



Australian Government

UEPOPS508 Manage commissioning and decommissioning

Release: 1

UEPOPS508 Manage commissioning and decommissioning

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 manage the commissioning and decommissioning of power generation plant and equipment. It includes the reporting of progress and completion of work against key indicators however, it does not cover the removal or return of plant to service under normal routine maintenance situations.

Commissioning refers to the process where equipment and/or plant is installed or completed and is then tested to verify that it functions according to its' design specification. Decommissioning refers to the planned shutdown or removal of equipment and/or plant from usage.

Competency in this unit requires the ability to plan work, commissioning of plant or equipment, decommissioning of plant or equipment, removal or disassembly of plant or equipment, recommissioning of plant or equipment and completing work. Individuals will, in general, work as an operator with responsibility for managing commissioning and decommissioning, 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 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 work

PERFORMANCE CRITERIA

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

- 1.1** Management of commissioning and decommissioning tasks are identified from and are confirmed with personnel by detailed site inspection and with a meeting of stakeholders
- 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 applied and managed throughout the commissioning and decommissioning of plant or equipment
- 1.3** Resources to satisfy commissioning and decommissioning management plan are obtained and inspected for compliance
- 1.4** Relevant plans, drawings and manuals are used, in accordance with the commissioning and decommissioning management plan
- 1.5** Commissioning and decommissioning work is sequenced and prioritised, in accordance with commissioning and decommissioning management plan and site requirements
- 1.6** Isolations and sequencing are managed, in accordance with commissioning and decommissioning management plan
- 1.7** Potential hazards are identified, and risk control measures are implemented and managed, in accordance with commissioning and decommissioning management plan
- 1.8** Work area is determined, in accordance with commissioning and decommissioning management plan,

		manufacturers' requirements and site procedures
	1.9	Roles and responsibilities are assigned and managed, in accordance with commissioning and decommissioning management plan requirements
2 Commission plant or equipment	2.1	Isolations are confirmed, in accordance with commissioning and decommissioning management plan and site requirements
	2.2	Equipment is connected to energy or material sources, in accordance with commissioning and decommissioning management plan
	2.3	Equipment is commissioned, in accordance with the commissioning and decommissioning management plan and manufactures' specifications
3 Decommission plant or equipment	3.1	Isolations are confirmed, in accordance with commissioning and decommissioning management plan and site requirements
	3.2	Equipment is disconnected from energy or material sources, in accordance with commissioning and decommissioning management plan
4 Removal and disassembly of plant or equipment	4.1	Isolations are confirmed, in accordance with commissioning and decommissioning management plan and site requirements
	4.2	Removal of plant or equipment, or disassembly of major components is carried out, in accordance with commissioning and decommissioning management plan
	4.3	Unused electrical conductors are isolated and terminated, in accordance with commissioning and decommissioning management plan
	4.4	Other sources of energy or materials, are terminated and blanked, in accordance with commissioning and decommissioning management plan
5 Recommission plant or equipment	5.1	Generation plant or equipment is de-isolated, in accordance with commissioning and decommissioning management plan and site requirements
	5.2	Preoperational checks are carried out on plant or equipment, in accordance with commissioning and decommissioning management plan, manufacturers'

recommendations and site requirements

- 5.3** Sequence for recommissioning procedures are managed, in accordance with commissioning and decommissioning management plan
- 5.4** Generation plant or equipment is tested for correct operation, in accordance with commissioning and decommissioning management plan, manufacturers' specifications and workplace procedures
- 5.5** Generation plant or equipment performance is monitored and tested, in accordance with commissioning and decommissioning management plan
- 5.6** Data is collected and referenced against manufacturers' specifications and any variances are recorded, in accordance with commissioning and decommissioning management plan
- 5.7** Generation plant or equipment is adjusted to manufactures' specifications using appropriate techniques, in accordance with commissioning and decommissioning management plan
- 5.8** Final inspections and performance data is collected, in accordance with commissioning and decommissioning management plan, to ensure compliance with manufacturers' specifications

6 Complete work

- 6.1** Work is completed and appropriate personnel are debriefed, in accordance with commissioning and decommissioning management plan and site requirements
- 6.2** Work area is cleared of waste, in accordance with commissioning and decommissioning management plan and site requirements
- 6.3** Specialist tools and equipment are maintained and stored, in accordance with commissioning and decommissioning management plan and manufacturers' recommendations.
- 6.4** Completion details, including report and recommendations are finalised, in accordance with commissioning and decommissioning management plan and site requirements

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 UEPOPS508B Manage commissioning/ decommissioning.

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 UEPOPS508 Manage commissioning and decommissioning

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:

- analysing data
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - hazard identification
 - risk control measures
- communicating with personnel
- completing work including reports
- identifying generation plant or equipment
- implementing legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and manuals
- managing commissioning and decommissioning of generation plant or equipment
- performing decommissions, recommissions and isolations
- planning and preparing for work related to the management of commissioning and decommissioning tasks
- recommissioning generation plant or equipment
- removal and disassembly of generation plant or equipment
- safe working practices
- using testing and measuring equipment
- 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:

- commission, decommission and recommission management plans including resourcing and implementation procedures

- generation plant and equipment, its location and operating parameters including performance limits
- generation plant or equipment commissioning and decommissioning
- isolations
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- permit to work system
- report processes
- test and measurement equipment for analysis of data
- typical arrangements of power production plant
- WHS/OHS legislated requirements including:
 - emergency procedures
 - hazard identification
 - 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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