



Australian Government

UEPOPS081 Operate and monitor auxiliary steam systems

Release: 1

UEPOPS081 Operate and monitor auxiliary steam systems

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 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 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 complete all documentation. 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.

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.

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|--|---|
| 1 Plan and prepare for auxiliary steam system plant operation | <ul style="list-style-type: none">1.1 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 monitored1.2 Work requirements, including permits, are identified from relevant personnel and documentation in accordance with workplace procedures1.3 Documentation to determine auxiliary steam system plant status is assessed and evaluated in accordance with workplace procedures1.4 Inspection, preoperational checks and field preparation for auxiliary steam system plant service are carried out in accordance with manufacturers' recommendations and specifications, and workplace procedures1.5 Auxiliary steam system plant operational prerequisites are established in accordance with manufacturers' recommendations and specifications, and workplace procedures1.6 Sequence for recommissioning of auxiliary steam system plant is determined in accordance with workplace procedures |
| 2 Operate auxiliary steam system plant | <ul style="list-style-type: none">2.1 Auxiliary steam system plant is operated in accordance with manufacturers' recommendations and specifications, and workplace procedures2.2 Auxiliary steam system plant is monitored and observed to detect deviations from normal operating conditions in accordance with workplace procedures2.3 Corrective actions are taken to rectify auxiliary steam system plant abnormalities in accordance with workplace procedures |
| 3 Test auxiliary steam system plant operation | <ul style="list-style-type: none">3.1 Operational tests are performed in accordance with workplace procedures3.2 Auxiliary steam system plant is observed for correct operational response in accordance with workplace procedures3.3 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 by analysing technical and operational information in accordance with workplace procedures
	4.2	Auxiliary steam system plant integrity and personnel safety is maintained in consultation with relevant personnel and technical and operational documentation in accordance with workplace procedures
5 Monitor and inspect auxiliary steam system plant	5.1	Auxiliary steam system plant is monitored and inspected to detect deviations from normal operating conditions of the plant in accordance with workplace procedures
	5.2	Relevant personnel are notified when defects are detected in accordance with workplace procedures
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 UEP Electricity Supply Industry – Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS329 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 UEPOPS081 Operate and monitor auxiliary steam systems

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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:

- 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 regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- interpreting 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 system
- working with auxiliary steam system plant and equipment.

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 include knowledge of:

- arrangements of power production plant
- auxiliary steam system plant and equipment, location and operating parameters
- auxiliary steam system plant status
- characteristic auxiliary steam plant faults and corrective actions
- isolations
- manuals
- permit system
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- workplace documentation
- workplace policies and procedures
- WHS/OHS requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices.

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.

Links

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