

UEERE0023Y Work safely with remote area power supply systems

Modification History

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

This unit replaces and is equivalent to UEERE0023 Work safely with remote area power supply systems. Modifications include:

- Several duplicate performance criteria removed
- Performance evidence updated.

Application

This unit involves the skills and knowledge required to work safely on remote area power supply (RAPS) systems.

It includes preparing to enter a RAPS system, applying safe working practices, and following workplace procedures for hazard identification and risk control in RAPS system areas.

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

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 Prepare to enter a RAPS system | 1.1 Hazards/risk control procedures for RAPS systems maintenance are identified and applied |
| | 1.2 System access permit is obtained from relevant person/s |
| | 1.3 Preparation for electrical and non-electrical isolation is completed in accordance with workplace procedures |
| | 1.4 Tools and equipment required for work are checked for safety and correct functionality in accordance with workplace procedures |
| 2 Apply safe working practices in RAPS system area | 2.1 Circuits/machines/system are confirmed as isolated in accordance with work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures |
| | 2.2 Safe work practices in RAPS system are applied in accordance with workplace procedures |
| | 2.3 Safe working practices are applied minimising waste of materials, energy, damage to apparatus, circuits, the surrounding environment and services |
| | 2.4 Quality checks are conducted in accordance with workplace procedures |
| 3 Follow workplace procedures for hazard identification and risk control in RAPS system areas | 3.1 Risks/hazards are identified, assessed and control measures implemented and monitored through consultation with relevant person/s and the local community |
| | 3.2 Workplace hazards are identified and reported to relevant person/s in accordance with workplace procedures |
| | 3.3 WHS/OHS incident reports are completed in accordance with regulatory requirements and workplace procedures |
| | 3.4 Instructions and training are applied 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.

Working safely with RAPS system must include at least the following:

- two different systems incorporating the following:
 - battery bank
 - generator set
 - photovoltaic (PV) array
 - one RAPS system with the addition of a wind generator.

Unit Mapping Information

This unit replaces and is equivalent to UEERE0023 Work safely with remote area power supply systems.

Links

UEE - Electrotechnology Training Package Companion Volume Implementation Guide at:
[sector webpage link here]

Assessment Requirements for UEERE0023Y Work safely with remote area power supply 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, performance criteria and range of conditions on at least two occasion and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures and practices in RAPS system, including:
 - completing WHS/OHS incident reports
 - applying work procedures and instructions as they apply to risk control measures
 - participating in consultation processes, identifying hazards and implementing and monitoring control measures
 - dealing with accidents and emergencies
 - preparing for and checking isolation of circuits/machines/systems
 - preparing to enter the remote area power supply (RAPS) system including, permission to enter the area and to isolate RAPS equipment
 - obtaining and inspecting tools and equipment and reporting faults
- conducting RAPS system quality checks.

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:

- RAPS safe working practices, including:
 - general safety encompassing:
 - general safety
 - risk assessment
 - personal protective equipment (PPE)
 - WHS/OHS procedures
 - RAPS safety and risk assessment encompassing:
 - types of hazards in and around RAPS:

- rotating machines
- fuels and oils
- exhaust fumes
- acids and flammable gases from batteries
- measures for dealing with hazards in and around RAPS
- purpose and methods for isolation and de-energisation of power supplies
- correct isolation and de-energisation procedures encompassing:
 - processes for preventing generator from automatically starting
 - isolating photovoltaic (PV) arrays
 - isolating wind driven generators
 - isolating battery
 - isolating inverter power sources
- safety signage encompassing:
 - types of signs
 - location
 - condition
 - suitability
- access to system encompassing:
 - methods for limiting access to plant areas
- reporting
- access to RAPS, including:
 - obtaining access permit/s
- relevant manufacturer specifications
- 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 PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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