Title	Carry out maintenance and commissioning tests on instrument transformers					
Level	4		Credits	5		
Purpose		People credited with this unit standard are able to carry out maintenance and commissioning tests on instrument transformers.				
Classification		Electricity Supply > Electricity Supply - Testing				
Available grade		Achieved				
Prerequisites		Unit 14287, Use and maintain test instruments used in the high voltage electricity supply industry, or demonstrate equivalent knowledge and skills.				

### **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.
- 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; and any subsequent amendments and replacements; Electricity Act 1992; Electricity (Safety) Regulations 2010; Electricity supply industry codes of practice and documented enterprise procedures, including Safety Manual Electricity Industry (SM-EI) (2015) Wellington: Electricity Engineers' Association, 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, business, and quality management requirements relevant to the workplace in which assessment is carried out.
- Tests may include but are not limited to ratio tests, phase angle tests, insulation resistance tests, winding resistance tests, capacitor divider checks, primary injection tests, burden tests, loading resistance tests, visual inspection, verification of winding markings, polarity of windings, capacitive voltage transformers, power factor.

# Outcomes and performance criteria

#### **Outcome 1**

Carry out maintenance and commissioning tests on instrument transformers.

Range evidence of six completed tests is required.

## Performance criteria

- 1.1 Equipment is prepared for testing in terms of client test requirements.
  - Range procedures, test specifications, performance standards, equipment operational release.
- 1.2 An access permit, or its approved equivalent, is obtained and a safe work zone is prepared.
- 1.3 Selected tests are carried out in accordance with the standard procedures and commissioning plan, or as specified by the client.
- 1.4 Test results are recorded, interpreted and analysed for compliance with the standard required.
  - Range may include but is not limited to reference to manufacturer's requirements, client standards, records of previous results.
- 1.5 Documentation is completed.
- 1.6 The equipment being tested is safely placed in, or returned to, service, and access permit is returned.

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 1998	31 December 2012	
Revision	2	11 February 2004	31 December 2012	
Review	3	19 May 2006	31 December 2012	
Review	4	08 December 2011	31 December 2022	
Review	5	23 April 2020	N/A	

Consent and Moderation Requirements (CMR) reference	0120
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This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.

NZQA unit standard

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# Comments on this unit standard

Please contact Connexis – Infrastructure Industry Training Organisation <a href="mailto:qualifications@connexis.org.nz">qualifications@connexis.org.nz</a> if you wish to suggest changes to the content of this unit standard.