



Australian Government

UEERE0027 Coordinate maintenance of renewable energy (RE) apparatus and systems

Release: 1

UEERE0027 Coordinate maintenance of renewable energy (RE) apparatus and 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 coordinate maintenance of renewable energy (RE) apparatus and systems.

It includes preparing for, conducting and completing coordination of maintenance work.

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

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0042 Solve problems in ELV single path circuits

UEERE0019 Maintain safety and tidiness of remote area power supply systems

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to coordinate maintenance

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 for relevant work area are identified and applied in accordance with workplace

procedures

- 1.2 Risk control measures are applied in accordance with workplace procedures prior to commencing work
 - 1.3 Risks/hazards are identified, assessed, reported to relevant person/s and control measures implemented
 - 1.4 Scope of work is determined from job specifications, drawings and regulatory requirements
 - 1.5 Relevant person/s is consulted to ensure work is coordinated effectively with others at the worksite
 - 1.6 Competencies required to conduct work are determined from job specifications and/or consultations with appropriate person/s
 - 1.7 Personnel and materials required for maintenance are obtained in accordance with workplace procedures and checked against job requirements
 - 1.8 Tools, equipment and testing devices required for maintenance are obtained in accordance with workplace procedures and checked for correct operation and safety
 - 1.9 Preparatory work is checked to ensure no damage has occurred and it complies with requirements
- 2 **Conduct maintenance work**
 - 2.1 Workplace risk control measures and procedures are applied
 - 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 Maintenance is conducted in compliance with technical standards, job specifications and requirements
 - 2.5 Strategies to deal with unexpected situations are determined from discussions with relevant person/s, job specifications and requirements
 - 2.6 Methods to deal with unexpected situations are selected based on safety requirements, specified work outcomes and workplace procedures

- 2.7 Maintenance quality checks are conducted in accordance with job specifications, technical standards, regulatory requirements and/or workplace procedures
 - 2.8 Work is conducted minimising waste of materials and energy, damage to apparatus, circuits, the surrounding environment and services
- 3 **Complete work**
 - 3.1 Workplace risk control measures and procedures are applied
 - 3.2 Worksite is made safe in accordance with workplace safety procedures
 - 3.3 Maintenance conforming with requirements is verified
 - 3.4 Completion of work is documented and appropriate person/s notified in accordance with 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.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEK110A Co-ordinate maintenance of renewable energy (RE) apparatus and systems.

Links

Companion Volume implementation guides are found in VETNet - -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEERE0027 Coordinate maintenance of renewable energy (RE) apparatus and systems

Modification History

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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 one occasion and include:

- interpreting maintenance schedule requirements correctly
- accessing appropriate plant, materials and personnel
- following a maintenance schedule
- evaluating apparatus for compliance with specified requirements
- arranging for corrective action of non-compliant apparatus
- documenting maintenance work
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures and practices, including the use of risk control measures
- coordinating maintenance of renewable energy (RE) apparatus and systems
- checking isolation of circuits/machines/systems
- completing relevant reporting/documentation
- conducting quality checks
- coordinating work with relevant person/s
- determining live electrical testing/measurement requirements
- determining scope of work.

Knowledge 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 and include knowledge of:

- scheduled maintenance process, including:
 - maintenance principles encompassing:
 - maintenance function
 - role of maintenance department
 - WHS/OHS requirements
 - maintenance systems encompassing:
 - maintenance terminology

- preventative maintenance
- predictive maintenance
- corrective maintenance
- data acquisition encompassing:
 - plant history cards/files
 - inspection techniques
 - predictive maintenance
 - remote visual inspection
 - non-destructive testing
 - thermography
 - vibration analysis
 - oil analysis
- maintenance plan encompassing:
 - characteristics of plant operation
 - assessment of failure characteristics
 - link failure characteristics to maintenance systems
 - identify production windows
 - resources
 - labour
 - materials
 - establish plan
 - implementation procedures
- review of maintenance plan encompassing:
 - analysis of records
 - manual recording methods
- computerised recording methods
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace 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
- resources that reflect current industry practices in relation to coordinating maintenance of RE apparatus and systems
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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