



Australian Government

**Assessment Requirements for UEERE0058
Coordinate the installation, fault finding
and repair of micro grid systems**

Release: 1

Assessment Requirements for UEERE0058 Coordinate the installation, fault finding and repair of micro grid 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 and performance criteria on at least two occasions and include:

- coordinating installation, fault finding and repair of micro-grid systems including:
 - applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including using risk control measures
 - verifying design and resolving any issues with designer
 - engaging and scheduling of contractors and other experts required for completion of work and confirming roles, responsibilities and levels of authority
 - planning work in consultation with others impacted by the work and sequenced appropriately
 - ensuring installed/repaired system components comply with design, manufacturer specifications, industry standards and regulatory requirements
 - conducting quality checks of installed apparatus
 - ensuring system is programmed in accordance manufacturer specifications and design
 - testing and commissioning the system in accordance with design, regulations, relevant industry standards and manufacturer specifications
 - completing necessary documentation, including handing over system operational documents to the customer.

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).

- conducting and reporting the outcomes of site surveys for renewable energy systems
- design principles for grid-connected, off-grid and micro-grid systems
- processes, procedures and techniques for the installation of:
 - grid connected photovoltaic systems
 - grid connected energy storage systems

- power conversion equipment to the grid
- power conversion equipment to essential loads
- off-grid systems to an electrical installation
- micro-grid system components and operating systems
- system configurations including multiple energy sources including:
 - systems with d.c. loads only
 - systems with d.c. and a.c. loads
 - systems with a.c. loads
 - renewable energy only systems including PV, wind and micro-hydro
 - hybrid systems comprising one or more RE system with fuel generator
- electrical installation requirements including:
 - methods used in wiring and connecting in accordance with relevant Australian Standards and manufacturers requirements
 - considerations involved in choosing the cable routes
 - selection and locating the associated protection and isolating devices in accordance with relevant Australian standards and industry guidelines
 - wiring diagrams for RE systems showing the general circuit layout and protection between the various system components
- system control installation including:
 - control and monitoring equipment
 - associated cabling
 - control programming
- fault finding, repair and maintenance of grid-connected and off-grid systems
- micro-grid system fault finding including:
 - procedures for individual equipment
 - procedures for interconnected systems
- micro-grid system maintenance procedures including:
 - requirements for individual equipment
 - requirements for interconnected systems.
 - requirements including relevant industry standards, regulations and manufacturer requirements
- micro-grid system quality check procedures
- micro-grid system testing and commissioning procedures including:
 - safe testing of equipment
 - safe testing of system operation
- system documentation
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant workplace documentation, policies and procedures.

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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable 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
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- 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>