



Australian Government

UEPOPS357 Operate local L.V. switchgear

Release: 1

UEPOPS357 Operate local L.V. switchgear

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to undertake the local operation of Low Voltage (L.V.) switchgear.

An L.V. switchgear is a combination of electrical disconnect switches, fuses or circuit breakers used to control, protect and isolate electrical equipment. Switchgears de-energise equipment to allow work to be undertaken and to clear faults downstream in electricity power systems.

Competency in this unit requires the ability to plan and prepare L.V. secondary switchgear, operating switchgear and validating, testing and reporting on L.V. switchgear integrity. Individuals will, in general, work under supervision, in a power generation facility as an operator.

Power generation plant operators are typically trained and authorised to isolate, prepare plant and issue permits to work.

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

Note: Workplace practice

The application of the skills and knowledge described in this unit may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Prepare to operate Low Voltage (L.V.) switchgear

- 1.1 Work requirements are identified and confirmed with appropriate personnel, in accordance with workplace procedures
- 1.2 Safety precautions when operating Low Voltage (L.V.) switchgears are identified, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, manufacturers' specifications and workplace procedures
- 1.3 Location of L.V. switchgear is determined from relevant drawings, plans and maps, in accordance with workplace procedures
- 1.4 Switchgear type and operating procedure is identified, in accordance with workplace procedures
- 1.5 L.V. switchgear condition is assessed for safe operation, in accordance with workplace procedures
- 1.6 Related L.V. switchgear protection is suppressed, if and where necessary, in accordance with workplace procedures

2 Conduct L.V. switchgear operation

- 2.1 Mechanical operation and limitations of L.V switchgear are identified, in accordance with workplace procedures
- 2.2 Implications of L.V. switchgear actions are identified, in accordance with workplace procedures
- 2.3 L.V. switchgear is operated and required status is confirmed, in accordance with workplace procedures
- 2.4 Racking, testing, isolation, circuit earthing and reinstatement processes are carried out, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, manufacturers' recommendations and workplace procedures
- 2.5 Test equipment's integrity is confirmed, and L.V. switchgear circuit is de-energised, in accordance with

		workplace procedures
3 Validate and report L.V. switchgear integrity	3.1	L.V. switchgear is inspected for safe operation, in accordance with workplace procedures
	3.2	L.V. switchgear environment is inspected to ensure statutory and workplace requirements are met
4 Complete documentation	4.1	L.V. switchgear plant problems, movements and status are reported, in accordance with workplace procedures
	4.2	Documentation is updated, 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS357B Operate local L.V. switchgear

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>

Assessment Requirements for UEPOPS357 Operate local L.V. switchgear

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and includes:

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations including:
 - emergency procedures
 - Personal Protective Equipment (PPE)
 - risk control measures
 - safe working practices
- communicating with personnel
- completing documentation
- conducting isolation and earthing procedures
- identifying status of L.V. switchgear
- implementing legislation, industry standards, codes of practice and regulations
- operating Low Voltage (L.V.) secondary switchgear using plant drawings and plans
- planning L.V. secondary switchgear work
- preparing and operating L.V. secondary switchgear protection equipment
- recognising abnormal switchgear operations
- using manufacturers' specifications and manuals
- validating switchgear integrity
- working with permit to work system

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of:

- abnormal secondary switchgear operations
- isolation and earthing procedures
- L.V. secondary switchgear operations
- legislation, industry standards, codes of practice and regulations

- manufacturers' specifications and manuals
- permit to work system
- power generating plant, equipment and its location
- typical arrangements for power generation plant
- WHS/ OHS regulations including:
 - emergency procedures
 - Personal Protective Equipment (PPE)
 - risk control measures
 - safe working practices
- workplace documentation
- workplace policies and procedures

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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 currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>