



Australian Government

UEPOPS048 Manage commissioning and decommissioning

Release: 1

UEPOPS048 Manage commissioning and decommissioning

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 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 plant is installed or completed and tested to verify it functions according to the design specification. Decommissioning refers to the planned shutdown or removal of equipment and 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 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

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 Plan and prepare for work

- 1.1** Commissioning and decommissioning management plan tasks are identified from relevant personnel and site inspection in accordance with 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** Resources to comply with commissioning and decommissioning management plan are obtained and inspected for compliance in accordance with workplace procedures
- 1.4** Relevant plans, drawings and manuals in the commissioning and decommissioning management plan are used in accordance with workplace procedures
- 1.5** Commissioning and decommissioning work is sequenced and prioritised in accordance with management plan and workplace procedures
- 1.6** Isolations and sequencing are managed in accordance management plan and workplace procedures
- 1.7** Potential hazards are identified and risk control measures implemented and managed in accordance with management plan and workplace procedures
- 1.8** Work area is determined in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures
- 1.9** Roles and responsibilities are assigned and managed in accordance with management plan and workplace procedures

2 Commission plant or equipment

- 2.1** Isolations are confirmed in accordance with management plan and workplace procedures

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| | 2.2 | Equipment is connected to energy or material sources in accordance with management plan and workplace procedures |
| | 2.3 | Equipment is commissioned in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures |
| 3 Decommission plant or equipment | 3.1 | Isolations are confirmed in accordance with management plan and workplace procedures |
| | 3.2 | Equipment is disconnected from energy or material sources in accordance with management plan and workplace procedures |
| 4 Remove and disassemble plant or equipment | 4.1 | Isolations are confirmed in accordance with management plan and workplace procedures |
| | 4.2 | Removal of plant or equipment, or disassembly of major components is carried out, in accordance with management plan and workplace procedures |
| | 4.3 | Unused electrical conductors are isolated and terminated in accordance with management plan and workplace procedures |
| | 4.4 | Other sources of energy or materials are terminated and blanked in accordance with management plan and workplace procedures |
| 5 Recommission plant or equipment | 5.1 | Generation plant or equipment is de-isolated in accordance with management plan and workplace procedures |
| | 5.2 | Preoperational checks are carried out on plant or equipment in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures |
| | 5.3 | Sequence for recommissioning procedures is managed in accordance with management plan and workplace procedures |
| | 5.4 | Generation plant or equipment is tested for operation in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures |
| | 5.5 | Generation plant or equipment performance is monitored |

and tested in accordance with management plan and workplace procedures

- 5.6 Data is collected and referenced and variances recorded in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures
- 5.7 Generation plant or equipment is adjusted using relevant techniques in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures
- 5.8 Final inspections and performance data is collected and recorded in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures

6 Complete work

- 6.1 Work is completed and relevant personnel are debriefed in accordance with management plan and workplace procedures
- 6.2 Work area is cleared of waste in accordance with management plan and workplace procedures
- 6.3 Specialist tools and equipment are maintained and stored in accordance with management plan, manufacturers' recommendations and specifications, and workplace procedures
- 6.4 Completion details, including report and recommendations are finalised, in accordance with management 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 UEPOPS508 Manage commissioning and 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 UEPOPS048 Manage commissioning and decommissioning

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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 data
- applying work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - emergency procedures
 - hazard identification
 - risk control measures
 - safe working practices
- communicating with personnel
- completing work, including reports
- identifying generation plant or equipment
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- implementing, commissioning and decommissioning of generation plant or equipment management plan
- interpreting 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
- removing and disassembling generation plant or equipment
- 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 and performance criteria and include knowledge of:

- arrangements of power production plant
- commission, decommission and recommission management plans, including resourcing and implementation procedures
- generation plant and equipment, location and operating parameters, including performance limits
- generation plant or equipment commissioning and decommissioning
- isolations
- manuals
- permit to work system
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- report processes
- testing and measurement equipment for analysis of data
- WHS/OHS requirements, including:
 - emergency procedures
 - hazard identification
 - 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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