



**Australian Government**

**Assessment Requirements for  
UETDRDU014 Joint, terminate and  
maintain low voltage underground paper  
insulated cable**

**Release: 1**

# Assessment Requirements for UETDRDU014 Joint, terminate and maintain low voltage underground paper insulated cable

## Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package Release 2.0.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant legislation, regulations, standards, codes of practice and organisational workplace requirements, including:
  - work health and safety (WHS)/occupational health and safety (OHS)
  - protecting existing underground services
  - handling underground power cables
  - using liquefied petroleum gas (LPG)
  - applying shoring requirements
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- obtaining and signing on and off relevant work permits in accordance with workplace requirements
- interpreting and using drawings, diagrams and instructions
- completing at least one (1) of the following cable joints:
  - tee-off
  - straight
  - breech
- completing at least one (1) of the following cable terminations:
  - pole top
  - transformer
  - low voltage (LV) switchboard
  - pillar/turret
- using at least one (1) of the following cable jointing/terminating products:
  - taped resin
  - heat shrink
  - cold applied
- completing at least one (1) of the following earth bond methods:
  - lead wiping

- mechanical
- completing at least one (1) of the following cable maintenance tasks:
  - outer sheath repair
  - insulation repair
- completing at least one (1) of the following to determine the cable electrical status:
  - spiking
  - guillotine/remote cutting
  - safe/live cut
- completing at least three (3) the following cable tests:
  - moisture content\*
  - voltage
  - continuity
  - insulation resistance
  - phase identification
  - (\*must do)
- using at least one (2) of the following cable conductor connection methods:
  - compression lug
  - mechanical connector
  - insulation piercing connector
- dealing with an unplanned event on at least one (1) occasion
- completing relevant work records, reports and documentation.

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- legislation, regulations, standards, codes of practice and organisational workplace requirements, including:
  - WHS/OHS
  - safe approach distances
- hazard, risk assessment and risk control requirements, including potential hazards
- types and application of PPE
- safe use of tools and equipment
- application, purpose and types of permits
- events constituting an unplanned event or incident
- procedures for responding to an unplanned event or incident
- safe work practices, including:
  - working in confined spaces
  - excavation and trench safety
  - LPG equipment and testing

- cable spiking, guillotine/remote cutting or safe/live cut
- manual handling
- cable alignment and identification
- work plan requirements, including:
  - layout of drawings
  - manufacturer's instructions
  - construction manuals
  - testing plan
  - quality checklist
  - workplace documentation procedures
- LV paper insulated cables, including:
  - types and sizes
  - construction, characteristics and properties
  - minimum bending radius
- cable jointing, terminating and maintenance requirements, including:
  - cable handling techniques
  - jointing principles, techniques and procedures
  - earth bonding methods and procedures
  - cable moisture testing procedures
  - types of cable damage/defects
  - use of test equipment
  - testing procedures.

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations, where it is appropriate to do so.

Where this is not appropriate, assessment must occur in simulated conditions involving realistic and authentic activities that replicate operational workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, facilities, equipment and PPE currently used in industry for jointing, terminating and maintaining LV underground paper insulated cable
- applicable documentation, including workplace requirements, relevant industry standards, equipment specifications, regulations, codes of practice and manufacturer's instructions.

## **Links**

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>