## Field Engineering and Technology

### Review and reinstatement of *Electricity Supply* unit standards

Subfield	Domain	ID
Electricity Supply	Electricity Supply - Core	12387, 20091, 20618, 23898,
	Skills	23899
	Electricity Supply - Power	14330, 27655
	System Maintenance	
	Electricity Supply - Testing	<b>14269</b> , 14271, 14272, 14287,
		14290

Connexis has completed the review and reinstatement of the unit standards listed above. Unit standards that have been reinstated are listed in **bold**.

Date new versions published

February 2020

Planned review date

December 2025

#### **Summary**

Connexis reviewed the programme leading to the New Zealand Certificate in Electrical Engineering Theory and Practice (Trade) [Ref: 2388]. Industry indicated some of the programme was unachievable in an Electricity Supply context or limited to some Electricity Supply workplaces. The reviewed programme contains the unit standards below, which were reviewed to coincide with the programme review and endorsed by industry representatives in November 2019.

### Main changes

- Guidance information was updated to ensure currency with industry knowledge and practice.
- Some unit standards were condensed to one outcome to more accurately reflect the task being assessed.
- Units 14271 and 14272 were changed to allow their use across a range of Electricity Supply workplaces. These major changes required the expiry of these units without replacement and development of new unit standards in a different domain.
- Unit standard 14330 was designated expiring and replaced with a new unit standard. The level of the new unit standard was raised to align with the job role in which the task is performed.
- Units 14269 and 14290 were reinstated and the status of the unit standards was changed from expiring to current, to allow their use in the reviewed programme leading to the New Zealand Certificate in Electrical Engineering Theory and Practice (Trade) [Ref: 2388].
- Titles of unit standards 14269, 14287, 14290, 23898, 23899 and 27655 were modified to fully represent the outcomes of the units. The level of unit standards 23899 and 27655 were raised to align with the job role in which the tasks are performed.
- Unit standard 20618 was designated expiring without replacement because it is not part of a current Connexis programme for a New Zealand Certificate in Electricity Supply.
- In response to industry feedback, a new unit standard was developed to cover the requirements for selecting and installing electric switchboards in the electricity supply industry.

#### Category C and D unit standards will expire at the end of December 2022

The last date for assessment of superseded versions of Category B unit standards is December 2022

# Impact on existing organisations with consent to assess

Current consent for Consent extended to					
Nature of	Classification or ID	Level	el Nature of consent Classification or ID		Level
consent					
Subfield	Electricity Supply	3	Standards	27655	4
				32060	4

# Detailed list of unit standards - classification, title, level, and credits

All changes are in **bold**.

Engineering and Technology > Electricity Supply > Electricity Supply - Core Skills

ID	Title	Level	Credit	Review Category
12387	Operate electrical switchgear in the electricity supply industry	4	6	В
20091	Read and interpret single line diagrams in the electricity supply industry	3	3	В
20618	Demonstrate knowledge of switching in the electricity supply industry	2	2	D
23898	Carry out polarity and phasing on LV electricity networks  Describe and carry out polarity and phasing tests on low voltage electricity networks	3	2	В
23899	Carry out phasing tests on HV electricity networks  Describe and carry out phasing tests on high voltage electricity networks	3	2	В
32059	Select and install an electric switchboard in the electricity supply industry	4	3	New

Engineering and Technology > Electricity Supply > Electricity Supply - Power System Maintenance

ID	Title	Level	Credit	Review
				Category
14330	Install substation earthing and bonding system	3	3	С
32060	Install and inspect an earthing and bonding	4	3	
	system for equipment used in the electricity			
	supply industry			
27655	Demonstrate familiarity with common faults, relay	3	4	В
	systems, and components of diagrams in power			
	system protection systems			
	Demonstrate knowledge of faults, relay systems,	4		
	and components of diagrams in power system			
	protection systems			
32057	Carry out routine inspection and service of a	4	6	New
	power transformer			
32058	Carry out routine inspection and service on a high	4	6	New
	voltage circuit breaker			

Engineering and Technology > Electricity Supply > Electricity Supply - Testing

ID	Title	Level	Credit	Review Category
14269	Locate faults in distribution and transmission power cables  Locate faults in power cables	4	5	Reinstated

ID	Title	Level	Credit	Review Category
14271	Carry out acceptance, commissioning and maintenance tests on power transformers	4	6	D
14272	Carry out maintenance and/or acceptance tests on high voltage circuit breakers	4	6	D
14287	Use and maintain test instruments used within the high voltage electrical industry Use and maintain test instruments used in the high voltage electricity supply industry	3	4	В
14290	Join, terminate, test and commission specialist communication cable systems  Joint, test and commission specialist communication cable systems	4	5	Reinstated