



**Australian Government**

# **UEPOPS036 Develop H.V. switching programs**

**Release: 1**

# UEPOPS036 Develop H.V. switching programs

## 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 develop high voltage (H.V.) switching programs where multiple sources of supply must be considered and managed.

Switching can be set up to provide power to critical circuits, or to entire electrical subpanels, or to allow loads in large backup generator installations to be smoothly transferred from the utility to synchronised generators and back again.

Competency in this unit requires the ability to interpret requirements, research switching program, draft switching programs and validate switching programs. 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.

### PERFORMANCE CRITERIA

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

- 1 Interpret requirements**
  - 1.1** Notification of switching program requirement is confirmed and assessed 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** Area of planned outage is identified in consultation with relevant personnel, power generation system diagrams, drawings and maps in accordance with workplace procedures
  - 1.4** Work details are interpreted from outage request and draft switching program in accordance with workplace procedures
- 2 Research switching program**
  - 2.1** Implications of switching program on the power generation system are identified and recognised in accordance with workplace procedures
  - 2.2** Types and function of switchgear to be operated are identified and suitability for operation under forecast system conditions during scheduled outage is assessed in accordance with workplace procedures
  - 2.3** System loadings, limitations and alternate supply route capabilities are evaluated to ensure system integrity in accordance with workplace procedures
  - 2.4** Consultation with relevant personnel affected by the switching program is undertaken in accordance with workplace procedures
  - 2.5** Location of isolation points are identified to ensure shortest route when determining sequence of switching steps in accordance with workplace procedures
  - 2.6** Safe working clearances are identified and maintained in accordance with workplace procedures
  - 2.7** H.V., low voltage (L.V.) and control circuitry is examined to ensure no back-feed in accordance with workplace procedures
- 3 Draft switching program**
  - 3.1** Switching program draft is documented, including

location, apparatus, identification and the operation to be conducted, in accordance with workplace procedures,

- 3.2 Permit to work procedures are implemented in accordance with workplace procedures
  - 3.3 Switching program is planned and implemented in accordance with workplace procedures
  - 3.4 Switching program is checked for omissions in accordance with workplace procedures
  - 3.5 All documentation supporting the switching program is completed in accordance with workplace procedures
- 4 Validate switching program**
- 4.1 Switching program is forwarded to relevant personnel for verification in accordance with workplace procedures
  - 4.2 Documentation is recorded 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 UEPOPS428 Develop H.V. switching programs.

## Links

Companion Volume implementation guides are found in VETNet -

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