



Australian Government

UEERE0035 Install ELV stand-alone photovoltaic power systems

Release: 1

UEERE0035 Install ELV stand-alone photovoltaic power systems

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 extra-low voltage (ELV) stand-alone photovoltaic (PV) power systems.

It includes preparing to install ELV stand-alone PV power apparatus and systems, installing ELV stand-alone PV power apparatus and system, completing installation and reporting installation activities.

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

Pre-requisite Unit

UEERE0022 Solve basic problems in photovoltaic energy apparatus and systems

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install ELV stand-alone PV power apparatus and 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 are determined from documentation or relevant person/s to determine the scope of work
- 1.5 Sitting limitations and customer system requirements are identified through consultation with relevant person/s
- 1.6 Energy demand is assessed and recommendations made to the customer for energy efficiency improvements, as necessary
- 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, pre-assembled, where necessary, and checked against job requirements in accordance with workplace procedures
- 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
- 1.13 Preparatory work is checked to ensure no unnecessary damage has occurred and complies with requirements

2 Install ELV stand-alone PV power apparatus and systems

- 2.1 Equipment is transported safely to site in accordance with workplace procedures
- 2.2 Need to test or measure live electrical work is determined in accordance with WHS/OHS requirements and conducted in accordance with workplace procedures

- 2.3 Circuits/machines/plant are isolated in accordance with WHS/OHS requirements and workplace procedures
 - 2.4 System components are installed in compliance with technical industry standards, job specifications and requirements, and with sufficient access to enable terminations, adjustment and maintenance
 - 2.5 Wiring is terminated at components and associated equipment in accordance with manufacturer specifications and functional and regulatory requirements
 - 2.6 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
 - 2.7 Checks of installed apparatus quality are conducted in accordance with workplace procedures
 - 2.8 System installation is conducted 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 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 System operation is tested and installation verified as compliant with standards and work specifications
 - 3.4 'As-installed' apparatus and associated equipment are documented and relevant person/s notified in accordance with workplace procedures
 - 3.5 Customer is informed of system operation, routine maintenance and limitations
 - 3.6 Documentation required by 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 UEENEEK134A Install ELV stand-alone photovoltaic power systems.

Links

Companion Volume implementation guides are found in VETNet - -

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