



Australian Government

Assessment Requirements for UETTD RIS37 Install and maintain low voltage services in remote communities (underground)

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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.

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 work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- connecting low voltage (LV) underground services, including at least two (2) of the following:
 - underground pillar/pit connection (single phase)
 - underground pillar/pit connection (three phase*)
 - underground to overhead connection
 - (* must do)
- installing LV underground service protection devices, including at least one (1) of the following:
 - fuse units
 - circuit breakers
 - service links
- using specialist testing equipment, including at least four (4) of the following:
 - polarity test *
 - phase rotation test
 - continuity test
 - voltage test
 - insulation resistance test
 - (* must do)
- connecting LV underground service protection devices, including at least one (1) of the following:
 - aluminium LV cable
 - cross-linked polyethylene (XLPE) cable
 - copper LV cable
- dealing with unplanned events on at least one (1) occasion.

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:

- standards, codes, legislation, supply authority regulations and/or enterprise requirements pertaining to the installation, maintenance and connection of LV underground service lines and associated equipment
- types, sizes and characteristics of LV underground services - two-core, three-core, four-core, cable cross-sectional area of conductors, current ratings and cable insulation materials
- types and characteristics of LV service associated equipment - conduit, jointing gloves, cable labelling, pillars and pits
- requirements prior to the installation of underground service - service documentation, minimum depths to assets in ground, relevant electrical access permit and multiple earthed neutral (MEN) system
- types of installation plant, equipment and tools - service cable puller, shovels, stripping tool, aerial bundled cable (ABC) spanner, ABC spreader, spanners and screwdrivers
- installation techniques - methods of laying cable, terminating and effect of poor connections
- testing and commissioning underground services - continuity testing, insulation testing, polarity testing, phase sequencing and neutral integrity testing
- completing enterprise documentation
- techniques for the maintenance of underground services - inspection, types of faults, diagnosis and repair of faults, and removing and replacing services and fuses.

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:

- a range of relevant exercises, case studies and/or other simulations for installing and maintaining LV underground services in remote communities
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry for installing and maintaining underground LV services in remote communities
- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

UET Training Package Companion Volume Implementation Guide is found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>