

41183 Carry out condition assessments of hardware in a traction line network

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	This skill standard is intended for people who are working in a traction line mechanic role on traction line networks. People with this skill standard will be able to carry out condition assessments of hardware in a traction line network. This skill standard aligns with the New Zealand Certificate in Traction Line Networks (Level 4) [Ref: 3988].

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Determine the purpose and requirements of condition assessments of hardware in a traction line network.	a. Determine requirements of condition assessments of network hardware in terms of the impact, types, codes, and causes of defects.
	b. Identify the requirements for condition coding.
2. Carry out condition assessments of hardware in a traction line network.	a. Develop and implement a worksite and safety plan to align with the scope of work determined within asset owner's requirements.
	b. Inspect hardware.
	c. Code, assess and record any defects within asset owner's requirements.
	d. Tag and report defective network hardware.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Candidates must be capable for consistent completion of condition assessments.

Evidence required in the completion of condition assessments must include:

- Different types of network hardware defects.
- Different types of return earth and bonding defects.
- Condition coding requirements.
- Procedures and equipment for condition assessments.

A worksite and safety plan must show consideration of asset owner's requirements with reference to relevant company policies and procedures, work instructions, product quality specifications, and legislative requirements.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

- Network hardware defects – chips in the concrete spalling, cracking, steel corrosion, deformation, splits, wear, ground movement, traction wire sags, conductor and traction wire insulation, mechanical and thermal stress, or other defects found.
- Return earth and bonding defects – bonded metalwork, return wire bonding, earthing and bonding on structures.

Rauemi | Resources

- Electricity Act 1992.
- Electricity (Safety) Regulations 2010.
- *Safety Manual – Electricity Industry* (SM-EI) available from www.eea.co.nz.
- ECP 34 - New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Energy and Infrastructure Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Engineering and Technology > Electricity Supply > Electricity Supply - Distribution Networks
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 May 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standards 31969 and 31970.		
Rā arotake Planned review date	31 December 2030		

Please contact Energy and Infrastructure Industry Skills Board qualifications@energyinfra-skills.nz if you wish to suggest changes to the content of this skill standard.