

Paris Session 2022



COMPOSITE INSULATORS IN HARSH ENVIRONMENT

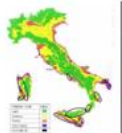









SC A3

PS1 Question 02

Alberto Pigini- Italy

Composite line insulators in harsh environment

- Composite insulators are a viable and reliable solution for overhead lines and substations. More than 20 million overhead AC line insulators are installed in the world with generally satisfactory performance. However, some cases of unsatisfactory performance were reported in very harsh environment

Italy Sardinia	   	
Saudi Arabia. Red Sea Coast	 	
Peru- Close to the Sea Lima region	 	
Spain Fuerte Ventura	 	

[1] A.Pigini, “Optimal insulator type and dimensioning in harsh service environment,” in *INMR world congress*, Tucson-USA, 2019.

Group Discussion Meeting

Composite housings

Composite station insulators, typically housings, are in principle prone to lower degradation due to their large diameter resulting in a lower current density as when compared to line composite insulators.

However the AC (and especially DC) service experience is much more limited (less components installed and generally for shorter time periods than for line insulators).

It would be interesting to have additional information about composite station insulators in the same environment found critical for line insulators.