



Australian Government

Assessment Requirements for UETDRDU019 Transition joint high voltage paper insulated cable to high voltage polymeric cable

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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
- jointing at least one (1) of the following cable types:
 - belted paper insulated cable to polymeric
 - screened paper insulated cable to polymeric
- completing at least one (1) of the following cable joints:
 - three core paper insulated to three core polymeric
 - three core paper insulated to 3 x 1 core polymeric
 - three core paper insulated to trifurcated three core polymeric
 - single core paper insulated to single core polymeric
- 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

- using at least one (1) of the following cable conductor connection methods:
 - compression lug
 - mechanical connector
- completing at least one (1) of the following to determine the cable electrical status:
 - spiking
 - guillotine/remote cutting
- completing at least three (3) of following cable tests:
 - moisture content*
 - continuity
 - insulation resistance
 - phase identification
 - (*must do)
- 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:

- relevant legislation, regulations, standards, codes of practice and organisational workplace requirements, including:
 - WHS/OHS
 - working in confined spaces
 - excavation and trench safety
 - LPG equipment and testing
 - cable spiking, guillotine/remote cutting
 - safe approach distances
 - manual handling
- 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
- cable alignment and identification
- work plan requirements, including:
 - types of and layout of drawings
 - manufacturer's instructions
 - testing plan
 - quality checklist

- completion of workplace documentation
- high voltage (HV) paper insulated and polymeric cables, including:
 - types and sizes
 - construction, characteristics and properties
 - electrical stress control
 - 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
 - cable repair techniques and procedures
 - 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 transitioning HV paper insulated cable to HV polymeric 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>