



Australian Government

Department of Education, Employment and Workplace Relations

UEGNSG501A Operate gas infrastructure to meet nominated demand

Release: 1

UEGNSG501A Operate gas infrastructure to meet nominated demand

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

1)

This competency standard covers the assessing and responding to anticipated demand. This competency standard also refers to Industry products and services; Authoritative sources; Product information; Stakeholders; Organisational requirements; Interpersonal skills; Nominated person(s); Product and service issues.

Application of the Unit

Application of the Unit

3)

This competency standard shall apply to any basic and safe work site where Gas Industry operations occur. It could also apply, where applicable to other workplaces in the electricity supply industry (transmission and distribution and generation), the electrotechnology industry and the water industry, subject to all Occupational Health and Safety and duty of care requirements being met for the workplace.

Licensing/Regulatory Information

License to practice

3.1)

The skills and knowledge described in this unit are not subject to licence regulation other than those directly related to Occupational Health and Safety, gas/electricity/water industry safety and compliance, industrial relations, environmental protection, telecommunications, anti discrimination and training.

License to practice**3.1)**

Commonwealth, State/Territory or Local Government legislation and regulations may exist that limits the age of operating certain equipment.

Pre-Requisites**Prerequisite Unit(s)****2)****Competencies****2.1)**

To minimise incidents related to safe systems of work, entry into this unit requires at a minimum that an individual has demonstrated or possesses a gas industry or relevant technical engineering discipline competencies of at least AQF level 3. It is intended that an individual will be expected to perform with a large degree of autonomy in decision-making, whilst in an individual environment.

This may include immediate response to protect human life, adverse effect on safety, security of supply or the integrity of the assets.

NOTE: Typically the following disciplines provide direct entry; electrical or instrumentation, fitting and turning or mechanical trade or marine engineering technologist.

Where an individual does not possess or demonstrate the requisite entry requirement, an equivalent bridging program shall be used to ensure equivalence of entry.

Employability Skills Information

Refer to the Evidence Guide

Elements and Performance Criteria Pre-Content

- 5) Elements describe the essential outcomes of a competency standard unit. Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Plan to operate gas infrastructure to meet nominated demand	1.1 Information, requirements and established procedures are detailed, analysed and the extent of the preparation of the work determined for planning and coordination
	1.2 Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes to a quality standard and in accordance with established procedures
	1.3 Risk control measures for identified hazards are prioritised, implemented and evaluated against the work schedule
	1.4 Relevant requirements and established procedures for the work are communicated to all persons and identified for all work sites
	1.5 Communicate with Gas Industry stakeholders, produce gas schedule based on bid and or nomination information
	1.6 Operation is carried out in accordance with organisational procedures
	1.7 OHS, environmental and sustainable energy policies and procedures related to the work are identified to ensure safe systems of work are followed
	1.8 Relevant stakeholders are provided with possible solutions and options within the scope, acceptable cost and requirements

ELEMENT	PERFORMANCE CRITERIA
2 Operate gas infrastructure to meet nominated demand	1.9 Liaison and communication issues with relevant stakeholders are resolved and activities coordinated to carry out work
	1.10 Persons participating in the work, including plant operators and contractors are fully briefed and respective responsibilities coordinated and authorised where applicable in accordance with establish procedures
	2.1 OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards
	2.2 Work is performed and coordinated in accordance with a work schedule and to requirements
	2.3 Remedial actions are taken to overcome any shortfalls encountered in the work schedule according to requirements and established procedures
	2.4 Schedule is produced according to the information collected in accordance with established procedures
	2.5 Any abnormal conditions are recognised and responded to in accordance with organisational procedures
3 Complete and review operation of gas infrastructure to meet nominated demand	2.6 Solutions to problems are identified and actioned using Essential Knowledge and Associated Skills according to requirements
	2.7 Ongoing checks of quality of the work are undertaken in accordance with requirements and established procedures
	3.1 Work undertaken is checked against schedule for conformance with requirements, anomalies are reported in accordance with established procedures
	3.2 Works completion records, reports, documentation and information is confirmed, processed and the appropriate persons notified as

ELEMENT**PERFORMANCE CRITERIA**

per established procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

6) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that knowledge has been acquired of safe working practices for assessing and responding to anticipated demand. The extent of the essential knowledge and associated skills (EKAS) required is given in Volume 2 - Part 2.2 EKAS. It forms an integral part of this unit.

- G 4.1.2 Understand the effective operation of Gas Industry plant and equipment and materials
- G 4.1.3 Gas Industry products and services
- G 4.1.4 Communicating in the Gas Industry at a supervisory level
- G 4.1.7 Complete Gas Industry reports and documentation
- G 4.1.8 Use a personal computer
- G 4.1.9 Transmission pipelines
- G 4.1.16 Operational understanding of Gas Industry facilities and stations
- G 4.1.17 Pipeline systems knowledge
- G 4.1.19 Knowledge and application of gas transmission agreements

Evidence Guide

EVIDENCE GUIDE

8) .

The Evidence Guide forms an integral part of this Competency Standard Unit and shall be used in conjunction with all components parts of this unit and, performed in accordance with the Assessment Guidelines of this Training Package.

Overview of Assessment

8.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the Industry's preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accord with Industry and, Regulatory policy in this regard.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Hence, sources of evidence need to be 'rich' in nature so as to minimise error in judgment.

Activities associated with normal every day work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practiced. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments.

Sample instruments are included for Assessors in the Assessment Guidelines of this Training Package.

EVIDENCE GUIDE

Critical aspects of evidence required to demonstrate competency in this unit

8.2) Before the critical aspects of evidence are considered all prerequisites shall be met.

Evidence for competence in this unit shall be considered holistically. Each element and associated performance criteria shall be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines UEG06'. Evidence shall also comprise:

- A representative body of performance criteria demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:
 - Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the performance criteria and range
 - Apply sustainable energy principles and practices as specified in the performance criteria and range
 - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit to such an extent that the learner's performance outcome is reported in accordance with the preferred approach; namely a percentile graded result, where required by the regulated environment
 - Demonstrate an appropriate level of skills enabling employment
 - Conduct work observing the relevant anti discrimination legislation, regulations, policies and workplace procedures
 - Demonstrate performance across a representative range of contexts from the prescribed items below.

Range of tools/equipment/materials/procedures/workplaces/other variables		
Group No	The minimum number of items on which skill is to be demonstrated	Item List
A	At least 1	Work site context: Gas Industry production, transmission and distribution

EVIDENCE GUIDE

		areas Location control centres or other places where communication processes occur
B	All	Use of relevant computer systems Work requests from other parties Relevant procedures for equipment use Perform work under or without supervision Work carried out in regular or specified timeframe Written requests and reports
C	All	Locate, interpret and apply relevant information Analyse process functions and problems Apply relevant customer service policies and procedures Use appropriate workplace language and communication technologies and techniques Maintain relevant workplace records Demonstrate understanding of the essential knowledge and associated skills associated with this competency standard Demonstration of each element on several occasions
D	At least one occasion	Deal with unplanned event by drawing on essential knowledge and associated skills to provide appropriate

EVIDENCE GUIDE

		solutions incorporated in holistic assessment with above listed items
--	--	---

Context of and specific resources for assessment**8.3)**

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

- OHS policy and work procedures and instructions.
- Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this Competency Standard Unit.
- Appropriate environmental regulation and work practices.
- Appropriate organisational requirements.
- Appropriate work environment, equipment and tools.

In addition to the resources listed above, in Context of and specific resources for assessment, evidence should show demonstrated competency in operating gas infrastructure to meet nominated demand.

Assessment of this competency must also be undertaken in either an actual workplace or under a simulated work environment. Assessment must also integrate the Key Competencies.

Method of assessment**8.4)**

This Competency Standard Unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

Note:

Competent performance with inherent safe working practices is expected in the Industry to which this Competency Standard Unit applies. This requires that the specified Essential Knowledge and Associated Skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the essential knowledge and associated skills described in this unit.

Concurrent assessment and relationship with other units**8.5)**

There are no recommended concurrent assessments with this unit, however in some cases efficiencies may be gained in terms of learning and assessment effort being concurrently managed with allied Competency Standard Units where listed.

EVIDENCE GUIDE

BSBFLM405A Implement operational plans

BSBCMN411A Monitor a safe workplace

Key Competencies 8.6)

Evidence that particular Key Competencies have been achieved within this Competency Standard Unit is in the context of the following performance criteria of evidence. See Volume 2, Part 4 for an explanation of Key Competencies and levels of this Training Package.

Key Competencies	Example of Application	Performance Level
How are ideas and information communicated within this competency?	Refer to the following Performance Criteria for examples of application: 1.4; 1.5; 1.10; 1.11; 1.12	2
How can information be collected, analysed and organised?	Refer to the following Performance Criteria for examples of application: 2.7; 2.8	3
How are activities planned and organised?	Refer to the following Performance Criteria for examples of application: 1.1; 1.2	2
How is team work used within this competency?	Refer to the following Performance Criteria for examples of application: 1.12	3
How are mathematical ideas and techniques used?	Refer to the following Performance Criteria for examples of application: 2.8	2
How are problem solving skills applied?	Refer to the following Performance Criteria for examples of application:	2
	2.9; 2.11; 3.1	

EVIDENCE GUIDE

How is use of technology applied?	Refer to the following Performance Criteria for examples of application:	2
	2.7	

Skills Enabling Employment**8.7)**

Evidence that competency in this unit incorporates skills enabling employment is in the context of the following performance. See Volume 2, Part 5 for definitions and an explanation of skills enabling employment.

Skills for Employment		Example of Application
1	Developing and using skills within a real workplace	Refer to the following Performance Criteria for examples of application: All
2	Learning to learn in the workplace	Refer to the following Performance Criteria for examples of application: 3.1; 3.3
3	Reflecting on the outcome and process of work task	Refer to the following Performance Criteria for examples of application: 3.3
4	Interacting and understanding of the context of the work task	Refer to the following Performance Criteria for examples of application: 1.4; 1.5; 1.10; 1.11; 1.12
5	Planning and organising the meaningful work task	Refer to the following Performance Criteria for examples of application: 1.1; 1.2
6	Performing the work task in non-routine or contingent situations	Refer to the following Performance Criteria for examples of application: 2.9; 2.11

Range Statement

RANGE STATEMENT

7) This relates to the competency standard unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This Competency Standard Unit shall/may be demonstrated in relation to assessing and responding to anticipated demand.

The following constants and variables included in the element/performance criteria in this unit are fully described in the Definitions Section of this volume and form an integral part of the Range Statement of this unit:

Areas to control

Gas infrastructure

Records/reports

Information systems

Industry products and services

Authoritative sources

Product information

Stakeholders

Organisational requirements

Interpersonal skills

Nominated person(s)

Product and service issues

Unit Sector(s)

Not Applicable

Literacy and numeracy skills

Literacy and numeracy skills 2.2)

Participants are best equipped to achieve this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 4 Writing 4 Numeracy 4

Competency Field

Competency Field 4)

Control centre.