

Field Engineering and Technology**Review of *Electricity Supply* unit standards**

Subfield	Domain	ID
Electricity Supply	Electricity Supply - Core Skills	16283,19323, 20090, 20094, 20095, 20421, 28572
	Electricity Supply - Distribution Networks	25074
	Electricity Supply - Power System Maintenance	27655
	Electricity Supply - Power System Management	16276, 16280, 16285, 18279, 19477, 24692, 24693
	Electricity Supply - Thermal Operations and Control	17413

Infrastructure ITO (Connexis) has reviewed the unit standards listed above.

Date new versions published

March 2017

Planned review date

December 2021

Summary

The review of these unit standards was initiated through their planned review and the Targeted Review of Qualifications (TRoQ) for Engineering and Technology triggered in 2011. The unit standards have been reviewed, and 15 new standards developed to meet the needs for the electricity supply sector's proposed new qualifications.

Between late 2014 and 2016 a series of industry working meetings and discussions including email collaborations took place with stakeholders for this qualification.

Main changes

- Purpose statements, explanatory notes, outcomes, evidence requirements, and range statements were updated to ensure they are fit for purpose and to provide clarity for users.
- 15 new unit standards were developed.
- Three unit standards have been set to expire and will be replaced.
- A last date for assessment of the superseded version of these standards was specified. Results will not be accepted where the assessment date is after the last date for assessment of the superseded version of the standard.

Category C unit standards will expire at the end of December 2020

The last date for assessment of superseded versions of Category B unit standards is December 2019

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
16283	Remove electricity supply field network equipment from service for access to work	4	8	B
19323	Demonstrate knowledge of single and three phase transformers used in the electricity supply industry	3	4	B
20090	Carry out switching operations on metal clad switchgear	4	3	B
20094	Receive and return transfer of control in the electricity supply industry	4	4	B
20095	Respond to substation secondary systems alarms and indications in the electricity supply industry	4	4	B
20421	Demonstrate knowledge of earthing in the electricity supply industry	3	5	B
28572	Demonstrate knowledge of electricity generation in New Zealand	3	6	C
30101	Demonstrate knowledge of the electricity generation sector in New Zealand	3	5	
30102	Operate electricity generation auxiliary plant and equipment	4	10	New
30103	Apply and remove portable earths in an electricity supply system	4	7	New
30104	Operate electrical switchgear in the electricity generation industry	4	10	New
30105	Isolate and reinstate a section of an electricity generation plant	4	10	New
30107	Handover operational plant	4	4	New
30108	Plan and compile an operating sequence in the electricity supply industry	4	6	New
30110	Action and report on an operating sequence in the electricity supply industry	4	6	New
30112	Demonstrate knowledge of electrical legislation and installation testing as an endorsed line mechanic	4	10	New
30113	Demonstrate knowledge of three-phase theory in the electricity supply industry	4	5	New

Engineering and Technology > Electricity Supply

ID	Classification	Title	Level	Credit	Review Category
17413	Electricity Supply - Thermal Operations and Control	Operate and monitor generator and associated systems in a thermal electricity generation station	4	15	C
30106	Electricity Supply - Core Skills	Operate and monitor an electricity generator and associated systems	4	10	

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

ID	Title	Level	Credit	Review Category
25074	Locate and repair or replace faulty components or repair faults in a distribution network	4	8	C
30111	Locate faults, repair or replace faulty components in a distribution network to a consumer installation	4	20	

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

ID	Title	Level	Credit	Review Category
27655	Demonstrate familiarity with common faults, relay systems, and components of diagrams in power system protection systems	3	4	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	4	9	B
16285	Plan for scheduled work on electricity supply power system 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
30109	Demonstrate knowledge of turbine governors used in electricity power plant	4	10	New
30114	Remove electricity transmission equipment from service for access to work	4	8	New

ID	Title	Level	Credit	Review Category
30115	Describe and apply the issuer's responsibilities for the management of access and test permits and assurances	4	10	New