Title	Plan and carry out maintenance on transmission grid assets		
Level	4	Credits	10

Purpose	<ul> <li>People credited with this unit standard are able to:</li> <li>plan and carry out maintenance on transmission grid assets;</li> <li>identify and apply earthing and bonding to lines and equipment before maintenance of transmission assets is undertaken; and</li> <li>carry out corrective maintenance to electricity structures.</li> </ul>	
	This unit standard partially fulfils the requirements for registration for transmission line mechanics with the Electrical Workers Registration Board (EWRB).	

Classification	Electricity Supply > Electricity Supply - Transmission Networks	
Available grade	Achieved	

## **Guidance Information**

- 1 This unit standard underpins one of two capstone assessments for registration with the EWRB for transmission line mechanics in the electricity supply industry.
- Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable legislative and industry requirements.
- 3 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
  - Health and Safety at Work Act 2015; Electricity Act 1992;
  - Electricity (Safety) Regulations 2010; and any subsequent amendments and replacements;
  - Electricity supply industry codes of practice and documented enterprise procedures, including Electrical Engineers' Association *Safety Manual Electricity Industry* (SM-EI) (current version) and relevant EEA guides available at <a href="https://www.eea.co.nz">www.eea.co.nz</a>.

## 4 Definitions

Asset owner refers to a participant who owns or operates assets used for generating or conveying electricity.

Industry requirements include all asset owner procedures; manufacturers' specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, and business and quality management requirements relevant to the workplace in which assessment is carried out.

# Outcomes and performance criteria

#### **Outcome 1**

Plan and carry out maintenance on transmission grid assets.

#### Performance criteria

- 1.1 Worksite safety plan is completed prior to work being undertaken.
- 1.2 Safety plan is implemented according to asset owner procedures.
- 1.3 Ropes, slings, and knots are used to replace tower components or lines according to asset owner procedures.

Range may include but is not limited to – lines, insulators, tower steel

work, hardware;

evidence of two replacements is required.

## Outcome 2

Identify and apply earthing and bonding to lines and equipment before maintenance of transmission assets is undertaken.

## Performance criteria

- 2.1 Earthing and bonding requirements for worksite are identified.
- 2.2 Test lines are de-energised before applying portable earths.
- 2.3 Portable earthing and bonding is applied.
- 2.4 Portable earthing and bonding equipment is removed on completion of work according to asset owner procedures.

#### Outcome 3

Carry out corrective maintenance to structures.

Range may include but is not limited to – steelwork, concrete footings and foundations, hardware replacement.

# Performance criteria

- 3.1 Defects are identified and logged according to asset owner procedures.
- 3.2 Suitable materials, equipment, and tools are sourced to carry out work.
- 3.3 Maintenance work is completed according to asset owner procedures.
  - Range evidence of two completed maintenance procedures is required.

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Planned review date	31 December 2025

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 August 2015	31 December 2022
Review	2	25 March 2021	31 December 2023
Review	3	26 May 2022	N/A

Consent and Moderation Requirements (CMR) reference 012	)120
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

# Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at <a href="mailto:qualifications@WaihangaAraRau.nz">qualifications@WaihangaAraRau.nz</a> if you wish to suggest changes to the content of this unit standard.