



Australian Government

UEPOPS410 Shut down a boiler unit

Release: 1

UEPOPS410 Shut down a boiler unit

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 conduct the shutdown of a boiler unit to a depressurised state.

A shut down of a boiler unit will involve a series of steps to stop production, feed and fuel flows in a safe and controlled manner.

Competency in this unit requires the ability to plan and prepare boiler unit shut down, conduct a shut down, test boiler unit operation during shut down, analyse boiler unit system faults during shut down and completing documentation post shut down. Individuals will, in general, work under supervision in a power generation facility as an operator.

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 boiler unit shut down work

2 Conduct boiler unit shut down

3 Test boiler unit plant operation

PERFORMANCE CRITERIA

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

- 1.1** Safety issues are identified, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) procedures and workplace procedures
- 1.2** Work requirements are identified from relevant personnel and documentation, in accordance with workplace procedures
- 1.3** Preoperational checks are carried out on boiler unit plant in accordance with workplace procedures, manufacturers' recommendations and workplace procedures and site requirements
- 2.1** Perform shut down of boiler unit, in accordance with manufacturers' specifications and workplace procedures.
- 2.2** Cool down and purge boiler unit, in accordance with manufacturers' specifications and workplace procedures
- 2.3** Depressurise boiler unit, in accordance with manufacturers' specifications and workplace procedures
- 2.4** Corrective actions are taken to rectify boiler unit abnormalities, in accordance with manufacturers' recommendations and workplace procedures
- 3.1** Tests are performed on boiler unit, in accordance with workplace procedures
- 3.2** Power generation system and boiler unit plant is observed for correct operational response, in accordance with workplace procedures
- 3.3** Corrective action is taken, in accordance with workplace procedures, when response does not meet with documentation, boiler unit plant integrity or personnel safety requirements
- 3.4** Boiler unit plant is returned to required operational status upon completion of testing, in accordance with workplace procedures

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| 4 Analyse and report on system faults during boiler unit shut down | 4.1 | Causes of abnormal boiler unit plant operating conditions are identified by analysing technical and operational information in accordance with workplace procedures |
| | 4.2 | Corrective action is taken, in accordance with workplace procedures |
| | 4.3 | Boiler unit plant integrity and personnel safety is maintained, in accordance with workplace procedures, and through consultation with appropriate personnel, and technical and operational documentation |
| | 4.4 | Appropriate personnel are notified, in accordance with workplace procedures, when defects are detected |
| 5 Complete documentation | 5.1 | Boiler unit plant problems, movements and status are reported, in accordance with workplace procedures |
| | 5.2 | 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS410B Shut down a boiler unit

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 UEPOPS410 Shut down a boiler unit

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 (WHS)/Occupational Health and Safety (OHS) including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with personnel
- identifying boiler unit plant status
- implementing legislation, industry standards, codes of practice and regulations
- monitoring and operating boiler unit plant and equipment
- organising resources
- planning shut down boiler unit plant operation
- preparing boiler unit plant and equipment for operation
- responding to abnormal boiler unit plant operating conditions
- testing boiler unit plant operation using diagnostic data analysis techniques and tools to determine faults
- using recording procedures to complete documentation
- utilising cooling and depressurising techniques
- 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:

- boiler cooling and depressurising techniques
- boiler operational processes
- boiler system components and their interaction
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals

- permit to work system
- typical power generation unit plant
- WHS/OHS legislation 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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