



Australian Government

UEGNSG062 Monitor and report on cathodic protection systems

Release: 1

UEGNSG062 Monitor and report on cathodic protection systems

Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Industry Training Package.

Application

This unit involves the skills and knowledge required to monitor, test and recognise faults; and review, record and report findings and faults on cathodic protection systems. It does not include specialist cathodic protection activities.

It includes applying relevant legislation, codes of practice, regulations, standards and workplace procedures.

Work may be performed autonomously in remote locations for long periods of time and includes selecting and using the correct tools, equipment, maps, drawings and personal protection equipment (PPE) in accordance with workplace procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Gas Transmission

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to monitor and report on cathodic protection systems

PERFORMANCE CRITERIA

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

1.1 Workplace safety, environmental and sustainable energy practices for the site are identified, obtained and understood

- 1.2 Job requirements are obtained and interpreted from plans, specifications and instructions
 - 1.3 Relevant job requirements and workplace procedures for work activities are discussed with relevant person/s, including third parties, to determine and confirm work schedule and respective responsibilities
 - 1.4 Hazards are identified, workplace safety and environmental risks are assessed, and control measures are prioritised, implemented and monitored in accordance with workplace procedures
 - 1.5 Scope of responsibility under the relevant job requirements, including all work permits and/or relevant notifications is determined and confirmed to access the services and perform work in accordance with job requirements and workplace procedures
 - 1.6 Equipment, tools and PPE needed to carry out work activities are identified, obtained and checked for correct operation and safety in accordance with workplace procedures and manufacturer instructions
 - 1.7 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
- 2 **Monitor and report on cathodic protection systems**
 - 2.1 Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.3 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
 - 2.4 Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures
 - 2.5 Alarms, codes and hazard warnings are correctly recognised, and the correct response strategy is selected and applied in accordance with workplace procedures
 - 2.6 Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements
 - 2.7 Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures

- 3 Review, record and report on monitoring cathodic protection systems**
- 3.1** Workplace safety risk control measures for work completion are followed
 - 3.2** Quality and safety checks of the work are conducted in accordance with job requirements, workplace procedures and community and industry standards
 - 3.2** Worksite is cleaned, reinstated and made safe in accordance with workplace procedures
 - 3.3** Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
 - 3.4** Incidents are reported and followed up as required in accordance with workplace procedures
 - 3.5** Relevant person/s is notified of work completion in accordance with workplace procedures
 - 3.6** Work completion documentation is completed accurately and provided to relevant person/s 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 UEG Gas Industry Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEGNSG355 Monitor and report on cathodic protection systems.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>

Assessment Requirements for UEGNSG062 Monitor and report on cathodic protection systems

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying problem-solving techniques
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant workplace safety requirements, including:
 - working safely with hazardous materials and equipment
 - identifying and reporting hazards
 - implementing risk control measures
- applying sustainable energy and environmental principles and practices
- communicating effectively with others
- completing relevant records, reports and documentation
- conducting quality and safety checks
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following work schedule, safety plan and job requirements
- following workplace procedures
- identifying and recognising cathodic protection system faults
- interpreting technical drawings, plans and maps
- monitoring and reporting on cathodic protection systems
- obtaining relevant resources, tools, equipment and materials to conduct the work
- preparing to monitor and report on cathodic protection systems
- rehabilitating and maintaining a clean worksite
- reporting anomalies, proposed solutions, incidents and injuries
- reviewing, recording and reporting relevant information
- selecting and using correct personal protective equipment (PPE)
- working in accordance with relevant work permit/notifications
- using and maintaining relevant cathodic protection equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- cathodic protection principles and equipment
- effective communication techniques
- fault-finding and troubleshooting techniques
- gas industry policies and procedures
- gas industry products, processes and characteristics
- gas transmission pipelines and operating parameters
- hazardous activities, including lifting, climbing, working in confined spaces and aloft, and use of power tools
- inspection and testing procedures for cathodic protection equipment and systems
- principles, procedures and requirements for cathodic protection on a gas industry pipeline
- quality and safety checks
- relevant gas industry documentation
- relevant industry standards, guidelines, codes of practice and regulations
- relevant stakeholders, including authorised persons, authorities, landowners and clients
- relevant technical drawings, diagrams, plans and maps
- relevant workplace safety requirements, including:
 - legislated work health and safety (WHS)/occupational health and safety (OHS) requirements
 - legislated industry/technical specific requirements
 - workplace safety procedures
 - manufacturer requirements
- relevant work permits and/or notifications
- relevant workplace documentation
- relevant workplace policies and procedures
- reporting requirements
- site preparation, safety plans, job requirements and work schedules
- techniques to identify system faults and operational conditions.

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 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 PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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