



Australian Government

UETDRTS032 Commission and maintain metering schemes

Release: 1

UETDRTS032 Commission and maintain metering schemes

Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package Release 4.0.

Application

This unit covers the skills and knowledge required to commission and maintain power systems metering schemes in the electricity supply industry (ESI).

It includes commissioning and maintenance procedures, safety and polarity testing, and accuracy measurements.

It also includes types of meters, control systems and associated equipment and accessories.

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

UEECD0010 Compile and produce an energy sector detailed report

UEECD0019 Fabricate, assemble and dismantle utilities industry components

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

UETDREL005 Work safely in the vicinity of live electrical apparatus

UETDRTS036 Develop secondary protection and control scheme isolation and restoration documents

Competency Field

Testing

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 commission and maintain metering schemes

- 1.1** Workplace organisational requirements for the commissioning and maintenance of metering schemes, are reviewed and determined
- 1.2** Purpose of the commissioning and maintenance of metering schemes is established
- 1.3** Testing procedures are discussed and reviewed with appropriate personnel
- 1.4** Testing parameters are established from workplace organisational requirements
- 1.5** Relevant stakeholders are identified and liaised with
- 1.6** Hazards are identified, risks assessed, and control measures identified
- 1.7** Work permits are organised in accordance with workplace requirements
- 1.8** Tools, equipment and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order

2 Commission and maintain metering schemes

- 2.1** Relevant stakeholder liaison and work permits are applied
- 2.2** Manual handling and use of tools, equipment and PPE are carried out in accordance with workplace requirements
- 2.3** Hazard control measures are applied and monitored in accordance with workplace requirements
- 2.4** Metering schemes are commissioned and maintained in accordance with workplace requirements

- | | | |
|--|------------|--|
| | 2.5 | Metering schemes are tested in accordance with workplace requirements |
| | 2.6 | Solutions to non-routine problems are identified and actioned |
| | 2.7 | Quality checks of work are undertaken in accordance with workplace requirements |
| 3 Complete work and documentation | 3.1 | Completed work is checked for compliance against workplace requirements |
| | 3.2 | Relevant stakeholders are notified of completion and reports and/or completion documents are finalised |
| | 3.3 | Commissioning and maintenance documentation is 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 unit replaces and is not equivalent to UETDRTS005 Commission power systems metering schemes.

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 UETDRTS032 Commission and maintain metering schemes

Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package Release 4.0.

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 (2) separate occasions and include:

- identifying hazards, assessing risks, and identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- obtaining and signing on and off relevant work permits in accordance with workplace requirements
- interpreting and using drawings, diagrams and instructions
- commissioning, maintaining and testing metering schemes, including accuracy measurements on three (3) types of metering systems.

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:

- metering schemes including:
 - commissioning and maintenance procedures
 - testing including accuracy measurements
- metering and control equipment including:
 - types of meters
 - control systems, including voltage regulation and capacitor bank control
 - types of associated equipment and accessories
 - testing procedures, including safety and polarity testing
 - commissioning procedures associated with relevant equipment.

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 tools, equipment and PPE currently used in industry
- applicable documentation, including workplace requirements, relevant industry standards, equipment specifications, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>