Title	**Demonstrate knowledge of and design documentation for the commissioning of significant electrical installations**		
Level	**5**	**Credits**	**5**

Purpose	This unit standard and is intended for use in the training and assessment of electricians beyond trade level who have responsibility for the management of significant industrial, commercial, residential, or domestic commissioning projects, including bringing assets which often represent substantial investment by their client or employer into service. It is designed to ensure that such people have sufficient knowledge of commissioning and handover to safely and competently perform these functions. People credited with this unit standard are able to: – demonstrate knowledge of standard commissioning procedures and documentation used to manage significant electrical installations – design and develop a documentation pack for commissioning and handover of a significant electrical installation.

Classification	Electrical Engineering > Electrical Installation and Maintenance

Available grade	Achieved

Guidance Information

1 Recommended skills and knowledge:
It is expected that candidates for assessment against this unit standard will already:
– have achieved an electrical qualification such as the National Certificate in Electrical Engineering (Electrician for Registration) (Level 4) [Ref: 1195], or demonstrate equivalent or higher skills and knowledge
– have learnt project management principles and techniques
– be familiar with the requirements of the Health and Safety at Work Act 2015.

2 This unit standard has been developed for learning and assessment off-job.

3 References
AS/NZS 3000 (version as cited in the Electricity (Safety) Regulations), *Electrical installations (known as the Australian/New Zealand Wiring Rules*), including Amendment 1
Electricity Act 1992
Electricity (Safety) Regulations 2010
Health and Safety at Work Act 2015

New Zealand Electrical Codes of Practice available at www.worksafe.govt.nz; and all subsequent amendments and replacements.

4 Definitions
Industry practice – those practices that competent practitioners within the industry recognise as current industry best practice.
Significant electrical installations – industrial, commercial, residential, or domestic installations involving a minimum of: lighting and power subcircuits, main switchboard, mains supply, and earthing system and that may require inspection by a registered electrical inspector.

5 *Commissioning processes associated with electrical installations* includes – all tests, adjustments, inspections, and related activities necessary to bring previously installed electrical equipment and systems into service.

6 Range
a All aspects of evidence must comply with the legislation, codes of practice, and standards listed in Guidance Information note 3.
b Hardware is to include all hardware in the installation and may include motors, drives, machinery control centres, distribution panels.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of standard commissioning procedures and documentation used to manage significant electrical installations.

Performance criteria

1.1 Site-specific safety requirements are acknowledged in accordance with industry practice.

1.2 Commissioning schedules are explained in accordance with specifications, objectives, and industry practice.

Range may include but is not limited to – manual systems; software such as spreadsheets, project management software.

1.3 Progress reporting, handover procedures, and check sheets are explained in accordance with industry practice.

1.4 Inspection forms and their uses are explained.

Range wiring and connection, hardware, software.

1.5 The requirement for liaison with stakeholders is explained to ensure effective coordination of commissioning activities in accordance with industry practice.

Range stakeholders may include but are not limited to – other project managers, accountant, site managers, engineers, technical experts, IT providers, supervisors, safety coordinators, suppliers, contractors.

1.6 Procedures and documentation requirements of commissioning significant remotely-controlled electrical installations are explained in accordance with industry practice.

Outcome 2

Design and develop a documentation pack for commissioning and handover of a significant electrical installation.

Performance criteria

2.1 Documentation pack is designed and developed for a given significant electrical installation in accordance with industry practice.

Range inspection forms, wiring, hardware, software, remotely-controlled installation, sign off sheet and handover check sheet.

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	19 June 2009	31 December 2025
Rollover and Revision	2	15 March 2012	31 December 2025
Revision	3	15 January 2014	31 December 2025
Rollover and Revision	4	28 January 2021	31 December 2025
Review	5	27 April 2023	31 December 2025

Consent and Moderation Requirements (CMR) reference	0003

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