

Title	Schedule and manage preventative maintenance for industrial electrical equipment		
Level	5	Credits	6

Purpose	<p>This unit standard is for people in the electrical industry who have responsibility for the development and management of a preventative maintenance schedule for electrical equipment.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – develop a preventative maintenance schedule for industrial electrical; and – manage a preventative maintenance schedule for industrial electrical equipment.
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Classification	Electrical Engineering > Electrical Installation and Maintenance
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 Definitions

Electrical equipment – wiring systems, switchgear, control gear, accessories, appliances, luminaires and fittings used for such purposes as generation, conversion, storage, transmission, distribution or utilization of electrical energy.

Electrical technicians and *service persons* – for the purposes of this unit standard means, people who hold or who are working towards electrical registration as an Electrical Service Technician or Electrical Appliance Serviceperson (endorsed to disconnect and connect).

Fixed-wired appliances – appliances that connect to a power source directly without the use of a plug and socket.

Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*.
- 3 Range
 - a The maintenance schedule may be a manual paper-based system, or in the form of a computer database. The unit standard is not intended to be used for assessing computer programming of such a system.
 - b Candidates may refer to current legislation and Standards during assessment.
 - c Demonstration of safe working practices and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard.

- d All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
 - i legislation;
 - ii policies and procedures;
 - iii ethical codes;
 - iv Standards – may include but are not limited to those listed in Schedule 2 of the Electricity (Safety) Regulations 2010;
 - v applicable site, enterprise, and industry practice; and,
 - vi where appropriate, manufacturers' instructions, specifications, and data sheets.

Outcomes and performance criteria

Outcome 1

Develop a preventative maintenance schedule for industrial electrical equipment.

Performance criteria

- 1.1 File location and equipment drawings, manuals, maintenance records, and specifications in an orderly and systematic fashion.
- 1.2 Obtain and/or prepare an inventory of electrical equipment in the installation.
 - Range typically the inventory will contain – item, type, plant number, serial number, model, rating, location, installation date.
- 1.3 Develop a preventative maintenance schedule for each item of equipment.
 - Range development is typically based on information from – equipment inventory, manuals, manufacturers' specifications, current regulations and standards, plant operating/shut-down schedules, shut-down procedures, past maintenance records, knowledge of safe working practices;
a typical schedule will list – equipment identification, frequency of maintenance, due date, type of maintenance, reference to instructions and/or checklists, location of spares, special requirements.
a typical schedule will incorporate or interface with – a system of initiating, allocating available resources, track progress and record results and costs of maintenance work.
- 1.4 Develop an inventory of spare parts from manufacturers' recommendations.
 - Range typically this would include – type of spare, quantity held locally, location, re-order level, supplier, cost.

Outcome 2

Manage a preventative maintenance schedule for industrial electrical equipment.

Performance criteria

- 2.1 Organise trades and other personnel to meet scheduled maintenance requirements.
- 2.2 Arrange shut-down times and periods to meet the maintenance schedule and other company requirements.
- 2.3 Carry out maintenance work in accordance with the maintenance schedule.
- 2.4 Complete maintenance documentation in accordance with the requirements of the maintenance schedule and related company systems.

Range documentation may include but is not limited to – progress tracking on maintenance charts or schedule, follow-up work instructions or recommendations, recording results of tests and measurements, site safety clearances, certifications, reports to management, recording of time and costs.

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	22 April 1994	31 December 2013
Review	2	23 April 1996	31 December 2013
Review	3	28 June 1999	31 December 2013
Review	4	26 May 2005	31 December 2021
Rollover and Revision	5	15 March 2012	31 December 2021
Revision	6	15 January 2014	31 December 2021
Review	7	21 July 2016	31 December 2025
Revision	8	16 March 2017	31 December 2025
Review	9	24 March 2022	31 December 2025

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.