



Australian Government

Assessment Requirements for UETDRTS030 Commission and maintain complex 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 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:

- applying relevant legislation, regulations, standards, codes of practice and organisational workplace requirements including:
 - work health and safety (WHS)/occupational health and safety (OHS) requirements
- identifying hazards, assessing risks, and identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- establishing the purpose of the commissioning or maintenance scheme
- establishing commissioning and maintenance procedures
- performing, on at least one (1) occasion, the following activities:
 - identification of faults with metering equipment
 - identification of faults with energy registration and revenue billing
- performing, on at least three (3) occasions, the commissioning or maintaining of at least seven (7) of the following complex metering scheme types:
 - multiple feeder high voltage (HV) and low voltage (LV) customers
 - summation
 - subtraction
 - interposing
 - voltage changeover schemes
 - generation
 - bulk supply
 - interconnector
 - wholesale metering
- demonstrating all of the following activities:
 - analysing data for best outcome
 - verifying installation
- performing, on at least two (2) occasions, at least six (6) of the following activities:
 - isolation

- inspection
- monitoring
- testing
- adjustment
- calibration
- functional checks
- performing, on at least three (3) occasions, all of the following activities:
 - verifying meter function
 - determining energy flows, voltage, current and phasor relationships
 - validating actual meter energy data
- dealing with an unplanned event on at least one (1) occasion
- obtaining and signing relevant work permits in accordance with workplace requirements
- completing relevant work records, reports and documentation.

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:

- relevant legislation, regulations, standards, codes of practice and organisational workplace requirements, including WHS/OHS requirements
- hazard, risk assessment and risk control requirements, including potential hazards
- types and application of PPE
- application, purpose and types of permits
- events constituting an unplanned event or incident
- procedures for responding to an unplanned event or incident
- workplace records, reports and documentation
- instrument transformers, including types, application and characteristics
- data analysis for best outcomes
- installation, and meter function and actual meter energy data
- energy flows, voltage, current and phasor relationships
- commissioning and maintaining metering scheme types and auxiliary systems, including:
 - wholesale metering
 - voltage changeover schemes
 - summation
 - multiple feeder HV and LV customers
 - generation
- principles of the following commissioning metering scheme types:
 - subtraction
 - interposing
 - bulk supply
 - interconnector

- procedures to perform all of the following activities in relation to metering equipment:
 - isolation
 - inspection
 - monitoring
 - testing
 - adjustment
 - repair
 - calibration
 - functional checks
- calculations of complex metering installations overall errors
- calculation and verification of transformer losses, transmission line losses, and correction factors in meter programming
- inputs and relationships of metering points to verify logical metering schemes
- metering instrument transformer burdens
- communication with market participants.

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, facilities, equipment and PPE currently used in industry
- applicable documentation, including workplace requirements, relevant industry standards, equipment specifications, regulations, 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>