

UETDRCD001 Work safely around powerlines as an ordinary person

Modification History

Release 1. This is the first release of this unit of competency in the Transmission, Distribution and Rail Sector Training Package Release 5.0.

Application

This unit involves the skills and knowledge required by ordinary persons (that are not associated with electrical work) to perform work activities safely around powerlines.

It includes preparing, planning, working safely and monitoring compliance with the identified minimum approach distances. It also includes communicating with workers to prevent unsafe work activities and to stop the encroachment of workers, plant, tools and equipment inside the minimum approach distances.

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

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

Pre-requisite Unit

Not applicable.

Competency Field

Cross Discipline

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

- 1 Prepare and plan to work safely around powerlines**
 - 1.1 Relevant regulations, guidelines, codes of practice and organisational workplace requirements for working safely around powerlines are referred to
 - 1.2 Powerline infrastructure is identified
 - 1.3 Minimum approach distances for the work to be performed are determined
 - 1.4 Work is assessed for potential encroachment inside the minimum approach distances
 - 1.5 Hazards are identified, risks assessed and control measures identified and applied
 - 1.6 Safety observer role and responsibilities are discussed and confirmed in accordance with identified risks and control measures
 - 1.7 Communication method between the workers and safety observer is discussed and confirmed in accordance with identified risks and control measures
 - 1.8 Worksite plan is prepared and communicated to all relevant personnel on site
- 2 Work safely around powerlines**
 - 2.1 Prepared worksite plan is implemented and monitored
 - 2.2 Safety observer is positioned to observe the work in accordance with workplace requirements
 - 2.3 Communication methods between workers and safety observer are used in accordance with workplace requirements
 - 2.4 Minimum approach distances are maintained when the work is being performed
 - 2.5 Site conditions are monitored for change
 - 2.6 Hazard control measures are monitored in accordance with workplace requirements
- 3 Respond to powerline incidents**
 - 3.1 Incidents are responded to in accordance with workplace requirements

- 3.2** Incidents are reported 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

UET Transmission, Distribution and Rail Sector Training Package Companion Volume Implementation Guide at: [sector webpage link here]

Assessment Requirements for UETDRCD001 Work safely around powerlines as an ordinary person

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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 one occasion and include:

- applying relevant regulations, guidelines, codes of practice and organisational workplace requirements for working safely around powerlines
- identifying powerline infrastructure
- determining relevant powerline voltages to determine minimum approach distance
- determining the ordinary person minimum approach distance(s)
- assessing the work for potential encroachment by person(s) into the minimum approach distance(s) and for at least one (1) of the following:
 - vegetation
 - plant and equipment
 - tools
 - material
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- determining communication method with safety observer in accordance with workplace requirements
- confirming safety observer is in position in accordance with workplace requirements
- preparing, assessing and where relevant communicating the worksite plan
- monitoring the site conditions for change
- responding to an incident
- reporting an incident.

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 regulations, guidelines, codes of practice and organisational workplace requirements for working safely around powerlines, including:
 - minimum approach distances
 - emergency procedures
- hazard, risk assessment and risk control requirements, including potential hazards

- relevant powerline identification tools
- site conditions and the changes that can occur
- assessment of minimum approach distance encroachment for:
 - person(s)
 - vegetation
 - plant and equipment
 - tools
 - material
- visual powerline markers
- earthing of mobile plant
- events constituting an incident
- procedures for responding to an incident including:
 - techniques for exiting vehicle/plant
 - stay
 - call for help
 - wait
 - escape
- safety observer's:
 - role and responsibilities
 - communication methods
- basic electrical principles, including:
 - voltage, current and resistance
 - typical effects of current, including physiological effects and induced voltages
 - consequences of short circuits, including arc flash, and touch and step potentials
- infrastructure including:
 - voltages (distribution and transmission)
 - earthing systems
 - structures and associated equipment
 - layouts and configuration
 - basic electrical powerline protection
 - underground powerlines and associated equipment
- impact of earthworks around the powerline infrastructure
- impact of contact with the powerline infrastructure.

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 powerline infrastructure
- applicable documentation, including workplace requirements, regulations, guidelines, codes of practice.

Links

UET - Transmission, Distribution and Rail Sector Companion Volume Implementation Guide
at: [sector webpage link here]