

Title	Carry out tree work in the insulated tool zone around power lines		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: prepare to carry out tree work in the insulated tool zone around power lines and carry out tree work in the insulated tool zone.
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Classification	Electricity Supply > Electricity Supply - Distribution Networks
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Available grade	Achieved
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Prerequisites	Unit 28494, <i>Work on vegetation and tree work near power lines and cables and demonstrate emergency procedures in utility arboriculture</i> , or demonstrate equivalent knowledge and skills.
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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:
 - 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;
 - *Approved Code of Practice: Arboriculture*;
 - *Approved Code of Practice: Maintenance of Trees Around Power Lines*;
 - *Working Near Overhead Electric Power Lines*;
 - *Best Practice Guidelines: Mobile Elevating Work Platforms*;
 - *Guide for Safety with Underground Services*, available at <https://worksafe.govt.nz>;
 - BS 3998:2010 *Tree work: Recommendations* available from <http://www.standards.co.nz/>;
 - ANSI Z133.1-2006 *Safety Requirements*, available from <https://webstore.ansi.org>.
- 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, business, and quality management requirements relevant to the workplace in which assessment is carried out.

- 4 Assessment of practical skills against the outcomes in this standard requires three practical observations from three different workplace activities, one of which may be conducted in a simulated electricity supply environment.

Outcomes and performance criteria

Outcome 1

Prepare to carry out tree work in the insulated tool zone around power lines.

Performance criteria

- 1.1 A safe worksite is established in accordance with approved work procedure.
- Range includes but is not limited to – minimum approach distance (MAD) for utility arborist and ordinary persons, work permits, tool insulation distance.
- 1.2 Insulated tools and equipment are selected, checked for safe operation, cleaned and tested according to manufacturers' instructions, codes of practice, and industry requirements.
- Range insulated tools may include but are not limited to – hydraulic pole pruner, hydraulic chainsaw, non-hydraulic tools; evidence of two required.
- 1.3 Documentation is completed and checked by the contractor and either the network owner, the network operator, or the asset manager.
- Range includes but is not limited to – tail gate sheets, close approach permits, work and time sheets, maintenance checklists, procedure forms.
- 1.4 Hazards are identified and recorded according to industry requirements.
- Range includes but is not limited to – tailgate sheets, equipment and machinery checklists, crew briefings and task allocation, work plan and strategies.
- 1.5 Hazards involved in the work are controlled according to industry requirements.
- Range includes but is not limited to – hazards involved with operating MEWP, working near electricity supply lines, step and touch potential, ground work, traffic and pedestrian control and exclusion from work zone, weather conditions.

Outcome 2

Carry out tree work in the insulated tool zone under a work permit.

Performance criteria

2.1 Network is logged onto and network operator is advised of work details prior to commencement.

Range may include but is not limited to – network operator advised of contractor, work commencement date and time, location, feeder being worked on, work authority taken out for high voltage lines, estimated duration of work; evidence of two required.

2.2 Tree work is completed to meet the site specifications, industry requirements, and code of practice requirements.

Range includes but is not limited to – target branches accessed without compromising MAD, safety observer in position, optimum cutting and removal technique chosen, size of cuttings in accordance with distance between conductors, MAD maintained at all times.

2.3 Job is finished according to site specifications and industry requirements.

Range includes but is not limited to – site cleaned up, network operator notified job complete, work authority returned to network operator, insulated tools cleaned and stored correctly.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 November 2010	31 December 2022
Review	2	20 November 2014	31 December 2022
Review	3	27 August 2020	N/A

Consent and Moderation Requirements (CMR) reference	0120
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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 at qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.