



Australian Government

UEERS0031 Maintain rail signalling power supplies

Release: 1

UEERS0031 Maintain rail signalling power supplies

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

This unit replaces and is equivalent to UEERS0010 Install and maintain rail signalling power supplies.

Modifications this release include:

- Title changed.
- Application updated to reflect title change.
- Element titles and performance criteria amended to reflect title change.
- Performance criteria 1.7, 2.2, 3.2 and 3.3 added.
- Performance and Knowledge Evidence updated for clarity.

Application

This unit involves the skills and knowledge required to maintain rail signalling power supplies.

It includes preparing and maintaining rail signalling power supplies by working safely to maintenance industry standards, matching equipment with that specified for location, terminating cables and connecting wiring compliance, functional testing, certifying and reporting.

Persons achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice, rules and/or guidelines.

No other licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

UEERS0021 Assemble and wire electrical rail signalling equipment

Competency Field

Rail Signalling

Unit Sector

Electrotechnology

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 maintain rail signalling power supplies

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified, obtained and clarified
- 1.2** Hazards are identified, risks assessed, and control measures and workplace procedures implemented
- 1.3** Safety hazards which have not previously been identified are noted on job safety assessments and risk control measures are implemented
- 1.4** Scope of work and location of power supply are determined by site inspection and from job instructions, specifications and/or diagrams
- 1.5** Batteries and type within the signalling location and management processes for the associated safety hazards are identified
- 1.6** Materials needed for the maintenance work are obtained in accordance with workplace procedures and checked against job specifications
- 1.7** Tools, equipment and testing devices needed to maintain power supplies are obtained in accordance with workplace procedures and checked for correct operation and safety
- 1.8** Authorisation to take temporarily out of service or disable systems is obtained in accordance with workplace procedures

2 Maintain rail signalling power supplies

- 2.1** WHS/OHS risk control measures and workplace procedures for carrying out work are followed
- 2.2** On-track safe working requirements are identified and applied in accordance with workplace procedures and safety management system
- 2.3** Power supply is checked to comply with technical industry standards, job specifications and requirements

- 2.4 Wiring and cable terminations are inspected to comply with technical industry standards, approved design drawings and requirements
 - 2.5 Inspection and tests are conducted to ensure maintained power supply complies with job specifications and functions as intended
 - 2.6 Maintenance of power supply is carried out efficiently, without waste of materials, damage to apparatus, the surrounding environment or services using sustainable energy practices
 - 2.7 Correct functioning of equipment is established from reference to manuals, system specifications and commissioning data
 - 2.8 Batteries are inspected and tested to ensure satisfactory operation and condition
 - 2.9 Faults are identified in accordance with relevant technical information of power supplies and fault-finding techniques
 - 2.10 Faulty, worn, damaged or insecure components are replaced, repaired or secured in accordance with manufacturer specifications and workplace procedures
 - 2.11 Existing methods for dealing with unplanned situations are discussed with appropriate person/s and documented in accordance with workplace procedures
- 3 Complete rail signalling power supplies maintenance**
- 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2 Confirmation that system is functional and that no alarms are present or indicated
 - 3.3 Test results for the batteries and power supplies are recorded
 - 3.4 Worksite is cleaned and made safe in accordance with workplace procedures
 - 3.5 Work completion is documented, and appropriate person/s notified in accordance with workplace procedures and relevant reports produced

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEERS0010 Install and maintain rail signalling power supplies.

Links

Companion Volume Implementation Guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>