



Australian Government

UEGNSG054 Install cathodic protection systems

Release: 1

UEGNSG054 Install 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 install cathodic protection systems to prevent corrosion of steel pipelines, test and commission cathodic protection system, and complete relevant documentation in accordance with relevant legislation, code, regulations and workplace procedures.

It includes the correct installation locations for cathodic protection system and system components, interpreting drawings and specifications, testing equipment and identifying cathodic protection faults.

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 Plan installation of cathodic protection system

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 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
 - 1.7 Technical specifications and drawings are prepared from the analysed cathodic protection survey data and approved in accordance with job requirements and workplace procedures
 - 1.8 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
- 2 Install cathodic protection system**
- 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 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 Test and commission cathodic protection system and complete relevant documentation**
- 3.1 Installed cathodic protection system and components are commissioned and tested for conformance and anomalies reported in accordance with regulatory requirements and workplace procedures
 - 3.2 Workplace safety risk control measures for work completion are followed
 - 3.3 Quality and safety checks of the work are conducted in accordance with job requirements, workplace procedures and community and industry standards
 - 3.4 Worksite is cleaned, reinstated and made safe in accordance with workplace procedures
 - 3.5 Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
 - 3.6 Relevant work permit/s are signed off and equipment is returned to service in accordance with job requirements and workplace procedures
 - 3.7 Cathodic protection system is tested and adjusted, and additional survey data collected.
 - 3.8 'As built/as-installed' drawings are checked, updated and returned to the relevant cathodic protection engineering person/s in accordance with workplace procedures
 - 3.9 Relevant person/s is notified of work completion in accordance with workplace procedures
 - 3.10 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 UEGNSG412 Install 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>