

Field Engineering and Technology

Review and revision of *Electricity Supply* unit standards

Subfield	Domain	ID
Electricity Supply	Electricity Supply - Core Skills	16283, 18275, 19323, 20094, 30101 – 30108, 30110, 30112, 30113, 32255
	Electricity Supply - Distribution Networks	20069, 30111
	Electricity Supply - Power System Maintenance	14700
	Electricity Supply - Power System Management	16276, 16280, 16281, 16285, 18279, 19477, 24692, 24693, 30114, 30115

Connexis has completed the review of the unit standards listed above. Unit standard in **bold** has been revised.

Date new versions published	September 2021
Planned review date	December 2026
Planned review date for standard 32255 (unchanged)	December 2025

Summary

Connexis identified unit standards due for review as part of the normal maintenance cycle. Unit standards with reference to parts of the Safety Manual – Electricity Industry were also reviewed or revised to align with the new publication of this manual.

Stakeholders with consent to assess and the Electricity Supply Reference Group were emailed to request feedback on the unit standards. Their recommendations were discussed at the June meeting of the Reference Group and final changes were advised to stakeholders by email and on the Connexis website.

Main changes

- Twenty-nine unit standards were reviewed and one unit standard was revised to align with the terminology used in the new version of the Safety Manual – Electricity Industry.
- Two unit standards were designated as expiring because they are no longer required in any electricity supply programmes.
- The credit value of unit standard 18275 was increased to align to the change in performance criteria.
- Titles for unit standards 16280, 16285, 20069, 30108, 30110 and 30111 were modified to clarify the context or to align to changes in terminology in the electricity supply industry.
- One outcome was removed from unit standard 16283 to enable it to be achieved throughout New Zealand.
- Guidance information in all unit standards was updated.
- A new unit standard was developed to meet industry requirements.

Category D unit standards will expire at the end of December 2023

The last date for assessment of superseded versions of Category B unit standards is 31 December 2023

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

All changes are in **bold**.

Revised

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

ID	Title	Level	Credit
32255	Demonstrate and apply knowledge of legislation and codes of practice in the electricity supply industry	4	8

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
16283	Remove electricity supply field network equipment from service for access to work	4	8	B
18275	Describe the major sectors in the New Zealand electricity supply industry and the relationships between them	2	2 3	B
19323	Demonstrate knowledge of single and three-phase transformers used in the electricity supply industry	3	4	B
20094	Receive and return transfer of control in the electricity supply industry	4	4	D
30101	Demonstrate knowledge of the electricity generation sector in New Zealand	3	5	B
30102	Operate electricity generation auxiliary plant and equipment	4	10	B
30103	Apply and remove portable earths in an electricity supply system	4	7	B
30104	Operate electrical switchgear in the electricity generation industry	4	10	B
30105	Isolate and reinstate a section of an electricity generation plant	4	10	B
30106	Operate and monitor an electricity generator and associated systems	4	10	B
30107	Handover operational plant	4	4	B
30108	Plan and compile an operating sequence in the electricity supply industry Plan and compile a switching instruction in the electricity supply industry	4	6	B
30110	Action and report on an operating sequence in the electricity supply industry Action and report on a switching instruction in the electricity supply industry	4	6	B
30112	Demonstrate knowledge of electrical legislation and installation testing as an endorsed line mechanic	4	10	B
30113	Demonstrate knowledge of three-phase theory in the electricity supply industry	4	5	B

ID	Title	Level	Credit	Review Category
32854	Work safely with others on an electricity supply worksite	3	5	New

Engineering and Technology > Electricity Supply > Electricity Supply – Distribution Networks

ID	Title	Level	Credit	Review Category
20069	Joint live LV paper insulated power cables in the electricity supply industry Joint live low voltage paper insulated power cables in the electricity supply industry	4	10	B
30111	Locate faults, repair or replace faulty components in a distribution network to a consumer installation Locate faults, and repair or replace faulty components in a distribution network to a consumer installation	4	20	B

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

ID	Title	Level	Credit	Review Category
14700	Apply and remove safety measures in an electricity supply environment	3	3	B

Engineering and Technology > Electricity Supply > Electricity Supply – Power System Management

ID	Title	Level	Credit	Review Category
16276	Respond to electricity supply external system operations communications	4	5	B
16280	Compile and action switching plans to maintain electricity supply power network security Compile and action switching instructions to maintain electricity supply power network security	4	9	B
16281	Maintain and update operating log for electricity supply operational purposes	3	3	B
16285	Plan for scheduled work on electricity supply power system equipment Plan for scheduled work on electricity supply network equipment	4	10	B
18279	Manage water resources for on site hydro-electricity generation	4	8	B
19477	Demonstrate knowledge of the national electricity grid	4	5	B
24692	Demonstrate knowledge of water turbine governors for hydro-electric power plant	4	10	B
24693	Demonstrate knowledge of water turbines for hydro-electric power plant	4	12	B
30114	Remove electricity transmission equipment from service for access to work	4	8	D
30115	Describe and apply the issuer's responsibilities for the management of access and test permits and assurances	4	10	B