SCE took the following actions to coordinate and manage response and support our customers during this pro-active de-energization event:

Coordination

- Reached out to the Geographical Coordination Center (GACC)[3] to coordinate regarding its expectation for fire potential over the course of the PSPS event.
- Coordinated with CalOES to identify COVID vaccine storage locations in High Fire Risk Areas to minimize potential impacts related to de-energization.
- Performed outreach to identified Hospitals, Healthcare facilities and COVID vaccine storage locations in forecasted PSPS areas of concern to brief them on the potential for de-energization impacts and help them to implement resiliency plans.

Response

- Activated a Dedicated PSPS IMT to coordinate response operations associated with the potential use of PSPS to maintain public safety. The IMT was activated and operated remotely due to the COVID-19 pandemic.
- Integrated Electrical Services Incident Management Team positions into the dedicated PSPS IMT to coordinate and manage restoration of pro-actively de-energized circuits and additional outages related to storm activity not caused by PSPS from the January 18 to January 20 wind event.
- Beginning at 72 hours and occurring through the duration of the event, provided daily notifications to Public Safety Partners, critical infrastructure providers, the CPUC, the California Department of Forestry and Fire Protection (CAL FIRE), the California Governor's Office of Emergency Services (Cal OES), and affected SCE customers. Additionally, SCE provided notices to Community-Based Organizations (CBOs), such as Independent Living Centers (ILCs), the American Red Cross, 2-1-1, and Fire Safety Councils.
- Provided daily situational briefings/coordination calls to State agencies, County Offices of Emergency Management and Critical Infrastructure Providers on the specifics of the PSPS event to include circuits potentially impacted and circuits actually de-energized during the PSPS event
- Initiated operating restrictions and performed field patrols of impacted circuits where possible in preparation for the potential use of the PSPS protocol for de-energization.
- Performed live field observations of monitored circuits as required during the period of concern to validate actual weather conditions and the need for the use of PSPS for de-energization.
- Utilized the Public Safety Power Shutoff protocol to de-energize circuits within High Fire Risk Areas (HFRA) as determined necessary by the Incident Commander based on observed conditions utilizing weather stations and/or live field observations
- Performed post patrols to verify no damage to de-energized circuits in support of restoration activities.

Customer Support

- Deployed Community Resource Centers (CRCs) and Community Crew Vehicles (CCVs) to impacted communities.
- Contacted vulnerable populations that could be impacted by PSPS to understand customer needs during the PSPS event

[3] 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.

Event Summary January 12 to January 21, 2021[4]

Communications During Event

On January 12, SCE contacted the Southern California GACC to confer on the incoming weather and notified the CPUC, CalOES and impacted counties of our intention to activate the dedicated Public Safety Power Shutoff Incident Management Team (PSPS IMT). SCE also hosted daily coordination calls with State Executives, County Offices of Emergency Management and Critical Infrastructure to provide situational updates.

During this event, SCE conducted daily notifications to public safety partners, critical infrastructure, and residential customers leading up to each period of concern. Additional notifications to public safety partners and customers were completed daily as the weather was updated over the duration of the event. During each period of concern, SCE attempted to provide imminent notification of de-energization to all customers, however these notifications were not always possible to provide. SCE details its provided notifications and missed notifications in this report and the associated attachments[5].

Period of Concern #1

January 12th – SCE meteorologists notified SCE's Business Resiliency Duty Manager (BRDM) of a Santa Ana weather system that was forecasted to bring elevated fire weather for portions of the SCE territory with wind speeds in excess of 45 mph with 55 mph gusts and relative humidity levels in the low-to-mid-teens. This weather was initially forecasted to impact the SCE territory beginning January 14 and continuing through January 17 with two periods of concern[6] -- January 14 at 3:00 pm to January 15 at 12:00 pm and January 16 at 6:00 am to January 17 at 12:00 pm.

Circuits in Los Angeles, Ventura, Orange, Riverside, and San Bernardino counties and approximately 39,468 customers were potentially in scope for de-energization during the first period of concern set to begin on January 14 and continue through January 15.

January 13th – Updated weather forecasts indicated circuits in Los Angeles, Ventura, Orange, Riverside, and San Bernardino counties and approximately 41,862 customers potentially in scope for de-energization during the current period of concern, which was revised to January 14 at 3:00 pm through January 15 at 12:00 pm.

SCE meteorologists also made the PSPS IMT aware of an additional period of concern with the potential to bring even greater elevated fire weather and Santa Ana winds with 75 mph peak gusts and relative humidity levels in the mid-teens to low 20's into the SCE territory on Monday, January 18 through Wednesday January 20.

[4] The following event summary serves to provide an overview of the event. Additional details regarding specific PSPS requirements are addressed in further detail after this narrative.

[5] SCE has improved narrative in question 13 and attachments for this event to explain the circumstances of missed notifications more adequately

[6] SCE uses 72 hours without potential Fire Weather between periods of concern as the break between separate weather events for the purposes of PSPS IMT activation and post event reporting.

January 14th – At approximately 2:30 am on January 14, the PSPS IMT began observing fire weather conditions as reported by SCE weather stations and elevated Fire Potential Index values in areas of Los Angeles and San Bernardino county. Sustained wind speeds were reaching 30-37 mph and gusts were between 42-48 mph. SCE monitored these conditions through the morning and at approximately 4:08 am determined that de-energization of circuits was necessary to maintain public safety. Customers on these impacted circuits received advance notification of de-energization, including imminent notification of de-energization.

Five circuit segments in total were de-energized morning affecting 1,268 customers. Two of the circuits de-energized did not receive imminent notification of de-energization (one circuit in Los Angeles county and one circuit shared between Los Angeles and Ventura county). De-energizations on these circuits occurred shortly after 8:00 am and both segments were restored by 12:30 pm.

January 15th – Overnight, SCE de-energized 8,263 customers on 15 circuit segments originally in scope that had received prior notifications of the potential for de-energization. However, 2,759 customers on two of the circuits de-energized did not receive imminent notifications.

The PSPS IMT also de-energized an additional four segments affecting 3,714 customers at approximately 9:00 am. One final circuit for the day which was not originally on the period of concern was de-energized after 1:30 pm but received notification of imminent de-energization. Power was restored to these customers approximately four hours later. In total, The IMT de-energized 13,851 customers during this first period of concern. The majority of customers de-energized during the first period of concern were able to be re-energized on January 15 with the exception of 39 customers in Los Angeles County on the Sand Canyon and Energy circuits.

Period of Concern #2

January 16th – At approximately 9:00 am, when the second period of concern was set to begin, the PSPS IMT began notifying customers of potential imminent de-energizations based on increasing wind speeds in Los Angeles and Ventura counties approaching thresholds. At 10:26 am, the weather station for the first circuit to be de-energized on this day was reporting sustained winds at 30.1 mph and gusts at 46.9 mph. Wind speeds kept the risk level close for many circuits, but ultimately only two more circuit segments were de-energized when conditions presented risks in excess of circuit thresholds. Three circuit segments were de-energized this day affecting 4,059 customers. Of the three new outages, two segments (including one carrying 3,211 customers of the 4,059) were able to be restored by approximately 6:00 pm.

January 17th – Three segments remained de-energized (two from the previous period of concern and one from the 16th) as wind conditions still posed a threat to public safety. Notifications of potential de-energization were sent at approximately 7:00 am as the PSPS IMT observed increasing wind speeds. At approximately 10:55 am, the Anton circuit was de-energized due to gusts reaching 47.8 mph. This was the last circuit to be de-energized in the second period of concern. SCE's weather forecasts indicated circuits in Fresno, Kern, Los Angeles, Ventura, Tulare, King, San Bernardino, Orange, Riverside, and Santa Barbara counties and approximately 303,928 customers potentially in scope for de-energization during the third period of concern, beginning January 18 at 9:00 am and continuing through January 20 at 9:00 am. SCE meteorologists forecast this as an extremely rare weather event; a strong, cold and

wet Santa Ana. This led to higher forecast uncertainty than usual and also led to some uncertainty of the fuel conditions based on the incoming precipitation that could be associated with the strong winds. In addition to SCE's forecast, the National Weather Service-issued Red Flag Warnings, Wind Advisories, Fire Weather Watches, and High Wind Warnings in areas in scope for the third period of concern as detailed later in this report. All customers de-energized during the second period of concern were restored by January 17 at 3:52 pm.

Period of Concern #3

January 18th – The third period of concern for this event was forecast to begin at 9:00 am on January 18. As early as 6:40 am on January 18, the PSPS IMT began observing escalating fire weather conditions with sustained wind speeds reaching 35 mph and gusts of 49 mph in parts of Los Angeles County exceeding thresholds and posing potential risks to public safety. The PSPS IMT determined that de-energization of circuits was necessary to maintain public safety due to observed wind conditions and elevated Fire Potential Index values in excess of 12.5. The first circuit segment was de-energized by 6:50 am. By 10:08 am, three more circuit segments were de-energized. Two circuits in Kern County with five SCE customers that required advance coordination with PG&E were proactively de-energized for coordination with PG&E. The fourth circuit segment was de-energized when wind speeds reached 31.4 mph sustained and gusts of 48.8 mph as reported by the respective SCE weather station. SCE monitored these escalating conditions and elevated Fire Potential Index values in areas of Kern, Los Angeles, and Ventura county through the morning and two more segments were de-energized by approximately 11:22 am for a total of six outages during the morning of January 18. Customers on these impacted circuits received advance notification of de-energization but not all customers received imminent notification of de-energization.

January 19th – Starting in the early hours of January 19, the IMT de-energized 124 circuits or circuit segments over the course of the next 16 hours with a total of 91,382 customers impacted. Customers on these impacted circuits received advance notification of de-energization but not all customers received imminent notification of de-energization.

January 20 – No additional circuits were de-energized on this day, but unsafe conditions persisted hindering restoration efforts. Before midnight leading into the 21st, SCE had restored power to 89,742 of the customers de-energized.

January 21 – By January 20, all circuits still de-energized had been released by the Incident Commander for patrol and re-energization. However, air patrols were required for six circuits and could not be completed safely on the 20th. This affected nine customers on the Sand Canyon circuit, 17 customers on the Veterans circuit, five customers on the Acosta, one customer on the Frozen circuit and four customers on the Grapevine Peak circuit. A combination of wind conditions affecting air patrols, terrain affecting ground patrols, and lack of daylight prevented these circuits from being safely patrolled until later in the morning of the 21st. SCE waited until the morning when patrols could be completed to notify those impacted customers of imminent re-energization. The remaining Sand Canyon, Veterans and Acosta segments were authorized for patrol and re-energization by 9:09 am. By 1:00 pm, all but five customers were restored. The two aforementioned circuits that require coordination with PG&E to restore were the last circuits to be re-energized with all customers restored by 6:30 pm.

The following responses address how SCE complied with all applicable PSPS regulatory requirements, including ESRB-8 and the Phase 1 (D. 19-05-042) and Phase 2 (D. 20-05-051) decisions, during this event.

1. The time, place, and duration of the power shutoff event

SCE performed de-energizations during all three periods of concern in this PSPS event. De-energization began on January 14 at 4:13 and continued through January 21 at 18:30. The event impacted portions of Fresno, Kern, Madera, Los Angeles, Orange, Riverside and San Bernardino. A summary table of de-energization specific is provided below and further detail can be found in Attachment A-De-Energization Specifics.

Event Dates	Circuit Segments De-Energized	Customers Affected	Earliest De-energization	Earliest Restoration	Latest De-Energization	Latest Restoration
January 14 to 15	25	13,851	1/14/2021 04:13	1/14/2021 09:39	1/15/2021 13:32	1/17/2021 14:13
January 16 to 17	4	4,198	1/16/2021 10:26	1/16/2021 15:03	1/17/2021 10:54	1/17/2021 15:52
January 18 to 20	132	96,292	1/18/2021 06:50	1/18/2021 11:51	1/19/2021 15:25	1/21/2021 18:30

Two circuit segments with zero customers were de-energized prior to the event to prevent the risk of these assets causing an ignition and minimize the impact to customers once hot work restrictions would have been active. The following table provides additional information for all circuit segments with reported as zero de-energized customers.

Circuit	Description of Circuit Segment
TAPO	Section of overhead line has no customers and serves as a tie switch to Guitar. Switched out of service prior to January 14.
TWIN PEAKS	**33kV line (feeder circuit) - 0 customers. Switched out of service prior to January 14.
LARCH	**33kV line (feeder circuit) - 0 customers
LAUDA	**33kV line (feeder circuit) - 0 customers
ESCONDIDO	Escondido PT feeds no customers. It is a 13x6 rack holding the ground bank for Davenport.

2. The local communities' representatives contacted prior to de-energization, the date 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 General Order 95, Rule 21.2[7]

County	Public Safety Partner	Date	Tier
Fresno	County and State public safety and first responder agencies and local governments	1/17	Tier 2 Tier 3
Madera[8]	N/A	1/18	Tier 2 Tier 3
Kern	County and State public safety and first responder agencies and local governments	1/15	Tier 2 Tier 3
Los Angeles	County and State public safety and first responder agencies and local governments	1/12	Tier 2 Tier 3
Orange	County and State public safety and first responder agencies and local governments	1/12	Tier 2 Tier 3
Riverside	County and State public safety and first responder agencies and local governments	1/12	Tier 2 Tier 3
San Bernardino	County and State public safety and first responder agencies and local governments	1/12	Tier 2 Tier 3
Ventura	County and State public safety and first responder agencies and local governments	1/12	Tier 2 Tier 3

[7] See Attachment B-Public Safety Partner Notifications for specifics of notifications. SCE maintains communication with local communities for the duration of the PSPS event and all dates listed denote initial notification to impacted stakeholders.

[8] SCE coordinated with PG&E for the one customer impacted in Madera County.

3. If unable to provide customers with notice at least 2 hours prior to the de-energization event, provide an explanation in its report.

SCE is not always able to forecast all circuits that may potentially be in scope for de-energization based on the information available through weather modeling. When this is the case, the Incident Commander will make de-energization decisions based on the information available in real time. This information can include wind trends and speeds as identified on weather stations in the area of concern and/or live field observations. As the result, SCE may be required to de-energize customers, in some situations, without any or all required prior notifications. In this PSPS event SCE de-energized 4,819 unique customers without any prior notification on 3 circuits as they were not originally forecasted to be in scope for this PSPS event.

4. Summarize the number and nature of complaints received as the result of the de-energization event and include claims that are filed due to de-energization.

As of the filing of this report, SCE was aware of 287 claims related to this PSPS event: 248 claimed food loss, 8 claimed food and property loss, 11 claimed property damage, 18 did not list their damage, and 2 filed claims for evacuation costs (hotel, etc.). SCE is not aware of any formal complaints that were submitted to the Commission. SCE Consumer Affairs received 39 complaints from representatives of affected cities through the CPUC's Consumer Affairs Branch related to SCE's PSPS events as detailed in the following table. [9]

PSPS Event Date	Number of Complaints	Nature of Complaints
12.16.2021	9	• Upset about frequency and duration of events • Upset about event Christmas eve • Upset about frequency and duration of events • Protesting PSPS altogether • Upset about water well unavailable • Upset about frequency of events; food and medication losses; claim filed • Upset about PSPS event with someone sick in the home
1.12.2021	39	• Upset about duration, COVID patients • Upset about frequency of events • Understands PSPS need, but why neighbors never out • Upset about frequency of events, feels discriminated/targeted • Protesting PSPS in general • Estimated restoration needed, elderly • Notifications confusing • Inquiring about PSPS in general, understands need but wants more detail • Protesting PSPS in general • Information not helpful • Requesting for generator due to PSPS • Upset about frequency and duration of events, impact to work • Upset about frequency and duration, loss of food • Received notice of power back on, but it was not • Why with upgrades do we still have PSPS?

[9] SCE is including complaints from previous PSPS events received after the 10-day filing period in this report

PSPS Event Date	Number of Complaints	Nature of Complaints
		• Protesting PSPS during COVID • Upset about frequency of events and being elderly

During this PSPS event, local jurisdictions expressed concern or sent inquiries related to the use of PSPS. SCE is including the following examples of those interactions here for context and not as an exhaustive list of all SCE's interactions with local agencies.

- The City of Malibu was not aware the Cuthbert circuit was under PSPS consideration until a short time prior to potential de-energization. The city requested additional information in order to inform generation decisions and any additional mitigations that would minimize impacts to traffic signals. SCE was able to sectionalize the outage on the Cuthbert circuit so that the traffic signals on PCH were not impacted
- The City of Irvine inquired about removing the Munich Circuit from the Period of Concern as it is in the Silverado burn scar. After verification with SCE Fire Science the circuit was removed from scope
- The City of Tehachapi relayed a customer concern about receiving late night calls as well as the accuracy of information the customer received from SCE's customer service call center. SCE followed up with the customer and investigated the customers assertion that the call center did provide inaccurate information. SCE will work with the call center to provide accurate information in future events.
- City of Chino Hills expressed concern that de-energization notifications were received "hours after de-energization". SCE followed up with the city and explained the notification process and why there could potentially be delays in receiving notifications.

5. The timeline for power restoration (re-energization), in addition to the steps taken to restore power as required in Resolution ESRB-8.

A PSPS event will continue while dangerous fire weather conditions exist, and the threat of a wildfire event remains due to these conditions. SCE's restoration process begins after dangerous fire weather conditions in the field have subsided, the period of concern has expired and the Incident Commander has approved restoration operations. If circuits are de-energized, those circuits and impacted lines will be inspected to ensure there is no damage before power can be safely restored. Any visual inspection of the power lines typically takes place during daylight hours for safety and accuracy. Therefore, patrol and restoration operations may be limited or prolonged during overnight hours. SCE strives to restore all power within 24 hours of de-energization when possible. The timeline for power restoration for all de-energized circuits is outlined in Attachment A-De-Energization Specifics.

6. For any circuits that require more than 24 hours to restore, the utility shall explain why it was unable to restore each circuit within this timeframe in its post event report.

SCE's restoration process begins after dangerous fire weather conditions in the field have subsided, the period of concern has expired, and the Incident Commander has approved restoration operations. SCE was able to restore power to nearly all de-energized circuits within 24 hours after the Incident Commander approved restoration operations on de-energized circuits.

There were five circuits in total that took longer than 24 hours to restore and 322 customers impacted.

One circuit segment with zero customers (Twin Peaks) was pre-emptively de-energized as stated previously but required air patrol to safely re-energize. SCE did not prioritize patrol of this circuit ahead of circuits with de-energized customers and the final restoration time was 38.5 hours after authorization from the incident commander. No customers were impacted by this delay.

The Blue Cut circuit was authorized for patrol and re-energization but is fed by the Verdemont 33 kV which had sustained damage and required repairs. Furthering the delay, power was restored to the Blue Cut circuit after repairs were completed on 1/20 14:32 but patrols lasting into the night were complicated and slowed by the fire-damaged terrain and low light. Restoration took 31 hours in total after the initial authorization from the incident commander affecting 292 customers.

The Tahquitz circuit was restored after 24 hours and 5 minutes due to the timing of when it was released for patrol by the incident commander, harsh terrain, inclement weather, and the requirement to patrol during daylight hours affecting 25 of the 137 customers on this segment. The other 112 customers were re-energized within approximately 22 hours.

Two circuits, the Frozen 12 kV and Grapevine Peak 2.4 kV, required longer than 24 hours to restore due to due to both high winds delaying air patrols to determine if the two circuits could be safely re-energized as well as the need for PG&E to coordinate re-energization on the portions of both circuits in their service territory. Both circuits were restored approximately 33 hours after the Incident Commander approved restoration operations affecting five SCE customers.

7. Identify the address of each community assistance location during the de-energization event, describe the location (in a building, a trailer, etc.), and describe the assistance available at each location, and give the days and hours that it was open.

Each of the CRC and CCV locations were equipped with ice vouchers or ice, water, snacks, blankets, and customer resiliency kits (containing PSPS program information, mask, gloves, hand sanitizer, solar power battery charger or an LED light with built-in battery). The Tehachapi location included firewood. Customers were also able to power medical devices, if necessary.

Both CRCs and CCVs were used in this event given the scope and size of the event and SCE's ability to adhere to COVID-19 protocols through their use. Each location was reviewed with local community site management and county OEM input and agreement. Based on the Governor's Stay-at-Home Order, SCE with external input chose locations and types of resources carefully with both SCE and customer safety as our highest priority.

Type	County	City/Community	Day and Time	Address
CCV	Los Angeles	Acton	1/15, 8am-10pm 1/18-1/20, 8am-10pm	3748 Nickels St., Acton, CA 93510
CCV CRC	Los Angeles	Agua Dulce	1/14, noon-10pm 1/15, 8am-10pm 1/18-1/20, 8am-10pm. 1/21, 8a,-noon	33201 Agua Dulce Canyon Rd., Agua Dulce, CA 91390

Type	County	City/Community	Day and Time	Address
CCV	Los Angeles	Chatsworth	1/14, noon-10pm 1/15-1/17, 8am-10pm, 1/18-1/20, 8am-10pm	23449 Lake Manor Dr., Chatsworth, CA 91311
CCV	Orange	Silverado	1/15-1/17, 8am-10pm, 1/18-1/19, 8am-10pm	7531 E. Santiago Canyon Rd., Silverado, CA 92676
CCV CRC	Riverside	Idyllwild	1/15, 1pm-10pm 1/18-1/19, 8am-10pm	25925 Cedar St., Idyllwild, CA 92549
CCV	San Bernardino	San Bernardino	1/15-1/17, 8am-10pm 1/18-1/19, 8am-10pm	5500 University Parkway, San Bernardino, CA 92407
CCV	Ventura	Moorpark	1/14, 6pm-10pm 1/15-1/17, 8am-10pm	200 Casey Rd., Moorpark, CA 93021
CCV	Los Angeles	La Canada	1/19-1/20, 8am-10pm	1800 Foothill Blvd., La Canada, CA 91011
CRC	Kern	Bear Valley	1/18-1/19, 8am-10pm	25101 Bear Valley Rd., Bear Valley, CA 93561
CCV	Los Angeles	Santa Clarita	1/20, 8am-10pm	20970 Centre Pointe Pkwy, Santa Clarita, CA 91350
CCV	Riverside	Calimesa	1/18-1/19, 8am-10pm	908 Park Ave, Calimesa, CA 92320
CCV	Ventura	Fillmore	1/18-1/20, 8am-10pm	533 Santa Clara Ave., Fillmore, CA 93015
CRC	Ventura	Simi Valley	1/18-1/20, 8am-10pm	3900 Avenida Simi, Simi Valley, CA 93063
CCV	Santa Barbara	Carpinteria	1/19-1/20, 8am-10pm	5351 Carpinteria Ave., Carpinteria, CA 93013

8. Any wind-related damage(s) to SCE's overhead equipment in the areas where power is shutoff.
Crews performed post-patrols on de-energized circuits to ensure they could be safely re-energized, completing repairs before safely restoring power. A summary of all wind-related damage from this PSPS event found during the post-patrol process is below:

Circuit	County	Structure	Damage
DeMille 16 kV	Los Angeles	4388086E	Damaged OH Primary Connection
Bouquet 16 kV	Los Angeles	1115132E	Damaged Conductor
Davenport 16 kV	Los Angeles	1186898E	Damaged Conductor
Hillfield 16 kV	Los Angeles	4863083E, 4104574E	Damaged to Span Guy
Lopez 16kV	Los Angeles	1123418E	Damaged Conductor
Pick 12 kV	Los Angeles	699682E	Damaged Secondary Conductor
Chawa 12kV	Riverside	5342555E	Span Guy Damaged
Dartmouth 12 kV	Riverside	4536571E	Damaged Conductor
Gilman 12 kV	Riverside	2134139E/4223194E	Damaged Secondary Pole
Steel 12 kV	Riverside	220984S, 4224033E	Damaged Primary Pole, Damaged Conductor
Northpark 12 kV	San Bernardino	F18075Y	Damaged Conductor

Circuit	County	Structure	Damage
Verdemont 33kV	San Bernardino	4280052E	Damaged OH Primary Equipment
Condor 12 kV	Tehachapi	BF88155	Damaged OH Primary Equipment
Anton 16kV	Ventura	1433040E, 4557493E	Damaged Conductor, Damaged OH Primary Connection
Langer 16 kV	Ventura	1275625E	Damaged Primary, Broken Crossarm
Atmore 16 kV	Ventura	4253764E	Damaged Conductors
Sexton 16 kV	Ventura	4254563E	Damaged Insulators
Morganstein 16 kV	Ventura	4761821E, 2144784E, 1278930E	Damaged Insulators, Damaged OH Primary Equipment, Damaged Conductor
Buckner 16kV	Ventura	1296774E	Damaged OH Primary Equipment
Castro 16kV	Ventura	960699E	Damaged Conductor
Cuthbert 16 kV	Ventura	1868114E	Damaged OH Primary Equipment
Estaban 16 kV	Ventura	1803860E	Damaged Conductor
Hampshire 16 kV	Ventura	1414533E	Service Wire Damaged
Hillcrest 16 kV	Ventura	1540198E, 1500737E	Damaged Conductor
Langer 16 kV	Ventura	1276627E	Damaged Conductor
Plateau 16 kV	Ventura	4125689E	Damaged OH Primary Equipment

9. All factors considered by SCE in its decision to shut off power, including wind speed, temperature, humidity, and vegetation moisture in the vicinity of the de-energized circuits

SCE's decision to shut off power is dynamic and not based on one single factor. The decision to de-energize during this PSPS event was made by considering and weighing the following factors during the PSPS event. Actual factors used to de-energize can be found in Attachment A-De-Energization decisions.

- National Weather Service-issued watches and warnings for high fire risk areas in our territory as outlined below:

Period of Concern	Warning/Advisory/Watch	Impacted County
January 14 to January 15	Red Flag Warning (RF) Wind Advisory (WA) Fire Weather Watch (FW)	Los Angeles County (RF, WA) Ventura County (RF, WA) San Bernardino County (RF) Orange County (RF) Riverside County (RF)
January 16 to January 17	Red Flag Warning (RF) Wind Advisory (WA) Fire Weather Watch (FW)	San Bernardino (RF, FW) Orange County (RF, FW) Riverside County (RF, FW) Ventura County (WA) Los Angeles County (WA) Kern County (WA)
January 18 to January 20	Red Flag Warning (RF)	San Bernardino (RF, HW)

	Wind Advisory (WA) Fire Weather Watch (FW) High Wind Warning (HW)	Orange County (RF, HW)) Riverside County (RF, HW) Los Angeles County (RF, WA, FW, HW) Ventura County (RF, WA, FW, HW) Kern County (WA)

- Ongoing assessments from our in-house meteorologists using high-resolution weather models, data from SCE weather stations and publicly available weather stations.
- Fire spread modeling to confirm areas having the greatest potential for significant fire activity. Results of this modeling identified the potential for fires in the 1-5-thousand-acre range in HFRA during the periods of concern.
    - The SCE Fire Potential Index (FPI)[10], a tool that utilizes weather data to include temperature and humidity, fuel conditions, and vegetation moisture content to rate the daily fire potential across our region. SCE uses the following metrics to rate ignition potential
        - Low - 11.99,
        - Elevated - 12-14.99 and
        - Extreme - 15 and above.
- Wind trends[11] and speeds, particularly when they exceed or are expected to exceed National Weather Service Wind Advisory levels (defined as 31 mph sustained wind speed and 46 mph gust wind speed) or exceed the top 1% of historical wind speeds in the area. Wind speeds are particularly important when we consider them in combination with other local conditions, such as dry vegetation, that could present a true hazard for the community. Wind speed thresholds may also be adjusted based on other factors or circuit design.
- Thresholds are typically set at the lower of the 99th percentile wind experienced by that circuit or the National Weather Service (NWS) Advisory level which is 31 mph sustained winds or 46 mph wind gusts (31/46). The threshold levels are capped at the NWS Wind Advisory criteria. In combination with an elevated Fire Potential Index (FPI), these wind speeds (31/46 or 99th percentile) could contribute to the ignition and spread of a catastrophic wildfire
- Triggers provide a readiness period during the PSPS event and are a way to prioritize circuits allowing the IMT to take appropriate action and in many cases, de-energize circuits before the forecast thresholds are breached in real-time. FPI and circuit health are the basis for designing the triggers and are calculated for each circuit. Triggers are determined by multiplying a discount factor that is informed by FPI, circuit health and ignition consequence modeling (REAX score) to the baseline threshold. Discount Factors range from 0.8 to 1.0 and the Baseline Threshold is the lower of NWS Advisory (31/46) or 99th % historical.

    PSPS Trigger = (Baseline Threshold) * (Discount Factor)

- The Trigger discount increases with high FPI, circuit health, and high REAX scores. In these cases,

[10] SCE details the entirety of its Fire Potential Index (FPI) in the 2020 SCE Wildfire Mitigation plan filing which can be found at www.sce.com/safety/wild-fire-mitigation

[11] SCE defines wind trends as increasing wind speeds that are projected to exceed threshold and may de-energize at its discretion when trending upwards

the discount is applied at the lower of 31/46 or the 99th percentile wind. Therefore, the circuit triggers will be below the circuit threshold.

- In medium and low REAX areas, the discount is applied at the 99th percentile wind, which may exceed 31/46, setting the triggers above the circuit threshold.

10. Evaluation of alternatives to de-energization that were considered, and mitigation measures used to decrease the risk of utility-caused wildfire in the de-energized area and an explanation of how the utility determined that the benefit of de-energization outweighed the potential public safety risks:

SCE does not make the decision to de-energize lightly and applies judgement based on the best information available during PSPS events to make de-energization decisions. SCE makes these decisions with the consideration of the safety of our workforce, our customers, and the communities we serve in mind. SCE sets thresholds based on a risk-informed assessment of the potential for a catastrophic wildfire should an ignition occur under the conditions presented. Under such conditions, the harm to life and property resulting from such a catastrophic wildfire vastly outweighs the impacts of the de-energization necessary to eliminate the potential of ignition. Additionally, SCE only uses de-energization when no other alternatives will mitigate this fire risk and to the extent possible, minimizes the impact by limiting the de-energization to the smallest number of customers possible through segmentation of impacted circuits, where possible.

SCE also considers the pre-emptive de-energization of a transmission line to be the "last resort" and takes proactive measures to reduce the likelihood and impact of such occurrences. Due to the unique operating characteristics, transmission line outages have the potential to cause significant impacts to public safety and electric system reliability. To address these factors, SCE has implemented PSPS protocols for transmission lines that traverse HFRAs. These operating protocols have been created to gauge the reliability risks associated with the pre-emptive de-energization of transmission lines including, analyzing forecasted fire weather conditions, identification of hazardous field conditions, application of risk evaluation models to analyze various operational scenarios, and the development of mitigation plans to address such events.

The protocol is designed to prevent testing of transmission lines when live field monitoring is taking place on a distribution line that is within one mile of a transmission line. When a distribution line is being monitored in the field due to extreme weather conditions, SCE performs a geospatial analysis to determine if there are transmission lines that run parallel to or cross over the distribution line being monitored. When a transmission line is within the one-mile boundary of the monitored distribution line, the transmission line has operating restrictions placed into effect to prevent a test if the transmission line was to relay. If the transmission line relayed it would require a patrol of the HFRA to ensure the line is safe, prior to being re-energized.

In the days leading up to potential PSPS events, including the events described in this report, SCE closely monitors weather forecasts to identify those areas most likely to experience weather conditions that could warrant the use of PSPS. Once forecasted fire weather conditions materialize, SCE uses a combination of weather stations and live field observers to determine if PSPS needs to be implemented to mitigate elevated or extreme weather conditions. This close monitoring of location-specific data enables SCE to implement PSPS only as a last resort when observed weather conditions warrant de-energization.

In all PSPS events, SCE uses sectionalizing through RAR devices or switches when available within a reasonable period to isolate and de-energize only the necessary portions of circuits. While avoiding de-energization entirely is not always possible, SCE takes these steps to reduce the impacts of de-energization on the community, considering the impacts of the de-energization on its stakeholders within the overall risk posed by the prevailing weather conditions, its de-energizations thresholds, and the unacceptable public safety risk of catastrophic wildfire ignition.

For this event, SCE also worked with the Hospital Association of Southern California to address concerns related to the ongoing COVID crisis. HASC contacted SCE regarding potential de-energization of local area hospitals given the large volume of COVID patients hospitals are currently supporting. Of additional concern was these same hospitals are also storing COVID vaccine, which has strict storage parameters, including refrigeration to maintain. In response to this, SCE added a task force to the existing IMT to review hospitals and medical facilities in scope for potential PSPS during this event. This task force worked with CalOES to identify additional COVID vaccine sites and contact these sites to understand their current resiliency and provide additional mitigation through switching plans and/or additional generation if necessary. SCE was able to successfully keep all hospitals and COVID vaccine sites energized during this PSPS event.

11. A copy of all notifications, the timing of notifications, the methods of notifications and who made the notifications (the utility or local public safety partners), as well as the number of affected customers broken down by all classifications including residential, medical baseline, commercial, industrial, etc.

A copy of all notifications and the timing of notifications can be found in Attachment A – De-Energization Specifics, Attachment B -Public Safety Partner Notifications, Attachment C-Pre Event Notifications, Timing and Customer Classifications Report and Attachment D-PSPS Activation Customer Notification Messaging. All PSPS event notifications to key stakeholders, including Public Safety Partners and customers, are delivered via voice, email, and TTY (telecommunication device for the hearing impaired) formats as per the preference of the recipient. All notifications are made by SCE and offered in multiple languages.

12. An explanation of the circumstances that resulted in failure to communicate a potential pro-active de-energization event, if any.

SCE is not always able to forecast all circuits that may potentially be in scope for de-energization based on the information available through weather modeling. When this is the case, the Incident Commander will make de-energization decisions based on the information available in real time. This information can include wind trends and speeds as identified on weather stations in the area of concern and/or live field observations. As the result, SCE may be required to de-energize customers, in some situations, without any or all required prior notifications. In this PSPS event SCE de-energized 4,819 unique customers without any prior notification on 3 circuits as they were not originally forecasted to be in scope for this PSPS event.

13. Each electric investor-owned utility shall enumerate and explain the cause of any false communications in its post event reports by citing the sources of changing data.

During this PSPS event, SCE believes there are three circumstances related to notification of potential de-energization that could be interpreted as false communications:

- Not all public safety partners and customers that were notified before the periods of concern were ultimately de-energized during the actual periods of concern.

SCE's PSPS notices before the actual periods of concern are primarily intended to provide a warning to customers of the potential for a de-energization event. SCE notices are designed to give customers notice that a de-energization could take place and a time frame within which the event is most likely to occur so that customers can act and prepare. Given that forecasting accuracy improves closer to the period of concern, SCE's advance notices do not confirm that a circuit *will be* de-energized, only that it could be de-energized. In fact, for clarity, SCE does not provide any affirmative confirmation of de-energization in its notifications until an actual de-energization has taken place.

SCE does not consider these as truly being "false positives" since SCE was notifying customers based on weather information available at the time and providing advance warning as required by the Commission. Any advance notifications to customers who were not de-energized, although not viewed by SCE as false positives, are being reported here for transparency purposes. During this PSPS event, SCE provided notice to 389,152 customers of potential de-energization ahead of the periods of concern and ultimately de-energized 114,341 customers during the three periods of concern in this event.

- Not all public safety partners and customers that were de-energized during the periods of concern that were ultimately de-energized received imminent notification of de-energization.

SCE is not always able to execute imminent notifications during actual de-energization either because actual onset of weather varies drastically from the forecasted weather, or because the Incident Commander believed the need to de-energize quickly to maintain public safety took priority over the need to provide imminent notification and the communications team was not advised of de-energization until after the fact. Details of these missed notifications can be found in Attachment A-De-Energization Specifics.

- No public safety partners or customers on circuits that were de-energized outside of the periods of concern received any notifications before de-energization.

SCE is not always able to forecast all circuits that may potentially be in scope for de-energization based on the forecasting information available through weather modeling. When this is the case, the Incident Commander will make de-energization decisions based on the information available in real time. This information can include wind trends and speeds as identified on weather stations in the area of concern and/or live field observations. This can result in no notifications being sent to customers on the circuit before de-energization since the circuit needing. SCE considers this an example of a false negative communication for this PSPS event because SCE de-energized 4,819

unique customers without any prior notification on 3 circuits (4 outages – the Calgrove circuit was impacted twice) that were not originally forecasted to be in scope for this PSPS event.

14. A description and evaluation of engagement with local and state public safety partners in providing advanced education and outreach during the de-energization event.

SCE works throughout the year leading up to fire season on education and outreach with local and State public safety and community partners to educate on the conditions that would warrant the use of PSPS and how we implement it when needed. SCE provided additional education and outreach for this PSPS event by communicating with all counties and local jurisdictions that could be impacted by de-energization. was Additionally, SCE contacted CalOES and the Commission before any forecasted weather was anticipated to impact the SCE service territory. Updates were provided throughout this event using the CalOES PSPS Notification Form, daily situational awareness and coordination calls for State Executives, County Offices of Emergency Management and Critical Infrastructure providers; specifically, water, wastewater and telecommunications audiences. SCE also maintained individual contact with Public Safety Partners, local governments and critical infrastructure in the affected counties, as necessary.

15. For those customers where positive or affirmative notification was attempted, an 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.

Currently, SCE only tracks critical care customers for positive or affirmative receipt of notification attempts. SCE also regularly requests updated contact information from all critical care customers to maintain accurate contact lists. Notifications are made daily as these customers remain on potentially impacted circuits. There was a total of 10,371 Medical Baseline customers in scope for potential de-energization during this event, with 1,880 designated as critical care customers.[12] While SCE was able to make positive contact with all critical care customers, there were a total of 26 that required secondary contact by a Field Services Representative (FSR) to confirm status during this event. SCE is currently evaluating the feasibility of expanding the current process for tracking critical care customers for positive or affirmative receipt of notification to include all medical baseline customers. When instituted, SCE will include this information in future post event reports.

16. A description of how sectionalizing, i.e., separating loads within a circuit, was considered and implemented and the extent to which it impacted the size and scope of the de-energization event.

There were 389,152 total customers in scope for potential de-energization during the period of concern for this event across all known circuits. There were an additional, 4,819 customers not in scope for the period of concern that SCE had to ultimately de-energize. SCE reduced the number of

[12] SCE categorizes the Medical Baseline subset of critical care customers as the most medically vulnerable requiring life saving devices

customers de-energized to 109,494 customers total (excluding the customers not in scope) using weather stations and switching playbooks that identified sectionalizing devices to limit the scope of the event. These sectionalizing devices[13] separate and isolate the de-energization areas, limiting the de-energization impacts as detailed in Attachment A-De-Energization Specifics. During the process of sectionalizing, 5,741 customers temporarily lost power for approximately 15 minutes or less[14] but SCE does not consider these customers as pro-actively de-energized in the context of PSPS due to the fact that this was a loss of power during switching operations and the customers at issue were only minimally impacted by the PSPS event.

17. Lessons learned from the de-energization events.

Based on feedback SCE has received from both the Commission and comments filed in response to our post event reports in the 2020 Fire Season, SCE is aware of the need to provide further transparency and detail of the decision-making process in its post event reporting. While we have included some additional elements of information for this report, we will commit to working toward further transparency and detail for inclusion in our post event reports for the 2021 Fire Season. SCE will detail the improvements to its post-event reports as part of the 2021 PSPS Corrective Action Plan that will be filed with the Commission on February 12, 2021. Additionally, although SCE initially committed to explaining, in a separate document, the lessons learned from the de-energizations that took place in late 2020, these lessons will now be made part of the Corrective Action Plan.

18. Any recommended updates to the guidelines adopted in Resolution ESRB-8 and this decision.

SCE looks forward to participating in Phase 3 of the De-Energization rulemaking proceeding (R.18-12-005) to review and refine the PSPS guidelines. At this time, we would ask the Commission to consider allowing SCE to include multiple periods of concern within one consolidated PSPS event report as long as these are clearly outlined individually within the report. SCE bases the timeframe for reporting on the activation of the PSPS IMT. This means that once activated the team will manage fire weather concerns for as long as they exist, only de-mobilizing once these conditions are no longer set to impact the service territory for 72 hours or more; given that notifications are executed as a piece of the overall PSPS IMT activation and the IMT would remain activated to perform them. This often results in periodic breaks in fire weather followed by additional periods of concern within one continuous event. Allowing multiple periods of concern in reports will more accurately reflect the entire fire weather event and the conditions under which the PSPS IMT was activated to manage the event. This will also ease the reporting burden which is dependent upon the same SME's who are activated to manage PSPS events. In the height of fire season, these SME's also actively manage PSPS event response are often in one PSPS event after another straining our ability to complete reports in the prescribed timeframe.

[13] Remote Automatic Recloser (RAR), Remote Controlled Switch (RCS), Pole Switch (PS), Gas Switch (GS), Padmount Enclosure (PME), and Circuit Breaker (CB) denote different types of sectionalizing devices used by SCE.

[14] SCE only counts those customers de-energized less than 15 minutes as exempt from the total count of PSPS impacts