



Australian Government

UEPOPS025 Coordinate local H.V. networks

Release: 1

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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 the control and management of high voltage (H.V.) substations or local networks.

H.V. substations are a node point in power generation infrastructure. They transform voltage from high to low, or the reverse, and enable the reliable transmission of large amounts of power.

Competency in this unit requires the ability to plan and prepare work; operate, monitor and control H.V. substation and local network; analyse and respond to H.V. substation or local network faults or incidents; review incident response and preventative procedures and complete all documentation. Individuals will, in general, work as an operator with responsibility for H.V. network coordination, 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

There are no prerequisite units

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Plan and prepare work

- 1.1** Documentation to determine H.V. substation or local network status is assessed and evaluated 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** H.V. substation or local network equipment operational prerequisites are established in accordance with manufacturers' recommendations and specifications, and workplace procedures
- 1.4** Sequence for operating local network section and equipment is determined in accordance with workplace procedures
- 1.5** Information to forecast and plan response for efficient operation of H.V substation or local network is utilised in accordance with workplace procedures
- 1.6** Regular consultation with key stakeholders is maintained in accordance with workplace procedures
- 1.7** Implications of operator's actions to H.V substation or local network are identified and assessed in accordance with workplace procedures

2 Operate, monitor and control H.V. substation or local network

- 2.1** Local network is operated and coordinated in accordance with workplace procedures
- 2.2** Local network voltage and current requirements are assessed and evaluated to maintain stability and system integrity in accordance with workplace procedures
- 2.3** Voltage and load profiles are identified in accordance with workplace procedures
- 2.4** Corrective actions to rectify H.V. substation or local network abnormalities are implemented following analysis of data in accordance with manufacturers' recommendations and specifications, and workplace procedures

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| | 2.5 | Resources are identified and coordinated to meet H.V. substation or local network system requirements in accordance with workplace procedures |
| 3 Analyse and respond to H.V. substation or local network faults | 3.1 | Cause of H.V. substation or local network fault conditions are identified by analysing technical and operational information in consultation with system control personnel in accordance with workplace procedures |
| | 3.2 | Operation of protection systems for H.V. substation or local network is identified and assessed to evaluate nature and cause of fault conditions in accordance with workplace procedures, |
| | 3.3 | Communication is established with key stakeholders to identify nature or source of H.V. substation or local network system interference in accordance with workplace procedures |
| | 3.4 | Corrective action is taken in accordance with workplace procedures |
| | 3.5 | Local system integrity and personnel safety are maintained through consultation with relevant personnel, operational documentation and contingency plans in accordance with workplace procedures |
| 4 Review incident response and preventative procedures | 4.1 | Incident or fault responses are assessed and reviewed in accordance with workplace procedures |
| | 4.2 | Alternative responses or contingency plan strategies are identified and assessed in accordance with workplace procedures |
| | 4.3 | Alternative responses or contingency plan strategies are documented in accordance with workplace procedures |
| 5 Complete documentation | 5.1 | H.V. substation or local network problems, movements and status are reported in accordance with workplace procedures |
| | 5.2 | 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 UEPOPS424 Coordinate local H.V. networks.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>