

| | | | |
|--------------|--|----------------|----------|
| Title | Apply condition coding systems to electricity supply tower structures | | |
| Level | 4 | Credits | 4 |

| | |
|----------------|---|
| Purpose | People credited with this unit standard are able to: demonstrate knowledge of tower structure defects; plan and prepare to inspect, and apply condition coding systems to towers; and carry out inspection of a tower, 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 tower structure defects.

Performance criteria

- 1.1 Structure types are identified.

- 1.2 Types of tower defects are identified and described.
- Range includes but is not limited to – cracking, corrosion, protective coating failures, contamination of protective layer, mechanical damage, landslips.
- 1.3 The impact of defects on the structure is described in terms of corrosion, mechanical damage and protective coating failure.
- 1.4 The impact of defects on the tower foundations is explained in terms of landslips, cracking and corrosion.
- 1.5 Earthing connection points are identified and their defects are described.
- Range includes but is not limited to – tower earthing plate, tower main steel members.

Outcome 2

Plan and prepare to inspect, and apply condition coding systems to towers.

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 Selection of measuring equipment meets the requirements of the scope of work.
- 2.4 Check sheets for condition assessment are selected or developed.

Outcome 3

Carry out inspection of a tower, apply condition coding systems and record condition data.

Performance criteria

- 3.1 Visual inspection of tower is carried out and defects are identified.
- 3.2 Tower condition coding system is applied.
- 3.3 Recording of condition data is complete, 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 December 2018 |
| 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 Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangāAraRau.nz if you wish to suggest changes to the content of this unit standard.