



Australian Government

UEERE0039 Install, set up and maintain ELV micro-hydro systems rated up to 6.4 kW

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.

Application

This unit involves the skills and knowledge required to install, adjust, set up and maintain extra-low voltage (ELV) micro-hydro systems rated up to 6.4 kilowatt (kW).

It includes preparing to install ELV micro-hydro systems, installing ELV micro-hydro systems, and completing and reporting installation activities.

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

Pre-requisite Unit

UEERE0045 Solve basic problems in micro-hydro systems

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install ELV micro-hydro systems

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 hazards are identified, risks assessed,

reported to relevant person/s and workplace procedures for risk control measures applied in preparation for work

- 1.3 System installation is planned in consultation with others impacted by the work and sequenced appropriately
- 1.4 Nature and location of the work is determined from documentation or relevant person/s to determine the scope of work
- 1.5 Location of system components is planned within the constraints of the building structure and regulations
- 1.6 Instructions for coordinating work with others are obtained from relevant person/s and applied
- 1.7 Materials required are obtained in accordance with workplace procedures and checked against job requirements
- 1.8 Tools, equipment and testing devices required are obtained in accordance with workplace procedures and checked for correct operation and safety
- 1.9 Preparatory work is checked to ensure no damage has occurred and compliance with requirements

2 Install ELV micro-hydro systems

- 2.1 Need to test or measure live electrical work is determined in accordance with WHS/OHS requirements and conducted in accordance with workplace procedures
- 2.2 Circuits/machines/plant are isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.3 System components are installed in compliance with technical industry standards, job specifications and requirements, and with sufficient access to enable terminations, adjustment and maintenance
- 2.4 Wiring is terminated at system components in accordance with manufacturer specifications and functional and regulatory requirements
- 2.5 Unplanned situations are discussed with relevant person/s and responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment

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| | 2.6 | Checks of installed apparatus quality are conducted in accordance with workplace procedures |
| | 2.7 | Apparatus installation is conducted minimising waste of materials, damage to apparatus, circuits, the surrounding environment and services using sustainable energy principles |
| 3 Complete and report installation activities | 3.1 | Worksite is cleaned and made safe in accordance with workplace procedures |
| | 3.2 | Final checks are conducted to confirm installed apparatus conforms to requirements |
| | 3.3 | ‘As-installed’ apparatus and associated equipment are documented and relevant person/s notified in accordance with workplace procedures |

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 UEENEEK137A Install, set up and maintain ELV micro-hydro systems rated up to 6.4 kW.

Links

Companion Volume implementation guides are found in VETNet - -

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