



Australian Government

UEERE0040 Maintain and monitor remote area essential service operations

Release: 1

UEERE0040 Maintain and monitor remote area essential service operations

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 maintain and monitor remote area essential service operations.

It includes preparing to maintain a power station compound, monitoring performance, developing maintenance schedules, completing work and reporting outcomes.

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

UEERE0023 Work safely with 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 maintain remote area power supply (RAPS) compound and monitor

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 a remote area power station facility are identified and applied in accordance with workplace routines and procedures

performance

- 1.2** Risks are identified, assessed and control measures 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** Nature and location of remote area power station facility is obtained from documentation or from relevant person/s to determine the scope of work
 - 1.5** Advice on coordinating work with others and the local community is obtained from relevant person/s and applied
 - 1.6** Sources of materials required for work are identified and accessed in accordance with workplace routines and procedures
 - 1.7** Tools, equipment and testing devices required for work are obtained and checked for correct operation and safety
 - 1.8** Defective and unsafe tools and service equipment are repaired or replaced in accordance with workplace procedures
- 2 Maintain RAPS compound and monitor performance**
 - 2.1** Workplace risk control measures and procedures are applied
 - 2.2** Circuits/machines/plant are isolated in accordance with WHS/OHS requirements and workplace procedures
 - 2.2** Power station building, generating equipment and compound are cleaned and tidied to maintain a safe and efficient plant area in accordance with workplace procedures
 - 2.3** Inspection and reporting are conducted on suitability, location and legibility of safety signage
 - 2.4** Inspection and reporting are conducted on location, suitability and condition of firefighting equipment
 - 2.5** Performance status and fuel and oil use of generation equipment is monitored and logged based on information obtained from instruments, meters and

		measuring devices
	2.7	Non-routine events are referred to relevant person/s for directions in accordance with workplace procedures
	2.8	Quality checks are conducted in accordance with instructions and workplace procedures
3	Develop maintenance schedule and complete work report	
	3.1	Workplace risk control measures and procedures are applied
	3.2	Maintenance schedule is developed based on logged information on power station performance status and condition of compound
	3.3	Maintenance issues beyond the scope of work are referred to relevant person/s in accordance with workplace procedures
	3.4	Work completed is reported to relevant person/s in accordance with maintenance reporting 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 may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEK118A Maintain and monitor remote area essential service (RAPS) operations.

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 UEERE0040 Maintain and monitor remote area essential service operations

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:

- understanding the location and nature of the work required
- following established procedures for repairing or replacing defectives tools and service equipment
- cleaning and tidying remote area power station building, generating equipment and compound effectively
- inspecting and reporting suitability, location and legibility of safety signage
- inspecting and reporting location, suitability and condition of firefighting equipment
- monitoring and logging performance, status and fuel and oil use of generation equipment
- developing an appropriate basic maintenance schedule from logged information
- documenting work activities accurately
- 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
- checking isolation of circuits/machines/system
- completing relevant documentation/reporting
- conducting quality checks
- coordinating work with relevant person/s
- determining scope of work from documentation and/or relevant person/s
- identifying and accessing materials, tools, equipment and testing devices
- identifying deterioration and damage to facilities
- identifying maintenance issues beyond the scope of work and notifying relevant person/s
- maintaining and monitoring remote area essential service operations
- preparing to maintain power station compound and monitor performance.

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:

- power station and compound maintenance, remote area power supply (RAPS) compound maintenance and meter reading, including:
 - maintaining clean, tidy and safe condition of the RAPS building and generating equipment encompassing:
 - removal of generating plant oil, coolant and fuel leaks
 - removal fluid spills from plant room floor areas
 - cleaning of RAPS ventilation systems
 - removal of insects and fauna from plant area
 - environmentally safe disposal of used consumables and rubbish
 - repositioning emptied rubbish bins
 - correct storage of plant spares
 - maintaining a clean, tidy and safe working environment of RAPS compound encompassing:
 - repairing and securing compound perimeter fencing and gates
 - removal and environmentally safe disposal of flora from the fence line and plant room perimeter
 - removal and environmentally safe disposal of compound rubbish
 - cutting and watering the compound grassed area
 - safe arrangements for storage of fuel drums and other flammable liquids
 - maintaining water reticulation equipment
 - inspecting, classifying and repairing the RAPS tools and equipment encompassing:
 - inspecting and reporting hand tools and service equipment for serviceability
 - equipment repair procedures
 - cleaning and storage of tools and equipment
 - inspecting and reporting on the safety signage displayed in the RAPS and on the perimeter fence encompassing:
 - types and location of safety signs relevant to a community RAPS and compound
 - reporting on the conditions and suitability of the signs
 - locating, inspecting and reporting on the fixed and portable firefighting equipment contained in and around the power station encompassing:
 - types of firefighting equipment suitable for a power station
 - typical locations of power station firefighting equipment
 - inspecting and reporting suitability and condition of firefighting equipment
 - instruments/meters showing performance/status of community power stations encompassing:
 - types of information displayed on the instrument panel and switchboards (engine oil pressure, coolant temperatures fuel pressure/flow, amperes, voltage, kilowatt, kilowatt hours, frequency, Hertz and engine running hours)
 - instrument/meter reading and recording techniques
 - dip stick measurement and recording methods of bulk fuel and engine oil
 - maintenance schedules from logged information of community power station

performance encompassing:

- logged information
- maintenance schedules, including timely ordering of fuel, coolant and engine oil, engine oil changes, engine oil filter changes, fan belt condition and adjustment, air cleaner element service, minor tune up requirements, valve adjustments and minor and major overhaul work
- instrument/meter reading and maintenance scheduling records
- relevant 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.

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 maintaining and repairing facilities associated with remote area essential service operations
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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