



Australian Government

UEPOPS129 Produce maintenance strategies for generation production plant

Release: 1

UEPOPS129 Produce maintenance strategies for generation production plant

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 undertake the establishment and implementation of maintenance strategies for power generation production plant. Generation production plant can include boilers, turbines, hydro equipment, electrical systems, control and monitoring systems, ash and dust systems, water treatment plant and fuel equipment.

A maintenance plan details the inspection, servicing, repairing or replacing of physical components of machines, plant and equipment used in power generation facilities through the implementation of a prescribed maintenance schedule. Strategies relate to what must happen to achieve the objectives outlined in the maintenance plan.

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

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

UEPOPS128 Produce maintenance plans for generation production plant

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Research and plan for strategies

PERFORMANCE CRITERIA

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

- 1.1 Existing maintenance strategies are reviewed in accordance with maintenance plan and 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 Business plans are reviewed for impact on maintenance plan and proposed work in accordance with workplace procedures
- 1.4 Maintenance activities are identified in accordance with maintenance plan and workplace procedures
- 1.5 Timeframes for implementation and completion of maintenance strategies are established in accordance with maintenance plan and workplace procedures
- 1.6 Key indicators of maintenance strategy performance are defined in accordance with maintenance plan and workplace procedures
- 1.7 Budget is developed to identify maintenance costs in accordance with maintenance plan and workplace procedures
- 1.8 Legal implications of maintenance work to be undertaken are identified in accordance with maintenance plan and workplace procedures
- 1.9 Risk control measures are applied in accordance with maintenance plan and workplace procedures
- 2.1 Resources to implement maintenance strategies are identified and obtained in accordance with maintenance plan and workplace procedures
- 2.2 Timeframes and potential variances for maintenance scheduling are identified in accordance with

2 Establish strategies

		maintenance plan and workplace procedures
	2.3	Interdependence of maintenance activities is identified and documented in accordance with maintenance plan and workplace procedures
	2.4	Objectives for maintenance strategies are documented in accordance with maintenance plan and workplace procedures
3 Implement strategies	3.1	Maintenance strategies are implemented to facilitate outcomes in accordance with maintenance plan and workplace procedures
	3.2	Variances in maintenance strategies are identified in accordance with maintenance plan and workplace procedures
	3.3	Strategies are redeveloped and updated in accordance with maintenance plan and workplace procedures
	3.4	Opportunities for maintenance strategy enhancements are identified and documented for inclusion in future strategy preparation in accordance with maintenance plan and 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 UEPOPS505 Produce maintenance strategies 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 UEPOPS129 Produce maintenance strategies for generation production plant

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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:

- applying work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- establishing and implementing maintenance strategies
- establishing and implementing maintenance plan
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- producing maintenance strategies
- researching and planning maintenance strategies using data analysis techniques and tools
- undertaking maintenance strategy development
- using manuals.

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
- maintenance plan
- maintenance work practices and planning principles
- manuals
- power generation plant and equipment, location and operating parameters
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- risk management techniques
- strategy development
- techniques for maintenance strategy development

- WHS/OHS requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- workplace documentation
- workplace policies and procedures.

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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