



**Australian Government**

# **UETDRDU017 Locate faults in underground power cables**

**Release: 1**

# UETDRDU017 Locate faults in underground power 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 2.0.

## Application

This unit involves the skills and knowledge required to locate faults in underground power cables in the electricity supply industry (ESI).

It includes setting up test equipment and using the equipment to pre locate and pinpoint the cable fault. It also includes interpreting test results, documenting the fault location and likely cause and listing recommendations for correcting the cable fault.

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

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEEEL0020 Solve problems in low voltage a.c. circuits

UEEEL0021 Solve problems in magnetic and electromagnetic devices

UETDREL005 Work safely in the vicinity of live electrical apparatus

## Competency Field

Distribution Underground

## 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 to locate underground power cable faults**

- 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 instruction is obtained and confirmed in accordance with workplace requirements
- 1.3** 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 instruction and workplace requirements
- 1.6** Work permits are organised in accordance with workplace requirements
- 1.7** Worksite is prepared in accordance with the work instruction and workplace requirements

#### **2 Carry out the locating of underground power cable faults**

- 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 in a confined space, and the use of 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** Test equipment is positioned, set up for testing and confirmed to be operating correctly
- 2.5** Cable is tested and confirmed de-energised in accordance with workplace requirements
- 2.6** Work permits are received and signed in accordance with workplace requirements

- 2.7 Cable is prepared for testing and test equipment connected to the cable in accordance with workplace requirements
  - 2.8 Cable is tested to pre-locate the cable fault in accordance with workplace requirements
  - 2.9 Cable is tested to pinpoint the location of the cable fault in accordance with workplace requirements
  - 2.10 Cable faults are identified and analysed in accordance with workplace requirements
  - 2.11 Incidents or unplanned events are responded to in accordance with workplace requirements
- 3 Complete work and documentation**
- 3.1 Recommendations for rectification are made in accordance with 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 Tools and equipment are cleaned, checked and returned to storage 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 equivalent to UETTDRIS58 Locate faults in power system underground power cables.

## Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>