



Australian Government

UEERE0061 Design grid-connected photovoltaic power supply systems

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.

This unit replaces and is not equivalent to UEERE0011 Design grid-connected photovoltaic power supply systems. Modifications include:

- Unit application updated
- Prerequisites changed
- Significant amendments made to Elements and Performance Criteria
- Range of conditions updated
- Significant amendments to Performance and Knowledge Evidence
- Assessment conditions updated.

Application

This unit involves the skills and knowledge required to design grid-connected photovoltaic (PV) power supply systems.

It includes designing grid-connected PV power supply system, following design briefs, utilising data/information from site survey to determine design requirements, ensuring safety and performance standards and functional requirements are met, documenting and obtaining approval for design.

This unit is appropriate for Licenced Electricians or Electrical Engineers with responsibility for designing grid-connected photovoltaic power supply systems.

Licensing, legislative or certification requirements that apply to this unit may differ between jurisdictions and system types. They should be checked prior to commencing this unit.

Pre-requisite Unit

UEERE0054 Conduct site survey for grid-connected photovoltaic and battery storage systems
and

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

or

UEERE0051 Apply electrical principles to renewable energy design

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to design a grid-connected PV power supply system

2 Develop a grid-connected PV power supply system design

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) requirements and workplace procedures are identified and applied

1.2 Potential grid-connected supply system options are determined from interpretation of site survey and available information

1.3 People or organisations involved in the design and installation are identified and roles clarified

1.4 Industry regulations, legal obligations and job requirements are identified and applied to work in accordance with workplace procedures

2.1 Grid-connected power supply systems, performance standards and compliance methods are applied to the design development

2.2 Safety, functional and budgetary considerations are incorporated in design

2.3 Grid-connected power supply system design draft is checked for compliance with the design brief, industry standards and regulations, job requirements and workplace procedures

2.4 Grid-connected power supply system design is documented and submitted in line with industry standards and regulations, job requirements and 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.

Must provide two PV power systems designs that include:

- different design briefs for different sites
- compliance with industry standards and regulatory requirements.

Unit Mapping Information

This unit replaces and is not equivalent to UEERE0011 Design grid-connected photovoltaic power supply systems.

Links

Companion Volume Implementation Guides are found in VETNet -

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