



Australian Government

UETTD RTP26 Install transmission structures and associated hardware

Release: 1

UETTD RTP26 Install transmission 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 transmission structures and associated hardware in the electricity supply industry (ESI).

It includes preparing to install and installing transmission structures, and associated hardware in accordance with construction plans, drawings and workplace procedures. It also includes updating system data, records and completing relevant documentation.

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

Transmission

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Prepare to install transmission structures and associated hardware

- 1.1** Works schedule, 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 erecting towers 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 are assessed and control measures identified in accordance with workplace procedures
- 1.6** Relevant work permits are confirmed and signed in accordance with workplace procedures
- 1.7** Plant, equipment, tools and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order
- 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

2 Carry out the erection of transmission towers 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** Transmission structures and associated hardware are assembled at ground level and erected in accordance with construction plans, drawings and workplace procedures
 - 2.4** Structure is stabilised in accordance with construction plans, drawings and workplace procedures
 - 2.5** Unplanned events are responded to in accordance with workplace procedures
 - 2.6** Quality checks of work are undertaken in accordance with workplace procedures
- 3 Complete installation of transmission 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 towers and 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 UETTD RTP26A Install transmission 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 UETTD RTP26 Install transmission structures and associated hardware

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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 structures must include at least two (2) of the following types:
 - pyramid
 - delta pi
 - enterprise specific type
- installing hardware must include all of the following:
 - insulators
 - clamps
 - bolts
 - structural components
- performing stabilisation activities must include the following:
 - welding
 - cleaning
- 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:

- requirements for the use of enterprise construction manuals, system diagrams/plans and drawings
- types of structures
- types and function of associated hardware/equipment and insulators
- types of conductors
- location of transmissions structures

- other equipment used on transmission structures, e.g. aircraft warning devices
- voltages on transmission structures
- 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, the procedures used to provide an effective traffic management scheme and the use of a two-way radio
- classification and identification of equipment, components and tools
- procedures for purchasing/ordering items, removing/dispatching items, stocktaking and record keeping
- safe working practices, including:
 - requirements to enable safe working on conductive poles
 - safe working practices when working with associated hardware/equipment and insulators
 - precautions of voltages on transmission structures
 - safe working practices when using specialised equipment.

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 the installation of transmission 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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