on circuits in scope that were not ultimately de-energized. These customers were not switched to adjacent circuits, were not on circuits with covered conductor, and did not require the use of sectionalization devices.





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

<b>Lessons Learned</b>		
<b>Issue</b>	<b>Discussion</b>	<b>Resolution</b>
<p>Problems with sending PSPS notifications to customers and Public Safety Partners (please see Table 9: Notification Failure)</p>	<p>Event size and complexity strained CDP automation.</p> <p>System errors forced the notifications team to revert to more time-consuming manual processes, which resulted in missed or delayed notifications.</p> <p>IT data transfer issues impacted customer contact data handoff to Message Broadcast and Everbridge (vendor notification systems).</p>	<p>Comprehensive review, expanded testing, and process and logic updates are being made to systems to better handle data demands for large events.</p> <p>Notification team staffing levels are being increased for large events where manual processes may be required.</p> <p>Detective controls are being developed to flag data transfer issues.</p>
<p>Problems with data sharing , geospatial information systems, and in-event communication with Public Safety Partners</p> <ul style="list-style-type: none"> <li>• Maps of in-scope/de-energized areas and impacted customer metrics contained errors and/or were inconsistent across sce.com, the Public Safety Partner Portal (Portal), and REST Service.</li> <li>• The data provided in the CalOES notification form was inconsistent with the information that was being published to external services</li> <li>• External briefing decks reflected customer metric inconsistencies.</li> </ul>	<p>Inconsistencies in SCE data systems caused discrepancies across external services and information reported to CalOES and in external briefing decks.</p> <p>Company-wide source data errors caused out-of-scope counties to show up on maps of impacted areas.</p> <p>Certain circuits were erroneously included as in scope due to programming error in CDP.</p> <p>Abnormal circuit configurations and circuit relays contributed to mapping issues.</p>	<p>Review system pipelines to ensure consistency across data systems and with information transmitted to external-facing platforms.</p> <p>Continue to validate customer-to-circuit connectivity and other source data issues.</p> <p>Correct programming errors that caused circuits to be incorrectly included in event scope</p> <p>Automate geospatial information to get updates when circuit configurations change due to abnormal conditions</p>

<b>Lessons Learned</b>		
<b>Issue</b>	<b>Discussion</b>	<b>Resolution</b>
<p>Post-event reporting issues</p> <ul style="list-style-type: none"> <li>• Inability to complete post-event report within 10-business-day timeframe.</li> <li>• Potential for data discrepancies and challenges producing metrics for required data tables.</li> <li>• Challenges identifying specific causes for different types of missed notifications.</li> <li>• Challenges in timely completing data validation.</li> </ul>	<p>Complexity and volume of event data,</p> <p>SCE was not able to identify the cause of some notification failures because this information was not captured during the event.</p> <p>Cumbersome process for producing and validating notification metrics led to delays in producing data for required tables.</p> <p>Resource limitations resulting from multiple back-to-back PSPS activations.</p>	<p>Improve reporting automation, data validation processes, and overall post-event reporting process.</p> <p>Ensure adequate resources are available for post-event reporting, including when reporting is conducted during back-to-back PSPS activations.</p>

## Section 12. Other Relevant Information

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

N/A

## Attachment A-Public Safety Partner and Customer Notification Scripts

### SCE LNO Notification Template Text/Format as of 7/17/23

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

#### There are seven unique LNO notification templates:

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

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

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

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

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

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

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

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

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

- City/County/Tribal Officials
- Public Safety Partners, including CalFire and other emergency contacts
- CCA Administrators
- State and Federal Legislative District Offices
- 211 Operators
- Independent Living Centers
- Other stakeholders with longer range emergency planning responsibilities

## **Template language for all notifications (after notification language)**

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

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

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

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

### **For More Information:**

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

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

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

- **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](mailto: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](mailto:SCELiaisonOfficer@sce.com). **Note: Only monitored during emergency activations.**
- **Access and Functional Needs issues:**
  - Phone: AFN Liaison Officer 24/7 hotline: **888-588-5552**. Only monitored during emergency activations.

- o Email: [AFNIMT@sce.com](mailto:AFNIMT@sce.com). **Note: Only monitored during emergency activations.**

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

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

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

**Notification Subject Line and Message**

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

**COMMENTS:**

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

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

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

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

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

---

**Updated Conditions (Update) Notification**

**Notification Subject Line and Message:**

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

**COMMENTS:**

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

Customers on the affected circuits are being notified if they are within two days of the period of concern, or if there has been a change to their status. The map on [sce.com/psps](https://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](https://sce.com/psps).

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

---

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

#### **Notification Subject Line and Message:**

**SCE Expected Shutoff Notice for PSPS Event in County Name.**

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

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

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

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

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

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

When the weather improves, we will inspect our lines for damage before we restore power. This typically takes up to 8 hours but could take longer if we need daylight for safe inspections.

**Recommended Language to Share with the Public:** SCE has informed us they are likely to call a Public Safety Power Shutoff impacting (insert organization name) within the next four hours. SCE will notify all customers who may be affected. For more info: [sce.com/psps](https://sce.com/psps)

---

### **PSPS Shutoff Notification (De-energization notification)**

#### **Notification Subject Line and Message:**

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

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

Impacted circuits and locations are:

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

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

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

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

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

**(Preparation for Restoration)**

**Notification Subject Line and Message:**

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

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

- **Circuit:** [CIRCUIT name]
- **Segment(s):**
- **Incorporated City:** [incorporated city]
- **Unincorporated County Area:** [unincorporated area description]
- **Comments:**

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

SCE is notifying customers. The map on [sce.com/psps](http://sce.com/psps) will be updated to reflect the current status.

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

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

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**Restore Notification (formerly: RE-ENERGIZE) Restoration Notification**

**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):**
- **Incorporated City:** [incorporated city]
- **Unincorporated County Area:** [unincorporated area description]
- **Comment:**

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

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

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

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### **Event Concluded Notification**

#### **Notification Subject Line and Message:**

**SCE PSPS Event Concluded in [COUNTY NAME].**

**Public Safety Power Shutoff update notification for official use:**

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

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

---

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

#### **Notification Subject Line and Message:**

**SCE PSPS Event Concluded Notice for [COUNTY NAME].**

**Public Safety Power Shutoff update notification for official use:**

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

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

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

### **Cancelation no longer in scope**

#### **Description:**

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

#### **Notification Subject Line and Message:**

**PSPS Cancellation for circuit(s) in County Name.**

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

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

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

**Cancelation no longer in scope**

**Description:**

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

**Notification Subject Line and Message:**

**PSPS Cancellation for the circuit(s) County Name.**

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

SCE PSPS Update: However, because high winds are still forecast through **^End Day of week^** **^morning/afternoon/evening^** we might have to shut off power again.

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

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

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

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

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

**PSPS Variable Notification Templates**

6/20/2023

1 | Advanced Initial [Typically 72 Hours Prior]

[Only for Public Safety Partners (Telecom/Water-Wastewater) and Critical Infrastructure]

SCE Advanced PSPS Alert: High winds and fire conditions are **^Day of ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may have to shut off power. We are working to reduce the number of customers affected, and weather patterns might change, so not all notified customers will have their power shut off. For the latest updates, visit

TEXT/SMS

VOICE

SCE Advanced Public Safety Power Shutoff Alert: High winds and fire conditions are forecast from **^Day of week^ ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may have to shut off power. We are working to reduce the number of customers affected, and weather patterns might change, so not all notified customers will have their power shut off. For the latest updates visit [publicsafetyportal dot sce dot com](https://publicsafetyportal.sce.com), contact your assigned SCE account representative, or call 1-800-611-1911

EMAIL

Subject: SCE Public Safety Power Shutoff (PSPS) Advanced Initial Alert  
From: [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

High winds and fire conditions are forecast from **^Day of week^ ^morning/afternoon/evening^** through **^End Day of week^ ^morning/afternoon/evening^**. We may need to shut off power to decrease the risk of dangerous wildfires. We are working to reduce the number of customers affected, and weather patterns might change, so not all notified customers will have their power shut off.

This alert applies to the following address(es):

For more information on this event, visit the [public safety partner portal](https://publicsafetyportal.sce.com), contact your assigned SCE account representative, or call 1-800-611-1911.

2 | Initial Notification [48 HOURS BEFORE] ALERT

TEXT/SMS

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

VOICE

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

#### EMAIL

**Subject:** SCE Public Safety Power Shutoff Alert

**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

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

This alert applies to the following address(es):

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

### 3 | Update Notification [24 HOURS BEFORE] WARNING

#### TEXT/SMS

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

#### VOICE

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

#### EMAIL

**Subject:** SCE Public Safety Power Shutoff (PSPS) Warning

**From:** [do\\_not\\_reply@scwebservices.com](mailto:do_not_reply@scwebservices.com) Southern California Edison

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

This alert applies to the following address(es):

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

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

#### 4 | PSPS EVENT ALL-CLEAR | AVOIDED

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

#### TEXT/SMS

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

#### VOICE

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

EMAIL

**Subject:** SCE Public Safety Power Shutoff (PSPS) All-clear  
**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

This alert applies to the following address(es):

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

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

5 | PSPS EXPECTED 1-4 HOURS BEFORE SHUTOFF WARNING

TEXT/SMS

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

VOICE

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

EMAIL

**Subject:** SCE Public Safety Power Shutoff (PSPS) Expected  
**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

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

This alert applies to the following address(es):

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

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

## 6 | PSPS SHUTOFF

### (SENT AT AUTHORIZATION TO DE-ENERGIZE)

#### SMS/TEXT

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

#### VOICE

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

#### EMAIL

**Subject:** SCE Public Safety Power Shutoff (PSPS)

**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

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

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

This alert applies to the following address(es):

Customer  
Service  
Meter

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

### SMS/TEXT

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

### VOICE

SCE Continued PSPS. To continue in English, press 1. [Spanish press 2], all other languages press 3.... Thank you for your continued patience during this Public Safety Power Shutoff. High winds are forecast to continue through **^End Day of week^ ^morning /afternoon/ evening^**. Before we restore power, we will inspect our lines for damage. This is expected to take up to 8 hours but could take longer if we need daylight for safe inspections or if we find damage. Visit [sce dot com slash psps](https://sce.com/psps) for the latest information on restoration and availability of community resources in your area. For downed power lines, call 911.

EMAIL

**Subject:** SCE Continued Public Safety Power Shutoff (PSPS)  
**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

We understand that any outage is an inconvenience. Thank you again for your continued patience as we work to keep your community safe!

REMEMBER: If you see a downed power line, call 911 first, and then notify

Customer  
Service  
Meter  
Rat

8 | PREPARE FOR RESTORATION

SMS/TEXT

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

VOICE

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

EMAIL

**Subject:** SCE Public Safety Power Shutoff Update

**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

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

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

This alert applies to the following address(es):

*Customer Address*

*Service Account*

*Meter Number*

*Rate*

## 9 | RESTORATION TIME PENDING

### SMS/TEXT

SCE PSPS Update: Winds have died down and we are inspecting our lines for damage. Restoration timing depends on need for daylight for safe inspections and the accessibility of power lines. We will alert you again when we restore power. For updated restoration estimates in your area, and for location of SCE community resources visit [sce.com/psps](https://sce.com/psps). Please turn off or unplug any appliances or equipment that could restart automatically and inspect your property for downed power lines. Call 911 if you find a downed line. View in more languages: [www.sce.com/PSPSPrepRestorePending](https://www.sce.com/PSPSPrepRestorePending)

### VOICE

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

### EMAIL

**Subject:** SCE Public Safety Power Shutoff Update

**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

Winds have died down and we are starting to inspect our lines for damage. Power restoration timing depends on need for daylight for safe inspections and the accessibility of power lines. We will alert you again when your power comes back on. For updated restoration estimates in your area, and for location of SCE community resources visit [sce.com/psps](https://sce.com/psps). Please turn off or unplug any appliances or equipment that could restart automatically and inspect your property for downed power lines. If you see a downed power line, stay away and call 911 first, then report it to SCE at 1-800-611-1911.

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

This alert applies to the following address(es):

Customer Address  
Service Account

Meter Number  
Rate

10 | RESTORATION TIME UPDATE (for when we have missed the 8-hour mark or when we have updated timing for customers who got 9—Restoration Time Pending)

SMS/TEXT

SCE PSPS Update: We have updated our estimated timing to restore your power. Please visit [sce.com/pmps](https://sce.com/pmps) for the latest information on restoration and availability of community resources in your area. *View in more languages.*

VOICE

SCE PSPS Update: To continue in English, press 1. [Spanish press 2], all other languages press 3... We have updated our estimated timing to restore your power. Please visit [sce dot com slash PMPs](https://sce.com/pmps) for the latest information on restoration and availability of community resources in your area.

SCE PSPS Update: We have updated our estimated timing to restore your power. Please visit [sce.com/pmps](https://sce.com/pmps) for the latest information on restoration and availability of community resources in your area. *View in more languages.*

EMAIL

SCE PSPS Update: We have updated our estimated timing to restore your power. Please visit [sce.com/pmps](https://sce.com/pmps) for the latest information on restoration and availability of community resources in your area. *View in more languages.*

**Subject:** SCE Public Safety Power Shutoff Update

**From:** [do\\_not\\_reply@scewebservices.com](mailto:do_not_reply@scewebservices.com) Southern California Edison

We have updated our estimated timing to restore your power. Please visit [sce.com/pmps](https://sce.com/pmps) to see updated information for your neighborhood and availability of community resources in your area. 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

## 11 | PSPS ENDED - RESTORED & ALL CLEAR [NO MORE RISK OF PSPS]

### SMS/TEXT

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

### VOICE

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

### EMAIL

**Subject:** SCE Public Safety Power Shutoff Ended: All Power Restored  
**From:** do\_not\_reply@scewebservices.com Southern California Edison

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

This alert applies to the following address(es):

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

## 12 | RESTORED, NOT ALL CLEAR – RISK OF PSPS REMAINS

### SMS/TEXT

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

### VOICE

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

EMAIL

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

**From:** do\_not\_reply@scewebservices.com Southern California Edison

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

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

This alert applies to the following address(es):

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

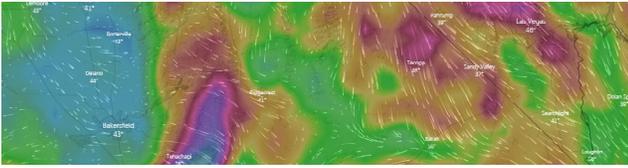


-5 DAYS FORECASTING

-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

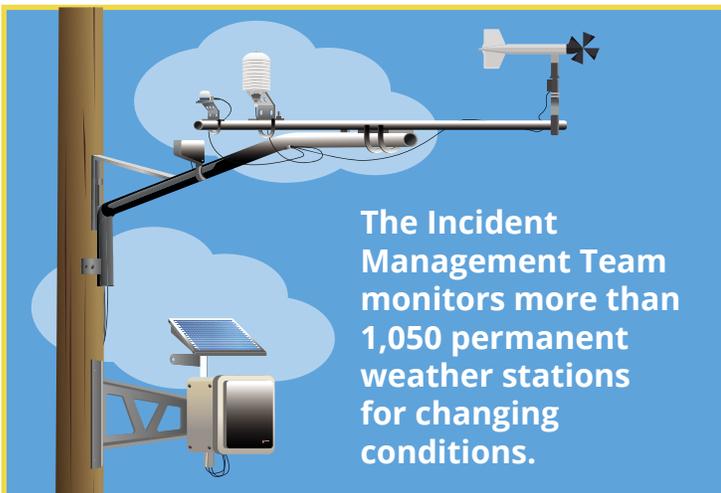
-3 DAYS FORECASTING

-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:

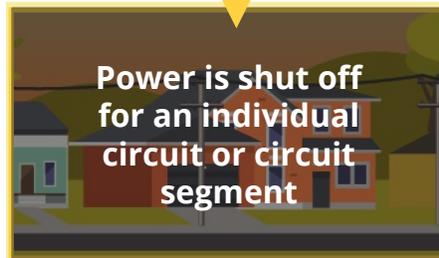
The lead PSPS operator recommends shutting off power to a circuit or segment when wind speeds are about to hit or exceed our predetermined threshold for unsafe conditions, or field crews advise of an urgent hazard in the field.



## DECISION POINT

### Authorization:

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

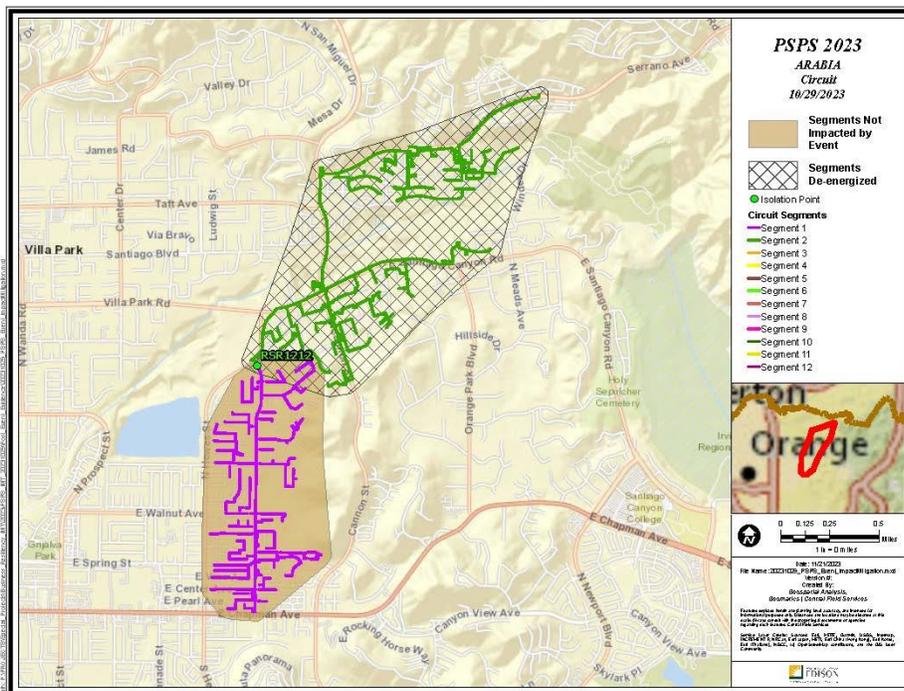
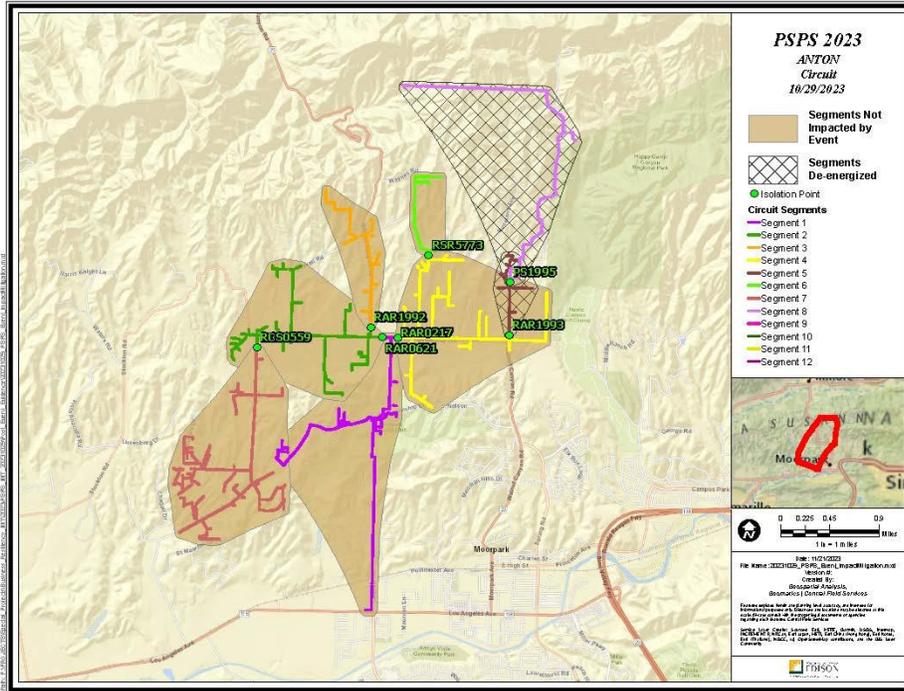


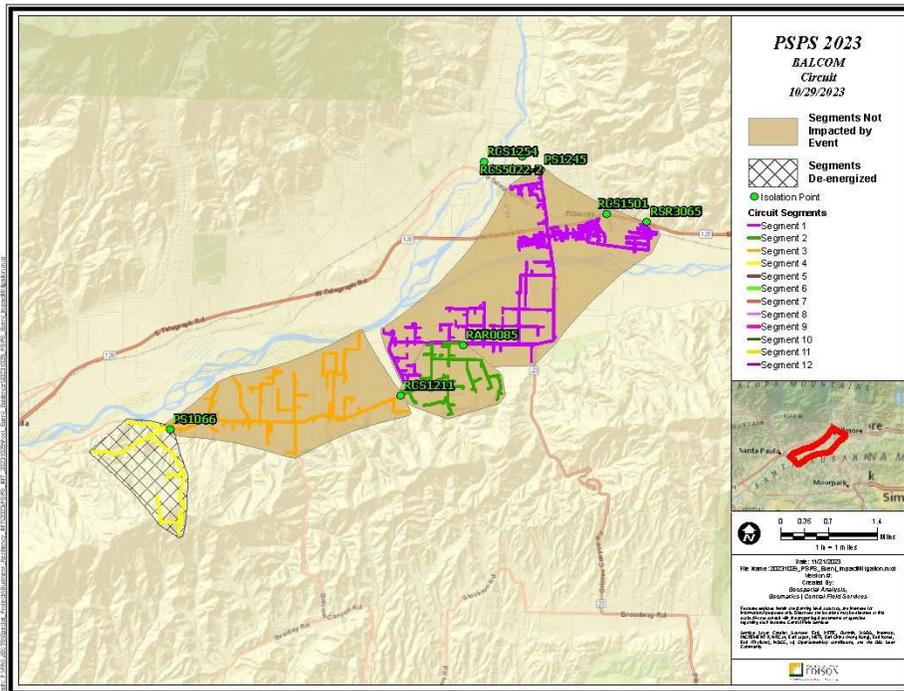
AS THE WINDS DIE DOWN,  
POWER IS RESTORED TO  
ALL CUSTOMERS

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.

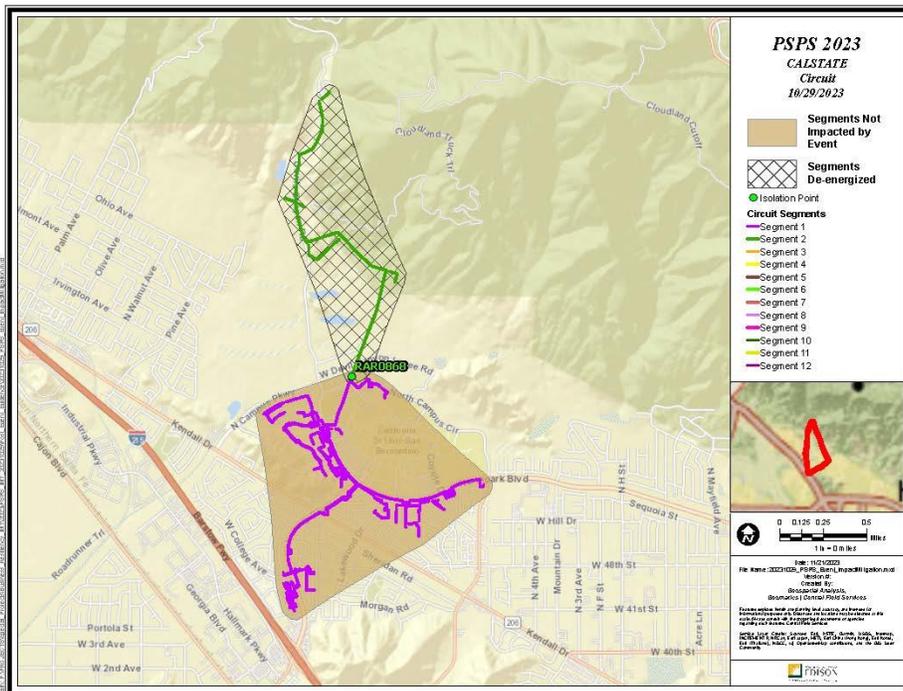
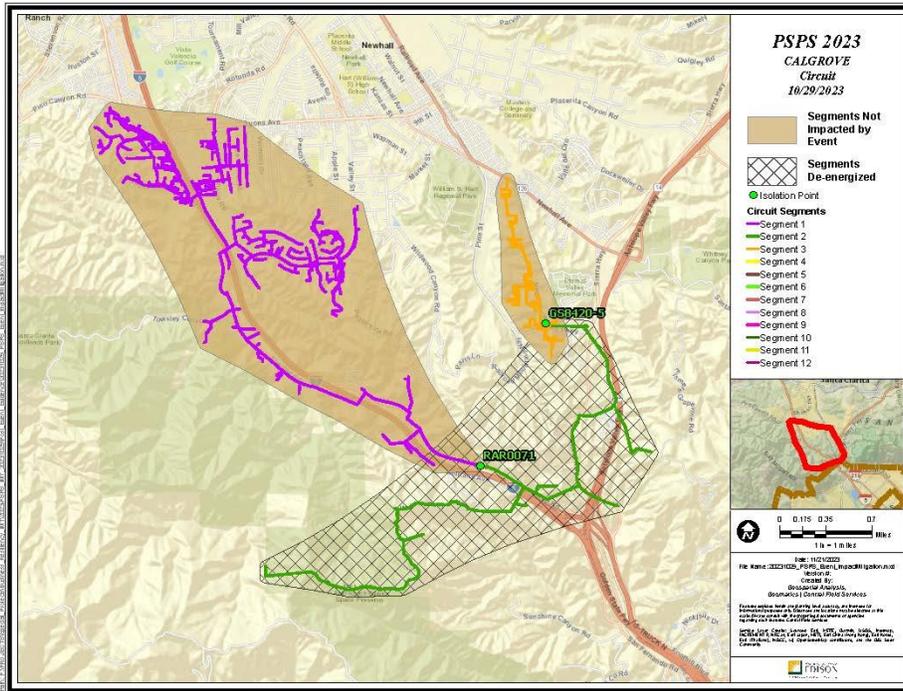
## Attachment C-PSPS Event Data Workbook



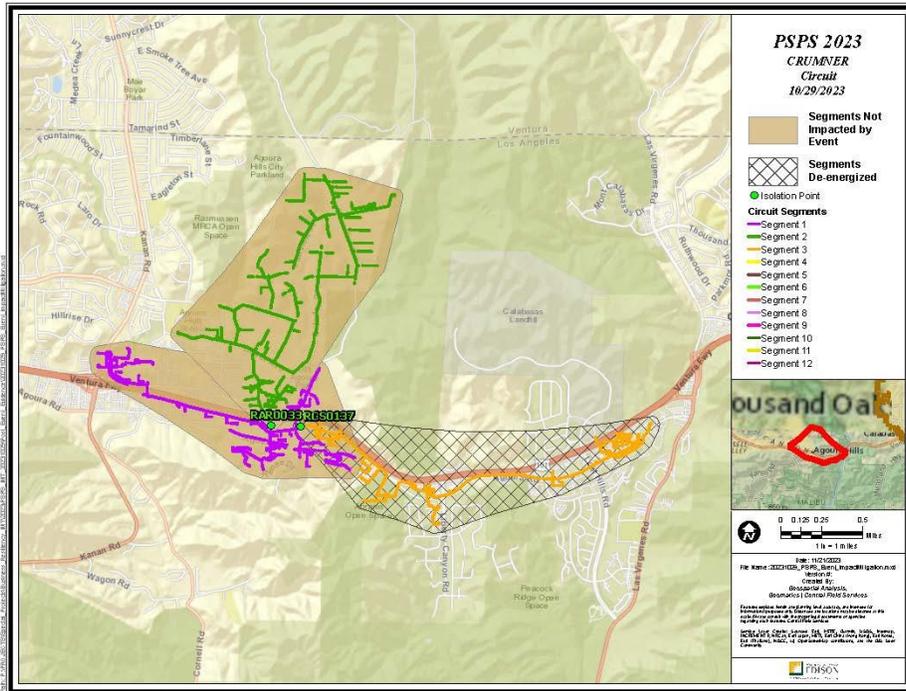




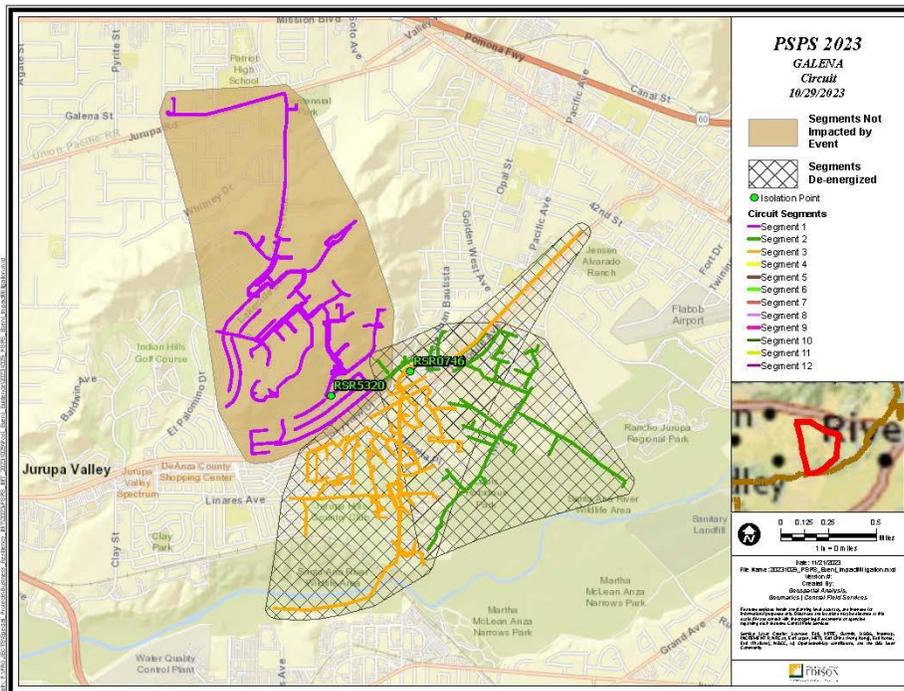
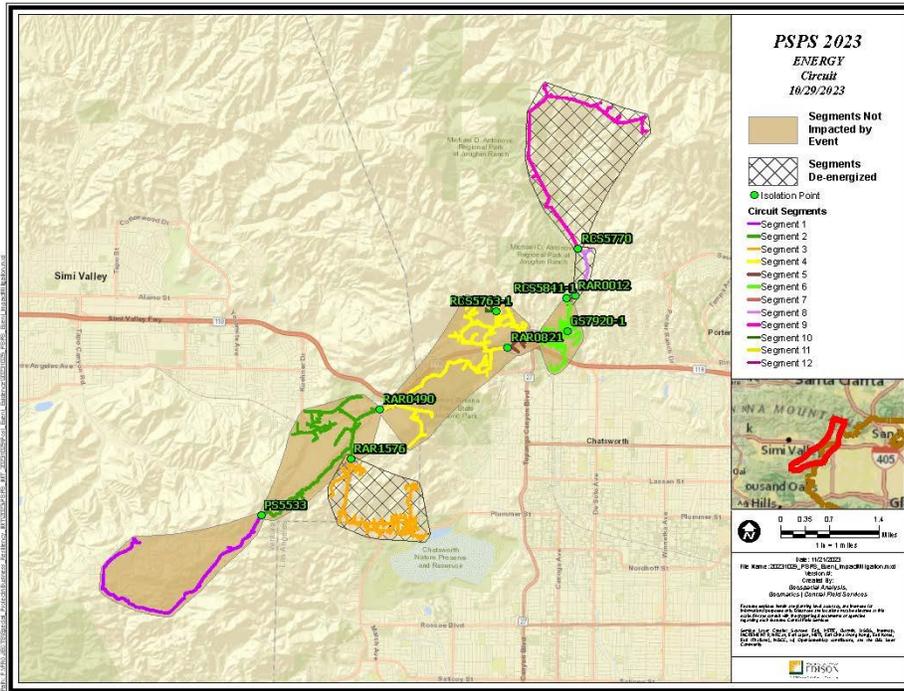


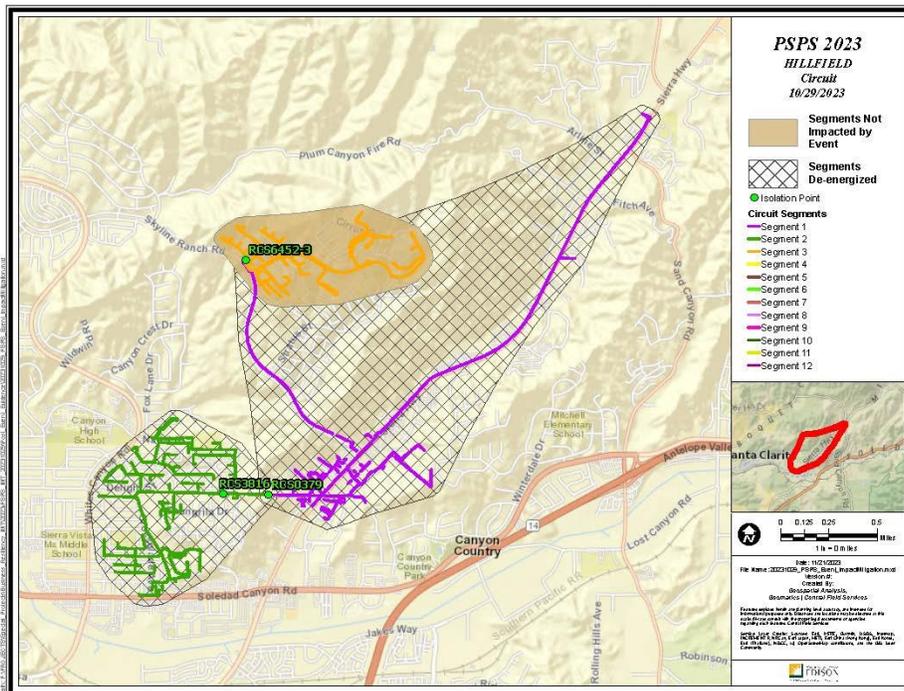
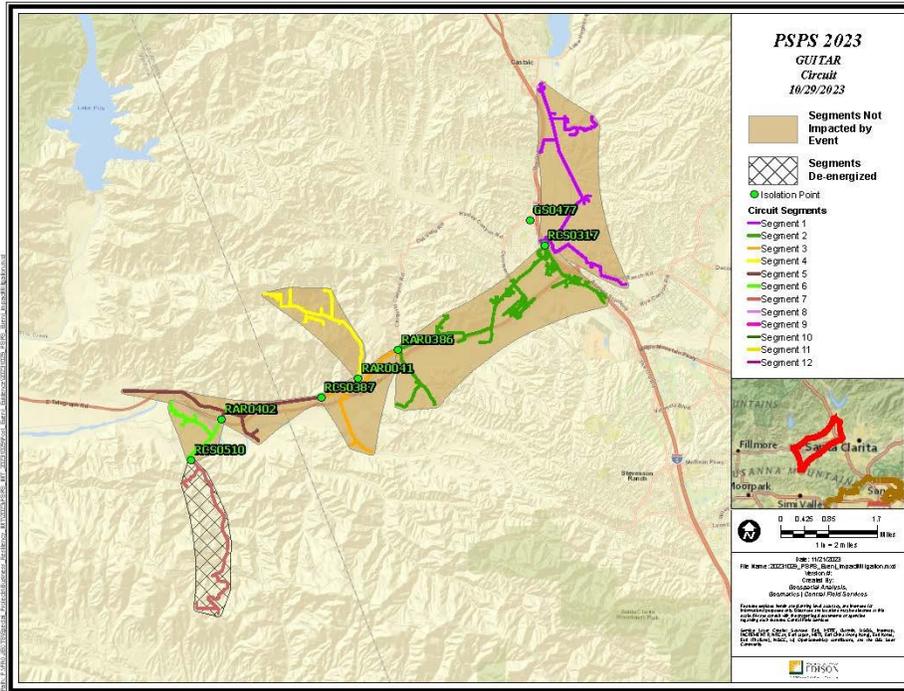


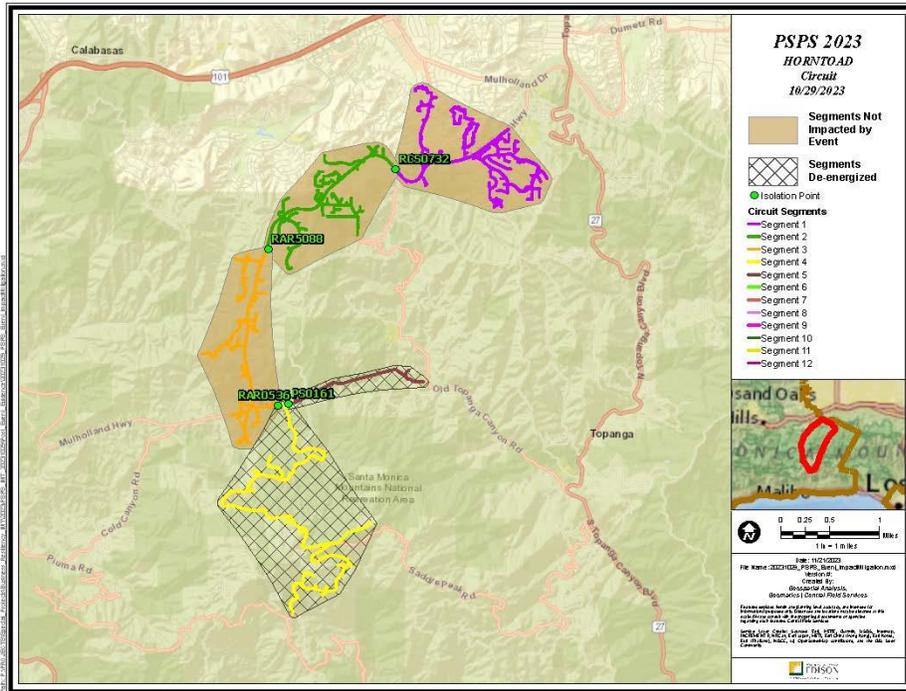


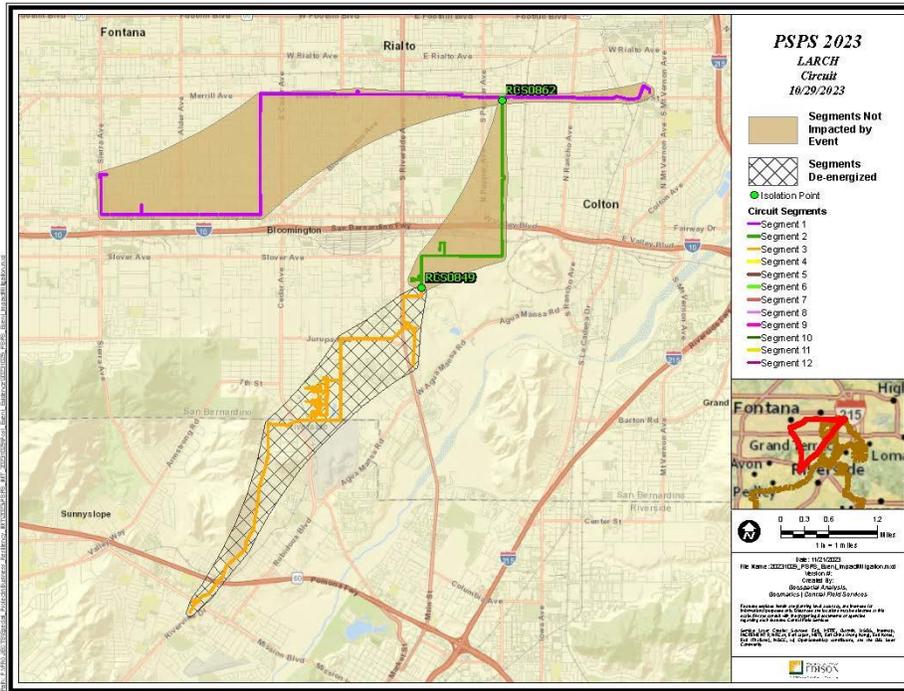


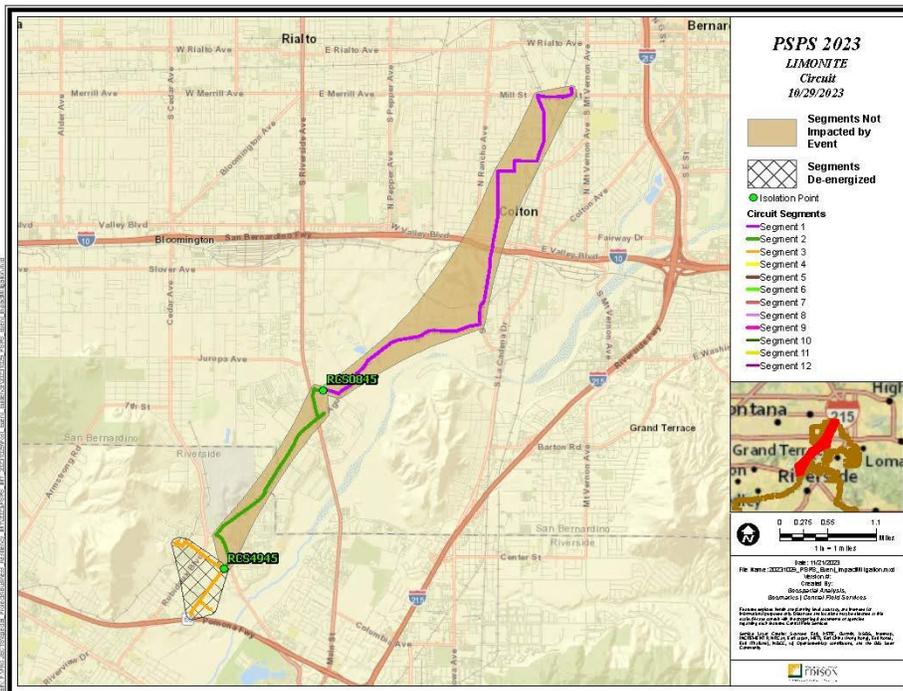
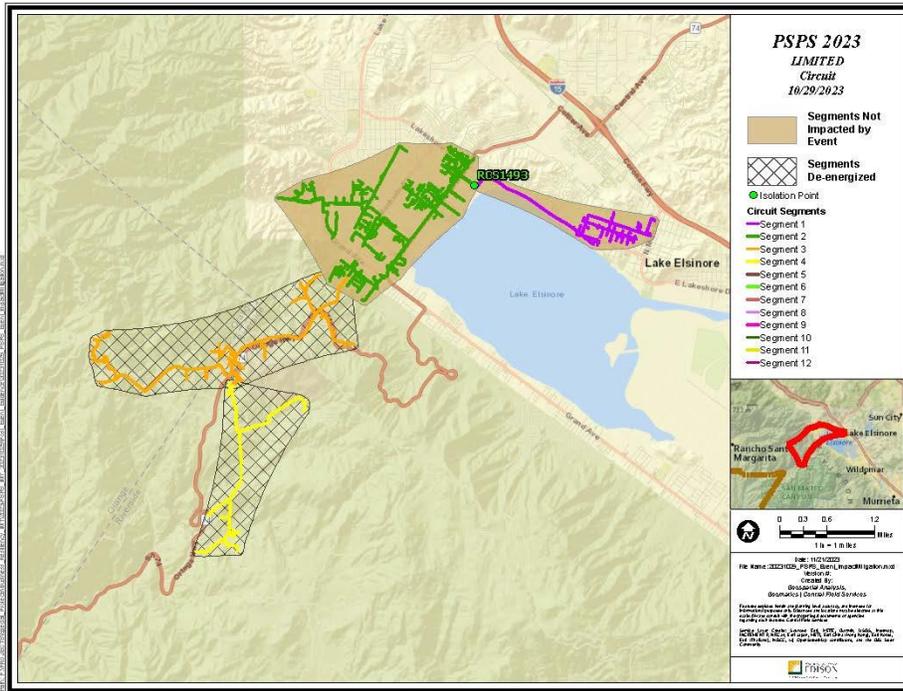








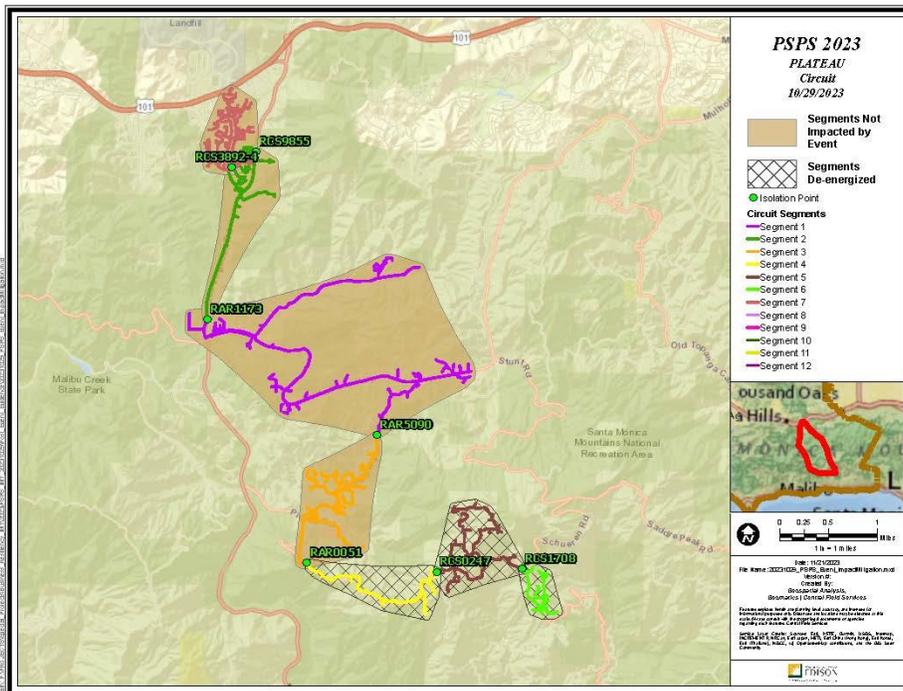
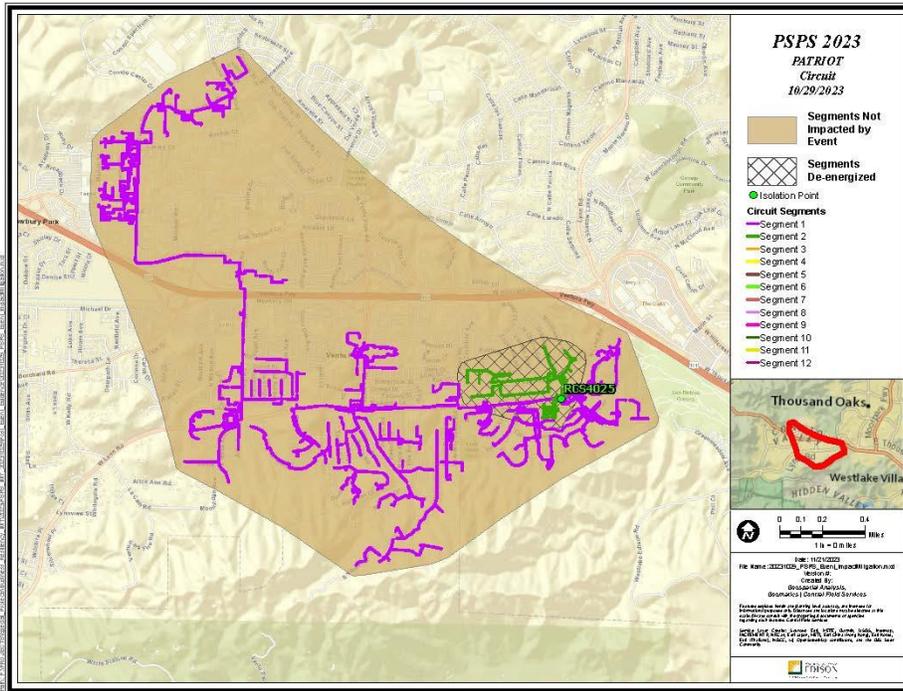




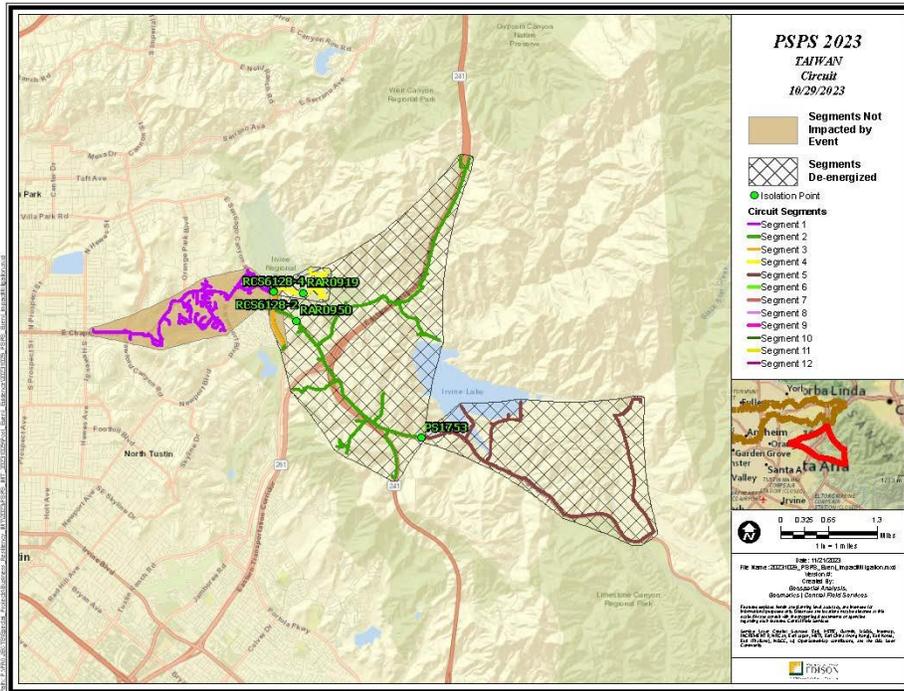












### Officer Verification

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 01<sup>st</sup> day of December 2023 in La Canada, California

DocuSigned by:  
  
F364FA6A2912409...

Shinjini Menon

Vice President,

Asset Management & Wildfire Safety