



Australian Government

UEPOPS425 Produce maintenance plans for generation production plant

Release: 1

UEPOPS425 Produce maintenance plans for generation production 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 undertake the establishment and implementation of maintenance plans for generation production plant. Power generation production plant can include boilers, turbines, hydro equipment and systems, electrical components and systems, control and monitoring systems, ash and dust systems, water treatment and fuel equipment.

A maintenance plan details the actions to maintain and improve the condition of power generating plant. It involves the inspection, servicing, repairing or replacing of the physical components of machines, plant and equipment.

Competency in this unit requires the ability to research and plan for maintenance, develop maintenance plans and implementing and monitoring maintenance plans. Individuals will, in general, work under supervision, in a power generation facility as an operator with responsibility for maintenance planning.

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.

PERFORMANCE CRITERIA

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

1 Research and plan for maintenance

- 1.1 Work requirements are identified and confirmed with appropriate personnel or by site inspection, in accordance with workplace procedures
- 1.2 Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, codes of practice, manufacturers' specifications, environmental obligations and workplace procedures are identified, applied and monitored
- 1.3 Resources for maintenance planning are obtained, in accordance with workplace procedures
- 1.4 Relevant plans, drawings and manuals are selected and used, in accordance with workplace procedures
- 1.5 Maintenance is sequenced and prioritised, in accordance with workplace procedures and site requirements
- 1.6 Potential hazards are identified and risk control measures are selected and implemented, in accordance with workplace procedures
- 1.7 Generation production plant maintenance history including condition monitoring information, recent modifications and existing status are identified and addressed in the maintenance plan, in accordance with workplace procedures
- 1.8 Costing of maintenance work is undertaken, and impact on budget is assessed, in accordance with workplace procedures
- 1.9 Need for operational testing or generation production plant recommissioning is identified, in accordance with workplace procedures

2 Develop maintenance plan

- 2.1 Maintenance schedule is placed into the maintenance plan, in accordance with workplace procedures
- 2.2 Generation production plant isolation and access requests are documented, in accordance with workplace

procedures

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| 2.3 | Availability of resources is confirmed and documented, in accordance with workplace procedures |
| 2.4 | Information relevant to work activities, including risk management and quality control, is attached to maintenance plan, in accordance with workplace procedures |
| 2.5 | Maintenance plan is distributed to personnel, in accordance with workplace procedures |
| 2.6 | Maintenance methods are documented as part of the maintenance plan and are presented for review to appropriate personnel, in accordance with workplace procedures |
| 3 Implement and monitor maintenance plan | |
| 3.1 | Maintenance plan is implemented, in accordance with workplace procedures |
| 3.2 | Feedback on maintenance plan is sought, in accordance with workplace procedures |
| 3.3 | Maintenance plan is modified and approved, in accordance with workplace procedures |
| 3.4 | Amended maintenance plan is distributed to appropriate personnel, 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 UEPOPS425B Produce maintenance plans for generation production 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 UEPOPS425 Produce maintenance plans for generation production plant

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:

- applying Work, Health and Safety (OHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices
- analysing information using data analysis techniques and tools
- communicating with personnel
- determining legislation, industry standards, codes of practice and regulations
- developing maintenance plan
- disseminating maintenance plan
- documenting maintenance methods
- identifying risk management and quality control information and procedures
- implementing and monitoring maintenance plan
- producing maintenance plans
- recognising maintenance requirements by applying maintenance planning principles
- researching and planning for maintenance
- using manufacturers' specifications and manuals

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:

- dissemination of maintenance plans
- generation production plant and equipment, its location and operating parameters
- legislation, industry standards, codes of practice and regulations
- maintenance methods
- maintenance plan development using maintenance planning philosophies and practices

- maintenance plan implementation
- manufacturers' specifications and manuals
- quality control
- risk management
- 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

Links

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