



Australian Government

UETDRDU022 Maintain gas and oil pressure systems for underground cables

Release: 1

UETDRDU022 Maintain gas and oil pressure systems for underground cables

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 gas and oil pressure systems for underground cables in the electricity supply industry (ESI).

It includes using specialised gas and oil processing and control equipment, determining route profiles and the operation of pressurised equipment.

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

UETDRDU020 Joint, terminate and maintain gas and oil filled underground cables

Competency Field

Distribution Underground

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to maintain gas and oil pressure systems

PERFORMANCE CRITERIA

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

1.1 Work plan is obtained, confirmed and communicated with relevant personnel in accordance with workplace

for underground cables	requirements
	1.2 Materials required for work are determined and obtained in accordance with work plan and workplace requirements
	1.3 Work is prioritised and sequenced for completion in accordance with work plan and workplace requirement
	1.4 Hazards are identified, risks assessed, and control measures identified and applied
	1.5 Work permits are received and signed in accordance with workplace requirements
	1.6 Plant, tools, equipment and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order
	1.7 Worksite is prepared in accordance with the work plan and workplace requirements
2 Maintain gas and oil pressure systems for underground cables	2.1 Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied and monitored
	2.2 Lifting, working at heights, working in confined spaces and the 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 Gas and oil pressure systems for underground cables are maintained in accordance with the manufacturer's instructions, work plan and workplace requirements
	2.5 Incidents or unplanned events are responded to in accordance with workplace requirements
	2.6 Quality checks of work are undertaken in accordance with work plan and 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, and surplus resources and materials are managed in accordance with workplace requirements
- 3.5 Work permits are signed off 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 not equivalent to UETDRDU003 Install and maintain gas and oil pressure systems for specialised underground cables.

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 UETDRDU022 Maintain gas and oil pressure systems for underground cables

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one (1) occasion and include:

- applying relevant legislation, regulations, standards, codes of practice and workplace requirements, including:
 - work health and safety (WHS)/occupational health and safety (OHS)
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- obtaining and signing relevant work permits in accordance with workplace requirements
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- using the following gas and oil processing and control equipment:
 - gas analyser/detector
 - cable freezing equipment
 - accessory impregnation equipment
 - oil degasification plant
 - manometers
 - flow boards
 - vacuum pumps
 - site bottles
 - gas cylinders
 - liquid nitrogen cylinders
 - pressure/vacuum meters
 - oil evacuation pumps
 - gas and oil piping equipment
 - oil sampling equipment
- using the following gas processing and control equipment:
 - gas control cubicles
 - nitrogen packs
- using the following oil processing and control equipment:
 - oil control cubicles
 - oil degasification units
 - oil pressure tanks

- maintaining oil and gas filled underground cables including jointing and terminating
- dealing with unplanned events on at least one (1) occasion.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy 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
- oil and gas filled underground cables including:
 - types of cables, including properties of paper insulation, construction, reasons for gas or oil filled cables, characteristics and capabilities of the cable, pressure and volume characteristics of gas and oil, and precautions when handling
 - types and functions of tools and equipment
 - techniques when testing, inspecting, handling, storing and disposing of cables
- gas and oil pressurised systems including:
 - types, characteristics and capabilities of pressurised systems
 - types and functions of specialised tools
 - techniques when testing, inspecting, handling, storing and disposing of pressurised systems
 - techniques in the safe maintenance of pressurised systems
 - techniques in the safe use of tools and equipment
 - techniques in determining route profiles and access locations.

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, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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