



Australian Government

UETTD RIS64 Install mobile generation set for synchronised HV Genset

Release: 1

UETTDRI64 Install mobile generation set for synchronised HV Genset

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 installation of temporary portable generation sets to high voltage (HV) distribution assets thereby maintaining supply in accordance with industry regulations and established procedures. It encompasses the operation, connection and disconnection of a temporary portable generator and includes the estimation of HV load and assessing the appropriateness of the generator for the required outcome and networking of generators.

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

UETTDREL16 Working safely near live electrical apparatus

Transmission Overhead Pathway Group

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDRI544 Perform HV field switching operation to a given schedule

UETTDRI554 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

UETTDRED12 Maintain overhead energised low voltage conductors and cables

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDRI541 Install network infrastructure electrical equipment

UETTDRI542 Maintain network infrastructure electrical equipment

UETTDRI543 Perform low voltage field switching operation to a given schedule

UETTDRI552 Install and maintain poles, structures and associated hardware

UETTDRI554 Install and maintain poles, structures and overhead conductors and cables

UETTDRI556 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

UETTDRI552 Install and maintain poles, structures and associated hardware

UETTDRI554 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

UETTDRT30 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

UETTDRI541 Install network infrastructure electrical equipment

UETTDRIS42 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 install mobile generation set for synchronised HV genset

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** 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, according to established procedures
- 1.4** Relevant requirements and established procedures for the work are to all personnel and identified for all worksites
- 1.5** WHS/OHS policies and procedures related to the work are identified to ensure safe systems of work are followed
- 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
- 1.10** Personnel participating in the work, including plant operators and contractors, are fully briefed and respective responsibilities coordinated and authorised, where applicable, in accordance with established procedures
- 1.11** Site is prepared according to the work schedule and to minimise risk and damage to property, commerce and individuals in accordance with established procedures
- 1.12** Positioning of road signs, barriers and warning devices is planned and coordinated in accordance with requirements

- | | |
|---|---|
| 2 Carry out the installation of mobile generation set for synchronised HV genset | <ul style="list-style-type: none">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 procedures2.2 First aid and other related work procedures are performed according to requirements and/or established procedures2.3 Lifting, climbing, working in confined spaces and aloft, and use of power tools/equipment, techniques and practices are safely exercised according to requirements2.4 Hazard warnings and safety signs are recognised and hazards and assessed WHS/OHS risks reported to immediate authorised personnel for directions according to established procedures2.5 Remedial actions are taken to overcome any shortfalls encountered in the work schedule according to requirements and/or established procedures2.6 Installation of mobile generation set for synchronised HV genset is carried out in accordance with the work schedule and requirements and/or established procedures2.7 Essential knowledge and associated skills are applied in the safe installation of mobile generation set for synchronised HV genset to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements2.8 Solutions to non-routine problems are identified and actioned using acquired essential knowledge and associated skills according to requirements2.9 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 the installation of mobile generation set for synchronised HV genset | <ul style="list-style-type: none">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 Worksite is rehabilitated, cleaned up and confirmed safe in accordance with established procedures
- 3.4 Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures
- 3.5 Relevant work permits are signed off and synchronised HV genset apparatus is returned to service and client/customer advised in accordance with requirements
- 3.6 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 UETTDRI64A Install mobile generation set for synchronised HV Genset.

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>