



Australian Government

UETTD RIS34 Install and replace energy meters and associated equipment in remote communities

Release: 1

UETTDRI34 Install and replace energy meters and associated equipment in remote communities

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 install and replace whole current energy meters and associated equipment in remote communities in the electricity supply industry (ESI).

It includes completing the installation and replacement of whole current energy meters and associated equipment, identifying faults, and ascertaining normal functions of meters and associated equipment.

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

UEENEEE105A Fix and secure electrotechnology equipment

UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work

UEENEEK101A Maintain safety and tidiness of remote area power supply systems

UEENEEK102A Work safely with remote area power supply systems

UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

Competency Field

Industry Specific Cross Discipline

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 for installation and replacement of energy meters and associated equipment

- 1.1** Work plan, construction plans, drawings, workplace procedures and material lists are received, confirmed and communicated with relevant personnel
- 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 installing and replacing energy meters and associated equipment 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** Plant, equipment, tools and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order
- 1.7** Worksite is prepared to minimise risk, damage to property, commerce and individuals in accordance with workplace procedures
- 1.8** Traffic management plan is confirmed as being applied in accordance with workplace procedures

2 Carry out the installation and replacement of energy meters and associated

- 2.1** WHS/OHS, sustainable energy and environmental principles and practices are monitored and followed to reduce incidents in accordance with workplace

equipment	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 Installation and replacement of whole current energy meters and associated equipment is completed in agreed timeframes, to quality standards and with minimum waste in accordance with workplace procedures
	2.4 Installation and/or replacement of whole current energy meters and associated equipment is performed, including wiring, testing, programming and sealing of meters and associated equipment in accordance with job requirements and workplace procedures
	2.5 Unplanned events are responded to in accordance with workplace procedures
	2.6 Quality checks of work are undertaken in accordance with workplace procedures
3 Complete the installation and replacement of energy meters and associated equipment	3.1 Completed work is checked against works schedule, construction plans and drawings for compliance and anomalies are reported in accordance with workplace procedures
	3.2 WHS/OHS and environmental incidents are reported in accordance with workplace procedures, as required
	3.3 Worksite is rehabilitated, cleaned up and made safe in accordance with workplace procedures
	3.4 Tools, equipment and surplus resources are cleaned, checked and returned to storage 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 UETTDRIS34A Install and replace energy meters and associated equipment in remote communities.

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>

Assessment Requirements for UETTDRIS34 Install and replace energy meters and associated equipment in remote communities

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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 separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- installing and replacing any one (1) of the following whole current energy meters and associated equipment:
 - induction disk energy meter
 - electronic energy meters
 - maximum demand meters
 - electronic summators
- installing at least one (1) of the following associated equipment:
 - service fuses
 - service links
 - meter boards
 - meter panels
- installing at least one (1) of the following associated equipment:
 - time switches
 - frequency injection relays
 - controlled output meters
 - contactors
- dealing with unplanned events on at least one (1) occasion.

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:

- standards, codes, legislation, supply authority regulations and/or enterprise requirements pertaining to the installation and replacement of energy meters and associated equipment

- construction, operation and selection of whole current energy meters (single, polyphase, pre-payment, demand, induction and electronic)
- construction, operation and selection of associated equipment-service protection device, high rupturing capacity (HRC), circuit breaker, meter boards, main switch, meter enclosure and service links
- metering arrangements - direct metering, distributed master metering, multiple master metering, plug-in metering, multiple earth neutral (MEN) system, and typical cable routes through buildings
- cable types and applications -cable construction, sizes and ratings and requirements for protection and supporting cables
- installation tools and equipment required
- installation and removal of energy meters - stripping cable correctly, need for sound terminations, wiring meter position correctly, fitting service protection device (SPD), fitting meter boards and fitting meters
- testing procedures - continuity testing, insulation testing, polarity testing, phase sequence testing, neutral integrity testing and meter functionality testing
- completing energy meter documentation
- customer education on energy meters
- techniques for the maintenance of energy metering (fault finding, fault rectification, meter reading and tariff changes).

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:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry for installing and replacing whole current energy meters and associated equipment in remote communities
- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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