



Australian Government

UEPOPS329 Operate and monitor auxiliary steam systems

Release: 1

UEPOPS329 Operate and monitor auxiliary steam systems

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 operate, inspect and monitor auxiliary steam systems in a power generation facility.

The function of an auxiliary steam system is to deliver ancillary steam, as required, to ensure the smooth operation of plant and equipment. Auxiliaries serve to keep steam water cycles safely circulating, and to return it to its thermodynamic starting point.

Competency in this unit requires the ability to plan work, operate auxiliary steam system plant, test auxiliary steam system plant, analyse auxiliary steam system plant faults, monitor and inspect auxiliary steam system plant and the completion of all 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.

1 Plan and prepare for auxiliary steam system plant operation

2 Operate auxiliary steam system plant

3 Test auxiliary steam system plant operation

PERFORMANCE CRITERIA

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

- 1.1** Safety issues related to operating and monitoring auxiliary steam system plant are identified, in accordance with workplace procedures and Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations and legislative requirements
- 1.2** Work requirements including permits to work are identified, in accordance with workplace procedures, and from relevant personnel and documentation
- 1.3** Documentation to determine auxiliary steam system plant status is assessed and evaluated, in accordance with workplace procedures
- 1.4** Inspection, preoperational checks and field preparation for auxiliary steam system plant service are carried out, in accordance with workplace procedures and manufacturers' recommendations
- 1.5** Auxiliary steam system plant operational prerequisites are established, in accordance with workplace procedures and manufacturers' recommendations
- 1.6** Sequence for recommissioning of auxiliary steam system plant is determined, in accordance with workplace procedures and site requirements
- 2.1** Auxiliary steam system plant is operated, in accordance with workplace procedures and manufacturers' operating recommendations
- 2.2** Auxiliary steam system plant is monitored and observed, in accordance with workplace procedures, to detect deviations from normal operating conditions
- 2.3** Corrective actions are taken to rectify auxiliary steam system plant abnormalities, in accordance with workplace procedures, industry standards and site requirements
- 3.1** Operational tests are performed, in accordance with workplace procedures

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| | 3.2 | Auxiliary steam system plant is observed for correct operational response, in accordance with workplace procedures |
| | 3.3 | Corrective action is taken when response does not meet with documentation, auxiliary steam system plant integrity or personnel safety requirements |
| | 3.4 | Auxiliary steam system plant is returned to required operational status upon completion of testing, in accordance with workplace procedures |
| 4 Analyse auxiliary steam system plant faults | 4.1 | Causes of abnormal auxiliary steam system plant operating conditions are identified, in accordance with workplace procedures, and by analysing technical and operational information |
| | 4.2 | Corrective action is taken, in accordance with workplace procedures |
| | 4.3 | Auxiliary steam system plant integrity and personnel safety is maintained, in accordance with workplace procedures, and in consultation with appropriate personnel and technical and operational documentation |
| 5 Monitor and inspect auxiliary steam system plant | 5.1 | Auxiliary steam system plant to be monitored and inspected is physically identified, in accordance with workplace procedures |
| | 5.2 | Auxiliary steam system plant is monitored and inspected, in accordance with workplace procedures, to detect deviations from normal operating conditions of the plant |
| | 5.3 | Corrective action is taken, in accordance with workplace procedures |
| | 5.4 | Appropriate personnel are notified, in accordance with workplace procedures, when defects are detected |
| 6 Complete documentation | 6.1 | Auxiliary steam system plant problems, movements, and status are reported, in accordance with workplace procedures |
| | 6.2 | 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS329B Operate and monitor auxiliary steam systems.

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 UEPOPS329 Operate and monitor auxiliary steam systems

Modification History

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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, performance criteria and range of conditions on at least two separate occasions and includes:

- analysing auxiliary steam system plant faults using data analysis techniques and tools
- 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 the operation of auxiliary steam system equipment
- identifying auxiliary steam system plant status
- implementing legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and manuals
- monitoring and inspecting auxiliary steam system plant operation
- operating auxiliary steam system plant
- organising resources
- performing isolations
- preparing and planning work
- recognising and responding to abnormal auxiliary steam system plant operating conditions
- testing auxiliary steam system plant operationally using diagnostic and testing techniques
- using permit to work system
- working with auxiliary steam system plant and/or equipment

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:

- auxiliary steam system plant and equipment, its location and operating parameters
- auxiliary steam system plant status
- characteristic auxiliary steam plant faults and corrective actions
- isolations
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- permit to work system
- typical arrangements of power production plant
- workplace documentation
- workplace policies and procedures
- WHS/OHS legislated requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices

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

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