### Field Engineering and Technology

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

Subfield	Domain	ID
Electricity Supply	Electricity Supply –	12391
	Business Services	
	Electricity Supply – Design	14279, 14298-142313
	and Commissioning	
	Electricity Supply –	19951, 20422
	Distribution Networks	
	Electricity Supply – Power	10394
	System Maintenance	
	Electricity Supply – Power	16096, 18201
	System Management	
	Electricity Supply –	6987, 14290
	Testing	
	Electricity Supply –	14188-14190, 14194-14197,
	Utilisation	14201-14202, 14207

The Electricity Supply Industry Training Organisation has completed the review of the unit standards listed above.

### Date new versions published

May 2010

# **Summary**

These unit standards were reviewed to ensure they remained relevant to industry. However, these standards have had very little or no usage over the past five years and therefore ESITO do not believe there is any further need for them by industry. Industry were advised of the planned expiry of these standards via the ESITO website.

#### Main changes

All standards were designated expiring.

Category D unit standards will expire at the end of December 2012

Impacts on existing accreditations, Accreditation and Moderation Action Plan (AMAP), and registered qualifications

None.

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

Ke	ey to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new
	version number
В	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID
	and a new version number
С	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 - Business Services

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ID	Title	Level	Credit	Review
				Category
12391	Manage operational and or maintenance contracts	4	4	D
	in an electricity supply environment			

Engineering and Technology > Electricity Supply > Electricity Supply - Design and

Commis	Commissioning					
ID	Title	Level	Credit	Review Category		
14279	Commission power system equipment from 'end to end'	5	7	D		
14298	Identify need and develop plans for power network reinforcement	5	10	D		
14299	Design power network substation electrical arrangement up to 72.5kV	5	12	D		
14300	Design physical layout for substations up to 72.5kV	5	12	D		
14301	Design electrical protection system for power network substation up to 72.5kV	6	15	D		
14302	Design power network supervisory control and data acquisition (SCADA) system	6	15	D		
14303	Prepare civil and structural design specification documents for substations	5	10	D		
14304	Design earthing systems for substations up to 72.5kV	5	10	D		
14305	Apply seismic design criteria to substation equipment and structural designs	6	10	D		
14306	Design voltage regulation system for power network	6	10	D		
14307	Design load control systems for power systems up to 72.5kV	6	15	D		
14308	Design power line installation up to 72.5kV	5	10	D		
14309	Conduct a line location route survey up to 72.5kV	5	12	D		
14310	Prepare civil and structural design specification documents for line and cable design	5	10	D		
14311	Design line and cable earthing and insulation coordination system	6	10	D		
14312	Design power cable installation up to 72.5kV	5	15	D		
14313	Design metering systems for power systems up to 72.5kV	6	15	D		

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

ID	Title	Level	Credit	Review
				Category
19951	Demonstrate knowledge of the construction of LV	2	4	D
	and HV power cables and preparation techniques			
20422	Demonstrate knowledge of street lighting systems	2	4	D
	and componentry			

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

ID	Title	Level	Credit	Review Category
10394	Service compressed air systems	3	3	D

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

ID	Title	Level	Credit	Review Category
16096	Demonstrate knowledge of the control and protection systems of the New Zealand HVDC transmission	5	10	D
18201	Monitor and operate electricity supply site security alarm and sensor systems	3	6	D

Engineering and Technology > Electricity Supply > Electricity Supply - Testing

ID	Title	Level	Credit	Review Category
6987	Test and calibrate excitation systems for ac synchronous generators of 100kVA and above	6	10	D
14290	Join, terminate, test and commission specialist communication cables systems	4	5	D

Engineering and Technology > Electricity Supply > Electricity Supply - Utilisation

ID	Title	Level	Credit	Review Category
14188	Assess domestic customer energy utilisation needs	4	5	D
14189	Assess commercial customer energy utilisation needs	4	8	D
14190	Assess industrial customer energy utilisation needs	4	8	D
14194	Provide domestic lighting energy utilisation solutions	5	10	D
14195	Provide domestic heating energy utilisation solution	5	10	D
14196	Provide domestic energy control and metering of utilisation solution	5	10	D
14197	Provide domestic atmosphere conditioning energy utilisation solutions	5	10	D
14201	Provide commercial and institutional lighting energy utilisation solution	6	15	D
14202	Provide commercial and institutional heating energy utilisation solution	6	15	D
14207	Prepare project brief for energy utilisation in-depth study	4	5	D