



**Australian Government**

# **UETTDRIS44 Perform HV field switching operation to a given schedule**

**Release: 1**

# UETTDRIS44 Perform HV field switching operation to a given schedule

## Modification History

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

## Application

This unit involves the skills and knowledge required to perform high voltage (HV) field switching operation to a given schedule in the electricity supply industry (ESI).

It includes the operation of circuit breakers, isolating devices, communicating with switching control officer or electrical control officer, isolating electrical equipment and line or worksite. It also includes proving area is de-energised and applying earthing equipment, issuing/accepting electrical permits and returning affected line and electrical equipment to service.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace.

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

## Pre-requisite Unit

All competencies in the Common Unit Group must have been completed, plus all competencies in one (1) of the identified Pathway Unit Group(s).

### Common Unit Group

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEEE102A Fabricate, assemble and dismantle utilities industry components

UEENEEE104A Solve problems in d.c. circuits

UEENEEE105A Fix and secure electrotechnology equipment

UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UEENEEG101A Solve problems in electromagnetic devices and related circuits

UEENEEG102A Solve problems in low voltage a.c. circuits

UETTDRREL16 Working safely near live electrical apparatus

### Transmission Overhead Pathway Group

UETTDRREL11 Apply sustainable energy and environmental procedures

UETTDRREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

UETTDRT26 Install transmission structures and associated hardware

UETTDRT27 Maintain transmission structures and associated hardware

UETTDRT29 Install and maintain transmission overhead conductors and cables

#### Distribution Overhead Pathway Group

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDNIS41 Install network infrastructure electrical equipment

UETTDNIS42 Maintain network infrastructure electrical equipment

UETTDNIS52 Install and maintain poles, structures and associated hardware

UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

UETTDNIS56 Install and maintain low voltage overhead services

#### Rail Traction Pathway Group

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDNIS52 Install and maintain poles, structures and associated hardware

UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

UETTDRT21 Install traction overhead wiring systems

UETTDRT22 Maintain traction overhead wiring systems

UETTDRT23 Install rail traction bonds

UETTDRT27 Install overhead traction components and equipment

UETTDRT28 Maintain overhead traction components and equipment

#### Distribution Cable Jointing Pathway Group

UETTDRCJ21 Lay ESI electrical cables

UETTDRCJ26 Install and maintain de-energised low voltage underground polymeric cables

UETTDRCJ27 Install and maintain de-energised high voltage underground polymeric cables

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDNIS41 Install network infrastructure electrical equipment

UETTDNIS42 Maintain network infrastructure electrical equipment

UETTDNIS55 Install and maintain low voltage underground services

#### Electrical Pathway Group

UEENEEE137A Document and apply measures to control OHS risks associated with

electrotechnology work

UEENEEG006A Solve problems in single and three phase low voltage machines

UEENEEG033A Solve problems in single and three phase low voltage electrical apparatus and circuits

UEENEEG063A Arrange circuits, control and protection for general electrical installations

UEENEEG106A Terminate cables, cords and accessories for low voltage circuits

UEENEEG108A Trouble-shoot and repair faults in low voltage electrical apparatus and circuits

UEENEEG109A Develop and connect electrical control circuits

UEENEEK142A Apply environmentally and sustainable procedures in the energy sector

UETTDRIS67 Solve problems in energy supply network equipment

## Competency Field

Industry Specific Cross Discipline

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### **1 Prepare to undertake HV switching procedures to a given schedule**

### PERFORMANCE CRITERIA

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

- 1.1** Switching and work schedules, plans, drawings, workplace procedures and material lists are received and confirmed
- 1.2** Job requirements and workplace procedures are identified and communicated with relevant personnel
- 1.3** Work health and safety (WHS)/occupational health and safety (OHS), environmental and workplace procedures for HV switching are obtained and confirmed for the purposes of the work to be performed
- 1.4** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with relevant personnel and in accordance with workplace procedures

- 1.5 Hazards are identified, WHS/OHS risks assessed and control measures identified in accordance with workplace procedures
- 1.6 Relevant authority is obtained to perform work in accordance with workplace procedures
- 1.7 Plant, equipment, tools and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order
- 1.8 Worksite is prepared to minimise risk, damage to property, commerce and individuals in accordance with workplace procedures
- 1.9 Traffic management plan is confirmed as being applied in accordance with workplace procedures
- 2 **Carry out HV switching procedures to a given schedule**
  - 2.1 WHS/OHS, sustainable energy and environmental principles and practices are monitored and followed to reduce incidents in accordance with workplace procedures
  - 2.2 Requirements for lifting and/or climbing and/or working at heights and the use of power tools/equipment are followed in accordance with workplace procedures
  - 2.3 HV switching procedures to a given schedule are applied to ensure completion in agreed timeframes, to quality standards and with a minimum of waste in accordance with workplace procedures
  - 2.4 Communications with switching control officer are established and maintained throughout the isolation operation in accordance with workplace procedures
  - 2.5 Electrical equipment, associated circuits, line/network or worksite to be switched, including paralleling, is isolated and proved de-energised using appropriate devices and earthed, where required, in accordance with workplace procedures
  - 2.6 Unplanned events are responded to in accordance with workplace procedures
  - 2.7 Relevant permits are prepared and issued in accordance with workplace procedures
  - 2.8 Quality checks of work are undertaken in accordance

- with workplace procedures
- 3 Complete HV switching procedures to a given schedule**
- 3.1** Completed switching is checked against work schedule and anomalies are reported in accordance with workplace procedures
  - 3.2** WHS/OHS and environmental incidents are reported in accordance with workplace procedures, as required
  - 3.3** Worksite is rehabilitated, cleaned and made safe in accordance with workplace procedures
  - 3.4** Plant, equipment and tools are cleaned, checked and returned to service in accordance with workplace procedures
  - 3.5** Relevant work permits are signed off, safety devices removed and system re-energised and returned to service in accordance with workplace procedures
  - 3.6** Work records, reports and/or documentation are completed 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 Companion Volume Implementation Guide.

## Unit Mapping Information

This unit replaces and is equivalent to UETTDRIS44A Perform HV field switching operation to a given schedule.

## Links

UET Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>