



Australian Government

UETDRTO017 String overhead transmission conductors

Release: 1

UETDRTO017 String overhead transmission conductors

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 3.0.

Application

This unit involves the skills and knowledge required for the stringing of overhead conductors with no electrical connections being made in the electricity supply industry (ESI).

It includes the preparation of a stringing site, use of stringing equipment and stringing overhead conductors prior to tensioning and terminating.

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

Other conditions may also apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing this unit.

Pre-requisite Unit

CPCCLDG3001 Licence to perform dogging

CPCCLRG3001 Licence to perform rigging basic level

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UETDREL002 Comply with environmental requirements

UETDREL006 Work safely in the vicinity of live electrical apparatus as a non-electrical worker

UETDRTO015 Assemble and erect transmission structures

UETDRTO016 Install transmission structure hardware

Competency Field

Transmission Overhead

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to string the overhead transmission conductors

PERFORMANCE CRITERIA

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

- 1.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are referred to and confirmed
- 1.2** Work plan is obtained and confirmed in accordance with workplace requirements
- 1.3** Materials required for work are determined and obtained in accordance with work plan and workplace requirements
- 1.4** Plant, tools, equipment and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order
- 1.5** Hazards are identified, risks are assessed and control measures identified and applied
- 1.6** Safety observer role and responsibilities are discussed and confirmed in accordance with workplace requirements
- 1.7** Communication method between the workers and safety observer is determined and confirmed in accordance with workplace requirements
- 1.8** Safe approach distances for the work to be performed are determined and confirmed in accordance with workplace requirements
- 1.9** Work is prioritised and sequenced for completion in accordance with work plan and workplace requirements
- 1.10** Work permits are signed in accordance with workplace requirements
- 1.11** Worksite is prepared in accordance with the work plan and workplace requirements
- 1.12** Traffic management plan is confirmed as being in place in accordance with workplace requirements

2 Carry out stringing of

- 2.1** Legislation, regulations, standards, codes of practice and

overhead transmission conductors

organisational workplace requirements for the work to be performed are applied and monitored

- 2.2 Lifting, working at heights and the use of plant, tools, equipment and PPE are carried out in accordance with workplace requirements
- 2.3 Hazard control measures are monitored in accordance with workplace requirements
- 2.4 Safety observer is positioned to observe the work in accordance with workplace requirements
- 2.5 Communication methods between workers and safety observer are used in accordance with workplace requirements
- 2.6 Safe approach distances are maintained when the work is being performed in accordance with workplace requirements
- 2.7 Stringing of overhead transmission conductors prior to terminating is performed in accordance with work plan, drawings and workplace requirements
- 2.8 Incidents or unplanned events are responded to in accordance with workplace requirements
- 2.9 Quality checks of work are undertaken in accordance with work plan and workplace requirements

3 Complete the work

- 3.1 Completed work is checked for compliance against the work plan and workplace requirements
- 3.2 Incidents or unplanned events are reported in accordance with workplace requirements
- 3.3 Worksite is rehabilitated, cleaned and made safe in accordance with workplace requirements
- 3.4 Plant, tools and equipment are cleaned, checked and returned to storage in accordance with workplace requirements
- 3.5 Surplus materials are returned to storage or disposed of in accordance with workplace requirements
- 3.6 Work permits are signed off in accordance with workplace requirements

- 3.7** Personnel are notified of work completion in accordance with workplace requirements

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 UET Transmission, Distribution and Rail Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is not equivalent to UETDRTO013 Pre-tension stringing overhead transmission conductors and cables.

Links

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

Assessment Requirements for UETDRT0017 String overhead transmission conductors

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 legislation, regulations, standards, codes of practice and organisational workplace requirements, including:
 - work health and safety (WHS)/occupational health and safety (OHS) requirements
 - safe approach distances
- identifying hazards; assessing risks; and identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- creating an equipotential work zone
- stringing conductors
- using at least five (5) of the following stringing equipment:
 - crimping equipment
 - conductor winches
 - lever hoist
 - conductor trailers/jinker
 - pre-formed splices
 - conductor drum stands
 - draw wire
 - rollers/sheaves
 - conductor grip
 - conductor stockings
 - swivels
- dealing with an unplanned event on at least one (1) occasion
- signing on and off relevant work permits in accordance with workplace requirements.

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
 - safe approach distances
- hazard, risk assessment and risk control requirements, including potential hazards of:
 - induced voltages
- types and application of PPE
- safe use of plant, 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
- construction manuals, system diagrams/plans and drawings
- role and responsibilities of a safety observer
- conductor types and characteristics
- construction clearances
- stringing methods.

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:

- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace requirements, equipment specifications, standards and operation manuals.

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