



Australian Government

UETDRRT015 Maintain energised rail traction networks

Release: 1

UETDRRT015 Maintain energised rail traction networks

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 4.0.

Application

This unit includes the skills and knowledge required to maintain energised rail traction networks in the electricity supply industry (ESI).

It includes knowledge of traction network components, insulated tools and other equipment.

It also includes procedures for maintaining components, removal of trapped foreign objects, and adjustment and measurement of contact or trolley wires.

Note: Entry into this unit is for users who hold a Certificate III in ESI - Rail Traction.

This unit can be completed concurrently with the qualification listed above, provided all requirements for completion of the Certificate III qualification are met prior to accrediting this unit.

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

Refer to Application.

Competency Field

Rail Traction

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Prepare to maintain energised rail traction networks

- 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** Required design standards and maintenance documents are identified and obtained
- 1.3** Plant, tools, equipment and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order
- 1.4** Hazards are identified, risks assessed, and control measures identified and applied
- 1.5** Work is prioritised and sequenced for completion in accordance with workplace requirements
- 1.6** Work permits are organised in accordance with workplace requirements
- 1.7** Worksite, road or rail management plan is prepared in accordance with workplace requirements

2 Maintain energised rail traction networks

- 2.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied and monitored
- 2.2** Plant, tools, equipment and PPE are used in accordance with workplace requirements
- 2.3** Hazard control measures are monitored in accordance with workplace requirements
- 2.4** Incidents or unplanned events are responded to in accordance with workplace requirements
- 2.5** Work is carried out on energised rail traction networks in accordance with workplace requirements
- 2.6** Quality checks of work are undertaken in accordance with workplace requirements and to ensure fit for service

3 Complete work and documentation

- 3.1** Completed work is checked against maintenance documents for compliance in accordance with workplace requirements
- 3.2** Worksite is rehabilitated, cleaned and made safe in

accordance with workplace requirements

- 3.3 Plant, tools and equipment are cleaned, checked and returned to storage in accordance with workplace requirements
- 3.4 Work permits are completed, and overhead traction equipment or components are confirmed fit for service in accordance with workplace requirements
- 3.5 Incidents or unplanned events are reported in accordance with workplace requirements
- 3.6 Work records, reports and documentation are completed 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 is a newly created unit.

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 UETDRRT015 Maintain energised rail traction networks

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) 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
- identifying hazards, assessing risks, and identifying, applying and monitoring control measures
- obtaining and inspecting and using relevant personal protective equipment (PPE)
- dealing with an unplanned event on at least one (1) occasion
- obtaining and signing on and off relevant work permits in accordance with workplace requirements
- obtaining and inspecting tools, plant and equipment and confirming working order
- performing two (2) of the following maintenance activities on an energised rail traction network:
 - maintaining, repairing, removing or replacing components
 - removing trapped foreign objects
 - adjusting contact or trolley wires
 - measuring contact or trolley wires
- performing work on an energised rail traction network from at least one (1) of the following:
 - elevated work platform (EWP)
 - insulated ladder
 - insulated mobile platform
 - ground level using an insulated pole/hot stick
- using at least one (1) of the following:
 - specialised tools
 - insulated gloves
 - tensioning equipment
 - geometry profiling equipment
- 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 requirements
- hazard, risk assessment and risk control requirements, including potential hazards
- 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
- workplace records, reports and documentation
- removal of trapped foreign objects
- adjustment of contact or trolley wires
- measurement of contact or trolley wires
- maintenance, repair, removal and replacement of components, including:
 - span
 - section insulator
 - support equipment
 - catenary
 - dropper
 - contact/trolley
 - feeder/in-span feeder
 - drape/potential jumper
- safe use and function of:
 - specialised equipment
 - tensioning equipment
 - insulated pole/hot stick
 - ropes, slings and chains
 - geometry profiling 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:

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

Links

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