



(U 338-E)

Southern California Edison Q3 2021 Quarterly Data Report

November 1, 2021

Table of Contents

I. INTRODUCTION	2
II. NON-SPATIAL DATA TABLES 1-12	3
III. APPENDIX A NON-SPATIAL DATA (TABLES 1-12).....	14

I. INTRODUCTION

Pursuant to Resolution WSD-011, Attachment 3, as modified by the February 16, 2021 Compliance Operational Protocols (Compliance Protocols), and the Office of Energy Infrastructure Safety's (OEIS or Energy Safety) Final Action Statement on SCE's 2021 Wildfire Mitigation Plan (WMP) Update, this Quarterly Data Report (QDR) includes Southern California Edison Company's (SCE) (1) non-spatial data, in Excel, pursuant to the non-spatial Tables 1-12 template; and (2) a description of the data included in the non-spatial Tables 1-12.¹

SCE includes the non-spatial data, in Excel and in pdf in Appendix A, pursuant to Resolution WSD-011, Attachment 2.3 within Tables 1-12. New data is being provided for recorded Q3 2021, where applicable. SCE also includes corrections to data errors that have been identified through further quality review of calculations and data. Annual forecasts are not changing except where data errors are being corrected and to maintain alignment of Table 12 with SCE's Change Order Report. All new and corrected data are displayed in red font. SCE is also including a pdf version of these tables in Appendix A of this QDR. Section II of this QDR includes a description of the data included in these tables. Subsequent QDRs not submitted concurrently with an annual WMP submission will continue to include the pdf version and description of the data for these tables. The non-spatial data in this QDR submission is still undergoing review. If there are material updates, SCE will provide them in subsequent QDR submittals or earlier, as applicable.

¹ SCE will provide the GIS Data Schema and a description of the data included in the geospatial database in a subsequent submission as communicated to OEIS

II. NON-SPATIAL DATA TABLES 1-12

Introduction:

SCE’s approach to updating Tables 1-12 of the non-spatial data requirements for this QDR includes 1) updating tables that require quarterly updates and not updating tables that require annual data, unless required to maintain alignment with SCE’s Change Order Report (see Table 12), and 2) corrections to data errors that have been identified through discovery and further quality review of calculations and data.

Table 1: Recent Performance on Progress Metrics

Table 1 provides a six-year history (2015-2020), where applicable, of Progress Metrics as defined by the 2021 WMP Guidelines and recorded data through Q3 2021. Updates to current and previous findings are in red font. The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data changed or is not available.

Metric Type 1 asks for inspection counts for different inspection category types for transmission and distribution in circuit miles. SCE accounts for completed inspections by noting the counts of assets inspected instead of noting by circuit miles. In order to present completed inspections in the requested format, SCE uses a calculated average span length multiplied by the number of structures inspected. Additionally, rows were added to inspection types (1c, ii-iv) in order to provide additional detail of inspection data collected as part of SCE’s detailed inspection program. The drivers and programmatic inspection changes can be seen in SCE’s 2021 WMP Update in Section 7.3.4.9.1 for Distribution and Section 7.3.4.10.1 for Transmission.

Metric Type 2 asks for the number of spans inspected for vegetation compliance. SCE accounts for completed vegetation compliance inspections by circuit miles. In order to present completed vegetation compliance inspections in the requested format, SCE divides the recorded circuit miles inspected by the calculated average span length.

Metric Type 3, customer outreach metrics, requires information not accounted for or maintained by SCE as SCE has no jurisdiction over evacuation orders. SCE diligently requested and followed up with local governments and law enforcement and was only able to obtain information from one county. Even then, the information provided included high-level estimations of evacuation counts estimated by the local government and law enforcement entity for a very limited set of fires. Because of this, SCE is unable to obtain the requested data, analyze it, and report on evacuation related requirements in this table. SCE anticipates this to be a recurring challenge going forward.

See Table 1 “Recent performance on progress metrics” for more detail.

Table 2: Recent Performance on Outcome Metrics

Table 2 provides a six-year history as well as recorded data through Q3 2021, where applicable, of Outcome Metrics as defined by the 2021 WMP Guidelines. Updates to current and previous findings are in red font. Comments are included in the table to provide additional details about the data provided or indicate if the data was corrected or is not available or not applicable for the past six years or through Q3 2021. The information provided in conjunction with the “utility-ignited” wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further

notes that to the extent the damages metrics were obtained from other agencies, SCE does not guarantee the accuracy of such information. Additionally, in many instances, the cause of wildfires is still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such a report.

See Table 2 “Recent performance on outcome metrics” for more detail.

Table 3: List and Description of Additional Metrics

Metrics and underlying data are critical components for WMP development, execution, and evaluation, but we continue to emphasize that the near-term focus should be on efficient implementation of our planned activities, while the assessment of whether the activities are having the desired and expected impact on risk reduction should be measured over a longer time horizon. A clear distinction is necessary between metrics that can help monitor compliance with approved WMPs and those that can help evaluate effectiveness of these approved plans and inform future WMP updates.

As in 2019 and 2020, we provide annual Program Targets for each WMP activity which establish goals to evaluate compliance. As stated in previous filings and submittals, tracking Program Targets for approved WMPs is the best means of determining progress and assessing WMP compliance in the near term.

In its response to Guidance-5, SCE proposed five outcome-based metrics, to gauge the effectiveness of the portfolio of its wildfire mitigation activities. These outcome-based metrics are:

1. CPUC reportable ignitions in HFRA (total and by key drivers including CFO, wire-to-wire contact, tree-caused circuit interruptions, and EFF)
2. Faults in HFRA (total and by the key drivers mentioned above)
3. Wire-down incidents in HFRA
4. Number of impacted customers and average duration of PSPS events
5. Timeliness and accuracy of PSPS notifications

SCE proposed these outcome-based metrics because WMP activities are ultimately designed to reduce wildfire ignitions associated with its electrical infrastructure and reduce the impact of PSPS de-energization events to customers. Faults and wire-down events are also key metrics as they are leading indicators of potential ignitions. Importantly, these metrics are within the reasonable control of utilities when appropriately normalized for weather and other exogenous factors. Other metrics such as safety incidents, acres burned or structures destroyed, though important to understand and drive California’s fire mitigation efforts, are impacted by events and circumstances largely outside of the utility’s control such as climate change, fire suppression efforts and fire response. Therefore, these are not appropriate WMP effectiveness metrics.

Most of SCE’s proposed WMP activities are selected to improve these metrics over time, while the remainder are enabling activities to support and supplement those WMP activities. Table SCE-1, updated since the 2021 WMP Update submission, demonstrates how each of SCE’s 2021 WMP activities map to the five outcome-based metrics.

**Table SCE-1
Activity to Metric Mapping**

Activity	Initiative	Ignitions	Faults	Wire Downs	PSPS # Impacted & Average Duration	PSPS Notification Timeliness & Accuracy	Enabling
SA-1	Weather Stations				X	X	
SA-2	Fire Potential Index (FPI)				X	X	
SA-3	Weather and Fuels Modeling System				X	X	
SA-4	Fire Spread Modeling				X	X	
SA-5	Fuel Sampling Program				X	X	
SA-7	Remote Sensing / Satellite Fuel Moisture				X	X	
SA-8	Fire Science Enhancements				X	X	
SA-9	Distribution Fault Anticipation (DFA)	X	X	X			
SH-1	Covered Conductor	X	X	X	X		
SH-2	Undergrounding Overhead Conductor	X	X	X	X		
SH-4	Branch Line Protection Strategy	X		X			
SH-5	Installation of System Automation Equipment – RAR/RCS				X	X	
SH-6	Circuit Breaker Relay Hardware for Fast Curve	X		X			
SH-7	Circuit Evaluation for PSPS-Driven Grid Hardening Work				X		
SH-8	Transmission Open Phase Detection	X					
SH-10	Tree Attachment Remediation	X	X	X			
SH-11	Legacy Facilities	X	X	X			
SH-12	Microgrid Assessment				X		

Activity	Initiative	Ignitions	Faults	Wire Downs	PSPS # Impacted & Average Duration	PSPS Notification Timeliness & Accuracy	Enabling
SH-13	C-Hooks	X	X	X			
SH-14	Long Span Initiative (LSI)	X	X	X			
SH-15	Vertical Switches	X	X				
IN-1.1	Distribution Ground / Aerial Inspections and remediations	X	X	X			
IN-1.2	Transmission Ground / Aerial Inspections and remediations	X	X	X			
IN-3	Infrared Inspection of energized overhead distribution facilities and equipment	X	X	X			
IN-4	Infrared Inspection, Corona Scanning, and High Definition imagery of energized overhead Transmission facilities and equipment	X	X	X			
IN-5	Generation Inspections and Remediations	X	X	X			
IN-8	Inspection Work Management Tools						X
VM-1	Hazard Tree Management Program	X	X	X			
VM-2	Expanded Pole Brushing	X	X	X			
VM-3	Expanded Clearances for Legacy Facilities	X	X	X			
VM-4	Dead and Dying Tree Removal	X	X	X			
VM-6	VM Work Management Tool						X

Activity	Initiative	Ignitions	Faults	Wire Downs	PSPS # Impacted & Average Duration	PSPS Notification Timeliness & Accuracy	Enabling
	(Arbora)						
PSPS-2	Customer Care Programs (Includes CRCs, CCVs, Battery Backup Programs, Well Water and Water Pumping Backup Generation, Resiliency Zones)						X
DG-1	Wildfire Safety Data Mart and Data Management (WISDM / Ezy)						X
DEP-2	SCE Emergency Responder Training						X
DEP-1.2	Customer Education and Engagement - Community Meetings						X
DEP-1.3	Customer Education and Engagement - Marketing Campaign						X
DEP-4	Customer Research and Education						X
DEP-5	Aerial Suppression						X

Table 3 provides the performance metrics and units SCE uses to evaluate performance within each of these outcome-based metrics, including historical performance over the past six years (2015-2020) as well as recorded data through Q3 2021.

As described in SCE’s response to Guidance-5, there might be annual variances in these metrics driven by uncontrollable factors such as weather, and effectiveness of WMP activities can be best assessed using longer-term trends in these outcome-based metrics. It will also be important to consider factors such as overall risk exposure, the population size of the assets, scope of work completed, and fire suppression by third party agencies when using these outcome-based metrics. These metrics cannot be used to measure progress or compliance per approved plans in the short term. To appropriately evaluate the effectiveness of its WMP activities, SCE is developing suitable quantitative and repeatable methods to measure and normalize these outcome-based metrics. We look forward to

collaborating with Energy Safety, utilities, and other stakeholders to agree on how these metrics should be appropriately measured and used to draw pertinent conclusions.

CPUC Reportable Ignitions in HFRA, Faults in HFRA, and Wire Downs incidents in HFRA

Large variations in weather events, including temperature, rainfall, fuel moisture and wind, can heavily impact outcome-based metrics including faults, wire-down events and ignitions, and can often skew direct comparisons of these metrics year over year.

SCE is monitoring the number of faults at the circuit level and ignitions and wire-down events at the structure level and by key driver (CFO, EFF, and other) both before and after the deployment of select WMP wildfire activities. By observing the key drivers of these events down to the circuit or individual structure level, SCE is building the capability to better evaluate the effectiveness of wildfire activities that were deployed to mitigate those specific drivers, as well as help align future deployment of mitigations to target specific drivers identified at those locations.

SCE continues to focus on maturing its modeling capabilities to provide forecasts of future ignitions across HFRA, incorporating the benefits of wildfire activities to reduce ignitions as well as normalizing exogenous factors such as weather, to provide an expected range of ignitions in future years across HFRA. In its 2021 WMP Update, SCE incorporated the estimated benefits of wildfire activities, including covered conductor, vegetation mitigation, inspection mitigation, in reducing the POI at each individual pole or structure level, and includes this reduction of ignition risk when forecasting expected ignitions. At this time, SCE does not incorporate weather normalization into its WMP ignition forecasts due to the complexity of determining the causal relationship between aberrant weather and ignition probability and fire spread.

SCE is currently evaluating different approaches to normalize exogenous factors, including but not limited to, weather and 3rd party suppression efforts. As SCE continues to focus on prudent and effective grid operations, inspections & maintenance, improvements to standards and timely equipment upgrades, it is recognized that although these actions will not entirely eliminate risk, they are expected, in aggregate, to result in overall improvements in outcome metrics, such as faults, wire-downs and ignition events associated with SCE's electrical infrastructure.

Number of impacted customers during and average duration of PSPS events

As more sectionalization equipment, covered conductor, and other grid hardening activities are deployed, de-energization thresholds can be raised, reducing the number of circuits and circuit segments that will need to be de-energized during extreme weather conditions. Improved weather and fire modeling capabilities along with enhanced operational protocols can also help reduce the frequency and duration of PSPS events. However, to assess the effectiveness of the WMP activities in reducing the frequency and scope of PSPS de-energizations, the total number of customers affected or the duration of outages during any period need to be normalized for the intensity of weather events, how widespread the weather events were, and the duration of the events as these can influence the number of circuits or circuit segments that have to be de-energized. In addition to weather, these metrics have to account for customer density on impacted circuits and other factors outside SCE's control. SCE is currently evaluating how metrics such as windspeed, FPI, etc., can be used to appropriately normalize the number of impacted customers and duration of PSPS events. The historical performance through Q3 2021 can be found in Table 3.

Timeliness and accuracy of PSPS notifications

SCE provides information on the timeliness and accuracy of PSPS notifications in post-event reports. SCE is re-evaluating the calculation of these metrics and benchmarking with the other IOUs to understand best practices. SCE welcomes Energy Safety’s guidance as well.

Table 4: Fatalities Due to Utility Wildfire Mitigation Initiatives

Table 4 provides a six-year history (2015-2020) as well as recorded data through Q3 2021, where applicable, of fatalities associated with utility wildfire mitigation initiatives as defined by the 2021 WMP Guidelines.

See Table 4 “Fatalities due to utility wildfire mitigation initiatives” for more detail.

Table 5: OSHA-Reportable Injuries Due to Utility Wildfire Mitigation Initiatives

Table 5 provides a six-year history (2015-2020) as well as recorded data through Q3 2021, where applicable, of OSHA-reportable injuries associated with utility wildfire mitigation initiatives as defined by the Guidelines. SCE does not use OSHA-reportable contractor and public incidents, as there is no direct employment relationship and no requirement to report to OSHA. However, SCE does monitor CPUC-reportable incidents, which have similar thresholds for identification and reporting (i.e., fatality or personal injury rising to the level of in-patient hospitalization, and in connection with utility assets). To provide a more complete data set, SCE provides data in Table 5 related to the “Contractor” and “Member of the Public” rows that correspond to CPUC-reportable incidents.

See Table 5 “OSHA-reportable injuries due to utility wildfire mitigation initiatives” for more detail.

Table 6: Weather Patterns

Table 6 provides a six-year history (2015-2020) as well as recorded data through Q3 2021, where applicable, of weather patterns as defined by the Guidelines. The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data is not available.

The first row in Table 6 is populated with historical data on Red Flag Warning (RFW) by circuit mile days per year. The RFW circuit-mile days are based on all overhead distribution and transmission circuits that traverse through the National Weather Service (NWS) Fire Weather Zone (FWZ) from a 2015-2020 historical database of RFW events from the NWS. The overhead lengths of distribution and transmission circuits are calculated within each FWZ polygon (area divided geospatially into over approximately 1,000 space areas). All circuit lengths within that FWZ polygon are then multiplied by the number of days (or fraction of days) that a particular polygon had an RFW in effect.

The 2021 WMP Guidelines require that SCE use RFW circuit mile days per year data to normalize data required in other tables. SCE recommends the Commission consider using the National Fire Danger Rating System (NFDRS), which all fire agencies use to determine daily fire danger risk, instead of RFW data. NFDRS is a system that allows fire managers to estimate today’s or tomorrow’s fire danger for a given area. It combines existing and expected states of selected fire danger factors into one or more qualitative or numeric indices that reflect an area’s protection needs. Fire danger ratings are typically reflective of the general conditions over an extended area, often tens of thousands of acres, where a possible wildfire could start. Fire danger ratings describe conditions that reflect the

potential, over a large area, for a fire to ignite, spread and require suppression action.

See Table 6 “Weather patterns” for more detail.

Table 7.1: Key Recent and Projected Drivers of Risk Events

Table 7.1 provides a six-year history (2015-2020) as well as recorded data through Q3 2021, where applicable, as well as projections through 2022 of key recent and projected drivers of risk events as defined by the 2021 WMP Guidelines. Updates for Q3 and data corrections made to previous quarters can be found in red text font.

The comment section for each metric in the table provides details of the source and data that was used or corrected or explanations for why certain data is not available.

To calculate the recent drivers of risk events, SCE utilized the following data sources:

- SCE’s Outage Management System (OMS) and Outage Data and Reliability Metrics (ODRM) interface
- Wire-down data to determine if the conductor failure led to a wire-down event
- Repair work records from SCE’s asset data in systems, applications & products (SAP) to identify failures
- CPUC reportable fire data

For purposes of this QDR, transmission lines refer to all lines at or above 65 kV, and distribution lines refer to all lines below 65 kV. Transmission faults and wire-downs are typically on transmission lines 65 kV and above but may include some lower voltages (from an operational perspective, SCE also treats its 55 kV lines as transmission).

To populate wire-down data for each driver, SCE used its wire-down database containing repair orders and OMS. SCE notes that as a result of continuous improvement efforts, it is currently in the process of reviewing prior period transmission wire down data and will provide a retroactive update in its next quarterly submission. This will also result in an update to the total wire down data in Table 2. To populate outage data for each driver, SCE used ODRM outage cause codes. ODRM database records and catalogs outage impacts and causes, determined by the cooperation of field, operations, and engineering employees.

To populate the number of ignitions per year for each driver, SCE used CPUC reportable data filed for 2015 through 2020 and preliminary data for Q1, Q2, and Q3 2021. The CPUC reportable data contains date and time, latitude and longitude, voltage, location, suspected initiating event, and driver and sub-driver (e.g., animal contact, balloon contact, and transformer failure) categories. SCE mapped the suspected initiating event to the driver and sub-driver categories for 2015 through Q3 2021.

For forecasts, SCE first created a baseline forecast for wire-down, outages, and ignitions based on timeseries forecasting. Time-series forecasting uses historical patterns to create a forecast and can capture variation over smaller periods compared to other forecasting methods. Then, the baseline forecast was subjected to the same methodologies used for RSEs, whereby SCE estimated the mitigation effectiveness of programs by risk drivers and determined the risk reduction, given the exposure and scope of the program, to incorporate the effects of SCE’s various wildfire programs into the forecasts.

See Table 7.1 “Key recent and projected drivers of risk events” for more detail.

Table 7.2: Key Recent and Projected Drivers of Ignition Probability by HFTD Status

- Table 7.2 provides a six-year history (2015-2020), as well as projections through 2022 of key recent and projected drivers of ignitions by HFTD region as defined by the 2021 WMP Guidelines.

The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data was corrected or is not available.

For purposes of this QDR, transmission lines refer to all lines at or above 65 kV, and distribution lines refer to all lines below 65 kV. Transmission faults and wire-downs are typically on transmission lines 65 kV and above but may include some lower voltages (from an operational perspective, SCE also treats its 55 kV lines as transmission).

To populate the ignitions per year for each driver, SCE used CPUC reportable data filed for 2015 through 2019, and preliminary data for 2020. The CPUC reportable data contains date and time, latitude and longitude, voltage, location, suspected initiating event, and driver and sub-driver (e.g., animal contact, balloon contact, and transformer failure) categories. SCE mapped the suspected initiating event to the driver and sub-driver categories for 2015 through 2020.

For forecasts, SCE first created a baseline forecast for ignitions based on time-series forecasting. Timeseries forecasting uses historic patterns to create a forecast and can capture variation over smaller periods compared to other forecasting methods. Then the baseline forecast was subjected to the same methodologies used for RSEs, whereby SCE estimated the mitigation effectiveness of programs by risk drivers and determined the risk reduction given the exposure and scope of the program to incorporate the effects of SCE’s various wildfire programs into the forecasts.

See Table 7.2 “Key recent and projected drivers of ignitions by HFTD region” for more detail.

Table 8: State of Service Territory and Utility Equipment

Table 8 provides a six-year history (2015-2020), where applicable, of state of service area and utility equipment as defined by the 2021 WMP Guidelines.

The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data was corrected or is not available.

Table 8 lists the current baseline state of SCE’s service area in terms of overhead circuit miles for distribution and transmission lines, substations (only in-service, not including third-party owned), and critical facilities. The table also lists the number of customers in WUI zones and by HFRA tier/zone. HFTD Zone 1 cells only reflect portions of SCE’s HFRA that are outside of HFTD Tier 2 and Tier 3 areas. Zone 1 areas that are wholly contained within Tier 2 and Tier 3 areas are reflected in those respective tiers. The WUI area delineation is based on a GIS layer published by the University of Wisconsin-Madison.

It is important to note, that GIS models are updated frequently to reflect changes within SCE's service

area and for data clean-up. SCE does not have the ability to analyze and calculate information in previous years. As such, only 2020 information was obtained from GIS. 2015-2018 data is not available and 2019 data is the same as what was provided in SCE’s 2020 WMP filing.

SCE does not record all customers that are designated as AFN customers. As such, data provided for the AFN population only includes SCE customers enrolled in MBL and/or Low-Income (i.e., enrolled in the CARE/FERA) programs.

See Table 8 “State of service area and utility equipment” for more detail.

Table 9: Location of Actual and Planned Utility Equipment Additions or Removal Year Over Year

Table 9 provides a six-year history (2015-2020), where applicable, as well as projections through 2022 of location of actual and planned utility equipment additions or removal, year over year, as defined by the 2021 WMP Guidelines. The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data is not available.

Table 9 provides planned additions, removals, and upgrades of utility equipment by the end of the three-year plan term. SCE does not routinely follow planned additions, removals, or upgrades by circuit mile, population density, or WUI. While SCE has a number of planned distribution projects over the next few years, the projects are not far enough along in the project lifecycle to have a complete list of affected structures (new or existing), circuit path/route geometries, and/or geospatial coordinates associated with them. Therefore, SCE is unable to map the distribution projects in GIS and subdivide as requested. The planned work with a well-developed scope and geospatial properties are typically major, longer lifecycle transmission and substation projects that have detailed engineering and/or a Certificate of Public Convenience and Necessity (CPCN) or Permit To Construct (PTC) from the Commission. Therefore, the only planned work that SCE included here are (1) transmission projects that have known, planned geospatial geometries (circuit path/route) that can be uploaded to GIS tools and then divided by population density, WUI, and HFTD Tier/Zone and (2) known, planned substation projects (of which SCE has one in the next three years, Safari Substation). Additionally, SCE plans to install at least 375 weather stations and will strive for approximately 475 additional weather stations between 2021 and 2022, but actual site/structure locations have not yet been determined and SCE is therefore unable to provide the locational attributes as requested.

The WUI area delineation is based on a GIS layer published by the University of Wisconsin-Madison.

See Table 9 “Location of actual and planned utility equipment additions or removal year over year” for more detail.

Table 10: Location of Actual and Planned Utility Infrastructure Upgrades Year over Year

Table 10 provides a six-year history (2015-2020), where applicable, as well as projections through 2022 of location of actual and planned utility infrastructure upgrades year over year as defined by the 2021 WMP Guidelines. The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data is not available.

Table 10 provides planned additions, removals, and upgrades of utility equipment by the end of the three-year plan term. For the reasons explained in the Table 9 section above, the only planned work

included in Table 10 are transmission and substation projects that have known, planned geospatial geometries.

The WUI area delineation is based on a GIS layer published by the University of Wisconsin-Madison.

See Table 10 “Location of actual and planned utility infrastructure upgrades year over year” for more detail.

Table 11: Recent use of PSPS and other PSPS Metrics

Table 11 provides a six-year history (2015-2020) as well as recorded data through Q3 2021, where applicable, as well as a projection through 2021 of recent use of PSPS and other PSPS metrics as defined by the 2021 WMP Guidelines. As of Q2 2021, SCE is currently unable to provide planned outage data metrics due to recent IT system implementation issues. SCE is actively investigating this issue and will provide the data when it is available. This affects rows 2a., 2c., 2d., 2e., and 2f. The comment section for each metric in the table provides details of the source and data that was used or explanations for why certain data was corrected or is not available.

Table 11 represents the frequency, scope, and duration of PSPS events in total. A combination of data from SCE’s OMS and data recorded by documentation specialists during actual PSPS events was used for the historical information including data through Q3 2021. For the Q4 2021 time period, SCE used 2020 recorded data adjusted for improvement expected based on SCE’s planned wildfire mitigation activities to create a baseline. To factor in weather variability, which has significant impacts on PSPS events, SCE developed a range around the baseline. The range was based on an 18-year backcast analysis that analyzed how current PSPS triggers would have resulted in PSPS events when applied to historical weather data. The following equation was used to calculate the factor used for the low and high range for PSPS forecast data.

$$\text{Lower limit factor} = \frac{\text{1st Quartile for days of interruption from the 18 year backcast}}{\text{Average days of interruption from the 18 year backcast}}$$
$$\text{Higher limit factor} = \frac{\text{3rd Quartile for days of interruption from the 18 year backcast}}{\text{Average days of interruption from the 18 year backcast}}$$

Please see Table 11 for updates to SCE’s use of PSPS protocols and other related metrics.

Table 12: Mitigation Initiative Financials

Table 12 provides 2020 recorded costs and 2021 through 2022 forecasts by initiative.

In this Q3 2021 submission, wildfire activities that are included in the November 1st Change Order Report have been updated for projected costs and or units as applicable. These updates are reflected in red font in Table 12.

III. APPENDIX A NON-SPATIAL DATA (TABLES 1-12)



Wildfire Safety Division Attachment 2.3

Wildfire Mitigation Plan Quarterly report - non-spatial data template

Resolution WSD-011 Attachment 2.3

Instructions for use

1. Fill out the tan cells (color represented here) starting with the cell below (D17: Utility). The Utility name will populate the Table tabs to follow. Date modified will vary by table.
 2. Cells will only accept valid entries. For most cells, this is positive numbers
 3. For each Table tab, after a modification is made, denote the date of the change in cell C4 for each Table tab.
 4. Some columns have an additional header in row 5 to serve as clarification for several columns. With the exception of projected data, row 5 will be highlighted in blue (color represented here)
 5. Some required metrics are future projections. For these, row 5, above the projections will be highlighted light green (color represented here)
In future submissions, report updated projected numbers if / when projections have changed, and report actuals once the quarter / year has passed.
 6. For data required annually rather than quarterly (see Tables 7.3 - 10), report for entire year even if part of the year is projected. Once year has passed, update cell with actuals
 7. Some tables will have additional instructions provided in a **Notes** box located in cells D2 - D4
Notes will explain terms, signal where projections are required, and provide other useful information.
 8. For the initial quarterly submission, utilities are required to submit data on annual metrics for 2015 - 2020, which should represent the most updated data from the 2020 WMP for years 2015-2019
- * Do not add or manipulate the template for any of the tabs

Update the below table to establish which year, quarter of the WMP cycle this submission this represents.

Utility	Southern California Edison Company
First year of 3-year WMP cycle	2020
Submission year	2021
Submission quarter	Q3
Date Modified	11/1/2021

1.g.iii.	Level 2 findings in HFTD for patrol inspections - Transmission lines	697	855	977	1,215	15,029	1,245	2,522	549	138	319	685	555	# findings	
1.h.iii.	Level 2 findings in HFTD for detailed inspections - Transmission lines	3	1	2	1	14	609	4,400	1,783	961	537	1,252	345	# findings	
1.i.iii.	Level 2 findings in HFTD for other inspections (list types of "other" inspections in comments) - Transmission lines	278	128	408	419	456	15	46	45	85	24	33	28	# findings	
1.j.iii.	Level 3 findings in HFTD for patrol inspections - Transmission lines	935	735	719	382	2,545	130	437	166	48	166	259	162	# findings	
1.k.iii.	Level 3 findings in HFTD for detailed inspections - Transmission lines	0	2	0	4	3	44	309	366	186	207	508	80	# findings	
1.l.iii.	Level 3 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines	0	0	0	0	103	3	1	0	3	0	1	0	# findings	
1.a.iv.	1. Grid condition findings from inspection - Transmission lines total														
	Number of total circuit miles inspected from patrol inspections - Transmission lines	13,068	13,068	13,068	13,068	13,068	3,267	3,267	3,267	3,267	1,713	1,980	3,036	# circuit miles	For 2015-2017, patrol inspections doubled as detailed inspections being completed on every transmission asset in the service territory. Beginning in 2018, the recorded inspection numbers estimate the patrol type inspections in circuit miles being completed. Additionally, SCE tracks completed inspections by "Grids". SCE's complete transmission line network is broken out into large areas called "Grids" and all execution and tracking are recorded at the grid level. The number being represented uses the current transmission circuit mile counts in HFTD for each year. 2020 in particular, evenly distributes the current transmission mile circuit counts into each quarter.
1.b.iv.	Number of total circuit miles inspected from detailed inspections - Transmission lines	NA	NA	NA	4,210	6,389	2,697	3,189	3,230	2,984	1,946	3,905	1,921	# circuit miles	This row is the sum of the three detailed inspection programs below it. An updated historical number for detailed inspections occurred requiring a new summation of the programs below.
	Detailed Inspections	NA	NA	NA	4,210	4,760	697	1,188	1,229	983	823	956	1,068		For 2015-2017, patrol inspections doubled as detailed inspections being completed on every transmission asset in the service territory. Beginning in 2018 the recorded inspection numbers estimate the detail inspections in circuit miles being completed. Additionally, the detailed inspection program completes inspections of 1/3 of all SCE transmission assets per year. The completed inspections are tracked by "Grids". SCE's complete transmission line network is broken out into large areas called "Grids" and all execution and tracking are recorded at the grid level. The number being represented uses 1/3rd of the current transmission circuit mile counts in HFTD for each year. 2020 in particular, evenly distributes the 1/3rd of the current transmission mile circuit counts into each quarter.
	High Fire Inspections	NA	NA	NA	NA	520	1,089	1,089	1,089	1,089	577	1,439	497		SCE tracks completed inspections by tracking the counts of assets inspected instead of tracking by circuit miles. In order to present completed inspections in the requested format, SCE used a calculated average span length multiplied by the number of structures inspected. A correction was made to the Q1 value as it incorrectly included some Q2 inspections.
	Aerial Inspections	NA	NA	NA	NA	1,109	911	911	911	911	546	1,509	357		SCE tracks completed inspections by tracking the counts of assets inspected instead of tracking by circuit miles. In order to present completed inspections in the requested format, SCE used a calculated average span length multiplied by the number of structures inspected. Additionally, for 2020, SCE tracked the completed asset inspected by the year and in order to represent the 2020 completed asset inspection by quarter, just evenly distributed the completed inspections to each of the four quarters in 2020.
1.c.iv.	Number of total circuit miles inspected from other inspections (list types of "other" inspections in comments) - Transmission lines	6,460	4,592	6,226	7,309	5,529	1,594	1,594	1,594	1,594	267	2,066	564	# circuit miles	This row is the sum of the two programs below that are considered as "other"
	IR Corona	0	0	0	0	0	43	43	43	43	0	73	382		For 2020, SCE tracked the completed inspections by the year. In order to represent the 2020 completed inspection by quarter, SCE evenly distributed the completed inspections to each of the four quarters evenly in 2020.
	Intrusive Pole Inspections	6,460	4,592	6,226	7,309	5,529	1,594	1,594	1,594	1,594	267	1,993	182		SCE tracks completed inspections by tracking the counts of assets inspected instead of tracking by circuit miles. In order to present completed inspections in the requested format, SCE used a calculated average span length multiplied by the number of structures inspected. Additionally, for 2020, SCE tracked the completed asset inspected by the year and in order to represent the 2020 completed asset inspection by quarter, SCE just evenly distributed the completed inspections to each of the four quarters in 2020.
1.d.iv.	Level 1 findings for patrol inspections - Transmission lines	241	252	211	178	304	51	51	106	108	48	65	49	# findings	
1.e.iv.	Level 1 findings for detailed inspections - Transmission lines	0	1	0	1	0	0	0	1	0	19	42	24	# findings	
1.f.iv.	Level 1 findings for other inspections (list types of "other" inspections in comments) - Transmission lines	1	2	2	1	1	7	0	1	0	0	0	1	# findings	
1.g.iv.	Level 2 findings for patrol inspections - Transmission lines	3,912	4,600	5,393	5,871	22,007	2,536	3,644	1,200	802	1,486	1,492	1,176	# findings	
1.h.iv.	Level 2 findings for detailed inspections - Transmission lines	10	8	7	4	37	628	4,494	1,889	1,072	553	1,259	356	# findings	
1.i.iv.	Level 2 findings for other inspections (list types of "other" inspections in comments) - Transmission lines	1,428	583	999	1,150	1,003	101	140	245	375	131	81	113	# findings	
1.j.iv.	Level 3 findings for patrol inspections - Transmission lines	7,020	3,350	3,060	1,732	5,049	744	904	475	383	371	508	301	# findings	
1.k.iv.	Level 3 findings for detailed inspections - Transmission lines	4	2	1	10	3	44	312	388	210	209	510	83	# findings	
1.l.iv.	Level 3 findings for other inspections (list types of "other" inspections in comments) - Transmission lines	1	1	4	3	136	3	2	0	3	0	1	0	# findings	
2.a.i.	2. Vegetation clearance findings from inspection - total														
	Number of spans inspected where at least some vegetation was found in non-compliant condition - total	NA	NA	NA	NA	2,645	132	568	1,511	924	403	444	550	# of spans inspected with noncompliant clearance based on applicable rules and regulations at the time of inspection	Prior to July 2019, SCE's work management system did not track the reason why a tree was trimmed, just that trimming was required. In other words, a tree may have been trimmed because it was nearing the regulatory clearance distance (RCD) or because it was inside the RCD. Starting in July of 2019, SCE implemented a new work management system that required inspectors to document whether the tree was found inside the RCD, or other SCE program distances related to clearance which exceed RCD clearance. The historical numbers were updated as a calculation error was discovered.
2.a.ii.	Number of spans inspected for vegetation compliance - total	NA	NA	NA	NA	130,934	37,783	58,595	69,975	73,341	67,137	60,876	75,316	# of spans inspected for vegetation compliance	SCE tracks completed vegetation compliance inspections by circuit miles. In order to present completed vegetation compliance inspections in the requested format, SCE divided the recorded circuit miles inspected by the calculated average span length. The historical numbers were updated as a calculation error was discovered.
2.b.i.	2. Vegetation clearance findings from inspection - in HFTD														
	Number of spans inspected where at least some vegetation was found in non-compliant condition in HFTD	NA	NA	NA	NA	1,446	88	368	835	659	282	324	343	# of spans inspected with noncompliant clearance based on applicable rules and regulations at the time of inspection	SCE tracks findings by count and does not record specific data that associate the findings to a specific span. Therefore SCE is unable to understand how many findings are on each span. The number being presented are just the counts of findings. The historical numbers were updated as a calculation error was discovered.
2.b.ii.	Number of spans inspected for vegetation compliance in HFTD	NA	NA	NA	NA	69,496	24,536	35,702	35,104	49,555	41,422	39,056	41,354	# of spans inspected for vegetation compliance	SCE tracks completed vegetation compliance inspections by circuit miles. In order to present completed vegetation compliance inspections in the requested format, SCE divided the recorded circuit miles inspected by the calculated average span length. The historical numbers were updated as a calculation error was discovered.
3.a.	3. Customer outreach metrics														
	# Customers in an evacuation zone for utility-ignited wildfire	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	# customers (if customer was in an evacuation zone for multiple wildfires, count the customer for each relevant wildfire)	SCE has no jurisdiction over evacuation orders. SCE diligently requested and followed up with local governments and law enforcement, and was only able to obtain information from one county. Even then, the information provided included high-level estimations of evacuation counts estimated by the local government and law enforcement entity for a limited amount of fires. Because of this, SCE is unable to obtain the requested data, analyze it, and report on evacuation related requirements in this table. SCE anticipates this to be a recurring challenge going forward.
3.b.	# Customers notified of evacuation orders	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	# customers (count customer multiple times for each unique wildfire of which they were notified)	SCE has no jurisdiction over evacuation orders. SCE diligently requested and followed up with local governments and law enforcement, and was only able to obtain information from one county. Even then, the information provided included high-level estimations of evacuation counts estimated by the local government and law enforcement entity for a limited amount of fires. Because of this, SCE is unable to obtain the requested data, analyze it, and report on evacuation related requirements in this table. SCE anticipates this to be a recurring challenge going forward.
3.c.	% of customers notified of evacuation in evacuation zone of a utility-ignited wildfire	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Percentage of customers notified of evacuation	SCE has no jurisdiction over evacuation orders. SCE diligently requested and followed up with local governments and law enforcement, and was only able to obtain information from one county. Even then, the information provided included high-level estimations of evacuation counts estimated by the local government and law enforcement entity for a limited amount of fires. Because of this, SCE is unable to obtain the requested data, analyze it, and report on evacuation related requirements in this table. SCE anticipates this to be a recurring challenge going forward.

Utility		Southern California Edison Company		Notes:																	
Table No.			2		Transmission lines refer to all lines at or above 65KV, and distribution lines refer to all lines below 65KV.																
Date Modified			11/1/2021																		
Table 2: Recent performance on outcome metrics					Note: These columns are placeholders for future QR submissions.																
Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Unit(s)	Comments
1. Risk events	1.a.	Number of all events with probability of ignition, including wires down, contacts with objects, line slap, events with evidence of heat generation, and other events that cause sparking or have the potential to cause ignition	12,337	12,406	13,243	14,635	16,794	2,902	3,368	5,077	3,178	3,578	3,652	3,838						Number per year	
	1.b.	Number of wires down (total)	1,532	1,865	1,639	1,217	1,524	391	537	523	593	503	374	342						Number of wires down per year	
	1.c.	Number of outage events not caused by contact with vegetation (total)	11,930	11,833	12,621	14,211	16,260	2,798	3,298	5,051	3,062	3,554	3,191	3,418						Number of outage events per year	
	1.d.	Number of outage events caused by contact with vegetation (total)	407	573	622	424	534	104	70	26	116	95	21	33						Number of outage events per year	
2. Utility inspection findings - Distribution	2.a.	Number of Level 1 findings (distribution - total)	19,559	22,364	23,598	20,998	24,028	4,857	5,595	6,993	5,634	5,307	4,892	5,186						# findings	
	2.b.	Number of Level 2 findings (distribution - total)	92,109	79,438	69,257	82,818	150,166	23,217	24,739	22,511	25,372	21,731	32,378	33,067						# findings	
	2.c.	Number of Level 3 findings (distribution - total)	85,588	77,057	64,408	72,774	189,600	14,381	19,487	19,984	21,075	18,450	18,034	20,534						# findings	
	2.d.	Number of distribution circuit miles inspected	51,792	51,848	51,228	77,908	69,596	6,496	31,118	19,189	11,733	13,037	19,588	19,373						# circuit miles	This total is a summation of all the completed distribution inspection program circuit miles, therefore will be a significantly larger number than the circuit miles of the distribution system.
2. Utility inspection findings - Transmission	2.a.ii	Number of Level 1 findings (transmission - total)	242	255	213	180	305	58	51	108	108	67	107	74						# findings	Transmission lines for faults and wire downs are typically 65kV and above, but may include some lower voltages (such as 55kV and 33kV).
	2.b.ii	Number of Level 2 findings (transmission - total)	5,350	5,191	6,399	7,025	23,047	3,265	8,278	3,334	2,249	2,170	2,832	1,645						# findings	
	2.c.ii	Number of Level 3 findings (transmission - total)	7,025	3,353	3,065	1,745	5,188	791	1,218	863	596	580	1,019	384						# findings	
	2.d.ii	Number of transmission circuit miles inspected	19,528	17,661	19,295	24,588	24,986	7,558	8,050	8,091	7,845	3,926	7,950	5,521						# circuit miles	This total is a summation of all the completed transmission inspection program circuit miles, therefore will be a significantly larger number than the circuit miles of the transmission system.
3. Utility ignited wildfire fatalities	3.a.	Fatalities due to utility-ignited wildfire (total)	0	0	2	3	1	0	0	0	0	0	0	0						Number of fatalities per year	The information provided in conjunction with the "utility-ignited" wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires are still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report. Data provided includes wildfires reported in SCE's Fire Incident Data Report, Electric Incident Safety Report and fatalities data from CAL FIRE. Thomas and Woosley CAL FIRE data contributed to the entirety of the 2017 and 2018 values.
	3.b.	Injuries due to utility-ignited wildfire (total)	0	3	2	3	3	0	0	6	2	0	0	0						Number of injuries per year	The information provided in conjunction with the "utility-ignited" wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires are still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report. Data provided includes wildfires reported in SCE's Fire Incident Data Report and Electric Incident Safety Report.
4. Value of assets destroyed by utility-ignited wildfire, listed by asset type	4.a.	Value of assets destroyed by utility-ignited wildfire (total)	\$ 21,944,989	\$ 483,632,927	\$ 1,601,205,795	\$ 3,342,821,539	\$ 21,714,000	\$ 150,400	\$ 300,800	\$ 120,688,284	\$ 12,082,300	\$ 188,000	\$ 451,200	\$ 2,739,090						Dollars of damage or destruction per year	Asset type listed is either SCE or Third Party. Asset per the WSD guidance is utility electrical equipment or third party property. SCE asset value using a per unit cost based on the identified equipment failure for each CPUC reportable ignition. Data provided includes wildfires reported in SCE's Fire Incident Data Report, Electric Incident Safety Report and asset value data from CAL FIRE and the California Department of Insurance. Where third party source of information was unavailable, SCE applied a proxy cost per structure destroyed of \$819,472 based on its methodology used in its RAMP report. The California Department of Insurance and proxy cost data use information from insured claims.
5. Structures damaged or destroyed by utility-ignited wildfire	5.a.	Number of structures destroyed by utility-ignited wildfire (total)	45	290	1,072	1,667	26	0	0	47	13	0	0	0						Number of structures destroyed per year	The information provided in conjunction with the "utility-ignited" wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires are still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report. Structure is defined as a dwelling, per WSD guidance. Data provided includes wildfires reported in SCE's Fire Incident Data Report and Electric Incident Safety Reports and structures destroyed data from CAL FIRE.
	5.b.	Critical infrastructure damaged/destroyed by utility-ignited wildfire (total)	NA	NA	36	31	NA	NA	NA	NA	NA	NA	NA	NA						Number of critical infrastructure damaged/destroyed per year	The information provided in conjunction with the "utility-ignited" wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires are still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report. Data was drawn from available subrogation claims. These numbers may be updated as more information becomes available.
6. Acreage burned by utility-ignited wildfire	6.a.	Acreage burned by utility-ignited wildfire (total)	15,711	82,897	292,051	97,240	22,784	4	574	115,871	12,863	12	513	30						Acrees burned per year	The information provided in conjunction with the "utility-ignited" wildfire statistics should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires are still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report. Data provided includes wildfires reported in SCE's Fire Incident Data Report and Electric Incident Safety Reports and acreage burned data from CAL FIRE.
7. Number of utility wildfire ignitions	7.a.	Number of ignitions (total) according to existing ignition data reporting requirement	107	96	105	110	124	16	56	45	32	28	59	45						Number per year	Data are from SCE's CPUC reportable ignitions data set. Historical numbers were updated due to a tabulation error.
	7.b.	Number of ignitions in HFTD (subtotal)	45	41	32	37	35	3	21	17	9	7	22	9						Number in HFTD per year	
	7.c.	Number of ignitions in HFTD Zone 1	0	0	0	0	0	0	0	0	0	0	0	0						Number in HFTD Zone 1 per year	
	7.c.ii.	Number of ignitions in HFTD Tier 2	13	12	9	15	13	1	5	6	3	1	11	3						Number in HFTD Tier 2 per year	
	7.c.iii.	Number of ignitions in HFTD Tier 3	32	29	23	22	22	2	16	11	6	6	11	6						Number in HFTD Tier 3 per year	
	7.d.	Number of ignitions in Non-CPUC HFTD	1	0	3	1	3	0	0	0	0	0	0	0						Number in Non-CPUC HFTD	
	7.d.	Number of ignitions in non-HFTD (subtotal)	61	55	70	72	86	13	35	28	23	21	37	36							8
8. Fatalities resulting from utility wildfire mitigation initiatives	8.a.	Fatalities due to utility wildfire mitigation activities (total) - "activities" defined as all activities accounted for in the 2020 WMP proposed WMP spend	0	0	0	0	0	1	0	0	0	0	0	0						Number of fatalities per year	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused a fatality.
9. OSHA-reportable injuries from utility wildfire mitigation initiatives	9.a.	OSHA-reportable injuries due to utility wildfire mitigation activities (total) - "activities" defined as all activities accounted for in the 2020 WMP proposed WMP spend	0	0	0	0	1	0	1	3	0	0	1	0						Number of OSHA-reportable injuries per year	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused an injury.

Utility	Southern California Edison Company
Table No.	3
Date Modified	11/1/2021

Note: These columns are placeholders for future QR submissions.

Table 3: List and description of additional metrics

Metric	Definition	Purpose	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Unit(s)	Comments
CPUC reportable ignitions in High Fire Risk Areas (HFRA)	Events meeting reportable ignition status per Decision 14-02-015 and falling within BL322, HFTD Zone 1 HFTD Tier 2 and 200 ft. Outer Buffer, and HFTD Tier 3 and 200 ft. Outer Buffer areas	To measure changes in rate of ignitions between years	3	22	16	9	7	22	9						Number of reportable ignitions in HFRA	HFRA includes HFTD Tier 3, HFTD Tier 2, HFTD Zone 1, and BL322 (non-CPUC HFRA)
Faults in HFRA	Events in which electrical current deviates from the anticipated path via SCE facilities within BL322, HFTD Zone 1 HFTD Tier 2 and 200 ft. Outer Buffer, and HFTD Tier 3 and 200 ft. Outer Buffer areas	To measure changes in rate of fault events which are a pre-cursor both ignition and safety events	1011	1147	1436	1132	912	806	866						Number of faults in HFRA	HFRA includes HFTD Tier 3, HFTD Tier 2, HFTD Zone 1, and BL322 (non-CPUC HFRA). Note: SCE is incorporating additional Transmission outage data as an improvement to its outage reporting. Historical reporting has been revised to reflect the additional Transmission outage data.
Wire Down Incidents in HFRA	Events in which SCE overhead conductors (energized or de-energized) fall within 8ft above ground or lower, within BL322, HFTD Tier 2 and 200 ft. Outer Buffer, and HFTD Tier 3 and 200 ft. Outer Buffer areas	To measure changes in rate of wire down events which are a pre-cursor both ignition and safety events	72	86	77	85	116	41	54						Number of wire downs per year in HFRA	HFRA includes HFTD Tier 3, HFTD Tier 2, HFTD Zone 1, and BL322 (non-CPUC HFRA)
Number of customers and average duration of Public Safety Power Shutoff (PSPS) events																
Total # of customers de-energized	Count of customers de-energized, with duplicates, per year	To measure the scale of impact of outages due to PSPS to customers, with duplicates	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.	Refer to Table 11, # 4.a.						Number of customers	None
Average duration of de-energization across all customers.	Average outage duration (hours per customer) experienced by PSPS de-energization per customer de-energized	Of the customers de-energized due to PSPS, to measure the magnitude of the effect of the PSPS de-energization	N/A	N/A	2.2	18.3	23.9	2.9	9.8						Hours	Applies to each instance of a customer being de-energized due to PSPS
Timeliness and accuracy of PSPS notifications																
% of customers notified prior to a PSPS event impacting them	# of customers notified prior to initiation of PSPS event who were impacted by PSPS / # of customers impacted by PSPS (if multiple PSPS events impact the same customer, count each event as a separate customer)	To measure success rate of notification for the customers who were impacted by de-energization	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.	Refer to Table 11, # 4.e.						Percentage	None
% of customers notified prior to a PSPS event that did not impact them	% of customers notified of potential de-energization that were not de-energized for that PSPS event (on a total customer basis) 1 - (# of total customers de-energized / # of imminent de-energization notifications sent)	To measure the occurrence of PSPS notifications and de-energizations	N/A	100%	39%	61%	65%	87%	0%						% of customers notified of imminent potential de-energization that were not de-energized for that PSPS event (on a total customer basis)	This data was not recorded prior to 2020.

Utility	Southern California Edison Company
Table No.	4
Date Modified	11/1/2021

Note: These columns are placeholders for future QR submissions.

Table 4: Fatalities due to utility wildfire mitigation initiatives

Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Unit(s)	Comments
1. Fatalities - Full-time Employee	1.a.	Fatalities due to utility inspection - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	1.b.	Fatalities due to vegetation management - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	1.c.	Fatalities due to utility fuel management - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	1.d.	Fatalities due to grid hardening - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	1.e.	Fatalities due to other - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
2. Fatalities - Contractor	2.a.	Fatalities due to utility inspection - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	2.b.	Fatalities due to vegetation management - Contractor	0	0	0	0	0	1	0	0	0	0	0	0						# fatalities	By providing this data, SCE is not admitting: 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused a fatality.
	2.c.	Fatalities due to utility fuel management - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	2.d.	Fatalities due to grid hardening - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	2.e.	Fatalities due to other - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
3. Fatalities - Member of public	3.a.	Fatalities due to utility inspection - Public	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	3.b.	Fatalities due to vegetation management - Public	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	3.c.	Fatalities due to utility fuel management - Public	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	3.d.	Fatalities due to grid hardening - Public	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	
	3.e.	Fatalities due to other - Public	0	0	0	0	0	0	0	0	0	0	0	0						# fatalities	

Utility	Southern California Edison Company	
Table No.		5
Date Modified		11/1/2021

Note: These columns are placeholders for future QR submissions.

Table 5: OSHA-reportable injuries due to utility wildfire mitigation initiatives

Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Unit(s)	Comments
1. OSHA injuries - Full-time Employee	1.a.	OSHA injuries due to utility inspection - Full-time employee	0	0	0	0	1	0	0	0	0	0	0	0						# OSHA-reportable injuries	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused an injury.
	1.b.	OSHA injuries due to vegetation management - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	1.c.	OSHA injuries due to utility fuel management - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	1.d.	OSHA injuries due to grid hardening - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused an injury.
	1.e.	OSHA injuries due to other - Full-time employee	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
2. OSHA injuries - Contractor	2.a.	OSHA injuries due to utility inspection - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	2.b.	OSHA injuries due to vegetation management - Contractor	0	0	0	0	0	0	0	1	0	0	0	1						# OSHA-reportable injuries	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused an injury.
	2.c.	OSHA injuries due to utility fuel management - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	2.d.	OSHA injuries due to grid hardening - Contractor	0	0	0	0	0	0	0	0	3	0	0	0						# OSHA-reportable injuries	By providing this data, SCE is not admitting that 1) any responsibility or liability for any incident reported herein or 2) that a wildfire mitigation activity caused an injury.
	2.e.	OSHA injuries due to other - Contractor	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
3. OSHA injuries - Member of public	3.a.	OSHA injuries due to utility inspection - Public	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	3.b.	OSHA injuries due to vegetation management - Public	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	3.c.	OSHA injuries due to utility fuel management - Public	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	3.d.	OSHA injuries due to grid hardening - Public	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	
	3.e.	OSHA injuries due to other - Public	0	0	0	0	0	0	0	0	0	0	0	0						# OSHA-reportable injuries	

Table 6: Weather patterns		Note: These columns are placeholders for future QR submissions.																			
Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Unit(s)	Comments
1. Red Flag Warning Overhead circuit mile Days	1.a.	Red Flag Warning Overhead circuit mile days - entire utility territory	80,504	286,327	476,404	283,806	201,423	0	24,845	62,241	162,422	58,515	16,825.39	5,764.50							Sum of overhead circuit miles of utility grid subject to Red Flag Warning each day within a given time period, calculated as the number of overhead circuit miles that were under an RFW multiplied by the number of days those circuit miles were under said RFW. For example, if 100 overhead circuit miles were under an RFW for 1 day, and 10 of those miles were under RFW for an additional day, then the total RFW OH circuit mile days would be 110.
	1.b.	Red Flag Warning Overhead circuit mile days - HFTD Zone 1	0.8	8.0	4.1	2.8	1.7	0.0	0.4	1.3	1.7	1	0.32	0.28							Red Flag Warning Overhead circuit mile days, see above for definition
	1.c.	Red Flag Warning Overhead circuit mile days - HFTD Tier 2	9,214	31,921	50,039	31,295	21,598	0	4,391	10,011	17,964	7,003	3,074.07	2,859.56							Red Flag Warning Overhead circuit mile days, see above for definition
	1.d.	Red Flag Warning Overhead circuit mile days - HFTD Tier 3	25,523	88,117	127,005	82,216	57,321	0	4,031	13,920	36,805	17,404	1,214.14	2,029.13							Red Flag Warning Overhead circuit mile days, see above for definition
	1.e.	Red Flag Warning Overhead circuit mile days - Non-HFTD	45,766	166,281	299,356	170,293	122,502	0	16,423	38,309	107,651	34,108	12,536.87	875.53							Red Flag Warning Overhead circuit mile days, see above for definition
2. Wind conditions	2.a.	High wind warning overhead circuit mile days	78,965	116,378	144,820	133,880	95,208	61,545	9,235	62	57,072	78,101	10,502.66	0							Sum of overhead circuit miles of utility grid subject to High Wind Warnings (HWW, as defined by the National Weather Service) each day within a given time period, calculated as the number of overhead circuit miles that were under an HWW multiplied by the number of days those miles were under said HWW. For example, if 100 overhead circuit miles were under an HWW for 1 day, and 10 of those miles were under HWW for an additional day, then the total HWW OH circuit mile days would be 110.
3. Other	3.a.	Other relevant weather pattern metrics tracked (add additional rows as needed)																			

Utility Southern California Edison Company
 Table No. 7.1
 Date Modified 11/1/2021

Notes:
 7.1 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV. Transmission lines for faults and wire downs are typically 65kV and above, but may include some lower voltages (such as 55kV and 33kV).
 Data from 2015 - 2020 Q2 should be actual numbers. 2020 Q3 - 2023 should be projected. In future submissions update projected numbers with actuals

Risk Event category	Cause category	#	Sub-cause category	Are risk events tracked for ignition driver? (yes / no)	Number of risk events										Projected risk events							
					2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	
Wire down event - Distribution	1. Contact from object - Distribution	1.a.	Veg. contact- Distribution	Yes	279	357	384	158	308	86	105	82	151	113	34	37	88	77	72	77	87	
		1.b.	Animal contact- Distribution	Yes	74	57	53	48	38	10	19	29	12	11	10	9	14	13	13	13	13	
		1.c.	Balloon contact- Distribution	Yes	115	112	115	134	98	22	47	27	12	24	48	21	11	23	41	20	10	
		1.d.	Vehicle contact- Distribution	Yes	227	349	248	267	269	76	121	88	98	80	106	99	72	76	69	71	70	
		1.e.	Other contact from object - Distribution	Yes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	2. Equipment / facility failure - Distribution	2.a.	2.a.	Connector damage or failure- Distribution	Yes	84	106	81	75	68	25	36	38	23	24	14	19	22	21	22	22	22
			2.b.	Splice damage or failure — Distribution	Yes	35	28	24	24	28	3	9	10	7	11	3	5	7	7	7	7	7
		2.c.	Crossarm damage or failure - Distribution	Yes	31	26	26	25	35	10	10	6	9	15	3	3	9	10	10	6	9	
		2.d.	Insulator damage or failure- Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2.e.	Lightning arrester damage or failure- Distribution	Yes	0	0	3	0	2	0	1	0	0	0	0	0	1	0	0	0	0	
2.f.		Tap damage or failure - Distribution	Yes	0	0	4	5	12	4	3	1	2	5	0	1	2	2	2	2	2		
2.g.		Tie wire damage or failure - Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2.h.		Other - Distribution	Yes	685	824	667	423	607	144	171	198	238	111	104	89	165	173	170	170	165		
		Pole damage or failure - Distribution	Yes	13	12	28	39	37	9	24	20	20	15	18	9	NA	NA	NA	NA	NA		
		Pothead damage or failure - Distribution	Yes	0	0	3	8	6	3	2	5	1	1	1	0	NA	NA	NA	NA	NA		
	Fuse failure damage or failure - Distribution	Yes	0	0	0	1	2	0	1	2	1	1	0	0	NA	NA	NA	NA	NA			
	Guy damage or failure - Distribution	Yes	0	0	1	3	5	1	0	0	0	0	0	1	NA	NA	NA	NA	NA			
	Conductor failure damage or failure - Distribution	Yes	0	0	28	44	120	33	51	63	57	56	25	14	NA	NA	NA	NA	NA			
	Various other damage or failure - Distribution	Yes	672	812	607	328	437	98	93	108	159	38	60	65	NA	NA	NA	NA	NA			
3. Wire-to-wire contact - Distribution	3.a.	Wire-to-wire contact / contamination- Distribution	Yes	0	0	1	2	1	0	4	2	1	4	0	0	1	1	1	1	1		
4. Contamination - Distribution	4.a.	Contamination - Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5. Utility work / Operation	5.a.	Utility work / Operation	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6. Vandalism / Theft - Distribution	6.a.	Vandalism / Theft - Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

	7. Other- Distribution	7.a.	All Other- Distribution	Yes	0	0	33	53	54	11	11	41	39	103	52	58	39	39	39	39	39	
	8. Unknown- Distribution	8.a.	Unknown - Distribution	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wire down event - Transmission	9. Contact from object - Transmission	9.a.	Veg. contact- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		9.b.	Animal contact- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		9.c.	Balloon contact- Transmission	Yes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		9.d.	Vehicle contact- Transmission	Yes	0	2	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	
		9.e.	Other contact from object - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10. Equipment / facility failure - Transmission	10.a.	Connector damage or failure- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.b.	Splice damage or failure — Transmission	Yes	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
		10.c.	Crossarm damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.d.	Insulator damage or failure- Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.e.	Lightning arrester damage or failure- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.f.	Tap damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.g.	Tie wire damage or failure - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		10.h.	Other - Transmission	Yes	1	3	0	1	1	0	0	0	0	0	0	0	0	0.35	0.30	0.38	0.35	0.35
			Pole damage or failure - Transmission	Yes	0	1	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
			Pothead damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
			Fuse failure damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
			Guy damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
			Conductor failure damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
			Various other damage or failure - Transmission	Yes	1	2	0	1	1	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
	11. Wire-to-wire contact - Transmission	11.a.	Wire-to-wire contact / contamination- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12. Contamination - Transmission	12.a.	Contamination - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	13. Utility work / Operation	13.a.	Utility work / Operation	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	14. Vandalism / Theft - Transmission	14.a.	Vandalism / Theft - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	15. Other- Transmission	15.a.	All Other- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	16. Unknown- Transmission	16.a.	Unknown - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Outage - Distribution	17. Contact from object - Distribution	17.a.	Veg. contact- Distribution	Yes	395	557	609	416	527	104	70	25	112	93	20	33	101	103	32	18	99	
		17.b.	Animal contact- Distribution	Yes	655	598	622	648	686	122	201	169	163	78	169	143	153	111	191	141	146	
		17.c.	Balloon contact- Distribution	Yes	758	785	911	975	776	178	348	275	191	245	436	248	153	220	307	209	144	
		17.d.	Vehicle contact- Distribution	Yes	508	586	528	647	517	116	113	153	132	144	128	147	131	132	130	124	125	
		17.e.	Other contact from object - Distribution	Yes	870	393	289	369	449	44	28	35	43	66	75	115	110	107	79	105	110	
			Ice/Snow - Distribution	Yes	4	15	19	9	3	0	0	0	0	1	0	0	NA	NA	NA	NA	NA	
			Lightning - Distribution	Yes	757	264	167	225	323	20	2	15	27	30	28	79	NA	NA	NA	NA	NA	
			Various other contact from object - Distribution	Yes	109	114	103	135	123	24	26	20	16	35	47	36	NA	NA	NA	NA	NA	
		18. Equipment / facility failure - Distribution	18.a.	Capacitor bank damage or failure- Distribution	Yes	319	309	425	376	457	128	160	73	44	120	100	126	95	88	94	92	95
				18.b.	Conductor damage or failure — Distribution	Yes	463	594	654	713	1,116	205	143	211	250	276	109	133	146	133	195	149
18.c.	Fuse damage or failure - Distribution			Yes	232	195	245	508	1,245	169	176	316	167	179	132	201	166	168	166	132	166	
18.d.	Lightning arrester damage or failure- Distribution			Yes	105	127	99	105	216	27	21	26	25	12	21	18	31	31	31	30	31	
18.e.	Switch damage or failure- Distribution			Yes	51	46	45	67	78	17	11	16	18	14	10	18	15	15	15	14	15	
18.f.	Pole damage or failure - Distribution			Yes	98	126	130	207	541	57	36	31	41	32	22	21	41	41	41	38	41	
18.g.	Insulator and brushing damage or failure - Distribution			Yes	42	75	79	123	121	28	14	11	43	30	13	22	31	24	16	15	31	
18.h.	Crossarm damage or failure - Distribution			Yes	127	143	138	354	834	98	45	29	45	39	17	17	74	75	75	60	74	
18.i.	Voltage regulator / booster damage or failure - Distribution			Yes	1	2	1	2	4	0	0	1	1	0	1	2	0	1	0	0	0	
18.j.	Recloser damage or failure - Distribution			No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	18.k.	Anchor / guy damage or failure - Distribution	Yes	17	20	18	17	20	3	3	3	4	3	1	3	6	6	4	2	6		
	18.l.	Sectionalizer damage or failure - Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	18.m.	Connection device damage or failure - Distribution	Yes	386	490	406	501	500	123	111	86	97	165	108	68	112	111	112	110	112		
	18.n.	Transformer damage or failure - Distribution	Yes	1,889	1,649	1,978	2,594	2,489	416	559	1,894	536	403	547	725	712	671	757	1141	709		
	18.o.	Other - Distribution	Yes	96	147	116	173	291	37	40	51	60	50	60	49	59	59	58	57	59		
		Pole Top Sub damage or failure - Distribution	Yes					1		1			0	0	0	NA	NA	NA	NA	NA		
		Pothead damage or failure - Distribution	Yes	91	143	109	155	128	24	27	27	40	29	33	23	NA	NA	NA	NA	NA		

		Tower damage or failure - Distribution	Yes	0	0	0	0	2	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	
		Various other damage or failure - Distribution	Yes	5	4	7	18	160	13	12	24	20	21	27	26	NA	NA	NA	NA	NA	
19. Wire-to-wire contact - Distribution	19.a.	Wire-to-wire contact / contamination- Distribution	Yes	46	78	64	41	13	6	5	8	7	3	2	11	7	7	7	6	7	
20. Contamination - Distribution	20.a.	Contamination - Distribution	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21. Utility work / Operation	21.a.	Utility work / Operation	Yes	149	117	99	94	67	32	15	18	10	14	10	12	16	16	16	16	16	
22. Vandalism / Theft - Distribution	22.a.	Vandalism / Theft - Distribution	Yes	78	80	78	102	103	23	21	21	15	9	16	21	22	22	22	22	22	
23. Other- Distribution	23.a.	All Other- Distribution	Yes	2010	2251	2359	3147	3125	481	586	977	453	375	526	697	615	574	651	959	615	
		De-Energize - Distribution	Yes	0	0	0	0	0	0	0	1	0	0	0	0	NA	NA	NA	NA	NA	
		Dig In - Distribution	Yes	42	51	57	83	48	10	7	18	13	15	16	16	NA	NA	NA	NA	NA	
		Source Lost - Distribution	Yes	5	2	26	49	96	12	14	14	4	15	11	4	NA	NA	NA	NA	NA	
		Substation - Distribution	Yes	10	18	30	61	106	16	24	22	18	28	29	14	NA	NA	NA	NA	NA	
		Underground Equipment - Distribution	Yes	1,949	2,166	2,234	2,944	2,846	442	531	909	409	317	470	663	NA	NA	NA	NA	NA	
		Various other - Distribution	Yes	4	14	12	10	29	1	10	13	9	0	0	0	NA	NA	NA	NA	NA	
24. Unknown- Distribution	24.a.	Unknown - Distribution	Yes	2,142	2,141	2,408	1,741	1,883	364	466	513	558	603	509	483	496	551	530	525	496	
Outage - Transmission	25. Contact from object - Transmission	25.a.	Veg. contact- Transmission	Yes	12	16	13	8	7	0	0	1	4	2	1	0	2	3	2	3	2
		25.b.	Animal contact- Transmission	Yes	80	75	67	67	31	7	19	4	8	6	12	10	8	8	6	8	8
		25.c.	Balloon contact- Transmission	Yes	23	39	55	36	24	2	13	5	8	9	14	4	8	8	10	8	8
		25.d.	Vehicle contact- Transmission	Yes	36	37	40	29	18	3	5	5	3	8	6	3	4	4	4	4	4
		25.e.	Other contact from object - Transmission	Yes	75	36	35	18	28	7	4	5	3	1	2	4	8	8	7	8	8
		Ice/Snow - Transmission	Yes		2	2	0	3	0	2	0	0	0	0	0	NA	NA	NA	NA	NA	
		Lighting - Transmission	Yes	64	22	28	33	21	4	1	5	2	0	1	4	NA	NA	NA	NA	NA	
		Various other contact from object - Transmission	Yes	11	12	5	5	4	3	1	0	1	1	1	0	NA	NA	NA	NA	NA	
26. Equipment / facility failure - Transmission	26.a.	Capacitor bank damage or failure- Transmission	Yes	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	26.b.	Conductor damage or failure — Transmission	Yes	22	15	89	44	36	5	2	13	7	9	3	5	10	10	9	10	10	
	26.c.	Fuse damage or failure - Transmission	Yes	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	26.d.	Lightning arrester damage or failure- Transmission	Yes	2	5	2	4	1	0	0	1	1	0	0	0	1	1	1	1	1	
	26.e.	Switch damage or failure- Transmission	Yes	5	3	4	5	2	3	2	0	0	0	1	0	1	1	1	1	1	

	26.f.	Pole damage or failure - Transmission	Yes	12	12	17	7	14	3	0	1	3	3	8	3	3	3	3	3	
	26.g.	Insulator and brushing damage or failure - Transmission	Yes	10	13	21	4	9	2	3	1	1	0	1	0	3	2	2	3	3
	26.h.	Crossarm damage or failure - Transmission	Yes	11	7	7	6	8	2	1	1	0	0	1	0	2	2	2	2	2
	26.i.	Voltage regulator / booster damage or failure - Transmission	Yes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	26.j.	Recloser damage or failure - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	26.k.	Anchor / guy damage or failure - Transmission	Yes	3	8	8	1	4	0	1	2	4	0	1	0	1	1	1	1	1
	26.l.	Sectionalizer damage or failure - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	26.m.	Connection device damage or failure - Transmission	Yes	1	1	3	1	2	0	0	0	0	0	1	0	0	0	0	0	0
	26.n.	Transformer damage or failure - Transmission	Yes	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
	26.o.	Other - Transmission	Yes	14	26	10	19	41	3	8	6	8	10	7	5	6	6	6	6	6
		Pole Tops Sub damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
		Pothead damage or failure - Transmission	Yes	6	4	0	12	5	0	0	1	0	0	0	0	NA	NA	NA	NA	NA
		Tower damage or failure - Transmission	Yes	0	2	1	2	0	1	1	2	0	0	0	0	NA	NA	NA	NA	NA
		Various other - Transmission	Yes	8	20	9	5	36	2	7	3	8	10	7	5	NA	NA	NA	NA	NA
27. Wire-to-wire contact - Transmission	27.a.	Wire-to-wire contact / contamination- Transmission	Yes	14	17	15	19	42	9	10	1	3	1	9	4	5	5	5	5	5
28. Contamination - Transmission	28.a.	Contamination - Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29. Utility work / Operation	29.a.	Utility work / Operation	Yes	10	15	8	9	8	0	1	1	1	2	2	3	2	2	2	2	2
30. Vandalism / Theft - Transmission	30.a.	Vandalism / Theft - Transmission	Yes	4	7	2	10	2	0	0	1	1	0	0	1	1	1	1	1	1
31. Other- Transmission	31.a.	All Other- Transmission	Yes	194	238	240	242	193	40	67	47	54	47	57	50	54	40	67	47	54
		De-energized - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
		Dig In - Transmission	Yes	1	1	0	2	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
		Source Lost - Transmission	Yes	7	2	21	38	36	5	3	7	7	3	3	4	NA	NA	NA	NA	NA
		Substation - Transmission	Yes	179	221	208	188	146	35	63	39	47	43	53	45	NA	NA	NA	NA	NA
		Underground Equipment	Yes	5	4	7	14	7	0	1	1	0	1	1	1	NA	NA	NA	NA	NA
		Various other - Transmission	Yes	2	10	4	0	4	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
32. Unknown- Transmission	32.a.	Unknown - Transmission	Yes	371	326	306	160	266	38	60	39	54	53	54	46	52	55	50	53	52

Ignition - Distribution	33. Contact from object - Distribution	33.a.	Veg. contact- Distribution	Yes	13	12	16	15	13	0	2	3	2	3	6	7	2	2	3	3	2
		33.b.	Animal contact- Distribution	Yes	9	8	6	12	18	0	8	3	4	2	7	2	5	3	7	5	4
		33.c.	Balloon contact- Distribution	Yes	12	10	18	30	15	0	7	1	2	3	10	4	3	0	9	6	3
		33.d.	Vehicle contact- Distribution	Yes	11	6	6	13	10	0	2	1	0	1	1	5	2	2	3	3	2
		33.e.	Other contact from object - Distribution	Yes	3	6	5	0	6	0	0	3	1	4	4	4	1	1	1	1	1
	34. Equipment / facility failure - Distribution	34.a.	Capacitor bank damage or failure- Distribution	Yes	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		34.b.	Conductor damage or failure — Distribution	Yes	2	19	15	5	11	3	6	8	6	4	12	6	4	3	5	6	3
		34.c.	Fuse damage or failure - Distribution	Yes	1	1	1	0	2	0	1	0	0	0	1	0	0	0	0	0	0
		34.d.	Lightning arrester damage or failure- Distribution	Yes	2	0	2	0	1	0	2	0	0	1	1	1	0	0	0	0	0
		34.e.	Switch damage or failure- Distribution	Yes	0	0	0	1	2	1	1	1	2	1	1	0	2	1	2	2	2
		34.f.	Pole damage or failure - Distribution	Yes	1	2	1	0	1	0	1	0	2	0	0	0	0	0	0	0	0
		34.g.	Insulator and brushing damage or failure - Distribution	Yes	1	2	2	1	2	3	1	2	1	0	0	1	1	1	1	1	1
		34.h.	Crossarm damage or failure - Distribution	Yes	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
		34.i.	Voltage regulator / booster damage or failure - Distribution	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		34.j.	Recloser damage or failure - Distribution	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		34.k.	Anchor / guy damage or failure - Distribution	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		34.l.	Sectionalizer damage or failure - Distribution	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		34.m.	Connection device damage or failure - Distribution	Yes	4	4	3	1	7	0	0	2	1	1	5	4	1	1	1	1	1
		34.n.	Transformer damage or failure - Distribution	Yes	3	2	2	10	3	1	3	3	3	0	3	4	2	2	2	2	2
		34.o.	Other - Distribution	Yes	6	7	1	7	2	0	2	2	0	1	4	3	1	1	1	1	1
	35. Wire-to-wire contact - Distribution	35.a.	Wire-to-wire contact / contamination- Distribution	Yes	1	1	3	3	8	0	2	2	1	3	1	0	1	0	1	1	1
	36. Contamination - Distribution	36.a.	Contamination - Distribution	Yes	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
	37. Utility work / Operation	37.a.	Utility work / Operation	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38. Vandalism / Theft - Distribution	38.a.	Vandalism / Theft - Distribution	Yes	3	0	0	1	6	2	1	2	1	1	2	1	1	1	1	1	1

	39. Other- Distribution	39.a.	All Other- Distribution	Yes	4	0	1	0	4	1	3	1	2	2	5	2	0	1	1	0	0
	40. Unknown- Distribution	40.a.	Unknown - Distribution	Yes	21	5	12	6	1	0	2	0	1	1	0	0	2	1	2	3	2
Ignition - Transmission	41. Contact from object - Transmission	41.a.	Veg. contact- Transmission	Yes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		41.b.	Animal contact- Transmission	Yes	3	2	3	0	2	1	1	1	0	0	2	0	0	0	1	0	0
		41.c.	Balloon contact- Transmission	Yes	1	1	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0
		41.d.	Vehicle contact- Transmission	Yes	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
		41.e.	Other contact from object - Transmission	Yes	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		42. Equipment / facility failure - Transmission	42.a.	Capacitor bank damage or failure- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	42.b.	Conductor damage or failure — Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.c.	Fuse damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.d.	Lightning arrester damage or failure- Transmission	Yes	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	42.e.	Switch damage or failure- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.f.	Pole damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.g.	Insulator and brushing damage or failure - Transmission	Yes	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	42.h.	Crossarm damage or failure - Transmission	Yes	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.i.	Voltage regulator / booster damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.j.	Recloser damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.k.	Anchor / guy damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.l.	Sectionalizer damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.m.	Connection device damage or failure - Transmission	Yes	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
	42.n.	Transformer damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	42.o.	Other - Transmission	Yes	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	43. Wire-to-wire contact - Transmission	43.a.	Wire-to-wire contact / contamination- Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	44. Contamination - Transmission	44.a.	Contamination - Transmission	Yes	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	

45. Utility work / Operation	45.a.	Utility work / Operation	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46. Vandalism / Theft - Transmission	46.a.	Vandalism / Theft - Transmission	Yes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47. Other- Transmission	47.a.	All Other- Transmission	Yes	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
48. Unknown- Transmission	48.a.	Unknown - Transmission	Yes	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Utility Table No.	Southern California Edison Company	Notes:
Date Modified	11/3/2021	"PSPS" = Public Safety Power Shutoff In future submissions update planned upgrade numbers with actuals

Table 11: Recent use of PSPS and other PSPS metrics			Actual												Projected				Unit(s)	Comments
Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022		
1. Recent use of PSPS	1.a.	Frequency of PSPS events (total)	0	0	1	3	7	0	0	2	8	1	1	1	Low 3 / High 11					Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof to reduce ignition probability, per year. Only include events in which de-energization ultimately occurred
	1.b.	Scope of PSPS events (total)	0	0	7	6	267	0	0	7	417	160	1	1	Low 147 / High 473					Circuit-events, measured in number of events multiplied by number of circuits de-energized per year
	1.c.	Duration of PSPS events (total)	0	0	87,019	3,570	5,275,193	0	0	3,981	4,451,955	1,953,962	224	88	Low 1,213,366 / High 3,893,102					Customer hours per year
2. Customer hours of PSPS and other outages	2.a.	Customer hours of planned outages including PSPS (total)	0	11,067,182	10,406,442	9,556,442	10,918,480	1,236,491	770,811	1,295,679	6,103,855	3,778,268	Not Currently Available	Not Currently Available						Total customer hours of planned outages per year
	2.b.	Customer hours of unplanned outages, not including PSPS (total)	8,401,612	9,276,813	7,788,697	6,088,158	7,617,913	1,480,964	1,496,752	2,350,456	2,224,812	1,615,913	1,958,196	3,639,476						Total customer hours of unplanned outages per year
	2.c.	System Average Interruption Duration Index (SAIDI) (including PSPS)	100.15	241.21	214.28	183.09	215.91	31.46	26.25	42.21	96.41	63.08	Not Currently Available	Not Currently Available						SAIDI index value = sum of all interruptions in time period where each interruption is defined as sum(duration of interruption * # of customer interruptions) / Total number of customers served
	2.d.	System Average Interruption Duration Index (SAIDI) (excluding PSPS)	100.15	241.21	213.25	183.04	154.47	31.46	26.25	42.16	44.88	39.76	Not Currently Available	Not Currently Available						SAIDI index value = sum of all interruptions in time period where each interruption is defined as sum(duration of interruption * # of customer interruptions) / Total number of customers served
	2.e.	System Average Interruption Frequency Index (SAIFI) (including PSPS)	1.164	1.335	1.203	1.029	1.105	0.222	0.216	0.282	0.321	0.293	Not Currently Available	Not Currently Available						SAIFI index value = sum of all interruptions in time period where each interruption is defined as (total # of customer interruptions) / (total # of customers served)
	2.f.	System Average Interruption Frequency Index (SAIFI) (excluding PSPS)	1.164	1.335	1.203	1.029	1.067	0.222	0.216	0.281	0.279	0.270	Not Currently Available	Not Currently Available						SAIFI index value = sum of all interruptions in time period where each interruption is defined as (total # of customer interruptions) / (total # of customers served)
3. Critical infrastructure impacted by PSPS	3.a.	Critical infrastructure impacted by PSPS	0	0	NA	NA	5,868	0	0	12	5,123	2,066	78	3	Low 1,658 / High 5,320					Number of critical infrastructure (in accordance with D.19-05-042) locations impacted per hour multiplied by hours offline per year
4. Community outreach of PSPS metrics	4.a.	# of customers impacted by PSPS	0	0	2,861	112	198,826	0	0	270	229,530	116,349	78	9	Low 67,220 / High 215,678					# of customers impacted by PSPS (if multiple PSPS events impact the same customer, count each event as a separate customer)
	4.b.	# of medical baseline customers impacted by PSPS	0	0	NA	NA	4,043	0	0	11	7,725	3,415	2	0	Low 2,443 / High 7,837					# of customers impacted by PSPS (if multiple PSPS events impact the same customer, count each event as a separate customer)
	4.c.	# of customers notified prior to initiation of PSPS event	0	0	NA	NA	155,824	0	0	232	143,908	110,217	66	9	Low 41,960 / High 134,628					# of customers notified of PSPS event prior to initiation (if multiple PSPS events impact the same customer, count each event in which customer was notified as a separate customer)
	4.d.	# of medical baseline customers notified prior to initiation of PSPS event	0	0	NA	NA	3,044	0	0	15	7,531	3,138	2	0	Low 296 / High 7,367					# of medical baseline customers notified prior to initiation (if multiple PSPS events impact the same customer, count each event in which customer was notified as a separate customer)
	4.e.	% of customers notified prior to a PSPS event impacting them	0	0	NA	NA	78%	0	0	85%	62%	95%	85%	100%	62%					=4.c. / 4.a.
	4.f.	% of medical baseline customers notified prior to a PSPS event impacting them	0	0	NA	NA	75%	0	0	100%	88%	92%	100%	0%	94%					=4.d. / 4.b.
5. Other PSPS metrics	5.a.	Number of PSPS events triggered where no de-energization occurred	0	0	NA	NA	7	0	2	0	0	0	1	0	0					Number of instances where utility notified the public of a potential PSPS event but no de-energization followed
	5.b.	Number of customers located on de-energized circuit	0	0	NA	NA	237,666	0	0	5,820	407,853	597,448	78	9	Low 118,918 / High 381,552					Number of customers
	5.c.	Customer hours of PSPS per RFW OH circuit mile day	0	0	NA	NA	NA	0	0	17	434	875	11	0	L 158 / H 507					=1.c. / RFW OH circuit mile days in time period
	5.d.	Frequency of PSPS events (total) - High Wind Warning wind conditions	0	0	NA	NA	NA	0	0	1	8	1	1	0	L 3 / H 11					Events over time period that overlapped with a High Wind Warning as defined by the National Weather Service

5.e.	Scope of PSPS events (total) - High Wind Warning wind conditions	<table border="1"> <tr> <td>0</td> <td>0</td> <td>NA</td> <td>NA</td> <td>NA</td> <td>0</td> <td>0</td> <td>7</td> <td>392</td> <td>151</td> <td>1</td> <td>0</td> <td>L 104 / H 335</td> </tr> </table>	0	0	NA	NA	NA	0	0	7	392	151	1	0	L 104 / H 335	Estimated customers impacted over time period that overlapped with a High Wind Warning as defined by the National Weather Service	<p>For Q2-Q4 2021 time periods, SCE used 2020 recorded data adjusted for improvement expected based on SCE's planned wildfire mitigation activities to create a baseline. To factor in weather variability, which has significant impacts on PSPS events, SCE developed a range around the baseline. The range was based on an 18 year backcast analysis that analyzed how current PSPS triggers would have resulted in PSPS events when applied to historical weather data. For further details on calculating the range, please see section 8.5</p> <p>SCE also notes, that earlier PSPS events were not tracked and recorded in the same level of detail as it is now, therefore not all data is available.</p> <p><i>SCE interprets this line item as de-energized circuit counts that overlap with High Wind Warnings.</i></p> <p><i>Historical numbers were corrected as the original analysis methodology was found to be faulty. Additionally, since historical numbers were adjusted, the forecast numbers were re-forecasted.</i></p>
0	0	NA	NA	NA	0	0	7	392	151	1	0	L 104 / H 335					
5.f.	Duration of PSPS events (total) - High Wind Warning wind conditions	<table border="1"> <tr> <td>0</td> <td>0</td> <td>NA</td> <td>NA</td> <td>NA</td> <td>0</td> <td>0</td> <td>3,500</td> <td>4,298,692</td> <td>1,826,480</td> <td>4</td> <td>0</td> <td>L 1,175,242 / H 3,770,782</td> </tr> </table>	0	0	NA	NA	NA	0	0	3,500	4,298,692	1,826,480	4	0	L 1,175,242 / H 3,770,782	Customer hours over time period that overlapped with a High Wind Warning as defined by the National Weather Service	<p>For Q2-Q4 2021 time periods, SCE used 2020 recorded data adjusted for improvement expected based on SCE's planned wildfire mitigation activities to create a baseline. To factor in weather variability, which has significant impacts on PSPS events, SCE developed a range around the baseline. The range was based on an 18 year backcast analysis that analyzed how current PSPS triggers would have resulted in PSPS events when applied to historical weather data. For further details on calculating the range, please see section 8.5</p> <p>SCE also notes, that earlier PSPS events were not tracked and recorded in the same level of detail as it is now, therefore not all data is available.</p> <p><i>Historical numbers were corrected as the original analysis methodology was found to be faulty. Additionally, since historical numbers were adjusted, the forecast numbers were re-forecasted.</i></p>
0	0	NA	NA	NA	0	0	3,500	4,298,692	1,826,480	4	0	L 1,175,242 / H 3,770,782					

