

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

Subfield	Domain	ID
Electricity Supply	Electricity Supply – Business Services	19483, 19484
	Electricity Supply – Core Skills	18273, 18277, 19950, 20421
	Electricity Supply – Distribution Networks	19952, 20074
	Electricity Supply – Power System Maintenance	6974, 6976, 6977, 6980-6983, 10396, 10399, 10401, 10407, 10413, 10417-10419, 10421-10424, 17633-17635
	Electricity Supply – Power System Management	12389, 15575, 19326, 19475-19477, 19482
	Electricity Supply – Testing	14296
	Electricity Supply – Transmission Networks	20412-20416, 20847

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

Date new versions published

November 2010

Planned review date

December 2015

Summary

These unit standards were reviewed to ensure they remained relevant to industry. Industry was invited to participate in the review, and assessors were asked to comment on those standards they had assessed against. A notification of the standards being reviewed was also posted on the ESITO website. No feedback was received for many of the standards and due to little or no usage it was considered that these standards were no longer required. Legislation and terminology were updated for the remaining registered standards. As standards 19483 and 19484 were the only remaining standards in the *Electricity Supply – Business Services* domain, they were transferred to the *Electricity Supply – Power System Management* domain and the *Electricity Supply – Business Services* domain was designated expiring.

Main changes

- Explanatory notes were updated.
- Standards 6974, 6976, 6977, 6980-6983, 10396, 10399, 10401, 10407, 10417-10419, 10422-10424, 12389, 14296, 17633-17635, 19326, 19475, 19476, and 19842 were designated expiring.
- Standards 19483 and 19484 were reclassified from the *Electricity Supply – Business Services* domain to the *Electricity Supply – Power System Management* domain.
- *Electricity Supply – Business Services* domain was designated expiring.

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

Impact on existing accreditations

Current Accreditation for			Accreditation extended to		
Nature of accreditation	Classification	Level	Nature of accreditation	ID	Level
Domain	Electricity Supply – Business Services	4	Standards	19483, 19484	4

Impact on registered qualifications

Key to type of impact	
Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set The qualification lists a standard that has changes to level or credits The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

The following Electricity Supply Industry Training Organisation qualifications are *not materially affected* by the outcome of this revision and will be updated when they are revised or reviewed in 2015.

Ref	Qualification Title	ID
0869	National Certificate in Electricity Supply (Cable Jointer – Low Voltage) (Level 3)	18273
1294	National Certificate in Electricity Supply (Electrical) (Level 3) with strands in Electricity Supply Electrician, Electrical Fitter, and Electrical Technician	18273, 18277
1369	National Certificate in Electricity Supply (Line Mechanic Distribution) (Level 3)	18273
1389	National Certificate in Electricity Supply (Line Mechanic Transmission) (Level 4) with optional strands in Optional Work Skills (E1 (O)), and Optional De-energised Work Skills (E3)	18273

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

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
18273	Demonstrate knowledge of the basic composition and properties of electricity Demonstrate knowledge of the composition, properties, and principles of electricity	2	5	B

ID	Title	Level	Credit	Review Category
18277	Demonstrate knowledge of the requirements for holding permits in the electricity supply industry Demonstrate knowledge of the requirements for holding access and test permits in the electricity supply industry	3	2	B
19950	Use test instruments and carry out electrical testing in the electricity supply industry	3	3	B
20421	Demonstrate knowledge of earthing in the electricity supply industry	3	5	B

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

ID	Title	Level	Credit	Review Category
19952	Demonstrate knowledge of the requirements for working on electricity supply networks Demonstrate knowledge of terminology, and testing and equipment requirements for working on electricity supply networks	2	4	B
20074	Demonstrate knowledge of the construction of LV and HV power cables and cable preparation	2	4	B

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

ID	Title	Level	Credit	Review Category
6974	Service bearings of rotating machines of 100kVA and above	3	3	D
6976	Service excitation systems for ac synchronous generators of 100kVA and above	4	5	D
6977	Repair and overhaul excitation systems for ac synchronous generators of 100kVA and above	5	12	D
6980	Repair and overhaul ac generators of 100kVA and above	5	20	D
6981	Service hydro control gates and associated equipment	3	4	D
6982	Repair and overhaul hydro control gates and associated equipment	4	7	D
6983	Service lubrication systems for rotating machines of 100kVA and above	3	3	D
10396	Service cooling systems	3	3	D
10399	Service fans	3	3	D
10401	Service gas turbines	4	8	D
10407	Service hydro control valves of 450mm diameter and above	3	3	D
10413	Service pumps Service pumps and components in electricity supply power plants	3	3	B
10417	Service steam turbines	4	5	D

ID	Title	Level	Credit	Review Category
10418	Repair and overhaul steam turbines	5	20	D
10419	Service valves up to 450mm diameter	3	3	D
10421	Service water turbines Service water turbines in electricity supply power plants	3	6	B
10422	Repair and overhaul water turbines	5	15	D
10423	Service water turbine governor and relief valve systems	3	6	D
10424	Repair and overhaul water turbine governor and relief valve systems	5	15	D
17633	Conduct an electrical service on ac generators of 100kVA and above	4	7	D
17634	Conduct a mechanical service on ac generators of 100kVA and above	4	7	D
17635	Isolate and restore electricity generation plant and equipment	4	5	D

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

ID	Title	Level	Credit	Review Category
12389	Conduct risk management in an electricity supply environment	6	8	D
15575	Operate hydro-electric generating plant from enterprise control room	6	16	B
19326	Maintain and modify distributed control systems to control electricity supply plant operations	5	15	B
19475	Manage electricity grid security	6	15	D
19476	Manage electricity market scheduling	6	10	D
19477	Demonstrate knowledge of the national electricity grid	4	5	B
19482	Demonstrate knowledge of the national electricity grid security	5	5	D

Engineering and Technology > Electricity Supply > Electricity Supply – Testing

ID	Title	Level	Credit	Review Category
14296	Carry out thermography inspection on substation equipment	4	4	D

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

ID	Title	Level	Credit	Review Category
20412	Carry out a line patrol on an electricity supply network	3	6	B
20413	Carry out condition assessments of electricity supply wooden pole structures	4	6	B

ID	Title	Level	Credit	Review Category
20414	Carry out condition assessments of electricity supply concrete and steel pole structures	4	6	B
20415	Carry out condition assessments of electricity supply steel tower structures	4	5	B
20416	Carry out condition assessments of electricity supply line hardware and conductors	4	5	B
20847	Carry out a fault patrol on an electricity supply network	4	6	B

Engineering and Technology > Electricity Supply

ID	Domain	Title	Level	Credit	Review Category
19483	Electricity Supply – Business Services Electricity Supply – Power System Management	Conduct a compliance audit on the operating of equipment in the electricity supply industry	4	6	B
19484	Electricity Supply – Business Services Electricity Supply – Power System Management	Conduct a compliance audit of work access systems in the electricity supply industry	4	6	B