



Australian Government

UEPOPS070 Operate and monitor a boiler unit

Release: 1

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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 operate and monitor an in-service boiler unit capable of supplying steam.

Boilers are used to create steam by applying heat to water, the steam expands and turns the turbines and these in turn drive the generators in power generation facilities.

Competency in this unit requires the ability to plan work, operate boiler unit plant, test boiler unit plant, analyse boiler unit plant faults, monitor and inspect boiler unit and complete all documentation. Individuals will, in general, work under supervision, in a power generation facility as an operator.

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.

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|---|---|
| 1 Plan and prepare work | 1.1 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 |
| | 1.2 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 manufacturers' recommendations and specifications, and workplace procedures |
| 2 Operate boiler unit plant | 2.1 Combustion is established and fuel consumption at minimum levels is supported in accordance with manufacturers' recommendations and specifications, and workplace procedures |
| | 2.2 Fuel and air feed flows are adjusted to achieve required steam conditions, demand and observation of operating requirements in accordance with workplace procedures |
| | 2.3 Boiler unit plant is operated within the limits of the design in accordance with workplace procedures |
| | 2.4 Boiler unit plant is monitored and observed to detect deviations from required operating conditions in accordance with workplace procedures |
| | 2.5 Corrective actions are taken to rectify boiler unit abnormalities in accordance with manufacturers' recommendations and specifications, and workplace procedures |
| 3 Test boiler unit plant operation | 3.1 Operational tests are performed in accordance with workplace procedures |
| | 3.2 Boiler unit plant is observed for correct operational response in accordance with workplace procedures |
| | 3.3 Boiler unit plant is returned to required operational status upon completion of test in accordance with workplace procedures |
| 4 Analyse boiler unit plant faults | 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** Boiler unit plant integrity and personnel safety is maintained in consultation with relevant personnel, technical and operational documentation in accordance with workplace procedures,
- 5 Monitor boiler unit plant**
- 5.1** Boiler unit plant is monitored for normal operation and to detect deviations in accordance with workplace procedures
- 5.2** Relevant personnel are notified when defects are detected in accordance with workplace procedures
- 6 Complete documentation**
- 6.1** Boiler unit plant problems, movements, abnormalities and status are reported in accordance with workplace procedures
- 6.2** 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 UEP Electricity Supply Industry - Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS339 Operate and monitor 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>