



Australian Government

UETDRRT24 Maintain rail traction bonds

Release: 1

UETDRRT24 Maintain rail traction bonds

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 maintain rail traction bonds in the electricity supply industry (ESI).

It includes maintaining and repairing temporary and permanent traction bonds, bonding cables and using safe working practices on or about the running line/track. It also includes isolating systems and circuits in accordance with work plans, identifying and implementing traffic management plans, issuing/accepting electrical permits, inspecting and checking equipment and associated hardware are in a safe condition to test and/or return to service, recommissioning tests to ensure integrity of bonding system prior to return to service and updating of system data/maintenance records.

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

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

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

UETTDREL16 Working safely near live electrical apparatus

UETTDRI52 Install and maintain poles, structures and associated hardware

UETDRIS54 Install and maintain poles, structures and overhead conductors and cables

UETDRRT21 Install traction overhead wiring systems

UETDRRT22 Maintain traction overhead wiring systems

UETDRRT23 Install rail traction bonds

UETDRRT27 Install overhead traction components and equipment

UETDRRT28 Maintain overhead traction components and equipment

Competency Field

Rail Traction

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for maintenance of traction bonds

PERFORMANCE CRITERIA

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

- 1.1 Work schedules, construction 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 the maintenance of traction bonds 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 work permits are obtained, understood and

signed 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 track protection officer and/or network control officer and workplace procedures
- 1.9 Personnel participating in work are fully briefed and responsibilities confirmed in accordance with workplace procedures
- 1.10 Traffic management plan is identified and implemented in accordance with workplace procedures
- 1.11 Environmental constraints applicable to work are identified and control measures applied

2 Perform maintenance of traction bonds

- 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 Systems and circuits are checked, isolated and proved safe to work on in accordance with workplace procedures
- 2.4 Maintenance and repair of traction bonds and bonding cables are completed in agreed timeframes, to quality standards and with a minimum of waste in accordance with workplace procedures
- 2.5 Cable and surrounds, including rail and other surfaces, are prepared for jointing and terminating in accordance with workplace procedures
- 2.6 Maintenance testing is performed in accordance with the work schedule, job requirements and workplace procedures
- 2.7 Unplanned events are responded to in accordance with workplace procedures

- 3 Complete maintenance of traction bonds**
- 2.8** Quality checks of work are undertaken in accordance with workplace procedures
 - 3.1** Completed work is checked against work schedule, construction plans and drawings for compliance and anomalies are reported in accordance with workplace procedures
 - 3.2** Worksite is rehabilitated, cleaned up and made safe in accordance with workplace procedures
 - 3.3** Tools, equipment and surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with workplace procedures
 - 3.4** Relevant work permits are signed off and the system that has undergone the maintenance of a traction bond/s is returned to service in accordance with workplace procedures
 - 3.5** 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 UETDRRT24A Maintain rail traction bonds.

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>