



Australian Government

UETTD RIS52 Install and maintain poles, structures and associated hardware

Release: 1

UETTDRI52 Install and maintain poles, structures and associated hardware

Modification History

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

Application

This unit involves the skills and knowledge required to install and maintain poles, structures and associated hardware in the electricity supply industry (ESI).

It includes the installation of poles and/or structures and associated hardware, (excluding towers), which may consist of wood, steel, concrete or composite type material.

It also covers the fixing and/or securing of associated hardware as well as the repair and replacement of poles and/or structures.

It includes identifying and implementing a suitable traffic management plan.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace.

Other conditions may apply under State and Territory legislative and regulatory licensing requirement which must be confirmed prior to commencing this unit.

Pre-requisite Unit

Common Unit Group

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEEE102A Fabricate, assemble and dismantle utilities industry components

UEENEEE105A Fix and secure electrotechnology equipment

UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL16 Working safely near live electrical apparatus

Competency Field

Industry Specific Cross Discipline

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for installation and maintenance of poles, structures and associated hardware

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Work schedules, construction plans, drawings, workplace procedures and material lists are received and confirmed
- 1.2** Job requirements and workplace procedures are identified and communicated with relevant personnel
- 1.3** Work health and safety (WHS)/occupational health and safety (OHS), environmental and workplace procedures for the installation and maintenance of poles and/or structures and associated hardware are obtained and confirmed for the purposes of the work to be performed
- 1.4** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with relevant personnel and in accordance with workplace procedures
- 1.5** Hazards are identified, WHS/OHS risks assessed and control measures identified in accordance with workplace procedures
- 1.6** Plant, equipment, tools and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order
- 1.7** Relevant work permits are obtained, understood and signed in accordance with workplace procedures
- 1.8** Worksite is prepared to minimise risk, damage to property, commerce and individuals in accordance with workplace procedures
- 1.9** Traffic management plan is confirmed as being applied in accordance with workplace procedures

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| 2 Carry out installation and maintenance of poles and/or structures and associated hardware | 2.1 WHS/OHS, sustainable energy and environmental principles and practices are monitored and followed to reduce incidents in accordance with workplace procedures |
| | 2.2 Requirements for lifting and/or climbing and/or working at heights and the use of power tools/equipment are followed in accordance with workplace procedures |
| | 2.3 Installation of poles and/or structures and associated hardware are completed in agreed timeframes, to quality standards and with a minimum of waste in accordance with workplace procedures |
| | 2.4 Poles and/or structures and associated hardware to be installed are stabilised in accordance with workplace procedures |
| | 2.5 Installation is assembled in accordance with construction plans, drawings and workplace procedures |
| | 2.6 Maintenance, including repair and/or replacement of poles and/or structures, is performed in accordance with work schedule, job requirements and workplace procedures |
| | 2.7 Unplanned events are responded to in accordance with workplace procedures |
| | 2.8 Quality checks of work are undertaken in accordance with workplace procedures |
| 3 Complete installation and maintenance of poles, structures and associated hardware | 3.1 Completed work is checked against work schedule, construction plans and drawings for compliance and anomalies are reported in accordance with workplace procedures |
| | 3.2 WHS/OHS and environmental incidents are reported in accordance with workplace procedures, as required |
| | 3.3 Worksite is rehabilitated, cleaned up and made safe in accordance with workplace procedures |
| | 3.4 Tools, equipment and surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with workplace procedures |
| | 3.5 Relevant work permits are signed off and poles and/or structures and their associated hardware are returned to |

service in accordance with workplace procedures

- 3.6** Work records, reports and/or documentation are completed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UETTDRI52A Install and maintain poles, structures and associated hardware.

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>

Assessment Requirements for UETTDRIS52 Install and maintain poles, structures and associated hardware

Modification History

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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
- installing at least one (1) of the following pole type and structures:
 - wood pole/structure
 - steel pole/structure
 - concrete pole/structure
 - composite pole/structure
- installing at least three (3) of the following associated hardware:
 - insulators
 - cross-arm braces
 - cross-arms
 - pole steps
 - shackle straps
 - earth leads
 - traction supports
 - traction registration
 - bonding
- using at least one (1) of the following pole stabilisation methods:
 - baulking
 - stays
 - concreting including foundation
- installing poles and structures using at least one (1) of the following:
 - crane
 - auger/erector
 - 'A' frame
 - lifting beam

- pole pikes
- helicopter lift
- 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 applicable to installing poles and associated hardware
- requirements for the use of enterprise construction manuals, system diagrams/plans and drawings, including:
 - characteristics and applications of different types of poles and associated hardware
- techniques for installing poles and associated hardware, including:
 - types of installation equipment/tools
 - excavation methods
 - types of footings/foundations
 - types of attachments
 - earthing systems
 - clearances between conductors
 - safe methods of erecting and stabling poles and/or structures and cross-arms
- techniques for maintenance of poles and associated hardware, including:
 - stabilisation techniques for unstable poles
 - methods of strengthen poles
 - maintenance and replacement of high voltage insulators and cross arms
- traffic management, such as:
 - purpose of traffic management and a power worker's responsibilities in accordance with relevant statutory requirements and electricity supply industry (ESI) requirements, procedures used to provide an effective traffic management scheme and the use of a two-way radio
- procedures for purchasing/ordering items, removing/dispatching items, stocktaking and record keeping.

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
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry for installing and maintaining poles, structures and associated hardware
- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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