



Australian Government

UEERE0043 Plan periodic maintenance schedules of remote area power supplies (RAPS)

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.

Application

This unit involves the skills and knowledge required to plan periodic maintenance schedules of remote area power supplies (RAPS).

It includes establishing maintenance requirements, developing and implementing maintenance schedule, and evaluating maintenance program.

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

UEECD0016 Document and apply measures to control WHS risks associated with electrotechnology work

UEERE0023 Work safely with remote area power supply systems

UEERE0006 Conduct periodic maintenance of remote area power supply battery banks

UEERE0007 Conduct periodic maintenance of remote area power supply generator sets

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

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|---|--|
| 1 Establish RAPS system maintenance requirements | <p>1.1 Work health and safety (WHS)/occupational health and safety (OHS) policies and procedures, skills required and frequency and level of maintenance work are determined in accordance with maintenance routines and workplace procedures</p> <p>1.2 Records are created to manage maintenance work and updated in accordance with workplace procedures</p> <p>1.3 Maintenance and replacement or repair work are determined in accordance with manufacturer and community requirements and workplace procedures</p> <p>1.4 Maintenance program, including basic periodic instruction in demand side use, is determined in accordance with local community requirements and workplace procedures</p> |
| 2 Develop and implement RAPS system maintenance schedule | <p>2.1 Maintenance schedules are developed from equipment manufacturer recommendations and in accordance with RAPS system safety and performance requirements</p> <p>2.2 Procedures are developed and implemented to ensure the maintenance program is completed in accordance with the planned schedule and requirements</p> <p>2.3 Procedures are developed and implemented to ensure records are maintained in accordance with planned schedule and requirements</p> |
| 3 Evaluate RAPS system maintenance program | <p>3.1 Periodic and sample inspection reports are used to determine maintenance quality and the need for revision of maintenance schedule and frequency</p> <p>3.2 Maintenance schedule is periodically reviewed and revised to maintain the integrity of the RAPS system</p> |

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 UEENEEK108A Plan periodic maintenance schedules of remote area power supplies (RAPS).

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 UEERE0043 Plan periodic maintenance schedules of remote area power supplies (RAPS)

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 separate occasions and include:

- 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
- completing maintenance schedule reporting and record keeping
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- developing a plan for periodic maintenance of remote area power supply (RAPS) systems located in different communities, including the following:
 - items to be check and tested
 - items to be replaced or repaired
 - frequency of the periodic maintenance
 - required materials and equipment
 - timeframes to conduct maintenance on each RAPS system
 - travel distance and times to each community
 - periodic and sample inspection reports
 - protocols for working in different communities
 - methods for recording and evaluating maintenance
 - periodic review and revision of RAPS system maintenance schedule.

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:

- development and self-management of simple maintenance programs
- maintenance scheduling principles, including:
 - limitation of the role of the RAPS service worker
 - periodic maintenance planning procedures

- development of vehicle booking procedures
- development of checklists for replacement equipment
- determining items to be checked
- determining items to be replaced
- development procedures for recording and reporting
- scheduling of maintenance at multiple communities
- developing checklists for preparation of service, vehicle and tools and equipment
- developing processes for sourcing and funding replacement components
- plant maintenance planning
- relevant RAPS system manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- reporting of maintenance work.
- techniques to develop and implement RAPS system maintenance schedule.

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 maintenance materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to developing a plan for periodic maintenance of RAPS systems located in different communities
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals
- maintenance equipment for RAPS system, including:
 - battery bank
 - engine driven generator sets

- fuel storage
- inverter and regulator
- photovoltaic (PV) array
- wind generators.

Links

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