



Australian Government

UETDRTS037 Maintain and calibrate protection relays and meters

Release: 1

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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 includes the skills and knowledge required to maintain and calibrate protection relays and meters in the electricity supply industry (ESI).

It includes the repair, calibration and testing of various types of protection relays, including electromechanical, analogue, digital electronic and numerical devices.

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 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 maintain and calibrate protection relays and meters

- 1.1** Workplace organisational requirements for the maintenance and calibration of relays and meters, are reviewed and determined
- 1.2** Purpose of the maintenance and calibration of relays and meters 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** Tools, equipment and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order
- 1.6** Work is prioritised and sequenced for completion in accordance with workplace requirements
- 1.7** Relevant stakeholders are identified and liaised with
- 1.8** Hazards are identified, risks assessed, and control measures identified
- 1.9** Work permits are organised in accordance with workplace requirements

2 Maintain and calibrate protection relays and meters

- 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 Protection relays and meters are maintained, tested and calibrated in accordance with workplace requirements
 - 2.5 Solutions to non-routine problems are identified and actioned
 - 2.6 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 UETDRTS023 Repair, test and calibrate protection relays and meters.

Links

Companion Volume Implementation Guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>