

July 13, 2020

Caroline Thomas Jacobs, Director
Wildfire Safety Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

SUBJECT: Southern California Edison's Submission on Mitigation Measures that are Part of a Combined Program that Cannot be Disaggregated

Dear Ms. Thomas Jacobs,

Southern California Edison (SCE) submits the following information and attached tables in response to Resolution WSD-002 (Guidance Resolution) that requires utilities, by July 13, 2020, to provide a list of all mitigation measures that are part of a combined program that they claim they cannot disaggregate.¹

INTRODUCTION

In the Guidance Resolution, in response to Pacific Gas and Electric Company's (PG&E) comments² regarding the inability to comply with several conditions in draft Resolution WSD-002 requiring disaggregation of wildfire mitigation initiatives from an accounting, tracking, and risk perspective, the Wildfire Safety Division (WSD) instructs the electrical corporations to furnish a list of all mitigation measures that are part of a combined program that they claim they cannot disaggregate. The Resolution further informs that the WSD may subsequently provide additional guidance, hold workshops, or engage in other consultation, but that in any event the electrical corporations remain bound by all WSD-002 conditions requiring disaggregation of initiatives into individual mitigations or groups of related mitigation. SCE interprets the Guidance Resolution to require a description and a list of WSD-defined initiatives and SCE-defined wildfire initiatives that either do not have separate costs or risk information and to inform where initiatives were grouped and why they were grouped.

BACKGROUND

The 2020 WMP Guidelines (Guidelines), issued on December 16, 2019, required the utilities provide details on 86 initiatives within 10 categories in their 2020 WMP submission.³ Utilities were also given the flexibility to add initiatives where a utility's wildfire mitigation activities did not align to one of the 86 WSD-defined initiatives. SCE's

¹ WSD-002, p. 39.

² WSD-002, p. 38-39.

³ See Guidelines, Section 5.3, pp. 49-51.

2020 WMP includes 69-specific wildfire initiatives. SCE aligned its 69 wildfire initiatives to the WSD-defined initiatives where possible and provided information for these in addition to each WSD-defined initiative beyond SCE's wildfire initiatives, where information was available. This alignment resulted in cases where many SCE wildfire initiatives mapped to one WSD-defined initiative (many-to-one), one SCE wildfire initiative mapped to many WSD-defined initiatives (one-to-many), one SCE wildfire initiative mapped to one WSD-defined initiative (one-to-one), and cases where either a SCE wildfire initiative or a WSD-defined initiative did not align at all. In total, this resulted in 136 unique initiatives.

OVERVIEW

The attached tables provide information on the population of WSD-defined initiatives and SCE wildfire initiatives that SCE does not uniquely and separately track costs or risk information and informs where initiatives were grouped for cost or risk evaluation purposes. In the tables, SCE describes why either the costs or risk information is not available at the initiative level or was grouped with another initiative.

This information is arranged by the categories, tables, and initiative numbering/descriptions included in Section 5.3 of the Guidelines and SCE's description of its wildfire initiatives.⁴ The majority of initiatives that do not have unique costs are WSD-defined initiatives where the work is performed by cross-functional resources as part of their regular job responsibilities, and for which SCE does not separately track incremental labor costs. For example, the initiative entitled, "A summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment" within the Risk Mapping and Simulation category is a collection of work efforts across many resources and departments. SCE's Geographic Information System (GIS) resources is one set of resources that support this initiative by plotting ignition and consequence data (developed by other resources) in our GIS products. These GIS resources perform hundreds of mapping activities supporting numerous efforts including wildfire mitigation. The incremental costs for these activities are relatively small, and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately for GIS mapping of ignition probability and wildfire consequence data for wildfire mitigation work.

Regarding risk information by initiative, SCE has previously described why many initiatives do not have separate risk spend efficiency (RSE) scores.⁵ SCE focused its RSE calculations for initiatives that directly mitigate probability or consequence of ignitions, where reliable and more objective data is available to perform the analysis, and where risk analysis and RSEs can be used to inform decision-making. To

⁴ SCE wildfire initiatives have their own unique identifier and, where applicable, are identified by a subset of the WSD-defined initiatives, e.g., the WSD-defined Continuous monitoring sensors initiative in the Situational Awareness Category has three SCE wildfire initiatives identified as 2.1, 2.2 and 2.3 in addition to the SCE-unique identifiers.

⁵ See, for example, SCE's Reply to Public Comments at pp. 7-8 and SCE's response to WSD data request SCE43879-E-64.

summarize, many wildfire initiatives either do not directly mitigate ignition risk (e.g., the Allocation methodology development and application initiative in the Resource allocation methodology category) or are traditional programs that have been performed for many years (e.g., vegetation management to achieve clearances around electric lines and equipment for which the baseline risk, had the work not been performed, is not available). SCE appreciates the WSD's acknowledgement of the differences in application of risk analysis to different initiatives and its willingness to work with electrical corporations to determine whether there are some initiative categories that should be analyzed in a different manner from RSE.⁶ SCE has provided high-level rationale in the attached table "No Risk Information," but notes that in SCE's responses to the Class A and Class B conditions SCE will provide additional information on how risk analysis informed decision making along with the alternate approaches taken to decision making if risk analysis was not available or used. Such information should provide the means for WSD to determine and evaluate which wildfire initiatives are effective and why they are needed or appropriate. SCE believes this information will be more relevant for WSD in assessing the efficacy of wildfire mitigation initiatives that do not directly reduce wildfire risk.

SCE understands and supports WSD's desire for increased consistency across the utilities so that cost, risk, effectiveness, and scope of wildfire risk mitigation activities can be compared. SCE does not believe a completely unified set of initiatives across all utilities is necessary to achieve that goal. SCE supports further discussions with the utilities, WSD and stakeholders to develop a consensus on the areas of the WMP filings where consistency and alignment are necessary to drive better outcomes for all stakeholders.

SCE looks forward to continued discussions on wildfire risk mitigation initiative tracking, costs, and risks to eliminate catastrophic wildfires associated with utility equipment. If you have any questions, or require additional information, please contact me at carla.peterman@sce.com.

Sincerely,

//s//

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Southern California Edison

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⁶ WSD-002, p. 39.

No
Cost
Information

No Cost Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No Cost Information	Referenced Initiative
Risk Mapping and Simulation	Table 21 / Sec 5.3.1	1	A summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 21 / Sec 5.3.1	2	Climate-driven risk map and modelling based on various relevant weather scenarios	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 21 / Sec 5.3.1	3	Ignition probability mapping showing the probability of ignition along the electric lines and equipment	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 21 / Sec 5.3.1	4	Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 21 / Sec 5.3.1	5	Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 21 / Sec 5.3.1	6	Weather-driven risk map and modelling based on various relevant weather scenarios	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
Grid Design and System Hardening	Table 23 / Sec 5.3.3	2.2	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Meter Alarm Down Energized Conductor (MADEC) (AT-1)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 23 / Sec 5.3.3	3.3	Covered conductor installation: Alternative Technology Implementation - Vibration Dampers (AT-4)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 23 / Sec 5.3.3	4	Covered conductor maintenance	Covered conductor maintenance is performed as part of inspection-driven remediation. Work orders for inspection remediation can include maintenance and remediation of different asset types including covered conductors. Costs are forecast and tracked for all assets together and not separately by asset type. The costs for this initiative are included with other initiative	Initiative SH-12.1, Table 23, Row 12.1
	Table 23 / Sec 5.3.3	5	Crossarm maintenance, repair, and replacement	Crossarm repair and maintenance is performed as part of inspection-driven remediation. Work orders for inspection remediation can include maintenance and remediation of different asset types including cross arms. Costs are forecast and tracked for all assets together and not separately by asset type. The costs for this initiative are included with other initiative	Initiative SH-12.1, Table 23, Row 12.1
	Table 23 / Sec 5.3.3	6.3	Distribution pole replacement and reinforcement, including with composite poles: Poles Identified During Inspections	Distribution pole replacement and reinforcement is performed as part of inspection-driven remediation. Work orders for inspection remediation can include maintenance and remediation of different asset types including poles. Costs are forecast and tracked for all assets together and not separately by asset type. The costs for this initiative are included with other initiative	Initiative SH-12.1, Table 23, Row 12.1
	Table 23 / Sec 5.3.3	8.1	Grid topology improvements to mitigate or reduce PSPS events: PSPS Driven Grid Hardening Work (SH-7)	Analysis will not be available until after 2020 WMP filing	
	Table 23 / Sec 5.3.3	8.2	Grid topology improvements to mitigate or reduce PSPS events: Microgrid Assessment (PSPS-8)	Microgrids strategy will be finalized in Microgrids OIR filing in February 2020	
	Table 23 / Sec 5.3.3	10	Maintenance, repair, and replacement of connectors, including hotline clamps	SCE does not track/unitize hotline clamps in its asset management system	
	Table 23 / Sec 5.3.3	11	Mitigation of impact on customers and other residents affected during PSPS event	Included mitigations that reduce impacts on customers affected during PSPS events in Section 5.3.6.5 as that WSD-defined initiative entitled "PSPS events and mitigation of PSPS impacts" seemed duplicative and SCE included six wildfire initiatives in this section	Initiative 5, Table 26 (PSPS Events and mitigation of PSPS Impacts)
	Table 23 / Sec 5.3.3	12	Other corrective action	Other corrective action is performed as part of inspection-driven remediation. Work orders for inspection remediation can include maintenance and remediation of different asset types. Costs are forecast and tracked for all assets together and not separately by asset type. The costs for this initiative are included with other initiative	Initiative SH-12.1, Table 23, Row 12.1
Table 23 / Sec 5.3.3	17	Updates to grid topology to minimize risk of ignition in HFTDs	Scope is TBD		
Table 23 / Sec 5.3.3	18	Transmission Overhead (TOH) Review (SH-9)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately		
Asset Management and Inspections	Table 24 / Sec 5.3.4	9.1.1	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations: Asset Defect Detection Using Machine Learning Object Detection (AT-5)	Scope is TBD	
	Table 24 / Sec 5.3.4	10.2.1	Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations: Assessment of Partial Discharge for Transmission Facilities (AT-6)	Scope is TBD	
	Table 24 / Sec 5.3.4	12	Patrol inspections of transmission electric lines and equipment	Patrol inspections are performed as part of its Transmission Inspection and Maintenance Program (TIMP) described in Section 5.3.4.2. Costs are therefore tracked as part of that program	Initiative 2, Table 24 (Detailed inspections of Transmission electric lines and equipment)
	Table 24 / Sec 5.3.4	14	Quality assurance / quality control of inspections: Quality Oversight / Quality Control (IN-2)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 24 / Sec 5.3.4	15.1	Failure Modes and Effects Analysis (FMEA) (IN-7)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
Vegetation Management and Inspection	Table 25 / Sec 5.3.5	1	Additional efforts to manage community and environmental impacts	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 25 / Sec 5.3.5	4	Emergency response vegetation management due to red flag warning or other urgent conditions	Conditions do not drive additional scope	
	Table 25 / Sec 5.3.5	5	Fuel management and reduction of "slash" from vegetation management activities	Because "slash" from vegetation management activities are disposed or recycled by trimming/removal contractors	
	Table 25 / Sec 5.3.5	14	Recruiting and training of vegetation management personnel	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	

No Cost Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No Cost Information	Referenced Initiative
	Table 25 / Sec 5.3.5	15	Remediation of at-risk species	SCE does not track this activity separately	
	Table 25 / Sec 5.3.5	18	Substation vegetation management	This activity is not broken out of the routine compliance program	
Grid Operations and Protocols	Table 26 / Sec 5.3.6	1.1	Annual SOB 322 review (OP-1)	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 26 / Sec 5.3.6	2	Crew-accompanying ignition prevention and suppression resources and services	Not a current SCE initiative/activity	
	Table 26 / Sec 5.3.6	4	Protocols for PSPS re-energization	Costs incurred for re-energization are included in Initiative 5 - PSPS events and mitigation of PSPS impacts as SCE tracks costs by PSPS event	Initiative 5, Table 26
	Table 26 / Sec 5.3.6	5.2	PSPS events and mitigation of PSPS impacts: Customer Resiliency Equipment Incentives (PSPS-3)	Pilot - costs still to be determined	
	Table 26 / Sec 5.3.6	5.4	PSPS events and mitigation of PSPS impacts: MICOP Partnership (PSPS-5)	Spend is unknown because future funding is determined on a yearly basis and evaluated based on program execution and Corp Contributions budget	
	Table 26 / Sec 5.3.6	5.5	PSPS events and mitigation of PSPS impacts: Independent Living Centers Partnership (PSPS-6)	Spend is unknown because future funding is determined on a yearly basis and evaluated based on program execution and Corp Contributions budget	
	Table 26 / Sec 5.3.6	6	Stationed and on-call ignition prevention and suppression resources and services	Not a current SCE initiative/activity	
Data Governance	Table 27 / Sec 5.3.7	2	Collaborative research on utility ignition and/or wildfire	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 27 / Sec 5.3.7	3	Documentation and disclosure of wildfire-related data and algorithms	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 27 / Sec 5.3.7	4	Tracking and analysis of near miss data	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
Resource Allocation Methodology	Table 28 / Sec 5.3.8	1	Allocation methodology development and application	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 28 / Sec 5.3.8	2	Risk reduction scenario development and analysis	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 28 / Sec 5.3.8	3	Risk spend efficiency analysis	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
Emergency Planning and Preparedness	Table 29 / Sec 5.3.9	3	Customer support in emergencies	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 29 / Sec 5.3.9	4	Disaster and emergency preparedness plan	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 29 / Sec 5.3.9	6	Protocols in place to learn from wildfire events	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
Stakeholder Cooperation and Community Engagement	Table 30 / Sec 5.3.10	1	Community engagement	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 30 / Sec 5.3.10	2	Cooperation and best practice sharing with agencies outside CA	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 30 / Sec 5.3.10	3	Cooperation with suppression agencies	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	
	Table 30 / Sec 5.3.10	4	Forest service and fuel reduction cooperation and joint roadmap	Costs incurred for this initiative are for work performed by departmental resources and SCE has currently not set up separate accounting to track or estimate labor hours or costs separately	

No
RSE
Information

No RSE Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No RSE	Referenced Initiative
Risk Mapping and Simulation	Table 21 / Sec 5.3.1	1	A summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 21 / Sec 5.3.1	2	Climate-driven risk map and modelling based on various relevant weather scenarios	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 21 / Sec 5.3.1	3	Ignition probability mapping showing the probability of ignition along the electric lines and equipment	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 21 / Sec 5.3.1	4	Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 21 / Sec 5.3.1	5	Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 21 / Sec 5.3.1	6	Weather-driven risk map and modelling based on various relevant weather scenarios	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
Situational Awareness and Forecasting	Table 22 / Sec 5.3.2	2.1	Continuous monitoring sensors: Distribution Fault Anticipation (DFA) (AT-2.1)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 22 / Sec 5.3.2	2.2.	Continuous monitoring sensors: Early Fault Detection (EFD) Evaluation (AT-7)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 22 / Sec 5.3.2	2.3	Continuous monitoring sensors: Transmission Open Phase Detection (SH-8)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 22 / Sec 5.3.2	3	Fault indicators for detecting faults on electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 22 / Sec 5.3.2	7	Develop Asset & Reliability & Risk Analytics Capability: Expansion of risk analysis (RA-1), Develop Asset Reliability & Risk Analytics Capability (SA-4)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
Grid Design and System Hardening	Table 23 / Sec 5.3.3	1	Capacitor maintenance and replacement program	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 23 / Sec 5.3.3	2.1	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: maintenance	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 23 / Sec 5.3.3	2.2	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Meter Alarm Down Energized Conductor (MADEC) (AT-1)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	23.1	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Rapid Earth Current Fault Limiter - Ground Fault Neutralizer (GFN) (AT-3.1)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	2.3.2	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Rapid Earth Current Fault Limiter - Arc Suppression Coil (AT-3.2)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	2.3.3	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Rapid Earth Current Fault Limiter - Isolation Transformer (AT-3.3)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	2.4	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - Distribution Open Phase Detection (AT-3.4)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	2.5	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: Alternative Technology Evaluations - High Impedance Relay Evaluations (AT-8)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	2.6	Circuit breaker maintenance and installation to de-energize lines upon detecting a fault: circuit breaker replacements	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 23 / Sec 5.3.3	3.3	Covered conductor installation: Alternative Technology Implementation - Vibration Dampers (AT-4)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	6.3	Distribution pole replacement and reinforcement, including with composite poles: Poles Identified During Inspections	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	Costs are included with initiative IN-1.1 - HFRI-D, Table 24, Row 9.1
	Table 23 / Sec 5.3.3	8.2	Grid topology improvements to mitigate or reduce PSPS events: Microgrid Assessment (PSPS-8)	Microgrids strategy will be finalized in Microgrids OIR filing in Feb 2020	
	Table 23 / Sec 5.3.3	10	Maintenance, repair, and replacement of connectors, including hotline clamps	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
Table 23 / Sec 5.3.3	12	Other corrective action	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk		

No RSE Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No RSE	Referenced Initiative
	Table 23 / Sec 5.3.3	14	Transformers maintenance and replacement	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 23 / Sec 5.3.3	15	Transmission tower maintenance and replacement	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 23 / Sec 5.3.3	17	Updates to grid topology to minimize risk of ignition in HFTDs	Scope is TBD	
	Table 23 / Sec 5.3.3	18	Transmission Overhead (TOH) Review (SH-9)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 23 / Sec 5.3.3	19	Legacy Facilities (SH-11)	Insufficient data to model risk	
Asset Management and Inspections	Table 24 / Sec 5.3.4	3	Improvement of Inspections	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 24 / Sec 5.3.4	6	Intrusive pole inspections (IPI)	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 24 / Sec 5.3.4	9.1.1	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations: Asset Defect Detection Using Machine Learning Object Detection (AT-5)	Scope is TBD	
	Table 24 / Sec 5.3.4	9.2.1	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations: Unmanned Aerial Vehicles (UAV) (AT-2.2)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 24 / Sec 5.3.4	9.2.2	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations: UAS Operations Training (OP-3)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 24 / Sec 5.3.4	10.2.1	Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations: Assessment of Partial Discharge for Transmission Facilities (AT-6)	Scope is TBD	
	Table 24 / Sec 5.3.4	11	Patrol inspections of distribution electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 24 / Sec 5.3.4	12	Patrol inspections of transmission electric lines and equipment	Included with other initiative	Initiative #2, Table 24 (Detailed inspections of Transmission electric lines and equipment)
	Table 24 / Sec 5.3.4	13	Pole loading assessment program to determine safety factor	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 24 / Sec 5.3.4	14	Quality assurance / quality control of inspections: Quality Oversight / Quality Control (IN-2)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 24 / Sec 5.3.4	15	Substation inspections	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 24 / Sec 5.3.4	15.1	Failure Modes and Effects Analysis (FMEA) (IN-7)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	1	Additional efforts to manage community and environmental impacts	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	2	Detailed inspections of vegetation around distribution electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 25 / Sec 5.3.5	3	Detailed inspections of vegetation around transmission electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
	Table 25 / Sec 5.3.5	4	Emergency response vegetation management due to red flag warning or other urgent conditions	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	5	Fuel management and reduction of "slash" from vegetation management activities	because slash from vegetation management activities are disposed or recycled by trimming/removal contractors	
	Table 25 / Sec 5.3.5	5.2	Fuel management and reduction of "slash" from vegetation management activities: Expanded Clearances for Legacy Facilities (VM-3)	Insufficient data to model risk	
	Table 25 / Sec 5.3.5	6	Improvement of inspections	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	Initiative #13, Table 25 (VM-5)
	Table 25 / Sec 5.3.5	8	LIDAR inspections of vegetation around transmission electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	

No RSE Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No RSE	Referenced Initiative
Vegetation Management and Inspection	Table 25 / Sec 5.3.5	11	Patrol inspections of vegetation around distribution electric lines and equipment	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	12	Patrol inspections of vegetation around transmission electric lines and equipment	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	13	Quality assurance / quality control of inspections: Quality Control (VM-5)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	14	Recruiting and training of vegetation management personnel	Costs are embedded in personnel time, and not broken out	
	Table 25 / Sec 5.3.5	15	Remediation of at-risk species	SCE does not track this activity separately	
	Table 25 / Sec 5.3.5	16	Removal and remediation of trees with strike potential to electric lines and equipment	Included with other initiative	Initiative 16.1, Table 25 (VM-1)
	Table 25 / Sec 5.3.5	17	Substation inspections	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	Initiative 15, Table 24 (substation inspections)
	Table 25 / Sec 5.3.5	18	Substation vegetation management	This activity is not broken out of the routine compliance program	
	Table 25 / Sec 5.3.5	19	Vegetation inventory system	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 25 / Sec 5.3.5	20	Vegetation management to achieve clearances around electric lines and equipment	No RSE was calculated as this is already a compliance program and not a WMP initiative. Addressed by a Traditional Program	
Grid Operations and Protocols	Table 26 / Sec 5.3.6	1.1	Annual SOB 322 review (OP-1)	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot.	
	Table 26 / Sec 5.3.6	2	Crew-accompanying ignition prevention and suppression resources and services	Not a current SCE initiative/activity	
	Table 26 / Sec 5.3.6	3	Personnel work procedures and training in conditions of elevated fire risk	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	Initiative 8, Table 29
	Table 26 / Sec 5.3.6	5.3	PSPS events and mitigation of PSPS impacts: Income Qualified Critical Care (IQCC) Customer Battery Backup Incentive Program (PSPS-4)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 26 / Sec 5.3.6	5.5	PSPS events and mitigation of PSPS impacts: Independent Living Centers Partnership (PSPS-6)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 26 / Sec 5.3.6	5.8	PSPS events and mitigation of PSPS impacts: Self Generation Incentive Program (SGIP) Resiliency	No RSE was calculated as the purpose of the assessment is to learn and assess the effectiveness of the mitigation. Under assessment/pilot	
	Table 26 / Sec 5.3.6	6	Stationed and on-call ignition prevention and suppression resources and services	Not a current SCE initiative/activity	
Data Governance	Table 27 / Sec 5.3.7	1	Centralized repository for data	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 27 / Sec 5.3.7	2	Collaborative research on utility ignition and/or wildfire	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 27 / Sec 5.3.7	3	Documentation and disclosure of wildfire-related data and algorithms	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 27 / Sec 5.3.7	4	Tracking and analysis of near miss data	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
Resource Allocation Methodology	Table 28 / Sec 5.3.8	1	Allocation methodology development and application	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 28 / Sec 5.3.8	2	Risk reduction scenario development and analysis	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 28 / Sec 5.3.8	3	Risk spend efficiency analysis	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 28 / Sec 5.3.8	4	Organizational Support - PMO, OCM, and wildfire-related IT support	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	

No RSE Information

Category	Table # / Sec #	Initiative #	Initiative	Rationale For No RSE	Referenced Initiative
Emergency Planning and Preparedness	Table 29 / Sec 5.3.9	1	Adequate and trained workforce for service restoration: SCE Emergency Response Training (DEP-2)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	2	Community outreach, public awareness, and communications efforts: Customer Education and Engagement (DEP-1.1, 1.2, 1.3), IOU Customer Engagement (DEP-3)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	3	Customer support in emergencies	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	4	Disaster and emergency preparedness plan	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	5	Preparedness and planning for service restoration	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	6	Protocols in place to learn from wildfire events	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 29 / Sec 5.3.9	7	Customer Research and Education (DEP-4)	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
Stakeholder Cooperation and Community Engagement	Table 30 / Sec 5.3.10	1	Community engagement	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 30 / Sec 5.3.10	2	Cooperation and best practice sharing with agencies outside CA	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 30 / Sec 5.3.10	3	Cooperation with suppression agencies	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	
	Table 30 / Sec 5.3.10	4	Forest service and fuel reduction cooperation and joint roadmap	No RSE was created as this is an enabling activity that indirectly, rather than directly, reduces risk	