

3GPP TSG RAN Meeting #102
Edinburgh, Scotland, December 11-15, 2023
Agenda Item: 9.1.2.5

RP-232765



Consideration on Rel-19 multiple UE UL physical aggregation

New H3C Technologies Co., Limited

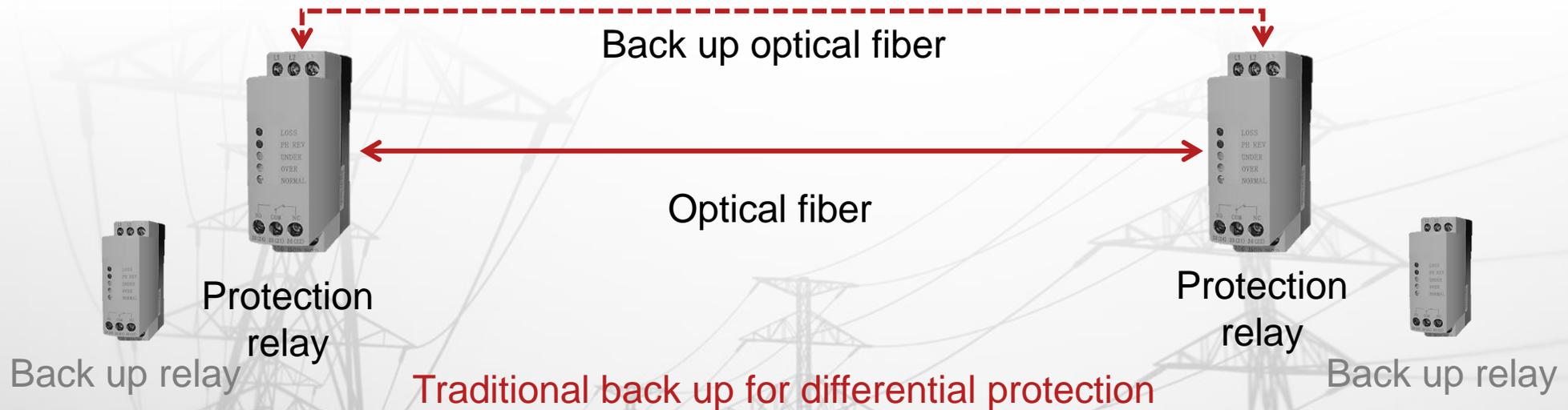
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Consideration on multiple UE UL physical aggregation(1/3)



□ Problem

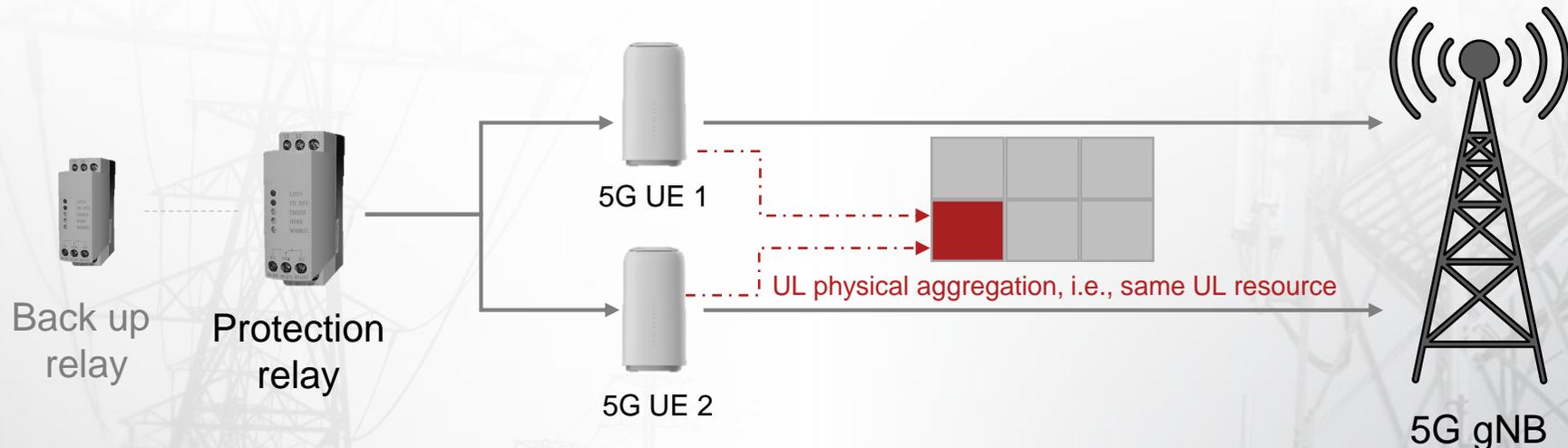
- Differential protection in smart grid is usually in an 1+1 (even 1+N) backup mode via optical fiber. Optical fiber always brings very high cost and faces great construction difficulty in some areas, this lead to a very low penetration rate.



Consideration on multiple UE UL physical aggregation(2/3)

□ Motivation

- Multiple UE UL physical aggregation can potentially resolve the issues of optical fiber, and offer wireless transmission robustness to smart grid and is aligned with the differential protection devices which are traditionally equipped by 1+1 or 1+N backup modes.
- In terms of discussion in RAN#101, CMCC, CUCC, CEPRI and China southern power grid show great interest for aggregation as hot backup scenario will increase the robustness



5G UL physical aggregation for differential protection

Consideration on multiple UE UL physical aggregation(3/3)



□ Proposal

- **Differential protection backup requirement in smart grid should be supported in Rel.19 work scope.**
 - ✓ **Corresponding multiple UE UL physical aggregation solution should be addressed in Rel-19 work scope.**
 - ✓ **This item can be independently established as WI in Rel-19 or part of other WI (such as Sidelink Relay) due to discussion/decision in RAN#102**

A top-down view of a wooden table where several people's hands are stacked in a circle. On the table, there are two laptops, a smartphone, a white mug with a drink, and a coffee cup with a lid. The scene is brightly lit, suggesting an office or meeting environment.

THANKS

A red circular logo with the letters 'HBC' in white, centered on a dark background.

HBC