



Australian Government

**UEERE0036 Install small wind energy
conversion systems rated up to 10 kW for
ELV stand-alone applications**

Release: 1

UEERE0036 Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications

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 small wind energy conversion systems (WECS) rated up to 10 kilowatt (kW) for extra-low voltage (ELV) stand-alone applications.

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

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

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

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEEEL0019 Solve problems in direct current (d.c.) machines

UEEEL0021 Solve problems in magnetic and electromagnetic devices
and

UEECD0043 Solve problems in direct current circuits
or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install small ELV WECS

PERFORMANCE CRITERIA

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

- 1.1** Work health and safety (WHS)/occupational health and safety (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 in 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 is obtained from relevant person/s and applied
- 1.10** Materials and components required are obtained in accordance with workplace procedures, pre-assembled, where necessary, and checked against job requirements
- 1.11** Materials and components are prepared for transport to the site and transport is arranged
- 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 small ELV 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 UEENEEK143A Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications.

Links

Companion Volume implementation guides are found in VETNet - -

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