

<b>Title</b>	<b>Carry out cathodic protection system monitoring in an energy and chemical plant</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	People credited with this unit standard are able to: assess, select, and operate cathodic protection system monitoring equipment; locate, interpret, and use documentation and reporting procedures for cathodic protection systems; and calculate and report results of testing cathodic protection systems; in an energy and chemical plant.
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<b>Classification</b>	Energy and Chemical Plant > Monitoring of Energy and Chemical Plant
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<b>Available grade</b>	Achieved
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### Guidance Information

- Legislation and standards relevant to this unit standard include but are not limited to:
  - Health and Safety at Work Act 2015;
  - Health and Safety at Work (Hazardous Substances) Regulations 2017 (HSWA);
  - Resource Management Act 1991;
  - Standards relating to cathodic protection issued by: National Association Corrosion Engineers (NACE), available at <http://www.nace.org>; Standards Australia, available at <http://www.saiglobal.com>; and any subsequent amendments.
- Definitions
 

*Energy and chemical plant* may be in – petrochemical, agri-nutrient, power generation, dairy processing, meat processing, and wood fibre manufacturing, or other plants that operate with a combination of high temperatures, pressures, steam and/or chemicals in gas, liquid or solid form.

*Organisational requirements* – documented policies and procedures. These may include: equipment manufacturers' procedures; plant procedures; suppliers' instructions; site signage; codes of practice; company health and safety plans; on site briefings; and supervisor's instructions. This includes all regulatory and legislative obligations that apply to the plant.

*Plant* – the operational unit, equipment, and/or workplace at which the person is working.

*Primary data* refers to first analysis results.

- 3 For the purposes of assessment:
- evidence for the practical components of this unit standard must be supplied from the workplace.
  - evidence for all outcomes must be presented in accordance with organisational requirements.

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## Outcomes and performance criteria

### Outcome 1

Assess, select, and operate cathodic protection system monitoring equipment in an energy and chemical plant.

#### Performance criteria

- 1.1 Assess the integrity of the cathodic protection system to determine the need to use cathodic protection system monitoring equipment.
- 1.2 Select cathodic protection system monitoring equipment relevant to site conditions.
- 1.3 Operate cathodic protection system monitoring equipment safely to determine the extent of maintenance required.
- 1.4 Identify and minimise any potential hazards from incorrect application and operation of cathodic protection system monitoring equipment.

Range under protection, over protection.

### Outcome 2

Locate, interpret, and use documentation and reporting procedures for cathodic protection systems in an energy and chemical plant.

#### Performance criteria

- 2.1 Locate and use specified documentation and standards for cathodic protection monitoring equipment.

Range test certificates, certification, standards for safety, standards for in-service safety inspection and testing of equipment, identification tags, labels.

- 2.2 Locate and interpret general equipment documentation and information.

Range manufacturer's information, equipment operating manuals, safety procedures, operating procedures, maintenance procedures.

- 2.3 Identify international cathodic protection standards and reporting criteria specific to the site.

Range international standards – BSI British, Standards Australia, NACE.

### Outcome 3

Calculate and report results of testing cathodic protection systems in an energy and chemical plant.

#### Performance criteria

- 3.1 Make any corrections to primary data in accordance with authorised procedures.
- 3.2 Calculate results from primary data.
- 3.3 Investigate and report any deviations from the expected range of results.
- 3.4 Compile a report including calculated results, analysis, and conclusions.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	6 February 1997	31 December 2018
Revision	2	3 August 2000	31 December 2018
Review	3	24 January 2002	31 December 2018
Review	4	20 February 2009	31 December 2018
Rollover and Revision	5	20 April 2017	31 December 2022
Review	6	27 February 2020	31 December 2026
Review	7	30 January 2025	31 December 2026

#### Consent and Moderation Requirements (CMR) reference

0079

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.