



Australian Government

UEPOPS022 Coordinate and direct switching program

Release: 1

UEPOPS022 Coordinate and direct switching program

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 coordinate and direct resources for a switching program.

An electrical switch can alternate a load between two sources either manually or automatically when sensors detect one of the sources has lost or gained power. A switch is installed where the backup generator is located so that the generator can be used to provide temporary electrical power, as required.

Competency in this unit requires the ability to prepare for a switching program, coordinate and direct a switching program, maintain dynamic integrity of power generation system and complete all documentation. Individuals will, in general, work as a switching program coordinator, in a power generation facility.

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

UEPOPS124 Perform switching to a switching program

Competency Field

Operations

Unit Sector

Electricity generation

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 for switching program

- 1.1** Qualifications and authorisations of personnel performing switching operations are established 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** Contingency plan is evaluated and discussed with key stakeholders and relevant amendments are relayed to relevant personnel in accordance with workplace procedures
- 1.4** Permit and access requirements are established prior to switching program commencement in accordance with workplace procedures
- 1.5** Documentation is distributed to relevant personnel prior to switching program commencement in accordance with workplace procedures,

2 Direct switching program

- 2.1** Personnel are advised of switching program and directed to locations in accordance with workplace procedures
- 2.2** Communication is established with key stakeholders and personnel and is maintained throughout duration of switching program in accordance with workplace procedures
- 2.3** Network system schematic diagram, or equivalent, is updated as switching program proceeds in accordance with workplace procedures,
- 2.4** Access to power generation plant is controlled in accordance with workplace procedures
- 2.5** Work groups are coordinated and directed throughout switching program in accordance with workplace procedures
- 2.6** Permits issued are monitored and recorded in accordance with workplace procedures

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| | 2.7 | Switching program is controlled to ensure outage coincides with planned timetable in accordance with workplace procedures, |
| 3 Maintain dynamic integrity of system | 3.1 | Switching program steps are verified before and after each operation in accordance with workplace procedures |
| | 3.2 | Switching program steps are recorded on successful completion of each operation in accordance with workplace procedures |
| | 3.3 | Network system conditions or stability is constantly monitored in accordance with workplace procedures |
| | 3.4 | Alternative switching program steps are developed for unexpected problems in accordance with workplace procedures |
| 4 Complete documentation | 4.1 | Equipment problems 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 UEP Electricity Supply Industry - Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS525 Coordinate and direct switching program.

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 UEPOPS022 Coordinate and direct switching program

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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 personnel
- completing documentation
- coordinating and directing switching programs
- identifying power generation plant status, including:
 - monitoring network system integrity and stability
 - analysing system operational information
 - recognising abnormal power generating plant and network system operating conditions
 - determining corrective actions
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- interpreting power generation plant drawings and network system diagrams
- liaising with stakeholders
- maintaining dynamic integrity of power generation system
- preparing for switching program
- using manuals
- utilising contingency plans
- 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 and performance criteria and includes knowledge of:

- arrangements of power production plant, including:

- corrective actions
- power generation plant and equipment, location and operating parameters
- power generation plant status
- switchgear types and characteristics
- systems network
- contingency plans
- coordination and direction of switching programs
- permit to work system
- plant drawings, network system diagrams, and manuals
- power generation network system diagrams
- power generation system integrity and stability monitoring processes and procedures
- preparations for switching programs
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- stakeholder liaison
- switching operation processes and procedures
- 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.

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