



Australian Government

UEPOPS354 Operate and monitor dual fuel firing plant

Release: 1

UEPOPS354 Operate and monitor dual fuel firing plant

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 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 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.

PERFORMANCE CRITERIA

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

1 Plan and prepare work

- 1.1** Safety issues are identified, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards and workplace procedures
- 1.2** Work requirements are identified from appropriate 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, pre-operational tests and field preparations for dual fuel firing service are carried out, in accordance with manufacturers' recommendations and workplace procedures
- 1.5** Dual fuel firing plant operational prerequisites are established, in accordance with manufacturers' recommendations and workplace procedures
- 1.6** Sequence for recommissioning of dual fuel firing plant is determined, in accordance with workplace procedures and site requirements

2 Conduct operation of dual fuel firing plant

- 2.1** Dual fuel firing plant is operated, in accordance with workplace procedures and manufacturers' recommendations
- 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 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 workplace procedures

- | | | |
|--|------------|--|
| 3 Test, monitor, analyse and report on duel fuel firing plant operation | 3.1 | Tests are performed on duel fuel firing plant, in accordance with workplace procedures |
| | 3.2 | Duel fuel firing 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 is not in accordance with documentation, plant integrity or personnel safety |
| | 3.4 | Duel fuel firing plant is returned to required operational status upon completion of testing, in accordance with workplace procedures |
| 4 Analyse duel fuel firing plant faults | 4.1 | Causes of abnormal duel fuel firing plant operating conditions are identified, in accordance with workplace procedures, by analysing technical and operational information |
| | 4.2 | Corrective action is taken, in accordance with workplace procedures |
| | 4.3 | Duel fuel firing plant integrity and personnel safety is maintained, in accordance with workplace procedures and through consultation with appropriate personnel and technical and operational documentation |
| 5 Monitor and inspect duel fuel firing plant | 5.1 | Duel fuel firing plant to be monitored and inspected is physically identified |
| | 5.2 | Duel fuel firing plant is monitored and inspected for normal operation, in accordance with workplace procedures to detect deviations |
| | 5.3 | Corrective action is taken, in accordance with workplace procedures |
| | 5.4 | Appropriate personnel are notified when defects are detected, in accordance with workplace procedures |
| 6 Complete documentation | 6.1 | Duel fuel firing plant problems, movements, 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS354B 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 UEPOPS354 Operate and monitor dual fuel firing plant

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:

- 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 legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and 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, performance criteria and range of conditions and includes knowledge of:

- dual fuel firing plant and equipment, its location and operating parameters
- dual fuel firing plant status
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals

- permit to work system
- test and fault finding techniques
- typical arrangements for power generation plant
- WHS/OHS legislated 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.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>