



Australian Government

**UEERE0079 Install off-grid power
conversion equipment to electrical
installation**

Release: 1

UEERE0079 Install off-grid power conversion equipment to electrical installation

Modification History

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

Application

This unit involves the skills and knowledge required to install off-grid power conversion equipment to electrical installation.

It includes preparing to work on off-grid systems, installing off-grid system to electrical installation, and completing and reporting on 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

UEEEL0039 Design, install and verify compliance and functionality of general electrical installations

UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems

UEERE0078 Install battery storage to power conversion equipment

UEERE0081 Install photovoltaic systems to power conversion equipment

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 off-grid power conversion equipment to electrical installation

- 1.1** Nature of the installation is verified from design documentation and any design concerns identified referred to designer
- 1.2** WHS/OHS processes and procedures for relevant work area are identified and applied in accordance with workplace procedures
- 1.3** WHS/OHS hazards are identified, risks assessed, reported to relevant person/s and workplace procedures for risk control measures applied in preparation for work
- 1.4** System installation is planned in consultation with others impacted by the work and sequenced appropriately
- 1.5** Location of system components is verified according to design within the constraints of the building structure and regulations
- 1.6** Materials, components, tools, equipment and testing devices required are obtained in accordance with workplace procedures and checked for correct operation and safety
- 1.7** Live testing, measurement and isolation requirements determined in accordance with WHS/OHS requirements and workplace procedures

2 Install off-grid power conversion equipment to electrical installation

- 2.1** Circuits/machines/plant are isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.2** System components are installed to comply with design, manufacturer specifications, industry standards and regulatory requirements
- 2.3** Wiring is terminated at system components and mandatory tests conducted prior to energisation
- 2.4** Quality checks of installed apparatus are conducted in accordance with workplace procedures

- 2.5 System is programmed in accordance manufacturer specifications and design
- 2.6 Testing and commissioning of the system is conducted in accordance with design documentation, regulations, relevant industry standards and manufacturer specifications
- 2.7 Worksite is cleaned and made safe in accordance with workplace procedures
- 2.8 'As-installed' system and associated equipment are documented, manuals produced, and system is handed over to required person/s as per legislation, regulations, industry standards and job requirements

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 Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit.

Links

Companion Volume Implementation Guides are found in VETNet -

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