



Australian Government

**Assessment Requirements for
UETDRTS028 Calibrate, verify and certify
revenue metering/energy measurement
instruments**

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)
- dealing with an unplanned event on at least one (1) occasion
- obtaining and signing relevant work permits in accordance with workplace requirements
- establishing the purpose of the calibration, verification and certification of revenue metering/energy measurement instruments
- establishing calibration parameters
- developing and evaluating procedures and routines to verify and certify the accuracy and traceability of revenue metering/energy measurement instruments
- conducting a test of revenue metering/energy measurement instruments and evaluating test results
- evaluating and implementing procedures and practices to ensure traceability of test equipment to workplace requirements
- developing test procedures for new hardware and analysing performance against required outcomes
- evaluating test equipment capability.

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
- purpose of the calibration, verification and certification of revenue metering/energy measurement instruments
- procedures for the calibration, verification and certification of revenue metering/energy measurement instruments
- equipment traceability and registration
- electrical field testing and measurement including:
 - measurement concepts, including notion of error, accuracy, resolution, sources of measurement error and uncertainties, instrument specifications and calibration certificates, test and measuring instrument safety certification levels and their application
 - types of field measuring instruments and their application
 - measuring low voltage (LV) in direct current (d.c.) and alternating current (a.c.)
 - measuring high voltage (HV)
 - measuring power, energy, reactive power, power factor and maximum demand
 - measuring power quality, including waveform distortion, harmonics, power factor, and transients
- calibration techniques including:
 - principles of common calibration techniques
 - purpose of standards and calibration certification
 - minimising error during calibration
 - determining calibration parameters
 - need for normal performance check.

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>