Title	**Demonstrate knowledge of stringing, tensioning, and terminating transmission network conductors**		
Level	**4**	**Credits**	**10**

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the preparation of line stringing equipment for installing transmission conductors; describe stringing of transmission network conductors; and describe tensioning and terminations of transmission network conductors.

Classification	Electricity Supply > Electricity Supply - Transmission Networks

Available grade	Achieved

Guidance Information

1 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.

2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of 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 *Safety Manual – Electricity Industry* (SM-EI) (2015) available at www.eea.co.nz.

3 Definitions
Asset owner refers to a participant who owns or operates assets used for generating or conveying electricity.
Industry requirements include all asset owner requirements; manufacturers' specifications; and enterprise requirements which may include the documented workplace policies, procedures, specifications, and business and quality management requirements relevant to the workplace in which assessment is carried out.

4 Overhead conductors over 50kV are defined as transmission conductors.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the preparation of transmission line stringing equipment for installing transmission conductors.

Performance criteria

1.1 The purpose, function, and limitations of lines stringing equipment are described.

1.2 Conductor requirement is established.

Range may include but is not limited to – size, type, configuration.

1.3 Structure arrangements are described.

1.4 Installation work plan and method are described.

Range equipment location, protection of equipment, pull length, rigging set-up, structure access, earthing set-up.

1.5 Conductor sag and tension are described.

Range calculation, sag chart, tension.

Outcome 2

Describe stringing of transmission network conductors.

Performance criteria

2.1 Running blocks installation is described.

2.2 Conductors' use without damage is described.

2.3 Conductors' run-out requirements are described.

Range electrical protection, mechanical protection, manufacturer's specifications.

Outcome 3

Describe tensioning and terminations of transmission network conductors.

Performance criteria

3.1 Conductor tensioning methods to control sagging are described.

3.2 Conductors jointing and terminations are described.

Range may include but is not limited to – compression, preform, swaged, implosive.

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	27 April 2001	31 December 2018
Revision	2	10 September 2004	31 December 2018
Review	3	23 April 2008	31 December 2018
Review	4	20 August 2015	31 December 2022
Review	5	25 March 2021	N/A

Consent and Moderation Requirements (CMR) reference	0120

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

Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.