

Southern California Edison

WSD-011 – Resolution implementing the requirements of Public Utilities Code Sections 8389(d)(1), (2) and (4) related to catastrophic wildfire caused by electrical corporations subject to the Commission’s regulatory authority

DATA REQUEST SET Cal Advocates - SCE - 2021 WMP - 14

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Response Date: 6/10/2021

Question 001:

For each Risk Spend Efficiency (RSE) in the “New/Revised RSE (Tier 3)” column in Table SCE 9.8-3, provide the mitigation effectiveness associated with that mitigation.

Response to Question 001:

All mitigations calculated for the Revision Notice in Table SCE 9.8-3 can be categorized into three general groupings: Distribution fire risk sub-driver mitigations, Transmission fire risk sub-driver mitigations, and mitigations that mitigate the consequences related to PSPS risk.

The mitigation effectiveness percentages for Distribution fire risk sub-driver mitigations are listed in Table 1 and include the following mitigations:

- Ground Inspections/Remediations - Distribution
- Aerial Inspections/Remediations - Distribution
- Fire Resistant Poles
- Covered Conductor

The mitigation effectiveness percentages for Transmission fire risk sub-driver mitigations are listed in Table 2 and include the following mitigations:

- Ground Inspections/Remediations - Transmission
- Aerial Inspections/Remediations - Transmission
- C-Hooks

Weather Stations and Sectionalizing Devices mitigate consequences related to PSPS risk. Both programs have a 44.65% mitigation effectiveness on safety, reliability, and financial components of PSPS MARS consequence.

Table 1 – Mitigation Effectiveness of Distribution fire risk sub-driver mitigations in Table SCE 9.8-3

Cause Category	Sub-cause Category	Distr. Ground	Distr. Aerial	Covered Conductor	FR Poles
Contact from Object - Distribution	Veg. contact- Distribution	97%	44%	60%	0%
	Animal contact- Distribution	53%	6%	99%	0%
	Balloon contact- Distribution	0%	0%	99%	0%
	Vehicle contact- Distribution	0%	0%	50%	0%
	Other contact from object - Distribution	0%	0%	77%	0%
	Unknown contact - Distribution	0%	0%	85%	0%
Equipment / facility failure - Distribution	Connector damage or failure- Distribution	100%	100%	90%	0%
	Splice damage or failure — Distribution	90%	3%	90%	0%
	Crossarm damage or failure - Distribution	97%	79%	50%	50%
	Lightning arrestor damage or failure- Distribution	95%	33%	0%	0%
	Tap damage or failure - Distribution	100%	0%	0%	0%
	Tie wire damage or failure - Distribution	0%	0%	0%	0%
	Other - Distribution	0%	0%	0%	0%
	Capacitor bank damage or failure- Distribution	95%	31%	0%	50%
	Conductor damage or failure — Distribution	0%	0%	90%	5%
	Fuse damage or failure - Distribution	94%	12%	0%	5%
	Switch damage or failure- Distribution	83%	6%	0%	5%
	Pole damage or failure - Distribution	99%	82%	0%	0%
	Insulator and brushing damage or failure - Distribution	96%	69%	90%	5%
	Voltage regulator / booster damage or failure - Distribution	100%	0%	0%	5%
	Recloser damage or failure - Distribution	100%	0%	0%	5%
	Anchor / guy damage or failure - Distribution	100%	89%	0%	0%
	Sectionalizer damage or failure - Distribution	0%	0%	0%	0%
	Connection device damage or failure - Distribution	0%	0%	0%	0%
	Transformer damage or failure - Distribution	78%	6%	0%	50%
Wire-to-wire contact - Distribution	Wire-to-wire contact / contamination- Distribution	0%	0%	99%	0%
Contamination - Distribution	Contamination - Distribution	0%	0%	0%	0%
Utility work / Operation	Utility work / Operation	0%	0%	0%	0%
Vandalism / Theft - Distribution	Vandalism / Theft - Distribution	0%	0%	0%	0%
Other - Distribution	All Other- Distribution	100%	99%	0%	0%
Unknown - Distribution	Unknown - Distribution	0%	0%	0%	0%

Table 2 - Mitigation Effectiveness of Transmission fire risk sub-driver mitigations in Table SCE 9.8-3

Cause Category	Sub-cause Category	Trans. Ground	Trans. Aerial	C-hooks
Contact from Object - Transmission	Veg. contact- Transmission	100%	97%	0%
	Animal contact- Transmission	98%	95%	0%
	Balloon contact- Transmission	0%	0%	0%
	Vehicle contact- Transmission	0%	0%	0%
	Other contact from object - Transmission	0%	0%	0%
Equipment / facility failure - Transmission	Capacitor bank damage or failure- Transmission	0%	0%	0%
	Connector damage or failure- Transmission	100%	100%	0%
	Splice damage or failure — Transmission	100%	100%	0%
	Crossarm damage or failure - Transmission	100%	98%	0%
	Lightning arrestor damage or failure- Transmission	100%	0%	0%
	Tap damage or failure - Transmission	0%	0%	0%
	Tie wire damage or failure - Transmission	0%	0%	0%
	Other - Transmission	0%	0%	25%
	Conductor damage or failure — Transmission	0%	0%	0%
	Fuse damage or failure - Transmission	0%	0%	0%
	Switch damage or failure- Transmission	100%	0%	0%
	Pole damage or failure - Transmission	100%	99%	0%
	Insulator and brushing damage or failure - Transmission	100%	100%	90%
	Voltage regulator / booster damage or failure - Transmission	0%	0%	0%
	Recloser damage or failure - Transmission	0%	0%	0%
	Anchor / guy damage or failure - Transmission	100%	92%	0%
	Sectionalizer damage or failure - Transmission	0%	0%	0%
	Connection device damage or failure - Transmission	0%	0%	0%
	Transformer damage or failure - Transmission	0%	0%	0%
Wire-to-wire contact - Transmission	Wire-to-wire contact / contamination- Transmission	80%	0%	0%
Contamination - Transmission	Contamination - Transmission	100%	100%	90%
Utility work / Operation	Utility work / Operation	0%	0%	0%
Vandalism / Theft - Transmission	Vandalism / Theft - Transmission	0%	0%	0%
Other - Transmission	All Other- Transmission	100%	100%	0%
Unknown - Transmission	Unknown - Transmission	0%	0%	0%