



Australian Government

UEPOPS342 Analyse single protection device operation

Release: 1

UEPOPS342 Analyse single protection device operation

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 analyse the operation of single protection devices.

Protection devices aim to keep power generation systems stable by isolating the components that are faulty, whilst leaving as much of the network as possible still in operation. 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 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 Respond to protection operation

- 1.1 Electrical and mechanical single protection device operations are confirmed, in accordance with workplace procedures
- 1.2 Apparatus affected by single protection device operations are identified, in accordance with workplace procedures
- 1.3 Single protection device targets, flags and alarms are identified, and recorded, in accordance with workplace procedures
- 1.4 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 is 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS342B Interpret and analyse single operation protection devices.

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 UEPOPS342 Analyse single protection device operation

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) requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with stakeholders
- communicating with stakeholders
- completing documentation
- implementing legislation, industry standards, codes of practice and regulations
- 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 manufacturers' specifications and manuals

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:

- alarms and flags raised by single protection devices
- causes of single protection devices operation
- fault finding methods and tools
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals

- resetting or 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 legislated requirements including:
 - emergency procedures
 - 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>