



**Australian Government**

# **Assessment Requirements for UETTD RIS53 Install and maintain power system public lighting**

**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
- installing and maintaining public lighting poles/columns at least one (1) of the following:
  - wood
  - concrete
  - steel
  - composite
- installing or and maintaining public lighting lanterns/luminaires, including at least two (2) of the following:
  - high pressure mercury vapour
  - low pressure and high pressure sodium vapour
  - fluorescent
  - quartz-halogen
- using specialist testing equipment, including at least three (3) of the following:
  - voltage detectors\*
  - insulation resistance testers
  - clamp-on ammeters
  - continuity testers
  - fault indicators
  - (\* must use)
- 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, local government and/or enterprise requirements pertaining to the installation and maintenance of public lighting systems and associated equipment
- requirements for the use of enterprise construction manuals, system diagrams/plans and drawings, including:
  - street lighting circuits
  - earthing system
- types of tools and equipment used for installation and maintenance
- types and function of lanterns/luminaires/lamps, control equipment, poles and associated hardware used for street lighting, such as:
  - high pressure mercury vapour, low pressure and high pressure sodium vapour, fluorescent, quartz-halogen, wood, concrete, steel, composite, choke boxes, photo-electric cells, time switches and contactor boxes
- types of lighting systems, including:
  - overhead and underground street lighting systems
  - controlling and switching of lighting systems
- techniques for the installation of street lighting systems
- techniques for the maintenance of street lighting systems, such as:
  - diagnosing of faults; removing, repairing, replacing and cleaning of public lighting and associated hardware
- application of specific testing equipment, such as:
  - voltage detectors, insulation resistance testers, clamp-on ammeters, continuity testers and fault indicators
- techniques for the inspection, testing and commissioning of street lighting systems.

## 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 maintaining power system public lighting

- 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>