

Field Engineering and Technology

Review of *Electricity Supply* unit standards

Subfield	Domain	ID
Electricity Supply	Electricity Supply - Core Skills	18028, 28893, 28894
	Electricity Supply - Power System Maintenance	28886-28892, 28895
	Electricity Supply - Transmission Networks	18025, 20414, 20415, 20420, 20847, 24746, 24747, 28943-28945

Connexis has completed the review of the unit standards listed above.

Date new versions published

March 2021

Planned review date

December 2025

Summary

As part of a qualification review for the New Zealand Certificate in Electricity Supply (Transmission Line Maintenance) (Level 4) with strands in Line Mechanics, and Structure Maintenance [Ref: 2705], Connexis identified unit standards that required review. Consultation occurred with stakeholders with consent to assess against these unit standards in April 2020.

Main changes

- Guidance information was updated in all standards to ensure currency with industry knowledge and practice.
- Guidance information for unit standard 28943 was aligned to other units used as capstone assessments
- The title for unit standard 18028 was amended to better align to outcomes.
- A group of unit standards were designated expiring without replacement due to low usage.

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The last date for assessment of superseded versions of Category B unit standards is December 2022

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

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

ID	Title	Level	Credit	Review Category
18028	Demonstrate knowledge of earthing in high voltage (HV) electricity network installations and works Demonstrate knowledge of earthing in high voltage electricity network installations and works	3	2	B

ID	Title	Level	Credit	Review Category
28893	Maintain and test substation equipment	4	15	B
28894	Plan and carry out low voltage (LV) and extra-low voltage (ELV) electrical installations to substation equipment	4	4	D

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

ID	Title	Level	Credit	Review Category
28886	Demonstrate knowledge of power transformers used in substations	4	3	D
28887	Demonstrate knowledge of disconnectors and earth switches used in substations	4	7	D
28888	Demonstrate knowledge of substation structures, insulators, conductors and bus hardware	4	7	D
28889	Demonstrate knowledge of cables and specialist substation equipment	4	7	D
28890	Demonstrate knowledge of sampling, testing, treatment and spill management of substation insulating and hydraulic oils	4	5	D
28891	Demonstrate knowledge of instrument transformers used in substations	4	5	D
28892	Demonstrate knowledge of circuit breakers and auto reclosers used in substations	4	7	D
28895	Maintain substation earthing and bonding	3	3	B

Engineering and Technology > Electricity Supply > Electricity Supply - Transmission Networks

ID	Title	Level	Credit	Review Category
18025	Demonstrate knowledge of stringing, tensioning, and terminating transmission network conductors	4	10	B
20414	Carry out condition assessments of electricity supply pole structures	4	6	D
20415	Carry out condition assessments of electricity supply steel structures	4	5	D
20420	Replace transmission tower structure steel	4	6	D
20847	Carry out a line patrol on an electricity supply network	4	6	D
24746	Demonstrate knowledge of rigging electricity network structures	4	6	D
24747	Install and replace insulators and fittings	4	5	D
28943	Plan and carry out maintenance on transmission grid assets, and carry out a rescue	4	10	B
28944	Demonstrate knowledge of construction and maintenance of electricity structures	4	15	D
28945	Demonstrate knowledge of three-phase theory for line maintainers	3	3	D