



Australian Government

**UEERE0038 Install, configure and
commission LV wind energy conversion
systems rated up to 10 kW**

Release: 1

UEERE0038 Install, configure and commission LV wind energy conversion systems rated up to 10 kW

Modification History

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

Application

This unit involves the skills and knowledge required to install, configure and commission low voltage (LV) wind energy conversion system (WECS) rated up to 10 kilowatt (kW).

It includes preparing to install LV WECS, installing LV WECS, completing installation and reporting installation activities.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, is required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

UEEEL0012 Install low voltage wiring, appliances, switchgear and associated accessories

UEERE0047 Solve problems in wind energy conversion systems rated up to 10 kW

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install LV WECS

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** WHS/OHS processes and procedures for relevant work area are identified and applied in accordance with workplace procedures
- 1.2** WHS/OHS risks are identified and workplace procedures for risk control are applied in preparation for work
- 1.3** Risks/hazards are identified, assessed, reported to relevant person/s and control measures implemented
- 1.4** System installation is planned in consultation with others impacted by the work and sequenced appropriately
- 1.5** Nature and location of the work are determined from documentation or relevant person/s to determine the scope of work
- 1.6** Sitting limitations and customer system requirements are identified by consultation with the customer
- 1.7** Suitable system components are specified and selected in accordance with workplace procedures
- 1.8** Location of system components is planned within the constraints of the building structure and regulations
- 1.9** Instructions for coordinating work with others are obtained from relevant person/s and applied
- 1.10** Materials and components required are obtained in accordance with workplace procedures, pre-assembled, as required, and checked against job requirements
- 1.11** Materials and components are prepared for transport to the site and transport is arranged in accordance with workplace procedures
- 1.12** Tools, equipment and testing devices required are obtained in accordance with workplace procedures and checked for correct operation and safety

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| | 1.13 | Preparatory work is checked to ensure no unnecessary damage has occurred previously and complies with requirements |
| 2 | Install LV WECS | |
| | 2.1 | Workplace risk control measures and procedures are applied |
| | 2.2 | Equipment is transported safely to the site in accordance with workplace procedures |
| | 2.3 | Need to test or measure live electrical work is determined in accordance with WHS/OHS requirements and conducted in accordance with workplace procedures |
| | 2.4 | Circuits/machines/plant are isolated in accordance with WHS/OHS requirements and workplace procedures |
| | 2.5 | System components are installed in compliance with technical industry standards, job specifications and requirements, and with sufficient access to enable terminations, adjustment and maintenance |
| | 2.6 | Wiring is terminated at components and associated equipment in accordance with manufacturer specifications and functional and regulatory requirements |
| | 2.7 | Unexpected events are discussed with relevant person/s, dealt with and documented in accordance with workplace procedures |
| | 2.8 | Unexpected situations are dealt with safely and with the approval of authorised person/s |
| | 2.9 | Quality checks of installed apparatus are conducted in accordance with workplace procedures |
| | 2.10 | System installation is completed minimising waste of materials, damage to apparatus, circuits, the surrounding environment and services using sustainable energy principles |
| 3 | Complete installation and report installation activities | |
| | 3.1 | Workplace risk control measures and procedures are applied |
| | 3.2 | Worksite is cleaned and made safe in accordance with workplace procedures |

- 3.3 Final checks are conducted to confirm installed apparatus conforms to requirements
- 3.4 System operation is tested and installation verified as compliant with industry standards and work specifications
- 3.5 'As-installed' apparatus and associated equipment are documented and relevant person/s notified in accordance with workplace procedures
- 3.6 Customer is informed of system operation, routine maintenance and limitations
- 3.7 Documentation required by industry standards or job specifications is provided to the customer

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEK144A Install, configure and commission LV wind energy conversion systems rated up to 10 kW.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>