



Australian Government

Assessment Requirements for UETDRTO010 Maintain energised transmission lines using barehand techniques from a helicopter

Assessment Requirements for UETDRT0010 Maintain energised transmission lines using barehand techniques from a helicopter

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)
 - minimum approach distances
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- inspecting, fitting and testing conductive suit
- determining communication method with safety observer
- confirming safety observer is in position in accordance with workplace requirements
- obtaining and signing on and off relevant work permits in accordance with workplace requirements
- calculating conductor load
- installing a working platform
- applying helicopter safety procedures
- confirming the electrical integrity of insulators
- completing at least three (3) of the following tasks using live work barehand techniques from a helicopter:
 - replacing/installing vibration damper
 - replacing/installing conductor spacers
 - replacing/installing conductor joint
 - replacing/installing helical repair splice
- 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
 - minimum approach distances
 - working on energised lines utilising live work barehand techniques from a helicopter
 - helicopter safety procedures
- 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
- safety observer:
 - role and responsibilities
 - communication methods
- roles and responsibilities of team members
- electrical and electrostatic principles, including:
 - relationship of the resistance of a human body to different levels of current and voltage
 - relationship of a human body to an electric field
 - effects of electrostatic induction
 - relationship of phase voltage and respective line voltages
 - effect of distance
 - potential of an object within the field and the effect of distances to the potential
 - Faraday's cage - effects of a body, advantages, description of the Faraday's cage used by barehand live line workers
 - lightning and switching surges
- application and function of extra-high voltage (EHV) auto-reclosing suppression
- testing, types, selection, maintenance and storage of specialised equipment:
 - conductive suit
 - tools
 - PPE
 - insulating sticks
- pilot briefing requirements:
 - emergency response and rescue
- techniques for working barehand on energised transmission lines from a helicopter
- requirements for aerial linework, including:
 - planning, establishing and implementing relevant aviation authority clearances
 - determining system requirements
 - aircrew familiarisation with network operations and equipment

- effective communication
- electrical integrity of insulators including:
 - visual and audible assessment
 - disc voltage difference
 - condition of insulator string.

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:

- materials, tools, equipment and PPE currently used for maintaining energised transmission lines using barehand techniques from a helicopter
- applicable documentation, including workplace requirements, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

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