

Title	Joint high voltage paper insulated cable to polymeric insulated cable up to 33kV using a transition jointing method		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to joint high voltage paper insulated cable to polymeric insulated cable up to 33kV using a transition jointing method.
----------------	--

Classification	Electricity Supply > Electricity Supply - Distribution Networks
-----------------------	---

Available grade	Achieved
------------------------	----------

Prerequisites	Unit 20535, <i>Joint high voltage paper insulated cable to polymeric insulated cable up to 22kV using a transition jointing method</i> , or demonstrate equivalent knowledge and skills.
----------------------	--

Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable legislative and industry requirements.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of the Health and Safety at Work Act 2015; Electricity Act 1992; Electricity (Safety) Regulations 2010; and any subsequent amendments and replacements; Electricity supply industry codes of practice and documented enterprise procedures, including *Safety Manual – Electricity Industry (SM-EI)* (2015) available at www.eea.co.nz.
- 3 Definitions
Asset owner refers to a participant who owns or operates assets used for generating or conveying electricity.
HV is defined as ‘high voltage’ and includes voltages exceeding 1000V AC.
Industry requirements include all asset owner requirements; manufacturers’ specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.
- 4 This unit standard excludes tough plastic sheath (TPS) type cables.

Outcomes and performance criteria

Outcome 1

Joint high voltage paper insulated cable to polymeric insulated cable up to 33kV using a transition jointing method.

Range evidence of three workplace activities is required.

Performance criteria

1.1 Work site is prepared, and safe working zone is established.

Range scope of work, identification and testing of cables, permit requirements, tools and equipment.

1.2 Joints are prepared.

Range cleaning, conductor preparation, stripping, earthing, moisture management, positioning.

1.3 Conductors are terminated and jointed.

Range may include but is not limited to – compression, mechanical, shearbolt, cleanliness, moisture management; evidence of three is required.

1.4 Conductors are re-insulated.

Range may include but is not limited to – barrier, elastomer, heat shrink, tapes, resins, void filling, screens, cable core separation; evidence of four is required.

1.5 Earth continuity is re-established.

Range bedding layer, screens, steel wire armour, steel tape armour.

1.6 Mechanical and environmental integrity are re-established.

Range may include but is not limited to – elastomer, heat shrink, tapes, compounding including resins, appropriate sealant; evidence of two is required.

1.7 Cables are tested after jointing.

Range includes but is not limited to – visual, HV pressure testing, insulation resistance, continuity test, sheath integrity, phase testing to manufacturers' specifications.

1.8 Joint as built is recorded to asset owner's requirements.

Range includes but is not limited to – location, test results.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 September 2014	31 December 2022
Review	2	27 February 2020	31 December 2022
Review	3	27 August 2020	N/A

Consent and Moderation Requirements (CMR) reference	0120
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.