



Australian Government

UEPOPS001 Analyse single protection device operation

Release: 1

UEPOPS001 Analyse single protection device operation

Modification History

Release 1. This is the first release of this unit of competency in the UEP Electricity Supply Industry – Generation Sector Training Package Release 2.0.

Application

This unit involves the skills and knowledge required to analyse the operation of single protection devices.

Protection devices aim to keep power generation systems stable by isolating the components that are faulty to ensure the network still in operational. Single operation protection devices are designed for specific types of apparatus used in power generation facilities.

Competency in this unit requires the ability to respond to single protection device operation, interpret and determine cause of single protection device operation, restore single protection device operation and complete documentation. Individuals will, in general, work under supervision, in a power generation facility as an operator. Power generation plant operators are 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.

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.

1 Respond to protection

PERFORMANCE CRITERIA

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

1.1 Electrical and mechanical single protection device

operation	operations are confirmed in accordance with workplace procedures
	1.2 Work health and safety (WHS)/occupational health and safety (OHS) regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, environmental requirements, and workplace procedures are identified, applied and monitored
	1.3 Apparatus affected by single protection device operations are identified in accordance with workplace procedures
	1.4 Single protection device targets, flags and alarms are identified and recorded in accordance with workplace procedures
	1.5 Relevant stakeholders are advised in accordance with workplace procedures
2 Interpret and determine cause of protection operation	2.1 Communication with external stakeholders and internal personnel is undertaken and recorded in accordance with workplace procedures
	2.2 Information on single protection device operations is collated and assessed in accordance with workplace procedures
	2.3 Sequence of events prior to, and following, single protection device operation is identified and analysed in accordance with workplace procedures
	2.4 Single protection device operations are analysed and evaluated in accordance with workplace procedures
	2.5 Single protection device operation findings are analysed, in conjunction with recorded data, to determine most probable cause of fault in accordance with workplace procedures
3 Restore protection	3.1 Relevant stakeholders are informed of single protection device operation findings and plan of action in accordance with workplace procedures
	3.2 Single protection device indicators are reset in accordance with workplace procedures
	3.3 Corrective action is taken in accordance with fault type

and workplace procedures

- 4 Complete documentation**
- 4.1** All single protection device operations events are analysed and reported to approved personnel in accordance with workplace procedures
 - 4.2** Records are 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 UEP Electricity Supply Industry – Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS342 Analyse single protection device operation.

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 UEPOPS001 Analyse single protection device operation

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Performance Evidence

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

- applying work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with stakeholders
- completing documentation
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- interpreting and analysing cause of electrical and mechanical single protection devices operation
- interpreting and determining cause of single protection device operations
- responding to electrical and mechanical single protection device operations
- responding to single protection device operations
- restoring electrical and mechanical single protection device status
- restoring single protection devices
- using manuals.

Knowledge Evidence

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

- alarms and flags raised by single protection devices
- causes of single protection devices operation
- fault-finding methods and tools
- manuals
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements

- resetting and restoring electrical and mechanical protection
- single protection devices
- single protection systems and schemes, including electrical and mechanical protection
- stakeholder communication
- types of electrical and mechanical faults
- WHS/OHS requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- workplace documentation
- 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 workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in 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
- applicable documentation, including workplace procedures, 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>