

*Southern California Edison*  
*2023-WMPs – 2023-WMPs*

**DATA REQUEST SET Cal Advocates - SCE - 2023 WMP - 21**

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

**Response Date: 11/30/2023**

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**Question 005:**

Cal Advocates understands that, in every project to replace overhead bare distribution with covered conductor, SCE performs, or has performed, pole loading calculations for every pole in the project.

- a) Is the above characterization correct? Please elaborate if it is incorrect.
- b) Does SCE have a threshold safety factor (or other result from a pole loading calculation) at which it will replace poles in a project?
- c) If the answer to part (b) is yes, please describe SCE's threshold(s).
- d) If the answer to part (b) is no, please explain how SCE determines which poles to replace in a project.

**Response to Question 005:**

*a) Is the above characterization correct? Please elaborate if it is incorrect.*

**Response to a):** Yes, SCE performs pole loading analysis on all impacted poles when replacing bare conductor with covered conductor.

*b) Does SCE have a threshold safety factor (or other result from a pole loading calculation) at which it will replace poles in a project?*

**Response to b):** Yes

*c) If the answer to part (b) is yes, please describe SCE's threshold(s).*

**Response to c):** The California Public Utilities Commission's General Order (G.O.) 95 specifies safety factors for each "Grade" of overhead line construction (refer to the specification on safety factors for new and in-service construction in SCE's Pole Loading Manual below). SCE's distribution facilities will be designed to meet or exceed either Grade A or Grade B requirements.<sup>1</sup> The site-specific wind zone must be referenced to help ensure the relevant wind

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<sup>1</sup> GO95 Rule 42 Table 3 states that if there is a joint owned pole with 3rd party communication, it should be Grade A construction. At SCE, jointly owned poles or poles with 3rd party attachments are designed as Grade A. GO95 Rule 42 also states that Class H circuits, which are SCE's distribution and sub-transmission circuits per GO95 Rule 20.6.D(2), are Grade B. Therefore, if we have SCE facilities, including Transmission Telecom Communication, on a pole it is considered and designed as Grade B.

pressure is considered during the design stage.



**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

*d) If the answer to part (b) is no, please explain how SCE determines which poles to replace in a project.*

**Response to d):** N/A