Title	Apply condition coding systems to electricity supply wooden and concrete poles
Level	4	Credits	4

Purpose	People credited with this unit standard are able to, for wooden and concrete poles: demonstrate knowledge of pole defects; plan and prepare to inspect, and apply condition coding systems; carry out inspection of poles and apply condition coding systems, and record condition data.

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:
–   Electricity Act 1992
–   Health and Safety at Work Act 2015
–   Electricity supply industry codes of practice and documented enterprise procedures, including *Safety Manual – Electricity Industry* (SM-EI) and relevant EEA guides available at www.eea.co.nz
and any subsequent amendments and replacements.

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 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

Demonstrate knowledge of pole defects for wooden and concrete poles.

Performance criteria

1.1   Pole structure types are identified.

1.2   Types of pole defects are identified and described.

        Range   includes but is not limited to – rot, cracking, mechanical damage, deflections, landslip, excavation, splitting.

1.3   The impact of defects on the pole foundations are described for excavation, landslip and cracking.

1.4   The impact of defects on the mechanical strength of the poles is described.

        Range   includes but is not limited to – rot, cracking, mechanical damage, splitting.

1.5   Bending moments are identified and described.

1.6   Methods for earthing poles are identified and described.

        Range   external, internal.

1.7   Earthing method defects are identified and described.

        Range   includes but is not limited to – field damage, earthing leads, mechanical damage, poor bonding.

Outcome 2

Plan and prepare to inspect, and apply condition coding systems to wooden and concrete poles.

Performance criteria

2.1   Scope of work is identified.

        Range   may include but is not limited to – inspection requirements, site information, plans, procedures, approvals.

2.2   Condition coding systems and codes are explained in terms of asset owner requirements.

2.3   Measuring equipment is selected to meet the requirements of the scope of work.

2.4   Check sheets for condition assessment are selected or developed.

Outcome 3

Carry out inspection of poles and apply condition coding systems, and record condition data for wooden and concrete poles.

Performance criteria

3.1   Visual inspection of pole is carried out and defects are identified.

3.2   Pole condition coding system is applied.

3.3   Recording of condition data is complete, accurate, concise, legible and is recorded in the required format by the asset owner.

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	28 September 2017	31 March 2023
Review	2	1 March 2018	N/A
Rollover and Revision	3	2 March 2023	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 Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangaAraRau.nz if you wish to suggest changes to the content of this unit standard.