



Australian Government

Assessment Requirements for UETTDRTS43 Commission energy/revenue metering schemes

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.

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
- performing on at least three (3) occasions, the commissioning of the following metering schemes types:
 - single feeder high voltage (HV)
 - low voltage (LV) current transformer customer sites
- performing on at least three (3) occasions, commissioning involving at least seven (7) of the following:
 - isolation
 - inspection
 - monitoring
 - testing
 - adjustment
 - repair
 - refurbishment and/or overhaul
 - functional checks of revenue metering schemes
- demonstrating on at least three (3) occasions, knowledge and application of at least two (2) different manufacturers:
 - proprietary software
 - application programming
 - interrogations
- undertaking, on at least three (3) occasions, the following:
 - calculations, including obtain final revenue multiplier
 - validation of meter pulse multiplier
- 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:

- commissioning techniques
- evaluation of the metering design and equipment accuracy to ensure suitability with national electricity market requirements
- recording nameplate details for all metering scheme components and ensuring compliance with the design accuracy class
- confirmation of instrument transformer connected ratios, polarities, burdens and voltage drops
- checking integrity of all wiring, connections and terminalisation's
- ensuring cable types and sizes selected are correct
- phase sequence and vector relationships are correct
- documentation verifying the errors of current transformers and voltage transformers
- validation of meter data to verify the metering programming parameters, display and error functions are all correct in accordance with manufacturer specifications
- verifying meter programming to ensure the best possible resolution of energy data measurement and recording
- validating the interval data with the responsible person and/or meter data provider
- confirming remote communications with the metering is established and is of sufficient quality to support reliable communications and data transfer
- standards, codes, Commonwealth/state/territory legislation, supply authority regulations and-or enterprise requirements associated with the commissioning procedures
- requirements for the use of isolation and tagging, manuals, system diagrams/plans and drawings
- requirements for the use of maintenance and commissioning manuals, system diagrams/plans and drawings
- techniques in commissioning procedures – planning, policy and testing techniques
- close out requirements
- requirements for the use of meter manufacturer manuals, system diagrams/plans and drawings.

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
- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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>