electricity north west

Bringing energy to your door

Policy Newsletter

April 2023

Hannah Aymes

Stay connected...

www.enwl.co.uk

April policy updates

Ref	Issue	Title
CP411Pt1N	15	LV Cable Jointing Manual
CP411Pt2	5	6.6kV & 11kV Cable Jointing Manual
EPD350	6	Protection for 132kV, 33kV, 6.6/11kV Systems
ES400J3	3	Specification for Low Voltage Cable Joint Shells
CP414	1	33kV Gas Insulated Cable Jointing Manual

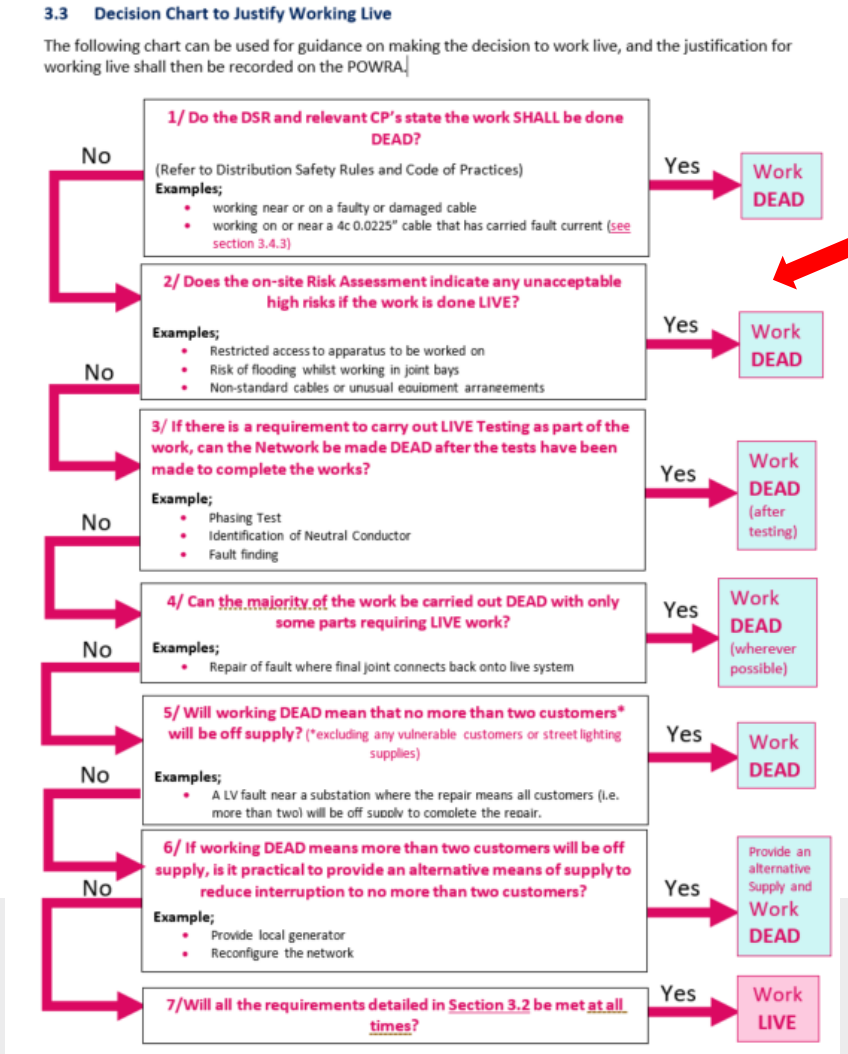
April archived policies

Ref	Issue	Title	Reason for Archive
CP608 A10 Appendix I	12	Point of Work Risk Assessment	Electrical feasibility and POWRA combining into Tree Cutting POWRA which will now be appendix H.
CP608 A10 Appendix H	15	Electrical Risk Assessment and Feasibility Study	Electrical feasibility and POWRA combining into Tree Cutting POWRA which will now be appendix H.

Major policy updates

electricity north west
Bringing energy to your door

CP411Pt1N – LV Cable Jointing Manual



3.3 Decision Chart to Justify Working Live

The following chart can be used for guidance on making the decision to work live, and the justification for working live shall then be recorded on the POWRA.

1/ Do the DSR and relevant CP's state the work SHALL be done DEAD?
(Refer to Distribution Safety Rules and Code of Practices)
Examples;
- working near or on a faulty or damaged cable
- working on or near a 4c 0.0225" cable that has carried fault current (see section 3.4.3)

No → **2/ Does the on-site Risk Assessment indicate any unacceptable high risks if the work is done LIVE?**
Examples;
- Restricted access to apparatus to be worked on
- Risk of flooding whilst working in joint bays
- Non-standard cables or unusual equipment arrangements

No → **3/ If there is a requirement to carry out LIVE Testing as part of the work, can the Network be made DEAD after the tests have been made to complete the works?**
Example;
- Phasing Test
- Identification of Neutral Conductor
- Fault finding

No → **4/ Can the majority of the work be carried out DEAD with only some parts requiring LIVE work?**
Examples;
- Repair of fault where final joint connects back onto live system

No → **5/ Will working DEAD mean that no more than two customers* will be off supply?** (*excluding any vulnerable customers or street lighting supplies)
Examples;
- A LV fault near a substation where the repair means all customers (i.e. more than two) will be off supply to complete the repair.

No → **6/ If working DEAD means more than two customers will be off supply, is it practical to provide an alternative means of supply to reduce interruption to no more than two customers?**
Example;
- Provide local generator
- Reconfigure the network

No → **7/Will all the requirements detailed in Section 3.2 be met at all times?**

1/ Yes	Work DEAD
2/ Yes	Work DEAD
3/ Yes	Work DEAD (after testing)
4/ Yes	Work DEAD (wherever possible)
5/ Yes	Work DEAD
6/ Yes	Provide an alternative Supply and Work DEAD
7/ Yes	Work LIVE

Following internal audit the following has been added:

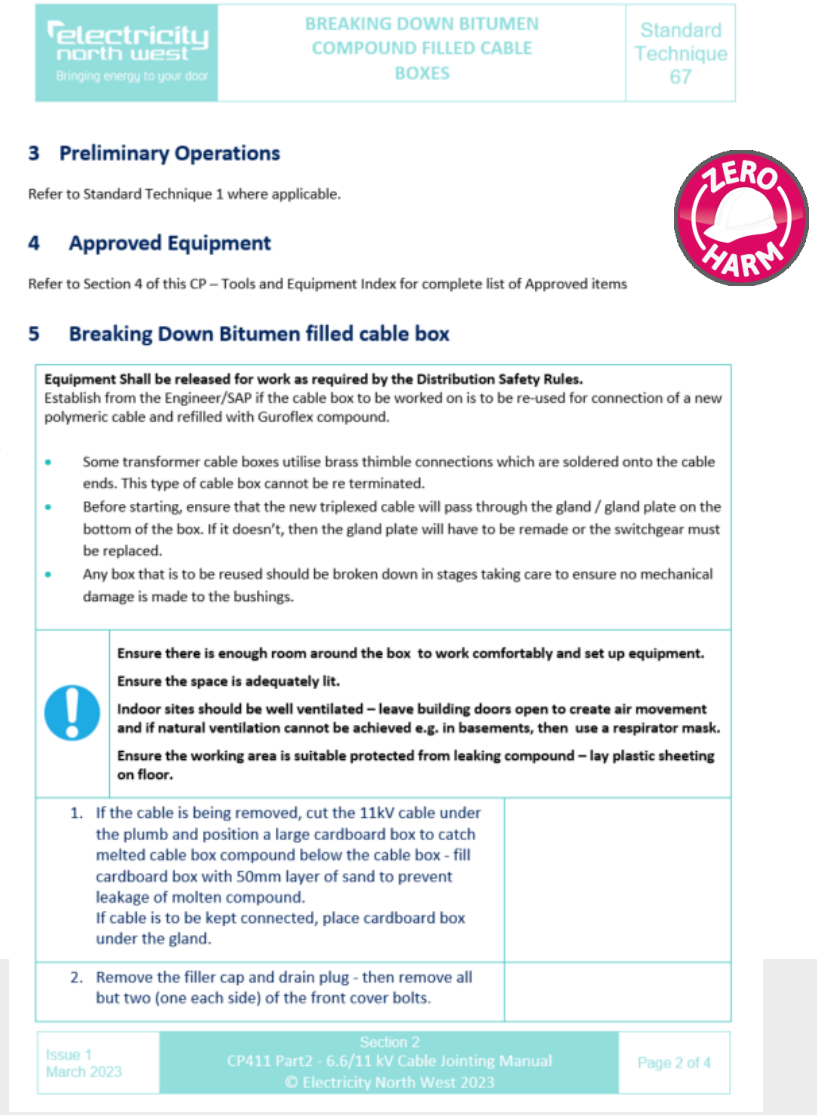
- General Requirements – New decision flow chart for justification for working live, with option to work dead if no more than two customers will be off supply
- Standard Technique 16.1 – New Procedure for opening of Cable Ducts
- Standard Technique 8 – Addition of JEM1X resin for Sicame link boxes and use of metal clips in cable joint shells
- Standard Technique 14 – Update on information about proving units to match Safety Bulletin 20/2/22 regarding PU2/4 units
- Instructions M9/M10 and M12 revised drawing to remove statement about waveform wires behind sheath (based on feedback from Steve Sharp)
- Section 4 – Tools and Equipment Index updated to include latest Martindale proving unit, new Stanley tin snips
- Section 5 – Miscellaneous instruction SWA2 updated to remove duplication of SWA1 information.

CP411Pt2 – 6.6kV & 11kV Cable Jointing Manual

Raised to issue 5 and the following changes have been made:

- Standard Technique 64 – Updated methods for removal and refilling of legacy cable boxes with Guroflex compound
- Standard Technique 67 – Creation of new technique covering decompounding (breaking down) of legacy cable boxes filled with bitumen oil based compounds
- Section 2 - Standard Technique 68 –New Technique on application of Greases
- Section 3 – New procedure 8-018 for 400mm2 “ALL COPPER” straight joint
- Section 4 – Tools & Equipment Index updated to show paddle mixer and various other additional tools

NEW POLICY ALERT!



electricity north west
Bringing energy to your door

BREAKING DOWN BITUMEN COMPOUND FILLED CABLE BOXES

Standard Technique 67

3 Preliminary Operations

Refer to Standard Technique 1 where applicable.

4 Approved Equipment

Refer to Section 4 of this CP – Tools and Equipment Index for complete list of Approved items

5 Breaking Down Bitumen filled cable box

Equipment Shall be released for work as required by the Distribution Safety Rules.
Establish from the Engineer/SAP if the cable box to be worked on is to be re-used for connection of a new polymeric cable and refilled with Guroflex compound.

- Some transformer cable boxes utilise brass thimble connections which are soldered onto the cable ends. This type of cable box cannot be re terminated.
- Before starting, ensure that the new triplexed cable will pass through the gland / gland plate on the bottom of the box. If it doesn't, then the gland plate will have to be remade or the switchgear must be replaced.
- Any box that is to be reused should be broken down in stages taking care to ensure no mechanical damage is made to the bushings.

Ensure there is enough room around the box to work comfortably and set up equipment.

Ensure the space is adequately lit.

Indoor sites should be well ventilated – leave building doors open to create air movement and if natural ventilation cannot be achieved e.g. in basements, then use a respirator mask.

Ensure the working area is suitable protected from leaking compound – lay plastic sheeting on floor.

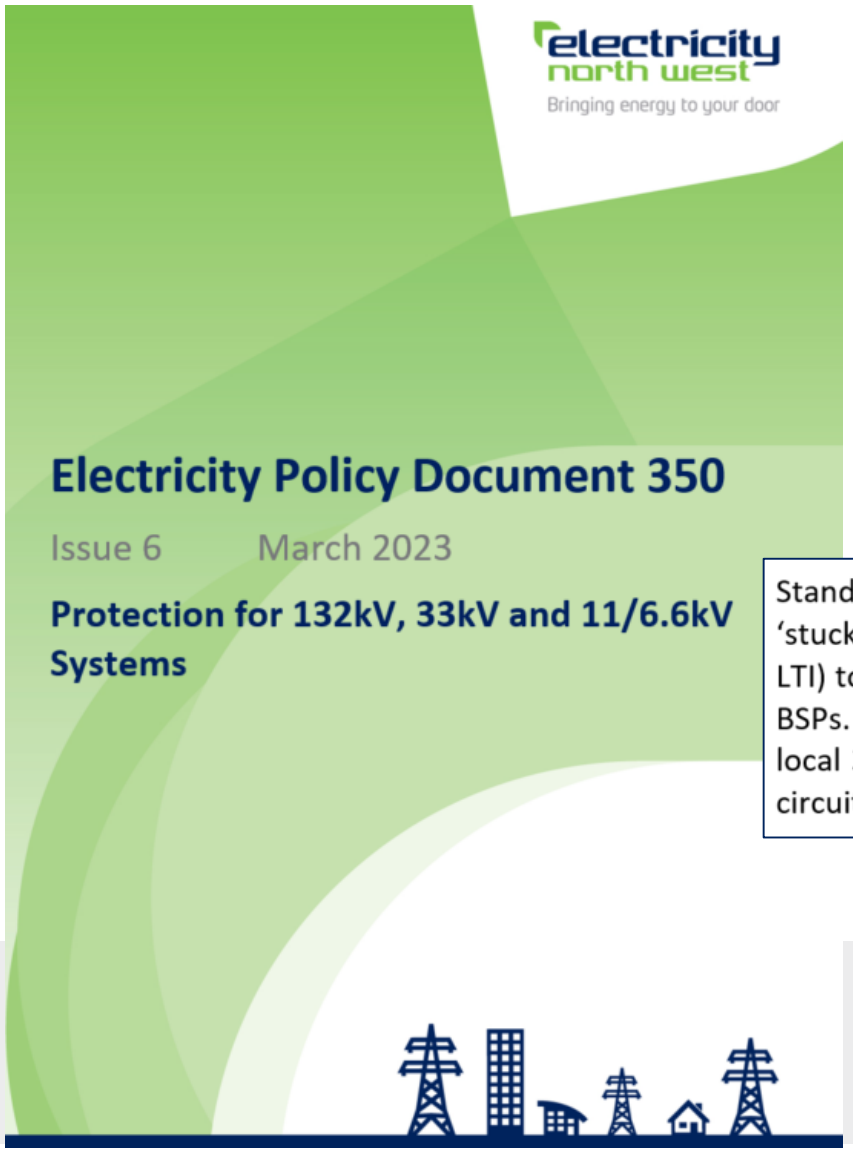
1. If the cable is being removed, cut the 11kV cable under the plumb and position a large cardboard box to catch melted cable box compound below the cable box - fill cardboard box with 50mm layer of sand to prevent leakage of molten compound.
   If cable is to be kept connected, place cardboard box under the gland.
2. Remove the filler cap and drain plug - then remove all but two (one each side) of the front cover bolts.

Issue 1
March 2023

Section 2
CP411 Part2 - 6.6/11 kV Cable Jointing Manual
© Electricity North West 2023

Page 2 of 4

EPD350 – Protection for 132kV, 33kV and 6.6/11kV Systems

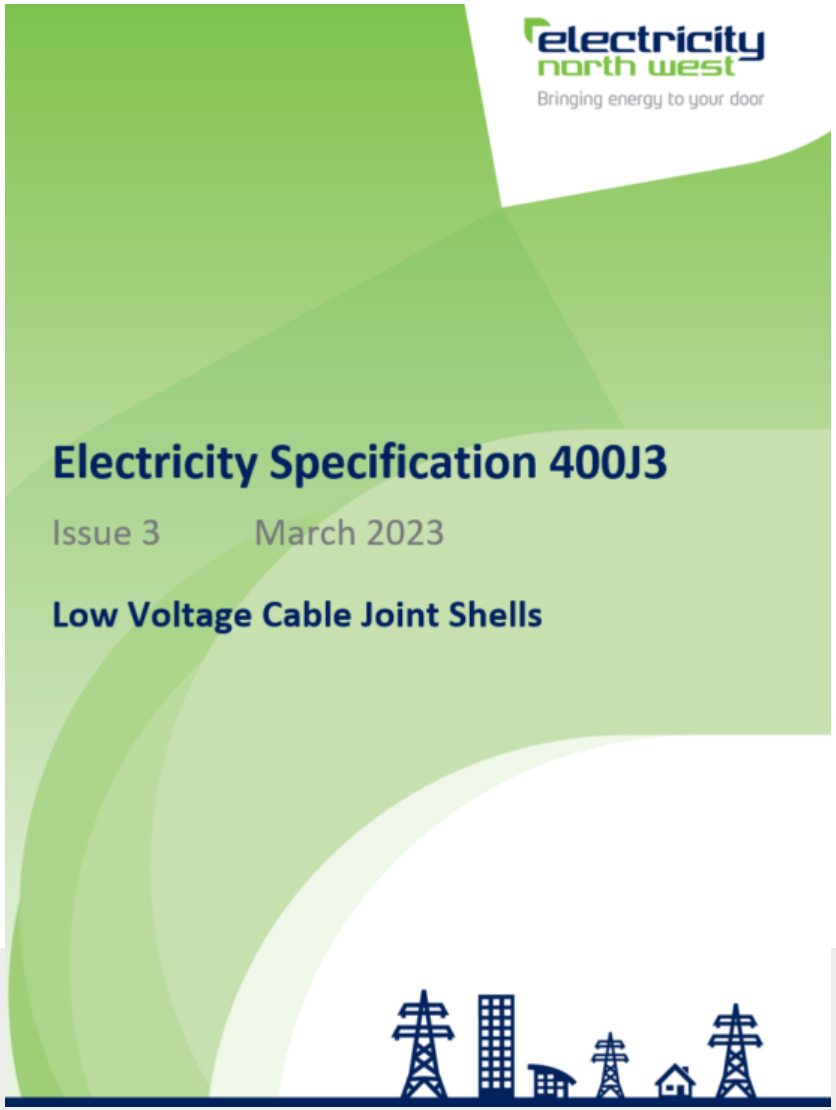


Additional definitions added to cover new systems in use and the document updated with these throughout. Updated specific sections on current protection systems in use

Specification updated to new template and new issue.

Standby earth fault protection provides protection to the NER and final feeder protection in the event of a 'stuck breaker' situation. The standby earth fault protection shall use an inverse time characteristic (usually LTI) to ensure appropriate tripping times and discrimination and shall be arranged to be a 2 stage scheme at BSPs. The standby earth fault protection on each of the 33kV incomers shall have a first stage that trips the local 33kV breaker. After a further short time delay the second stage shall trip/intertrip the remote 132kV circuit breaker.	Mar 23

ES400J3 – Specification for Low Voltage Cable Joint Shells



Update of specification in anticipation of LV cable jointing tender to be issued approx. September 2023 for placement in March 2024.

Specification updated to new template and new issue.

Minor policy updates

Minor policy updates

CP414 – 33kV Gas Insulated Cable Jointing Manual

- Updated to new template.