



Australian Government

UEGNSG059 Maintain cathodic protection systems

Release: 1

UEGNSG059 Maintain cathodic protection systems

Modification History

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

Application

This unit involves the skills and knowledge required to maintain cathodic protection systems to prevent corrosion of steel gas pipelines.

It includes identifying the type and location of the cathodic protection fault, using the correct electrical equipment, maintaining and adjusting cathodic protection system and equipment, re-establishing the system and completing relevant documentation.

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

Pre-requisite Unit

Not applicable.

Competency Field

Cathodic Protection

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare and plan to maintain 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 Readings from cathodic protection monitoring equipment and anode beds are taken at regular intervals and data collected in accordance with workplace procedures and industry standards
 - 1.5 Hazards are identified, workplace safety and environmental risks are assessed, and control measures are prioritised, implemented and monitored in accordance with workplace procedures
 - 1.6 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
 - 1.7 Equipment, tools and personal protective equipment (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
 - 1.8 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
- 2 **Maintain and adjust cathodic protection system equipment**
 - 2.1 Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.2 Appropriate materials, tools and equipment are selected and used safely in accordance with manufacturer instructions and workplace procedures
 - 2.3 Cathodic protection system is inspected, adjusted and maintained correctly and safely in accordance with job requirements, workplace procedures and industry standards
 - 2.4 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
 - 2.5 Hazardous activities are conducted safely in accordance

with regulatory requirements and workplace procedures

- 2.6 Alarms, codes and hazard warnings are correctly recognised, and the correct response strategy is selected and applied in accordance with workplace procedures
- 2.7 Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements
- 2.8 Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures

3 Re-establish system and complete relevant documentation

- 3.1 Cathodic protection system is re-established, work undertaken is checked against work schedule for conformance and anomalies, and proposed solutions reported to relevant person/s in accordance with workplace procedures
- 3.2 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
- 3.3 Worksite is cleaned, reinstated and made safe in accordance with workplace procedures
- 3.4 Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
- 3.5 Incidents are reported and followed up as required in accordance with workplace procedures
- 3.6 Relevant person/s is notified of work completion in accordance with workplace procedures
- 3.7 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 UEGNSG411 Maintain 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>