



Australian Government

UETTD RIS51 Coordinate and direct power system switching schedules

Release: 1

UETTDRIS51 Coordinate and direct power system switching schedules

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 covers the coordination and direction of switching the high voltage (HV) and low voltage (LV) system. It includes coordinating switching between operating authorities and HV customers. It also includes the direction of switching on the HV and LV electrical network.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace subject to regulations for undertaking of electrical work.

Other conditions may apply under state and territory legislative and regulatory licencing 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

UETTDRIS44 Perform HV field switching operation to a given schedule

UETTDRISS54 Install and maintain poles, structures and overhead conductors and cables

UETTDRTTP26 Install transmission structures and associated hardware

UETTDRTTP27 Maintain transmission structures and associated hardware

UETTDRTTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREDP12 Maintain overhead energised low voltage conductors and cables

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDRISS41 Install network infrastructure electrical equipment

UETTDRISS42 Maintain network infrastructure electrical equipment

UETTDRISS43 Perform low voltage field switching operation to a given schedule

UETTDRISS52 Install and maintain poles, structures and associated hardware

UETTDRISS54 Install and maintain poles, structures and overhead conductors and cables

UETTDRISS56 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

UETTDRISS52 Install and maintain poles, structures and associated hardware

UETTDRISS54 Install and maintain poles, structures and overhead conductors and cables

UETTDRTT21 Install traction overhead wiring systems

UETTDRTT22 Maintain traction overhead wiring systems

UETTDRTT23 Install rail traction bonds

UETTDRTT27 Install overhead traction components and equipment

UETTDRTT28 Maintain overhead traction components and equipment

UETTDRTT30 Perform to a given schedule rail traction switching operations

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

UETTDRISS41 Install network infrastructure electrical equipment

UETTDRISS42 Maintain network infrastructure electrical equipment

UETTDRIS43 Perform low voltage field switching operation to a given schedule

UETTDRIS55 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

UETTDRSB39 Perform power system substation switching operation to a given schedule

Competency Field

Industry Specific Cross Discipline

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare/plan to coordinate and direct switching schedules

PERFORMANCE CRITERIA

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

- 1.1 Work schedules, including drawings, plans, requirements, established procedures and material lists, are obtained and analysed, as necessary, by site inspection and the extent of the preparation of the work determined for planning and coordination
- 1.2 Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes, to a quality standard and in accordance with established

procedures

- 1.3 Risk control measures are identified, prioritised and evaluated against the work schedule
 - 1.4 Relevant requirements and established procedures for the work are communicated to all personnel and identified for all worksites
 - 1.5 Hazards are identified, work health and safety (WHS)/occupational health and safety (OHS) risks assessed and control measures prioritised, implemented and monitored, including emergency exits kept clear, to ensure safe systems of work are followed and according to established procedures
 - 1.6 Relevant work permits are secured to coordinate the performance of work according to requirements and/or established procedures
 - 1.7 Resources, including personnel, equipment, tools and personal protective equipment (PPE), required for the job are identified, scheduled and coordinated and confirmed safe and in technical working order
 - 1.8 Clients/customers are provided with possible solutions and/or options within the scope, acceptable cost and requirements
 - 1.9 Liaison and communication issues with others/authorised personnel, authorities, clients and land owners are resolved and activities coordinated to carry out work
- 2 Carry out coordinate and direct switching schedules**
- 2.1 WHS/OHS and sustainable energy principles and practices to reduce the incidents of accidents and minimise waste are monitored and actioned in accordance with requirements and/or established procedures
 - 2.2 First aid, pole top rescue and other related work procedures are performed according to requirements and/or established procedures
 - 2.3 Lifting, climbing, working in confined spaces and aloft, and use of power tools/equipment, techniques and practices are safely exercised according to requirements
 - 2.4 Hazard warnings and safety signs are recognised and hazards and assessed WHS/OHS risks are reported to

immediate authorised personnel for directions according to established procedures

- 2.5 Remedial actions are taken to overcome any shortfalls encountered in the work schedule according to requirements and/or established procedures
 - 2.6 Coordination and direction of switching schedules are carried out in accordance with the work schedule and requirements and/or established procedures
 - 2.7 Essential knowledge and associated skills are applied in the safe coordination and direction of switching schedules to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements
 - 2.8 Solutions to non-routine problems are identified and actioned using acquired essential knowledge and associated skills according to requirements
 - 2.9 Ongoing checks of quality of the work are undertaken in accordance with requirements and established procedures to ensure a quality outcome is achieved for the client/customer and to a community/industry standard
- 3 Complete coordinate and direct switching schedules**
- 3.1 Work undertaken is checked against work schedule for conformance with requirements, anomalies reported and solutions identified in accordance with established procedures
 - 3.2 Accidents and/or injuries are reported and followed up in accordance with requirements/established procedures
 - 3.3 Relevant work permits are signed off and electrical plant is returned to service and client/customer advised in accordance with requirements
 - 3.4 Work completion records, reports, as installed/modified drawings and/or documentation and information are confirmed, processed and appropriate personnel notified

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 UETTDRIS51A Coordinate and direct power system switching schedules.

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>