



Australian Government

UEECD0058 Observe safety practices are followed in the vicinity of isolated electrical cables

Release: 1

UEECD0058 Observe safety practices are followed in the vicinity of isolated electrical cables

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to observe safety practices are followed in the vicinity of isolated electrical cables.

It includes preparing and observing safety practices whilst taking actions to mitigate risks when working near isolated cables/conductors designed to operate above extra-low voltage (ELV). It also includes identifying electrical hazards and consequences of damage to cables and electrical infrastructure, applying safe working methods, identifying hazards, evaluating risks, adapting safe work methods and documenting safety activities.

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

Pre-requisite Unit

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

Competency Field

Cross Discipline

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to observe safety practices

PERFORMANCE CRITERIA

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

1.1 Extent of work is determined from job instructions, design brief and other relevant documentation

	1.2	Electrical cables in the work area are located and identified and authorisation received from relevant person/s
	1.3	Access permit is obtained, read and applied from authorised switching officer and electrical supply is isolated
	1.4	Safe workplace procedures for plant, machinery and equipment are reviewed and applied
2 Observe safety practices	2.1	Work is observed to ensure safe working methods are followed in accordance with workplace procedures
	2.2	Work area near isolated electrical cables is observed to ensure it is not damaged or disturbed
	2.3	Unplanned events are responded to in accordance with workplace procedures
3 Take actions to mitigate risk	3.1	Hazards not previously identified are referred to relevant person/s for risk mitigation measures in accordance with workplace procedures
	3.2	Hazards are identified, risks assessed and control measures implemented
	3.3	Solutions used to solve problems are justified and documented in accordance with workplace procedures

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Observing safety practices are followed in the vicinity of isolated electrical cables normally operating above ELV must include each of the following situations:

- cables installed underground in ducts or buried direct
- bare and insulated overhead conductors/cables
- cables installed above ground, unenclosed or

enclosed in conduit, trunking or ducts

Unit Mapping Information

This unit replaces and is equivalent to UEENEEE152A Observe safety practices are followed in the vicinity of isolated electrical cables.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEECD0058 Observe safety practices are followed in the vicinity of isolated electrical cables

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, performance criteria and range of conditions on at least one occasion and include:

- reading instructions and understanding the nature of the work to be undertaken
- understanding the location of electrical cables in the vicinity of the work to be undertaken
- receiving, reading and understanding access permits
- reviewing and understanding safe working methods for the plant, machinery and equipment to be used
- observing work activities ensuring safe working methods are followed
- dealing with previously unidentified hazards in accordance with established procedures
- monitoring risk mitigation methods for continuous improvement in accordance with established procedures
- documenting safe working practices and any corrective actions in accordance with established procedures
- dealing effectively with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including taking actions to mitigate risk
- implementing risk control measures
- observing safety practices are followed around isolated electrical cables
- preparing and observing safety practices.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- safety practices - working safely around electrical cables and infrastructure, including:
 - effects of electric shock on the human body encompassing:
 - shock currents
 - burns
 - risks of low voltage (LV), high voltage (HV) and high currents

- risk management and assessment of risk encompassing:
 - principle and purpose of risk management
 - processes for conducting a risk assessment
- hazards associated with electrical cables/conductors encompassing:
 - electrical supply arrangements for isolation of circuits
 - supply connected
 - capacitance charge on cables isolated from supply
- consequences of damaged cables/conductors encompassing:
 - accelerated deterioration of insulated cables, including damage to enclosures, serving, armours, sheathing and insulation without exposure of the conductors
 - damage of exposing conductors with the likelihood of dangerous step voltage and touch voltage
 - how a short circuit occurs and the resulting potential damage they cause
- risks and control measures associated with work in the vicinity of electrical cables and infrastructure
- the main features and purpose of an access permit system
- electrical isolation and types of permits issued for work in the vicinity of isolated cables
- scope of work permitted on an access permit
- safety observation procedures
- relevant industry standards for electrical isolation
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures.

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 workplace operational situations that replicate 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:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications,

regulations, codes of practice and operation manuals.

Links

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