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November 29, 2018

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

SUBJECT: ESRB-8 Report Regarding Pro-Active De-Energization Event
November 5 to November 13, 2018

Dear Ms. Malashenko,

Southern California Edison (SCE) respectfully submits the attached report in compliance with ESRB-8 requirements regarding its pro-active de-energization event that began November 5, 2018. This report has been verified by an officer of SCE in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

Sincerely,

Laura Genao
Managing Director, Regulatory Affairs

cc: ESRB_ComplianceFilings@cpuc.ca.gov

**Southern California Edison
ESRB-8 Report Regarding Pro-Active De-Energization Event
November 5 to November 13, 2018**

**Submitted to:
California Public Utilities Commission
Director of the Safety and Enforcement Division
November 29, 2018**

ESRB-8 Report Regarding Pro-Active De-Energization Event November 5 to November 13, 2018

Southern California Edison (SCE) submits the following report to the California Public Utilities Commission's Director of the Safety and Enforcement Division pursuant to Resolution ESRB-8 reporting requirements applicable to a pro-active de-energization event. In separate sections of this report, SCE sets forth the reasons for its decision to notify and de-energize customers utilizing the Public Safety Power Shut-Off protocol, day by day background for the events leading up to de-energization, and responds to the specific questions set forth by ESRB-8.

SCE's Decision to Notify and De-energize Customers

SCE's decision to notify and de-energize customers utilizing the Public Safety Power Shut-Off (PSPS) protocol during this event was based on many factors: the Fire Weather Watches and Warnings issued by the National Weather Service (NWS) indicating strong winds, low relative humidity, and warm temperatures for the period November 8 to November 13 in parts of the SCE service territory; the Santa Ana Wildfire Threat Index (SAWTI), a modeling tool SCE uses to give context to forecasted weather that includes wind speeds, atmospheric moisture, and fuel vegetation moisture was at "moderate," with fuel conditions listed as "medium" for November 8 and 9; the SCE Fire Potential Index (FPI), an internal tool used to give context to the potential for fire in the SCE service territory utilizing both modeled forecasted meteorological conditions and conditions of fuels, identified certain circuits at high risk for fire; and the most up-to-date Live Fuel Moisture values (October 26 and November 5) were at 64% across Los Angeles County and 55% in Ventura County.

Background—Event Timeline November 5 to November 13, 2018

Monday, November 5, Southern California Edison (SCE) meteorologists notified SCE personnel of forecasts predicting high winds and fire weather across the SCE service territory beginning Thursday, November 8 or Friday, November 9, 2018. Per SCE's Wildfire Response Plan, the SCE Watch Office coordinated internal situational awareness calls regarding the pending weather event. Activation of the on-duty Incident Support Team (IST) 2 and Electrical Services Incident Management Team (ES IMT) 6 to monitor the weather event was made effective, Tuesday, November 6 at 9:00 a.m. at the SCE Emergency Operations Center (EOC).

Tuesday, November 6, the National Weather Service (NWS) issued Fire Weather Watches for most of Southern California in effect from Thursday morning, November 8, to Friday evening, November 10. SCE meteorologists indicated the NWS was also planning on issuing Red Flag warnings later in the day and predicted wind gusts to meet or exceed pre-determined monitoring thresholds in parts of the service territory.

SCE meteorologists used the variables of wind gusts, red flag/fire weather watches, the Santa Ana Wildfire Threat Index (SAWTI) and internal Fire Potential Index (FPI) criteria to identify circuits for monitoring during the weather event. The FPI was used in the planning stages to

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inform and refine circuit monitoring decisions and used the following criteria for determining which circuits would be initially identified, added or removed from the monitoring list:

- Circuits with winds forecasted at, above or within 5mph of internal thresholds with an FPI level of extreme would be monitored
- Circuits with winds forecasted below internal thresholds with an FPI level of normal or elevated would not be monitored
- Circuits were removed from the monitoring list when winds were forecasted to drop 20% below threshold levels for 2 or more hours (and not forecasted to increase back to threshold levels in the next 48 hours) and the FPI was below the extreme level.

This methodology initially identified 21 circuits affecting parts of Orange, Los Angeles, Riverside and San Bernardino counties for monitoring. Given this information, the IST and ES IMT began customer notifications to the potentially 26,408 impacted customers on these monitored circuits. SCE began notifying these customers beginning at 3:00 p.m. on the afternoon of November 6.

Wednesday, November 7, based on internal modeling and NWS input, SCE began to gain confidence in the forecasts calling for critical fire weather later in the week with the anticipation of Red Flag Warnings being issued by the NWS for the morning of Thursday, November 8 through the evening of Friday, November 9. Given this information, SCE meteorologists added 15 additional circuits to the monitoring list previously identified on Tuesday, November 6, for a total of 36 circuits affecting parts of Orange, Los Angeles, and Riverside, San Bernardino and Ventura counties, bringing the customer totals to 49,685. SCE began notifying these additional customers at 3:00 p.m. on November 7.

As the day progressed, SCE meteorologists again identified circuits to be added to the monitoring list based on updated forecasting. This added an additional 3 circuits to the list for a total of 39 circuits, with customer totals at 54,039. SCE began notifying these additional customers at 5:00 p.m. on November 7.

Thursday, November 8, SCE meteorologists identified 8 additional circuits to be added and 4 circuits to be removed from the monitoring list based on updated weather forecasting, bringing the total number of circuits being monitored to 43 with a total of 64,963 customers. SCE meteorologists also outlined the highest period of weather concern on November 8 as being between 5:00 p.m. Thursday evening and 8:00 a.m. Friday morning for most circuits. SCE began notifying these additional customers at 9 a.m. on November 8.

As the day progressed, SCE meteorologists again identified additional circuits for monitoring based on updated forecasting. This added an additional 4 circuits to the monitoring list bringing the circuit totals to 51 and customer totals to 68,537. SCE began notifying these additional customers at 5:00 p.m. on November 8.

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Extreme fire weather continued overnight on Thursday, November 8 through the morning of Friday, November 9. Given these conditions, as well as real time observations in the field of conditions that posed a public safety risk, the IST Incident Commander made the determination to de-energize limited portions of circuits in Los Angeles, Orange and San Bernardino counties as detailed below. All of the customers on these circuits received prior notification of a possible de-energization event. Notifications of de-energization were also made to the Offices of Emergency Management in Los Angeles, Orange and San Bernardino Counties, the Safety and Enforcement Division of the CPUC as required, and the CalOES Warning Center as requested.

- *Taiwan 12kV Circuit-Orange County*, out of the Moderna Substation in the city of Orange, was proactively de-energized at 11:24 p.m. on November 8 after observations in the field identified trees and branches falling near circuit lines. There were 12 customers in the area of Irvine Regional Park affected, including the Orange County Zoo, the Equestrian Center, and the Irvine Ranch Outdoor Center Boy Scouts Camp. No critical care or essential customers were affected. After winds abated and appropriate re-energization protocols were applied, power was restored at 2:45 p.m. on November 9 with no repairs necessary.
- *Lopez 12kV Circuit-Los Angeles County*, out of the San Fernando Substation in the cities of Santa Clarita and Sylmar was pro-actively de-energized at 7:52 p.m. on November 8 after observations in the field identified wires close to swinging together and poles appearing to be stressed from the 55 mph wind gusts. Eight customers in the area were affected. No critical care or essential customers were affected. After winds abated and appropriate re-energization protocols were applied, power was restored at 1:34 p.m. on November 9 with no repairs necessary.
- *CalState 12kV Circuit-San Bernardino County*, out of the Shandin Substation in unincorporated San Bernardino County, was proactively de-energized at 12:19 a.m. on November 9 after observations in the field identified debris flying through the air in 55 mph wind gusts. There were 9 customers affected in the area. No critical care or essential customers were affected. After winds abated and appropriate re-energization protocols were applied, power was restored at 5:10 p.m. on November 9 with no repairs necessary.

Friday, November 9, SCE meteorologists identified additional circuits for monitoring based on updated forecasting. This added an additional 3 circuits to the monitoring list bringing the circuit totals to 54 and customer totals to 71,616. SCE began notifying these additional customers at 4:00 p.m. on November 9.

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As the day progressed, weather conditions improved and SCE meteorologists began to remove circuits from the monitoring list that no longer met thresholds, bringing the circuit totals down to 6 circuits with 8,546 customers located only in San Bernardino and Orange counties. These circuits remained on the circuit monitoring list in anticipation of further extreme fire conditions from November 11 to 13.

Saturday, November 10, SCE meteorologists identified additional circuits for monitoring based on updated forecasting. This added an additional 20 circuits to the then-existing monitoring list, bringing the circuit totals to 28 with a total of 30,309 customers. SCE began notifying these additional customers of a possible de-energization event at 1:00 p.m. on November 10.

Sunday, November 11, SCE meteorologists identified additional circuits for monitoring based on updated forecasting. This added an additional 2 circuits to the monitoring list, bringing the circuit totals to 28 circuits with 32,204 customers. SCE began notifying these additional customers of a possible de-energization event at 1:00 p.m. on November 11.

Monday, November 12, Extreme fire weather continued overnight on Monday, November 12 through Tuesday, November 13. Given these conditions, as well as real time observations in the field of conditions that posed a public safety risk, SCE made the determination to de-energize limited portions of circuits in Los Angeles and Ventura County as detailed below. All of the customers on these circuits received prior notification of a possible PSPS de-energization event. Notifications of de-energization were also made to the Offices of Emergency Management in Los Angeles and Ventura County, the Safety and Enforcement Division of the CPUC as required, and the CalOES Warning Center as requested.

- *Anton 16kV Circuit*, out of Moorpark Substation, in Ventura County, was proactively de-energized at 10:54 a.m. on November 12 after observations in the field identified rocking cross arms in 55 to 60 mph wind gusts. There were 50 customers affected in the area. No critical care or essential customers were affected. After winds abated and appropriate re-energization protocols were applied, power was restored at 7:48 p.m. on November 13 to a majority of customers. Additional repairs were made to a segment of the circuit with a downed wire and the remaining two customers were restored at 11:35 a.m. on November 14. Seven customers remained without power from damage sustained by the Woolsey Fire.
- *Energy, 16kV Circuit*, out of Chatsworth Substation, in LA County, was pro-actively de-energized at 11:56 p.m. on November 12 after observations in the field identified rocking cross arms in 50 mph wind gusts. There were 35 customers affected in the area. There were no critical care and 4 essential use customers on the affected circuit. After appropriate re-energization protocols were applied, power was restored at 7:24 p.m. on November 13. Five customers remained without power from damage sustained by the Woolsey Fire.

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Tuesday, November 13, SCE meteorologists began removing circuits from the monitoring list based on improving weather conditions. As of 2:00 p.m. on the afternoon of Tuesday, November 13, no circuits remained on the monitoring list.

Response to ESRB-8 Questions

The following material addresses Resolution ESRB-8 requirements in each of the five categories associated with notifications. Each of these categories is addressed in separate sections.

1. 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-D

SCE maintained ongoing communications with both unincorporated and incorporated communities affected throughout the duration of the weather event ending November 13. Additionally, PDF maps and electronic mapping files for affected areas were sent to all County Offices of Emergency Management. The following table illustrates when initial contact was made to the appropriate unincorporated (county) or incorporated (city) community.

Table 1-Communications to Local Communities

Community/Representative	Date	Zone 1	Tier 2	Tier 3
State/Regulatory Agencies				
California Public Utilities Commission	11/6/18			
California Office of Emergency Services	11/6/18			
California State Warning Center	11/6/18			
Los Angeles County				
LA County Office of Emergency Management	11/6/18	X	X	X
City of Altadena	11/6/18			
City of Agoura Hills	11/11/18			
City of Beverly Hills	11/8/18			
City of Calabasas	11/10/18			
City of Hidden Hills	11/9/18			
City of Glendora	11/8/18			
City of La Verne	11/8/18			
City of Lake Forest	11/8/18			
City of Malibu	11/9/18			
City of Pasadena	11/6/18			
City of San Dimas	11/8/18			
City of Santa Clarita	11/6/18			
City of Santa Monica	11/10/18			
City of Sylmar	11/8/18			

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Community/Representative	Date	Zone 1	Tier 2	Tier 3
City of Westlake Village	11/12/18			
Orange County	11/6/18		X	X
Orange County Office of Emergency Management	11/6/18			
Orange County Fire Department	11/6/18			
City of Irvine	11/7/18			
City of Mission Viejo	11/8/18			
City of Orange	11/6/18			
City of Rancho Santa Margarita	11/8/18			
City of Villa Park	11/8/18			
Riverside County	11/11/18		X	X
Riverside County Office of Emergency Management	11/11/18			
City of Banning	11/11/18			
City of Beaumont	11/11/18			
City of Hemet	11/11/18			
City of Jurupa Valley	11/11/18			
City of Lake Elsinore	11/11/18			
City of Riverside	11/11/18			
City of Temecula	11/11/18			
San Bernardino County	11/6/18		X	X
San Bernardino County Office of Emergency Management	11/6/18			
San Bernardino County Fire Department	11/6/18			
City of Fontana	11/9/18			
City of Rialto	11/9/18			
City of Rancho Cucamonga	11/6/18			
City of San Bernardino	11/6/18			
Ventura County	11/6/18	X	X	X
Ventura County Office of Emergency Management	11/6/18			
City of Fillmore	11/7/18			
City of Moorpark	11/7/18			
City of Ojai	11/8/18			
City of Santa Paula	11/9/18			
City of Simi Valley	11/7/18			
City of Thousand Oaks	11/8/18			

SCE provided continuous informational updates to the public during the weather event through SCE’s website (see Table 2 below), interviews and social media. Approximately 100 media calls were received with multiple follow-up calls and emails to reporters and media outlets including

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major network and local stations for CBS, NBC, ABC and FOX. Inquiries were received from Reuters, the Associated Press, the New York Times, the Los Angeles Times, Bloomberg, the Daily Mail, the Wall Street Journal, Politico and BuzzFeed among others.

SCE heavily leveraged social media to share information regarding the weather event, generating more than 1.7 million impressions (views) on Facebook for information related to pro-active de-energization, as well as 2.2 million impressions for safety ads SCE promoted on the platform. Twitter generated 1,139,966 impressions for information related to pro-active de-energization, as well as 823,755 impressions for safety ads SCE promoted on the platform. SCE’s combined outreach on both social media platforms garnered 2.9+ million impressions for information and 3,081,184 million impressions for safety ads. The following table illustrates initial publishing of news articles that were continuously updated on our Energized by Edison platform as new information became available.

Table 2--Communications to Media/Public Outreach

Outlet	Date	Article Name
Energized by Edison	November 6	<ul style="list-style-type: none"> • SCE Responds to Predicted Strong Santa Ana Winds • SCE Notifies Customers of Potential Power Shutoffs
	November 9	<ul style="list-style-type: none"> • SCE Crews Ready for Santa Ana Winds • SCE Works with Fire Officials to Restore Power
	November 13	<ul style="list-style-type: none"> • SCE Crews Begin Making Fire Repairs
	November 16	<ul style="list-style-type: none"> • SCE Ready to Help Fire Victims

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

Not applicable. All customers who were pro-actively de-energized during the reporting period received timely notifications.

3. 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.
 - *Customer 1-November 8, 2018:* Customer received a phone call from the City of Malibu regarding pro-active de-energization outages and wanted more information. Customer was under the impression the entire city would be shut down as part of the weather event.

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- *Customer 2-November 14, 2018:* Customer believed SCE was placing the customer at risk by shutting power down because they would have no way to communicate or receive updates. There was no pro-active de-energization in the customer's area; however, the customer received notification of a possible event and the customer experienced an outage because of fire.
- *Customer 3-November 14, 2018:* Customer believed SCE was placing the customer at risk by shutting power down because they would have no way to communicate or receive updates. Customer also noted that SCE was leaving the customer vulnerable to looting and damage by widely advising the public of cities where pro-active de-energization had occurred. There was no proactive de-energization in the customer's area; however, the customer received notification of a possible event and the customer experienced an outage because of fire.

As of the date of this report, no claims have been filed as a result of the pro-active de-energizations.

4. Provide a detailed description of the steps taken to restore power.

All circuits pro-actively de-energized during this event were evaluated under the following criteria before they were re-energized:

- Wind (sustained and gusts) must be at 20% below threshold for the circuit for at least two hours and not predicted to escalate for the next 48 hours;
 - Field conditions must validate that no winds near or above threshold exist;
 - Circuit must be physically patrolled end- to-end for damage;
 - Any damage found on the circuit must be isolated and or repaired;
 - Incident Commander (IC) in consultation with Grid Operations makes the determination to re-energize or leave de-energized based on applicable criteria; and
 - Grid Operations physically re-energizes the circuit once approved by the IC.
5. Identify the address of each community assistance location during a 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.

SCE did not establish any stand-alone community assistance locations directly related to this de-energization event. However, SCE did participate with Los Angeles and Ventura County at their Local Assistance Centers to provide community assistance as needed related to ongoing fires during the same time period.

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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 28th day of November, 2018, at Rosemead, California.



Phillip R. Herrington
Senior Vice President,
Transmission & Distribution