



**Australian Government**

# **Assessment Requirements for UEERE0076 Install and maintain wind energy systems to power conversion equipment**

**Release: 1**

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## **Modification History**

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

This unit replaces and is not equivalent to:

- UEERE0036 Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications, and
- UEERE0038 Install, configure and commission LV wind energy conversion systems rated up to 10 kW

Modifications include:

- Unit title changed
- Unit application updated
- Prerequisites changed
- Significant amendments made to Elements and Performance Criteria
- Range of conditions updated
- Significant amendments to Performance and Knowledge Evidence.

## **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 occasions and include:

- installing wind energy systems, including:
  - applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including using risk control measures
  - verifying design and resolving any issues with designer
  - coordinating work with relevant person/s
  - applying appropriate installation methods for wind energy system
  - testing and verification wind energy system safely
  - connecting and commissioning in accordance with industry standards and regulations
  - completing documentation according to regulatory and industry standards.

## **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:

- installation of wind energy systems including:
  - selection of an appropriate tower for the installation of a wind energy system taking into

consideration soil type and footings, local council approvals, appropriate codes, relevant Australian standards

- appropriate methods and safety procedures for raising tower and wind energy system, lightning protection, tower maintenance, safety in the erection and maintenance of the tower and wind energy system, and site management to minimise environmental impacts
- appropriate electrical transmission voltage and cable size from the wind energy system to the relevant PCE (if applicable)
- appropriate installation, commissioning, fault diagnosis and rectification using appropriate safety procedures, including wind energy system power output, voltage regulation, and transmission cable voltage drop, manual and automatic furling, and shutdown
- schematic and wiring diagrams for the wind energy system showing the general circuit layout and protection between the wind energy system and PCE according to relevant Australian standards and lightning protection requirements
- safety procedures for the installation, commissioning, fault diagnosis of system components
- maintenance of wind energy system including:
  - appropriate methods and safety procedures for tower maintenance
  - appropriate maintenance methods and safety procedures, including wind energy system power output, voltage regulation, and transmission cable voltage-drop, manual and automatic furling, and shutdown
  - safety procedures for the maintenance of system components
  - maintenance schedule for the system
  - tower maintenance
- relevant industry standards
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant workplace documentation
- relevant workplace policies and procedures.

## 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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable simulated workplace operational situations that replicate 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, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to installing and maintaining wind energy system for stand-alone applications
- applicable documentation, including workplace procedures, 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=b8a8f136-5421-4ce1-92e0-2b50341431b6>