

Australian Government

# UETTDRTP29 Install and maintain transmission overhead conductors and cables

Release: 1

# **UETTDRTP29** Install and maintain transmission overhead conductors and cables

## **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 transmission overhead conductors and cables in the electricity supply industry (ESI).

It includes installing and maintaining overhead conductors and cables used on towers including stringing, tensioning and terminating of conductor/cable while de-energised, securing conductor to the insulators or supports and performing the electrical connections. It also includes maintenance work associated with phasing, completing workplace tests, isolating systems and circuits, accepting/issuing electrical permits and updating of system data/maintenance records.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

# 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

UETTDRTP26 Install transmission structures and associated hardware

UETTDRTP27 Maintain transmission structures and associated hardware

# **Competency Field**

Transmission

# **Unit Sector**

Not applicable.

### **Elements and Performance Criteria**

#### ELEMENTS

#### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

1 Prepare for installation and maintenance of overhead conductors and cables used on towers

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 overhead conductors and cables used on towers 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 installation and 2.1 maintenance of overhead conductors and cables used on towers
- 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 Systems and circuits are isolated and proved safe to work in accordance with job requirements, work permits and workplace procedures
- 2.4 Installation and maintenance of overhead conductors and cables are completed in agreed timeframes, to quality standards and with minimum waste in accordance with requirements
- 2.5 Overhead conductor/cables are strung, tensioned and terminated in accordance with workplace procedures
- 2.6 Conductors, anti-vibration devices and spaces/spreaders are secured in accordance with workplace procedures
- 2.7 Electrical connections are made in accordance with the workplace procedures
- 2.8 Maintenance, including repair and/or replacement of overhead conductors and cables, is performed in accordance with workplace procedures
- 2.9 Unplanned events are responded to in accordance with workplace procedures
- 2.10 Quality checks of work are undertaken in accordance with workplace procedures
- **3** Complete installation and 3.1 Completed work is checked against work schedule, maintenance of overhead construction plans and drawings for compliance and conductors and cables anomalies are reported in accordance with workplace used on towers 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 overhead conductors and cables used on towers 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 UETTDRTP29A Install and maintain transmission overhead conductors and cables.

# 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