



Australian Government

UEPOPS090 Operate and monitor dual fuel firing plant

Release: 1

UEPOPS090 Operate and monitor dual fuel firing 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 operate, inspect and monitor dual fuel firing plant in which each fuel source provides a 100% maximum continuous rating.

Dual fuel firing plant must provide the means for maintaining a 100% maximum continuous rating by using alternative sources of fuel.

Competency in this unit requires the ability to plan work, operate, test, analyse and report on dual fuel firing plant operations. 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.

1 Plan and prepare work

PERFORMANCE CRITERIA

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

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 Documentation to determine dual fuel firing plant status is assessed and evaluated in accordance with workplace procedures
- 1.4 Inspection, preoperational tests and field preparations for dual fuel firing service are carried out in accordance with manufacturers' recommendations and specifications, and workplace procedures
- 1.5 Dual fuel firing plant operational prerequisites are established in accordance with manufacturers' recommendations and specifications, and workplace procedures
- 1.6 Sequence for recommissioning of dual fuel firing plant is determined in accordance with workplace procedures

2 Conduct operation of dual fuel firing plant

- 2.1 Dual fuel firing plant is operated in accordance with manufacturers' recommendations and specifications, and workplace procedures
- 2.2 Changeover from one fuel source to the other is conducted with minimal effect on load and steam conditions in accordance with manufacturers' recommendations and specifications, and workplace procedures
- 2.3 Dual fuel firing plant is monitored to detect deviations from normal operating conditions in accordance with workplace procedures
- 2.4 Corrective actions are taken to rectify dual fuel firing plant abnormalities in accordance with manufacturers' recommendations and specifications, and workplace procedures

3 Test, monitor, analyse and report on dual fuel firing plant operation

- 3.1 Tests are performed on dual fuel firing plant in accordance with workplace procedures

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| | 3.2 | Dual fuel firing plant is observed for correct operational response in accordance with workplace procedures |
| | 3.3 | Dual fuel firing plant is returned to required operational status upon completion of testing in accordance with workplace procedures |
| | 3.4 | Causes of abnormal dual fuel firing plant operating conditions are identified by analysing technical and operational information in accordance with workplace procedures |
| 4 Monitor and inspect dual fuel firing plant | 4.1 | Dual fuel firing plant to be monitored and inspected is physically identified in accordance with workplace procedures |
| | 4.2 | Dual fuel firing plant is monitored and inspected for normal operation to detect deviations in accordance with workplace procedures |
| | 4.3 | Relevant personnel are notified when defects are detected in accordance with workplace procedures |
| 5 Complete documentation | 5.1 | Dual fuel firing 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 UEP Electricity Supply Industry – Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS354 Operate and monitor dual fuel firing 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 UEPOPS090 Operate and monitor dual fuel firing 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) legislated requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with personnel
- completing documentation using recording procedures
- identifying and responding to abnormal plant operating conditions
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- interpreting manuals
- monitoring and inspecting dual fuel firing plant
- operating dual fuel firing plant
- organising resources
- planning dual fuel firing plant or equipment for operation
- reporting on dual fuel firing plant status
- testing dual fuel firing plant operationally using diagnostic and data analysis techniques
- using testing and measurement instruments to identify faults and abnormalities
- 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 for power generation plant
- dual fuel firing plant and equipment, location and operating parameters
- dual fuel firing plant status
- manuals

- permit to work system
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- testing and fault-finding techniques
- 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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