



Australian Government

UETDREL003 Identify and apply controls for alternate supplies on the distribution network

Release: 2

UETDREL003 Identify and apply controls for alternate supplies on the distribution network

Modification History

Release 2. Amended Competency Field

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 identify and apply controls for alternate supplies on the distribution network in the electricity supply industry (ESI).

It includes identifying potential alternate supplies and applying control measures while performing work on or near the de-energised distribution network.

It also includes monitoring control measures for the alternate supplies to manage two-way power flow.

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

UETDREL001 Apply environmental requirements

UETDREL005 Work safely in the vicinity of live electrical apparatus

UETDRIS018 Perform low voltage field switching operation to a given schedule

Competency Field

Entry Level

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 work on the distribution network

- 1.1** Legislation, regulations, standards, codes of practice and workplace requirements for the work to be performed are referred to and confirmed
- 1.2** Alternate supplies are identified and control measures are applied in accordance with workplace requirements
- 1.3** Hazards are identified, risks assessed and control measures identified and applied
- 1.4** Work permits are organised in accordance with workplace requirements
- 1.5** Tools, equipment and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order
- 1.6** Worksite is prepared in accordance with workplace requirements

2 Carry out work on the distribution network

- 2.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied
- 2.2** Work permits are received and signed in accordance with workplace requirements
- 2.3** Control measures are monitored for alternative supplies in accordance with workplace requirements
- 2.4** Manual handling, the use of tools, equipment and PPE are carried out in accordance with workplace requirements
- 2.5** Work is carried out on the distribution network in accordance with workplace requirements
- 2.6** Incidents or unplanned events are responded to in

accordance with workplace requirements

3 Complete work and documentation

- 3.1** Work is completed and control measures removed from the worksite in accordance with workplace requirements
- 3.2** Work permits are signed off in accordance with workplace requirements
- 3.3** Worksite is rehabilitated, cleaned and made safe in accordance with workplace requirements
- 3.4** Incidents or unplanned events are reported in accordance with workplace requirements
- 3.5** Tools and equipment are cleaned, checked and returned 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 is a new unit. No Equivalent Unit.

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 UETDREL003 Identify and apply controls for alternate supplies on the distribution network

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 and performance criteria on at least two separate occasions and include:

- applying relevant legislation, regulations, standards, codes of practice and workplace requirements, including:
 - work health and safety (WHS)/occupational health and safety (OHS)
- identifying hazards, assessing risks, identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- identifying potential alternate supplies
- identifying control measures to manage alternate supplies
- implementing at least two (2) of the following control measures for alternate supplies:
 - isolation points, including using tags and locks in accordance with workplace requirements
 - short circuiting and earthing
 - bonding
 - low voltage (LV) short circuited
- monitoring control measures for alternate supplies to manage two-way power flow
- dealing with an unplanned event on at least one (1) occasion
- obtaining and signing on and off relevant work permits in accordance with workplace requirements
- completing relevant work records, reports and documentation.

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 legislation, regulations, standards, codes of practice and workplace requirements, including:
 - WHS/OHS
- hazard, risk assessment and risk control requirements, including:

- potential hazards, including:
 - alternating current (a.c.) and direct current (d.c.)
 - installation multiple earthed neutral (MEN) location changes in stand-alone mode
 - residual charge in electronic devices, e.g., capacitors in inverters
 - potential rise and currents on neutral
- potential backfeed hazards from:
 - faulty equipment
 - incorrectly installed equipment
- types and application of PPE
- test equipment
- concept, application and operation of alternate supplies, including:
 - anti-islanding control and protection
 - system monitoring and load management
- identification of alternate supplies from:
 - signage
 - visual
 - registers
- alternate supplies, including:
 - photovoltaic (PV) systems
 - battery systems
- awareness of known and unknown alternate supplies, including:
 - generation sources
 - storage sources
- impacts of two-way power flow connected to the grid
- control measures for alternate supplies, including:
 - isolation points, including tags and locks, in accordance with workplace requirements
 - short circuiting and earthing
 - bonding
 - LV short circuited
- application, purpose and types of permits
- events constituting an unplanned event or incident
- procedures for responding to an unplanned event or incident
- procedures for workplace records, reports and documentation.

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, regulations, codes of practice and operation manuals.

Links

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