



**Australian Government**

**UEERE0037 Install, configure and  
commission LV micro-hydro systems rated  
up to 6.4 kW**

**Release: 1**

## **UEERE0037 Install, configure and commission LV micro-hydro systems rated up to 6.4 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) micro-hydro systems rated up to 6.4 kilowatt (kW).

It includes preparing to install LV micro-hydro systems, installing LV micro-hydro systems, and completing 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

UEERE0045 Solve basic problems in micro-hydro systems

### **Competency Field**

Renewable Energy

### **Unit Sector**

Electrotechnology

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

#### **1 Prepare to install LV micro-hydro systems**

- 1.1** WHS/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 are 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 is obtained from relevant person/s and applied
- 1.7** Material required is 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 complies with requirements

#### **2 Install LV 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 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
- 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 UEENEEK136A Install, configure and commission LV 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>