Paris Session 2022



Substation Equipment Overstress Management

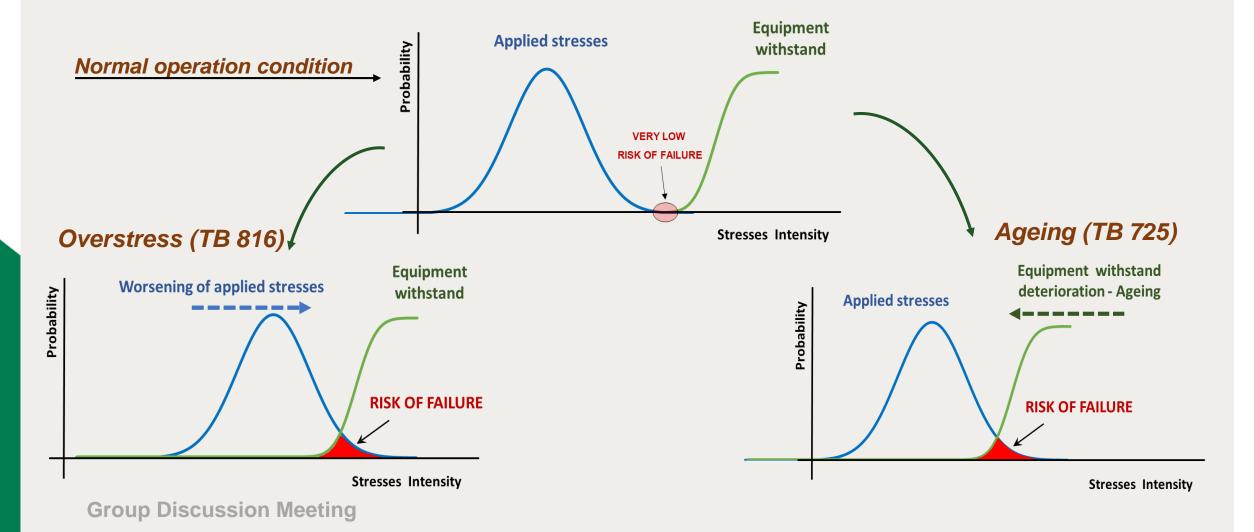
SC A3 - Transmission and Distribution Equipment

PS 1: Q5: Can other long-term users of equipment installed in adverse climatic conditions with composite insulators also share their experiences, including HVDC composite insulators?

Antonio Carvalho – Brazil (on the behalf of WG A3.30)



Substation Equipment Overstress Management - CIGRE TB 816 (WG A3.30)



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Main contents of TB 816:

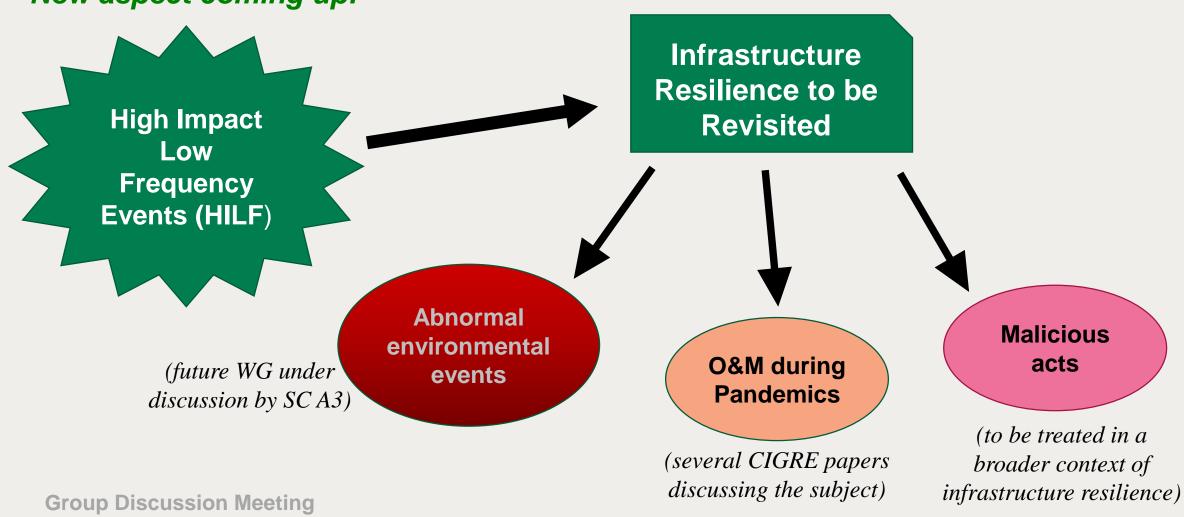
- presents the main kinds of overstress applied to HV equipment
- summarizes how utility can check for possible overstresses
- adapt asset management process to mitigate overstress consequences

Future investigation needs identified by WG A3.30:

- Operation voltage above ratings (JWG A3/A2/A1/B1.44 Consequence of High Voltage Equipment operating exceeding highest system voltages)
- Controlled switching for MV switchgear (future WG under discussion by SC A3)
- Instrument transformers performance (WG A3.42 Failure Analysis and Risk Mitigation for Recent Incidents of AIS Instrument Transformers)
- Overstress due to pandemic, abnormal environmental events and malicious acts

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•New aspect coming up:



Thank You!

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TECHNICAL BROCHURE Transmission and distribution equipment **Substation equipment** overstress management Reference: 816

Group Discussion Meeting