Southern California Edison
2023-WMPs – 2023-WMPs

DATA REQUEST SET C a l A d v o c a t e s - S C E - 2 0 2 3 W M P - 2 1

To: Cal Advocates
Prepared by: Tram Camba
Job Title: Wildfire Safety – Sr Advisor
Received Date: 11/13/2023

Response Date: 11/30/2023

Question 006:
For each year from 2020 through 2023, please provide ten randomly-selected pole loading calculations performed as part of a bare-to-covered conductor replacement project. For these calculations, please provide:
a) The full calculation input(s).
b) The full calculation output(s).
c) Any interpretations associated with the calculation (for example, an engineer's determination that the calculation demonstrates a pole must be replaced).

Response to Question 006:

For responses to parts (a) and (b) above, please see attachment, "CalAdvocates-SCE-2023WMP-21 Q6 Pole Loading Calculations.zip".

Response to (c):

SPIDACalc is a commercially available structural analysis software that performs stress analysis used by SCE to calculate pole and guy safety factors. The SPIDACalc results determine if the pole meets the minimum required safety factors, as outlined in PLM-2 Table 8 below. If SPIDACalc determines the pole safety factor is below the minimum required in PLM-2 Table 8, then the pole is identified as requiring replacement or remediation to meet required safety factors.

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2.0 Safety Factors for Wood, Composite, and Light Weight Steel Poles

Table 8: Safety Factors for Wood, Light Weight Steel (LWS), and Composite Fiber Glass Poles

Pole Type	Design Criteria (lb)	New Construction			In-Service Construction		
		Grade A Construction (Joint-Use Poles) Pole Load Safety Factor	Grade B Construction Pole Load Safety Factor	Buckling	Grade A Construction (Joint-Use Poles) Pole Load Safety Factor	Grade B Construction Pole Load Safety Factor	Buckling
Wood	6	4.00	3.00	4.00	2.67	2.00	2.67
	8	4.00	3.00	4.00	2.67	2.00	2.67
	12	3.00	3.00	4.00	2.00	2.00	2.67
	18	3.00	3.00	4.00	2.00	2.00	2.67
	24	3.00	3.00	4.00	2.00	2.00	2.67
LWS	6	2.50	1.88	2.50	1.50	1.50	1.50
	8	2.50	1.88	2.50	1.50	1.50	1.50
	12	1.88	1.88	1.88	1.50	1.50	1.50
	18	1.88	1.88	1.88	1.50	1.50	1.50
	24	1.88	1.88	1.88	1.50	1.50	1.50
Composite Fiberglass	6	4.00	3.00	4.00	2.67	2.00	2.67
	8	4.00	3.00	4.00	2.67	2.00	2.67
	12	3.00	3.00	4.00	2.00	2.00	2.67
	18	3.00	3.00	4.00	2.00	2.00	2.67
	24	3.00	3.00	4.00	2.00	2.00	2.67
Guying Requirements	-	2.00	2.00	-	1.33	1.33	-

= For Reference Only