

**Field      Engineering and Technology**

**Review and expiry of *Electricity Supply* unit standards**

Subfield	Domain	ID
Electricity Supply	Electricity Supply - Power System Maintenance	6975, 6984, 6985, 10411, 10420, 10421, 14329, 14332-14347, 14701, 15156, 18278, 24669
	Electricity Supply - Power System Management	11577, 11578, 12385, 12386, 12388, 15558, 15566, 15567, 15569-15571, 15573-15581, 16274, 16286, 19326, 19478, 19480, 19483, 19484, 23409, 24691, 26748

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

**Date new versions published**

**January 2019**

**Summary**

The unit standards were identified as overdue for review. Checks of usage showed that the standards had received little or no usage in the last 3 years and are not included in any current Connexis programmes. A list of standards was circulated among relevant industry stakeholders in October 2018, and any standards identified as no longer needed were reviewed with the intention to expire them from the Directory of Assessment Standards.

**Main changes**

- All standards were designated expiring and reissued as new versions with an expiry date included.
- References in guidance information and within individual standards were updated.
- Standard setting body information and contact details were updated.

**Category D unit standards will expire at the end of December 2020**

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

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

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

ID	Title	Level	Credit	Review Category
6975	Repair and overhaul bearings of rotating machines of 100kVA and above	4	8	D
6984	Repair and overhaul lubrication systems for rotating plant of 100kVA and over	4	5	D
6985	Repair and overhaul power transformers of 5kVA and above	5	10	D
10411	Service low voltage electric motors 415 volts and below	4	5	D

ID	Title	Level	Credit	Review Category
10420	Repair and overhaul valves	4	5	D
10421	Service water turbines in electricity supply power plants	3	6	D
14329	Carry out routine inspection and servicing on distribution power transformers 33kV to 11kV	4	8	D
14332	Carry out routine inspection and service on oil filled distribution power transformers 11kV to 400V	4	8	D
14333	Carry out routine inspection and servicing on transmission power transformers above 33kV	4	8	D
14334	Carry out routine service on transmission instrument transformers 33kV and above	4	7	D
14335	Service and repair high voltage disconnectors, earth switches and other bus structure equipment	3	6	D
14336	Carry out routine inspection and servicing on distribution instrument transformers below 33kV	4	7	D
14337	Carry out routine inspection and servicing on high voltage minimum oil circuit breakers	4	6	D
14338	Carry out routine inspection and servicing on high voltage bulk oil circuit breakers	4	6	D
14339	Carry out routine inspection and servicing on 11kV and 33kV pole mounted re-closer circuit breakers	3	3	D
14340	Carry out routine inspection and servicing on high voltage air blast circuit breakers	4	4	D
14341	Carry out routine inspection and service on high voltage indoor metal clad circuit breakers and bus	4	4	D
14342	Carry out routine inspection and minor servicing on high voltage SF6 outdoor circuit breakers	4	5	D
14343	Carry out routine inspection and servicing on high voltage gas insulated switchgear	4	5	D
14344	Carry out routine inspection and servicing on substation emergency services	3	4	D
14345	Carry out routine inspection and servicing on substation air compressor systems	3	4	D
14346	Carry out routine inspection and servicing on security services at substations	3	4	D
14347	Carry out routine inspection and service of high voltage capacitor banks and signal injection plant	3	3	D
14701	Manage electricity supply work control systems	4	4	D
15156	Conduct hydraulic structures safety and surveillance inspections	4	4	D
18278	Service battery banks in the electricity supply environment	2	2	D
24669	Carry out routine inspection and service of high voltage static var compensation (SVC) equipment	4	5	D

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

ID	Title	Level	Credit	Review Category
11577	Describe and apply electricity power generation, renewable and sustainable energy, and conservation technologies	6	15	D
11578	Describe and apply electricity power transmission technology	6	15	D
12385	Operate hydro-electric generating plant on site	4	8	D

ID	Title	Level	Credit	Review Category
12386	Operate electricity generating electrical control systems on site	4	6	D
12388	Operate hydro-electric station auxiliary plant	4	8	D
15558	Investigate and analyse electricity generation plant and system failures and recommend remedial actions	5	6	D
15566	Manage implementation of power system dispatch instructions	6	10	D
15567	Produce power system dispatch implementation plan	6	6	D
15569	Manage power system control and optimisation	6	16	D
15570	Respond to emergencies which threaten electricity generation	5	15	D
15571	Manage enterprise offers into New Zealand wholesale electricity market	6	10	D
15573	Manage enterprise bids into New Zealand wholesale electricity market	6	10	D
15574	Demonstrate knowledge of the New Zealand electricity market operation and regulation	5	16	D
15575	Operate hydro-electric generating plant from enterprise control room	6	16	D
15576	Operate and manage electricity transmission network	6	15	D
15577	Control electricity distribution network	6	15	D
15578	Maintain electricity system frequency and voltage within agreed tolerances	5	6	D
15579	Manage hydrological resources for electricity generation	6	16	D
15580	Manage electricity generation dispatch	6	10	D
15581	Operate frequency injection equipment	4	4	D
16274	Manage operations staff to maintain the electricity supply and provide input to operational business plans	4	3	D
16286	Respond to major emergencies that threaten the electricity supply power network	5	15	D
19326	Maintain and modify distributed control systems to control electricity supply plant operations	5	15	D
19478	Demonstrate knowledge of HVDC in the role of a power system controller	5	10	D
19480	Use advanced SCADA functions to manage the power system	5	3	D
19483	Conduct a compliance audit on equipment operation in the electricity supply industry	4	6	D
19484	Conduct a compliance audit of work management systems in the electricity supply industry	4	6	D
23409	Utilise a Distributed Control System (DCS) in the operation of an electricity generation power station	5	6	D
24691	Demonstrate knowledge of a.c generators for hydro-electric generation	4	15	D
26748	Carry out operations on a DC system associated with a power station electrical system	4	6	D