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Policy Newsletter

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Policy updates



Ref	Issue	Title
CP421-5/6	12/6	Maintenance and Refurbishment of Overhead Lines
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CP606 A10	3	Tree Work and Vegetation Clearance in Proximity to Live Overhead Lines
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Major policy updates





6.5 Conductors

Where the damage and/or corrosion is extensive, the affected conductor section(s) shall be replaced (refurbishment).

When a conductor is to be replaced, the following shall be considered:

- Obsolete conductors, shall be considered for replacement with new conductors to ES400C4 at the next refurbishment. Existing ACSR conductor shall be considered for replacement by AAAC. As a general rule, obsolete conductors shall only normally be replaced where necessary. Local conditions and circumstances of the line shall be taken into account before a decision is made to replace the conductor.

- Where possible, quad and twin conductors shall be replaced by the larger sized single equivalent, therefore, removing the need for spacers.

- Taking into the consideration in the bullet points below, Lynx conductor shall be replaced with UPAS conductor to increase the rating of the overhead line, wherever practicable.

If an overhead line is being reconducted in a conductor which differs from the type used in the original design specification in either type or design/operating temperature a study shall be completed to confirm the following criteria are still met.

- Clearances to ground and objects are maintained as per CP 420 Part 2, Chapter 15.
- Tower structures are suitable for increased mechanical loads.
- Tower foundations are suitable for increased mechanical loads.

Where there is evidence of conductor clashing, appropriate measures shall be taken to avoid recurrence of the problem. For example, due to galloping interphase spacers between phases may be installed or additional spacers for twin conductors.

When a conductor is replaced, all connected insulators/fittings, jumpers and downloads (including lugs, etc) shall be replaced.

After a conductor has been replaced, an infrared check for hotspots on the new section(s) shall be carried out, paying particular attention to joints. This check shall be done within two months of the replacement.

Aug 23

Code of Practice 421-6

Issue 6 August 2023

Maintenance and Refurbishment of Overhead Lines – HV Mains Supply Steel Towers



Requirement added to replace non-bimetallic with bimetallic bails in CP421-5



Requirement to replace Lynx with Upas conductor under refurbishment added in CP421-6.



Minor policy updates





CP410 – Mains Practice up to and Including 132kV Underground Cable Systems

- Reformat of the existing CP to merge all 5 previous separate chapters into one single document to make it easier for navigating on screens.
- Addition of contents of EPD 410 into Chapter 5 – EPD410 will be archived.
- THIS IS A DOCUMENT FORMAT CHANGE ONLY – NO TECHNICAL CONTENT UPDATED.

CP606 A10 – Tree Work and Vegetation Clearance in Proximity to Live Overhead Lines

- Section A10 Application Guide – correction of clearance dimension for 132kV lines.

CP614 - Authorisation

- Removal of old training course references where new Greenlight training course references are used.
- Code 128 – Removal of 33kV jointing to be just 132kV jointing and modification of authorisation route to include manufacturers training and assessment.



EPD307 – Equipment Approved for Use on Electricity North West Network

- Kolektor Etra 11.5/23MVA 33/6.6kV (design ref 5014) added to the approved list following successful type testing. Efacec Primary Transformer Voltage added.

ES281 – Approved Equipment and Materials

- The Approved equipment spreadsheet has been updated to include Sicame LV materials for LV cable jointing. This will allow ICP's to use these products in line with our new LV jointing Code of Practice CP411Pt1.
- Kolektor Etra 11.5/23MVA 33/6.6kV (design ref 5014) added to the approved list following successful type testing

ES324 – 132kV Lower Voltage Transformers and Earthing/Auxiliary Transformers

- Section 15.6 part (n) section c updated on impulse testing to add one reduced chopped wave application in the test sequence.



ES400C10 – Specification for 33kV Cables

- Reformat of the existing specification to the new template with general information removed and now referenced to ES001.
- Removal of requirement for marking sheath with “Property of ENWL”.
- Removal of EPR material as an option for insulation.
- All testing requirements aligned with BS7870-4.10.
- Requirement for longitudinal water blocking in stranded aluminium conductors and clause for providing procedure and test evidence for removal of waterblocking when jointing.