



**Australian Government**

# **UEPOPS452 Conduct operational checks and carry out corrective action on in-service electrical plant**

**Release: 1**

# **UEPOPS452 Conduct operational checks and carry out corrective action on in-service electrical plant**

## **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 conduct operational checks and carry out corrective actions on in-service electrical plant.

An operational check is the verification that a group of components or units are working together to accomplish a single objective. An operational check consists of running in-service electrical plant to ensure that all the systems function together.

Competency in this unit requires the ability to plan for plant in-service checks, carry out in-service electrical checks, carry out corrective actions and complete work. Individuals will, in general, work as an operator in a power generation facility.

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 practices**

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.

#### **1 Plan for plant in-service checks**

### PERFORMANCE CRITERIA

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

- 1.1** Safety issues and Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations are identified, in accordance with workplace procedures
- 1.2** Work, electrical in-service plant and resource requirements are identified from relevant personnel, work orders and documentation, in accordance with workplace procedures
- 1.3** Electrical in-service plant status and work requirements are confirmed with appropriate personnel or by site inspection, in accordance with workplace procedures
- 1.4** Equipment is checked for correct calibration and operation and materials are obtained and inspected for compliance with job specification, in accordance with workplace procedures
- 1.5** Potential hazards are identified and risk control measures are selected, in accordance with the workplace procedures
- 1.6** Pre-access checks of electrical in-service plant are carried out, in accordance with workplace procedures and site requirements

#### **2 Carry out in-service electrical checks**

- 2.1** Electrical in-service plant is operated, in accordance with workplace procedures and manufacturers' recommendations
- 2.2** Electrical in-service plant checks are conducted and monitored, in accordance with workplace procedures, to detect deviations from normal operation parameters
- 2.3** Electrical in-service checks are performed, in accordance with workplace procedures
- 2.4** Electrical in-service plant integrity and personnel safety are maintained, in accordance with workplace procedures and in consultation with appropriate personnel and technical and operational documentation

### **3 Carry out corrective actions**

- 3.1** Corrective actions are identified after analysing electrical in-service plant operations, in accordance with manufacturers' recommendations and workplace procedures
- 3.2** Isolations are confirmed, where appropriate, in accordance with workplace procedures and site requirements
- 3.3** Equipment for use in conducting operational checks is modified using appropriate plans, drawings and manuals, in accordance with workplace procedures
- 3.4** Corrective actions are carried out on electrical in-service plant, without damage or loss to other plant, in accordance with workplace procedures
- 3.5** Modified electrical in-service plant is set up to meet operational parameters, in accordance with workplace procedures and manufacturers specifications
- 3.6** Final electrical in-service plant inspection is performed, in accordance with workplace procedures

### **4 Complete work**

- 4.1** Operational checks and corrective actions are completed, and electrical in-service plant is returned to operational status, in accordance with workplace procedures
- 4.2** Appropriate personnel are notified of work completion, in accordance with workplace procedures
- 4.3** Electrical in-service plant problems and corrective actions are reported, 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 UEPOPS452A Conduct operational checks and carry out corrective action on in-service electrical plant.

## 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 UEPOPS452 Conduct operational checks and carry out corrective action on in-service electrical plant**

## **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
- carrying out in-service electrical checks
- communicating with personnel
- completing work
- determining and completing corrective actions using data analysis techniques and tools
- finalising documentation using recording procedures
- identifying electrical in-service plant status
- implementing legislation, industry standards, codes of practice and regulations
- interpreting power generation plant drawings, manufacturers' specifications and manuals
- maintaining electrical in-service plant integrity
- performing isolations
- planning for electrical in-service plant checks
- preparing electrical in-service plant or equipment for operational check
- recognising abnormal electrical in-service plant operating conditions
- recognising remote indication of plant status and conditions
- 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, performance criteria and range of conditions and includes knowledge of:

- electrical in-service plant and equipment, its location and operating parameters

- electrical in-service plant drawings
- electrical in-service plant status
- isolations
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- modification techniques
- permit to work system
- typical arrangements of power production plant
- 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.

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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.

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