



Australian Government

UETDRTO005 Inspect transmission structures, conductors and hardware

Release: 1

UETDRTO005 Inspect transmission structures, conductors and 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 Release 2.0.

Application

This unit involves the skills and knowledge required to inspect transmission structures, conductors and hardware in the electricity supply industry (ESI).

It includes the inspection of transmission poles and towers, conductors, underground and overhead transition points, hardware and earthing systems in accordance with work plan and workplace requirements.

It also includes the completion of inspection reports and other relevant documentation in accordance with requirements.

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

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

UETDREL001 Apply environmental requirements

UETDREL005 Work safely in the vicinity of live electrical apparatus

Competency Field

Transmission Overhead

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare for the inspection of transmission structures, conductors and hardware

- 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** 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 work plan and workplace requirements
- 1.6** Work permits are organised in accordance with workplace requirements
- 1.7** Liaison and communication with stakeholders is carried out in accordance with workplace requirements

2 Carry out inspection of transmission structures, conductors and hardware

- 2.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied and monitored
- 2.2** Working at heights and 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** Inspection of structures, conductors and hardware is carried out in accordance with the work plan and workplace requirements
- 2.5** Incidents or unplanned events are responded to in accordance with workplace requirements

3 Complete work and documentation

- 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 Work permits are completed 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 unit replaces and is equivalent to UETTDRTTP30 Inspect transmission overhead structures and electrical apparatus.

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 UETDRT0005 Inspect transmission structures, conductors and 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 legislation, regulations, standards, codes of practice and organisational workplace requirements, including:
 - work health and safety (WHS)/occupational health and safety (OHS)
 - safe approach distances
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- organising and completing relevant work permits in accordance with workplace requirements
- undertaking inspections of structures, conductors and hardware using at least two (2) of the following methods:
 - visual
 - infra-red camera
 - X-ray
 - camera
 - binoculars/telescope
 - remote piloted aircraft (RPA)
 - thermographic
- recording inspection results in accordance with workplace requirements
- dealing with an unplanned event on at least one (1) occasion
- 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

- safe approach distances
- construction design clearances
- 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
- deterioration of structures, conductors and hardware, including:
 - relationship between steel, concrete and other materials
 - deterioration in steel and concrete
 - inspection procedures for deterioration
- inspection methods and techniques for:
 - below ground
 - ground level
 - above ground
 - reporting.

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 for inspecting transmission structures, conductors and hardware
- applicable documentation, including workplace requirements, relevant industry standards, regulations, codes of practice and operation manuals.

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