



Australian Government

Assessment Requirements for ICTWHS205 Work safely near power infrastructure at a telecommunications workplace

Release: 1

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Modification History

Release	Comments
Release 1	This version released with ICT Information and Communications Technology Training Package Version 5.0.

Performance Evidence

The candidate must demonstrate the ability to perform the tasks outlined in the elements, performance criteria, and foundation skills, and to:

- conduct a risk assessment or simulated risk assessment for a telecommunications work site near power infrastructure
- identify the safety and licensing requirements for working at heights and working in confined spaces
- apply safety precautions while working at heights or in confined spaces near power infrastructure
- test power pole infrastructure for electrical safety before working on the infrastructure
- perform tests on the mechanical soundness of a pole in accordance with the asset (pole) owner guidelines.

Note: Evidence must be provided at least once when a specific volume or frequency is not stated.

Knowledge Evidence

The candidate must demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria, and foundation skills, which includes knowledge about:

- consequences of short circuits including:
 - arc flash
 - basic power industry protection schemes like reclosers
 - drop out fuses and their limitations for current limiting
- effects of current including:
 - physiological effects and protection for physiological effects
 - basic principle by which electrical current can result in the production of heat, light and electromagnetic field
 - typical effects of current

- definitions of terminologies including:
 - safe work zone
 - risk assessment
 - safe approach distances zones
 - safe working distances
 - work permit
 - access authorisation permits
 - technical standards
 - isolation procedures
 - compliance requirements
- legislation, regulations, codes, standards, guidelines, enterprise requirements, certification and licensing applicable to above performance evidence and own telecommunications role when working safely up to the defined 'safe work zone' near energised electrical apparatus (including electrical powerlines), in particular:
 - electrical safety and technical knowledge relating to operating plant or vehicle near power lines including 'step and touch potential' and earth potential rise
 - safe approach distances including safe work zones that may apply for the intended work
 - for work near live electrical infrastructure – including AS/NZS 3000:2018 Electrical installations known as the Australian/New Zealand Wiring Rules
 - main components of work health and safety (WHS) that affect the work function
 - workplace environmental and WHS procedures including:
 - designation of personnel responsible for WHS
 - requirement for employee participation in WHS management
 - standard meanings of WHS symbols found on signs and labels in the workplace
 - raising WHS issues
 - recognising and reporting on hazards
 - responding to accidents, fires and emergencies
 - work operations to control risks
 - common road and pedestrian safety control measures appropriate to the worksite
- separation and segregation between power and telecommunications cables and fittings
- ground clearances, in-span clearances and attachment point clearances
- test procedure for timber, steel, concrete and composite poles
- techniques and precautions for undertaking different work functions and working safely up to the defined 'safe work zone' near energised electrical apparatus (including electrical powerlines) applicable to above performance evidence and own telecommunications role (work functions that may be performed include, vegetation control, rigging, dogging and/or any other activity that requires working safely near live electrical apparatus by a telecommunications worker)
- limitations of installing telecommunications infrastructure on power assets, including installations near transformers and power substations
- environmental control processes:

- disposal and handling of hazardous and dangerous substances
- noise pollution
- waste disposal
- electricity infrastructure assets, related voltages and requirements for working safely near live electrical apparatus as a telecommunications worker
- how step or touch potential manifests itself
- earth potential rise and how it manifests itself
- weather conditions suitable for working near live electrical apparatus as a telecommunications worker
- safe work zone for safe access near live electrical infrastructure for workers and operational plant
- established enterprise procedures relating to working safely near power infrastructure at a telecommunications workplace, including incident management procedures
- low and high aerial voltage systems.

Assessment Conditions

This unit of competency falls into the definition of high risk work and should be delivered and assessed in accordance with the national standard.

Skills must be assessed in a workplace or simulated environment where conditions are typical of those in a telecommunications work environment or workplace.

Access is required to:

- telecommunications site/s near power infrastructure
- relevant WHS legislation, regulations and codes of practice
- enterprise WHS policies and procedures
- personal protective equipment (PPE).

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. Refer also to the *Requirements for assessors* of high risk units in the ICT Information and Communications Technology Training Package Companion Volume Implementation Guide.

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>