Paris Session 2022



Considerations in cable design, installation, and recycling

SC B1 Insulated Cables - PS3 - Q3

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Group Discussion Meeting

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Considerations in cable design, installation, and recycling

Measures to reduce environmental impact, promote carbon neutrality, and improve cable recyclability:

The key is to improve cable system reliability and improve/ease cable recycling processes

- Improve in cable design
 - Reduce material volume, material variability, and replace environmental unfriendly material in cables and packages.
 - Remove bonding in cable components: e.g., no bonding between metal sheath and core jacket, use insulation material other than XLPE
 - Prolong the service lifetime of the cable system, or re-use a healthy retrieved cable system for other projects
- Improve in cable qualification
 - better definition of cable testing environment and testing methods, testing requirements to represent actual cable installation and operational conditions
 - Pay attention of FO cable components

Considerations in cable design, installation, and recycling

- Improve in cable production
 - high requirement in manufacturing Quality Assurance and Quality Control (QA/QC) to reduce cable scrapping rate
- Improve in cable installation consideration and practice
 - Cable installation process should minimize impact on environment
 - Monitoring during cable handling process will reduce cable damage rate therefore minimize environmental impact caused by repairing
 - Standardize cable handling procedures to reduce cable damage during handling
- Improve in cable end of life strategy
 - alternative of cable recycling
 - careful choosing of cable material separation and recycling

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