



Australian Government

Assessment Requirements for UEERE0057

Coordinate the design of micro-grid renewable energy systems

Release: 1

Assessment Requirements for UEERE0057 Coordinate the design of micro-grid renewable energy systems

Modification History

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

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS), and risk assessment and control procedures
- developing the site survey plan in consultation with the project manager, client, equipment manufacturers, installers and engineers
- identifying, engaging and coordinating and technical expertise required for the site survey and design
- communicating effectively with stakeholders
- undertaking site inspection safely and documenting findings
- coordinating qualified person/s as required to:
 - assess client energy demand requirements
 - develop options for suitable generating systems
 - develop options for suitable storage systems
 - determine impact of site conditions on selection of best options
 - determine placement of system components, any restrictions or issues of concern
 - identify potential installation problem/s and recommend solutions
 - determine any required sign-off or approval for design and final installation
 - produce final site survey report
 - produce micro-grid design
- obtaining approval for final design
- completing relevant organisational documentation.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of the following. Additional advice and definitions for some items is provided in the UEE Training Package Companion Volume Implementation Guide (CVIG).

- relevant WHS/OHS requirements
- relevant manufacturer specifications
- relevant workplace documentation, policies and procedures
- relevant standards, building regulations and codes of practice
- methods to identify and comply with contractual obligations
- customer service responsibilities
- stakeholders involved in the design, installation and maintenance of energy systems and their roles
- methods to identify conditions to drive energy source
- environmental management plan development and implementation
- management of system maintenance processes
- site surveying
- energy assessment and monitoring
- micro-grid energy generating systems
- micro-grid energy storage systems
- basic energy principles
- methods for identifying and recording existing electrical and generation infrastructure
- electricity network requirements and restrictions
- government/utilities incentive schemes
- jurisdictional approvals required before installation
- roles and responsibilities of people involved in design and installation
- load control, demand management and tariffs.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

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