Title	Demonstrate knowledge of de-commissioning, commissioning, and verification of electrical installations		
Level	4	Credits	6

Purpose	<ul> <li>People credited with this unit standard are able to demonstrate knowledge of:</li> <li>de-commissioning electrical installations;</li> <li>commissioning plans; and</li> <li>electrical installation verification, fault repair, and maintenance.</li> </ul>
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Classification	Electrical Engineering > Electrical Installation and Maintenance	
Available grade	Achieved	

#### **Guidance Information**

 Unit standards or equivalent prior knowledge and skills recommended: Unit 32614, Demonstrate knowledge of electrical faults, circuit protection, decommissioning, and commissioning; Unit 32618, De-commission, test and commission basic electrical appliances, fittings, and equipment.

2 References

AS/NZS 3000 (version as cited in the Electricity (Safety) Regulations), *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*; AS/NZS 3017:2007, *Electrical installations - Verification guidelines*; AS/NZS 3019:2007, *Electrical installations - Periodic verification*; or any current subsequent amendments and replacements.

3 Definitions

*Commissioning* – refers to the safety testing, livening and functional testing of circuits and equipment ready to handover to the customer for use.

*De-commissioning* – refers to the removal of fittings and equipment (rather than replacement) and the necessary steps to make the resulting exposed energy supply system safe.

*Electrical installation* – refers to all or a significant part of an electrical installation or plant equipment. This might be to accommodate the removal/installation of all or part of a structure or plant. The intention is that the installation or plant involved is more complicated requiring more complex planning than a single circuit and fittings or an appliance.

*Process for maintaining electrical installations* – refers to identification, scheduling, documentation, reporting on the results and any issues found, communication with customers.

- 4 This unit standard can be used together with other relevant unit standards, additional learning and workplace training to meet the requirements of the Electrical Workers Registration Board (EWRB) core competencies, available at <a href="https://www.ewrb.govt.nz">https://www.ewrb.govt.nz</a>
- 5 This unit standard applies to installations and equipment rated above extra-low voltage unless specifically stated.

# Outcomes and performance criteria

## Outcome 1

Demonstrate knowledge of de-commissioning electrical installations.

## Performance criteria

- 1.1 Describe a de-commissioning plan.
  - Range includes but is not limited to features of a plan, process to develop a plan, and recognising when other trades or specialists may need to assist.
- 1.2 Identify requirements for unused cables and alterations to parts of an electrical installation from AS/NZS 3000.

Range one requirement for unused cables, one requirement for alterations.

# Outcome 2

Demonstrate knowledge of commissioning plans.

### Performance criteria

- 2.1 Describe a commissioning plan.
  - Range includes but is not limited to features of a plan, process to develop a plan, testing required, recognising when other trades or specialists may need to assist.

# Outcome 3

Demonstrate knowledge of electrical installation verification, fault repair, and maintenance.

### Performance criteria

- 3.1 Describe electrical installation verification with reference to AS/NZS 3019.
  - Range must include but is not limited to the purpose, Certificate of Verification.

3.2 Outline the process when a fault is discovered while carrying out an electrical installation verification.

Range documenting, reporting, further action to rectify faults.

3.3 Describe the types and process for maintaining electrical installations.

Range types of maintenance must include but is not limited to – repairs, pre-emptive maintenance, maintenance for compliance.

Planned review date	31 December 2026

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

Process	Version	Date	Last Date for Assessment
Registration	1	24 March 2022	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0003			
This CMR can be accessed at <a href="http://www.nzga.govt.nz/framework/search/index.do">http://www.nzga.govt.nz/framework/search/index.do</a> .				

### Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at <u>qualifications@waihanga.nz</u> if you wish to suggest changes to the content of this unit standard.