Australian Government

UEEEL0047 Identify, shut down and restart systems with alternate supplies

Release: 2

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Modification History

Release 2. This is the second release of this unit of competency in the UEE Electrotechnology Training Package.

Assessor requirements updated in Assessment Conditions.

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 identify, shut down and restart systems with alternate supplies.

It includes identifying the system configuration, working safely with electricity generation systems and inverters, identifying hazards and controlling the associated risks, isolation and testing for de-energisation, reinstating the system after isolation, and completing relevant documentation.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, may be required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEEEL0003 Arrange circuits, control and protection for general electrical installations

UEEEL0020 Solve problems in low voltage a.c. circuits

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

UEEEL0019 Solve problems in direct current (d.c.) machines

UEEEL0021 Solve problems in magnetic and electromagnetic devices

and

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Prepare to work on systems with alternate supplies	**1.1** Nature of the installation is obtained from appropriate written documentation, electrical drawings and/or relevant person/s to determine the scope of work
	1.2 WHS/OHS workplace procedures are obtained, interpreted and applied
	1.3 Hazards are identified, risks are assessed, and control measures are implemented
	1.4 Tools, equipment and circuit testing devices are obtained and checked for correct operation and safety in accordance with workplace procedures
	1.5 Work supervisor is consulted to ensure work is coordinated effectively with others
2 Identify and isolate alternate supplies	**2.1** Labelling indicating generation system/s connected on site is located, interpreted and checked against electrical diagrams

	2.2 Switchboard, circuits and known supply are identified
	2.3 Site procedures for isolation and shutdown are obtained and interpreted
	2.4 Circuit to be isolated is identified and tested
	2.5 Shutdown procedures are completed in accordance with industry standards and workplace procedures
	2.6 Isolation of energy sources is completed and proved in accordance with workplace procedures, industry standards and regulatory requirements
	2.7 Systems are inspected and tested for compliance with industry and regulatory standards
	2.8 Battery storage system integrity is checked in accordance with industry standards and regulatory requirements
	2.9 System is re-instated after isolation
3 Complete work and document records	**3.1** WHS/OHS work completion risk control measures and procedures are followed
	3.2 Worksite is cleaned and made safe in accordance with workplace procedures
	3.3 Work completion is documented, electrical drawings are updated, and relevant personnel are notified in accordance with workplace procedures and regulatory requirements

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.

Identifying, shutting down and restarting	• one with an energy source that is still

systems must include electricity generation systems and electricity converters relevant to the installation type, including:	available once turned off; and • one inverter energy system • AND, at least two of the following: • grid-connected inverter systems • photovoltaic (PV) array systems • micro-inverters • engine-driven generating sets • stand-alone power systems • battery systems

Unit Mapping Information

No equivalent unit.

Links

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