Southern California Edison

R.18-10-007 – Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018).

DATA REQUEST SET A b r a m s - S C E - 0 0 2

To: Abrams
Prepared by: Gary Cheng
Job Title: Senior Advisor
Received Date: 11/12/2019

Response Date: 11/26/2019

Question 003:
Absolute Risk Reduction Ratio (ARR) and Relative Risk Reduction Ratio (RRR) for Every Proposed WMP Mitigation Tactic – IOUs should provide these measures for every proposed mitigation tactic (undergrounding, covered conductor deployment, pole wrap, etc.). If IOUs are unable or unwilling to provide this information for a particular tactic, it should be stricken from their plan as it will not provide a substantive baseline WMP.

Response to Question 003:
SCE's wildfire risk assessment is included in its 2018 Risk Assessment and Mitigation Phase (RAMP) Report submitted in the RAMP Order Instituting Investigation proceeding, I.18-11-006. In that report, SCE explains the risk methodology (Attachment: "I.18-11-006 SCE RAMP Report – Final.pdf", Chapter 2) and quantification of the wildfire risk (Attachment: "SCE 2018 RAMP Amendment and COS.pdf", Chapter 10), in terms of establishing a baseline risk score and calculating mitigation risk reductions for Distribution in High Fire Risk Areas (HFRA). Although SCE does not use the terms ARR and RRR in its risk framework, SCE's methodology is consistent with the CPUC Safety Model Assessment Proceeding (S-MAP) settlement principles.

In SCE's 2021 General Rate Case (GRC) filing, SCE further updated the RAMP wildfire mitigation risk analysis in SCE-01, Vol. 02, workpapers ("Updated RAMP Risk Analysis" and "Transmission Ignition Risk Analysis"); these are included as attachment ("WPSCE01V02.pdf"). These GRC workpapers show the Risk Spend Efficiency (RSE), which is a function of risk reduction and spend, and discusses the limitations of these calculations. The tables below show the breakdown of the RSE calculation by risk reduction, in units of MARS,[1] and spend by wildfire mitigation for the years 2021-2023.

[1] Multi Attribute Risk Scoring – discussed further in Chapter 2 of the 2018 SCE RAMP Report

Distribution:

	2021 - 2023 Period		
	Risk reduction (Expected Value)	Risk reduction (Tail Avg)	Spend ($M)
C1 - Overhead Conductor Program	0.08	0.24	$ 23.4
C2 - FR3 Overhead Distribution Transformer	0.04	0.12	$ 17.0
M1 - Wildfire Covered Conductor Program	7.39	24.14	$ 2,450.3
M2 - Remote-controlled Automatic Reclosers (RARs) and Fast Curve Settings	1.11	5.24	$ 10.6
M3 - Public Safety Power Shutoff(PSPS) Protocol and support functions	2.24	10.53	$ 96.7
M4 - Infrared (IR) Inspection Program	0.38	1.06	$ 1.3
M5 - Enhanced Vegetation Management	0.32	0.82	$ 162.4
M7 - Enhanced Situational Awareness	1.04	4.93	$ 11.8
M8 - Fusing Mitigation	0.23	0.68	$ 4.2
M9 - Fire Resistant Poles	0.22	1.75	$ 335.3
M10 - Enhanced Overhead Inspection	2.46	7.50	$ 266.8
M11 - Targeted Undergrounding	0.14	0.36	$ 108.6

Transmission:

	RSE (2021-2023)		
	Risk Reduction (Expected Value)	Risk Reduction (Tail Avg)	Spend ($M)
Enhanced Overhead Inspection	0.23	0.95	$ 95.0

SCE continues to evaluate and evolve its understanding of wildfire risk and refine its capability to quantifiably assess mitigation effectiveness and risk reduction for both new and existing programs.