



Australian Government

UEERE0060 Design grid-connected battery storage 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 UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems. Modifications include:

- Unit title changed
- Unit application updated
- Prerequisites changed
- Amendments made to Elements and Performance Criteria
- Range of conditions updated
- Significant amendments to performance and knowledge evidence requirements and CVIG content developed
- Assessment conditions updated.

Application

This unit involves the skills and knowledge required to design battery storage systems.

This unit applies to a person with a sound knowledge of the components and different system configurations of battery storage systems for grid-connected photovoltaic (PV) systems and suitable energy management strategies that can be applied to the site where a system can be installed.

A person competent in this unit will be able to design a system, which includes calculating and selecting the correct sized equipment, so the system output performance meets the client specific objectives, within the guidelines of relevant industry standards, regulations and manufacturer requirements.

The unit involves designing a system taking into consideration all necessary work health and safety requirements relevant for the selected system and documenting the design including all calculations, equipment specifications and layouts.

This unit is appropriate for Licenced Electricians or Electrical Engineers with responsibility for designing grid-connected battery storage 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

UEERE0061 Design grid-connected photovoltaic power supply 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 and Sustainable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Prepare to design grid-connected battery storage systems

- 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 battery storage 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 Develop a grid-connected battery storage system design

- 2.1** Grid-connected battery storage system, 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 battery storage 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 can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is not equivalent to UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems

Links

Companion Volume Implementation Guides are found in VETNet -

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