

**FIELD                    ENGINEERING AND TECHNOLOGY****Review of *Electricity Supply* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>Id</b>
Electricity Supply	Electricity Supply – Core Skills	10507, 12296, 17028
	Electricity Supply – Design and Commissioning	14297
	Electricity Supply – Power System Management	19481
	Electricity Supply – Testing	14271-14276, 14280, 14282, 14285, 14287, 14288, 14291

The Electricity Supply Industry Training Organisation (ESITO) has completed the review of the unit standards listed above that were registered in April 1998, November 1999, April 2001, July 2002, and October 2003.

**Date new versions published**

**May 2006**

**Planned review date**

**December 2011**

**Summary of review and consultation process**

The review was prompted by the development of a proposed new qualification for power technicians. The review group represented network and generation asset owners, electricity supply contractors, training providers, and the Electricity Engineers' Association. As part of the development process towards this qualification, the unit standards proposed for the qualification were looked at in detail in May 2005 and requirements for change were identified. The resulting drafts of the amended unit standards were posted on the ESITO website and final changes were made, in response to feedback, and approved.

**Main changes resulting from the review**

- Change of title for unit standards 14271, 14273, 14275, 14276, 14291, and 14297.
- Change of entry information for unit standards 10507, 12296, 14271-14276, 14280, 14285, 14287, 14288, 14291, 14297, 17028, and 19481.
- Updates to special notes for unit standards 10507, 14271-14276, 14280, 14282, 14285, 14287, 14288, 14291, 14297, and 19481.
- Modification to element 1 for unit standards 14273 and 14275.
- Modification to element 1 and the range of performance criterion 2.1 for unit standard 14271.
- Modification to element 1 and the ranges of performance criteria 1.2 and 1.3 for unit standard 14276.
- Modification to element 4 for unit standard 14274.
- Modification to element 3 for unit standard 14288.
- Removal of elements 5 and 6 from unit standard 14291 and reduction of credits from 8 to 6.
- Removal of performance criterion 2.1 from unit standard 14297.
- Adjustment of terminology in some performance criteria to match changes to special notes.
- The term 'enterprise' replaced by 'industry' throughout unit standard 19481.

## Impact on existing provider accreditations

None.

## Impact on existing qualifications

Qualifications that contain the reviewed standards are tabled below.

<b>Affected</b>	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
<b>Not materially affected</b>	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

The following ESITO qualifications are not materially affected by the changes. They will be updated when they are next reviewed.

Qualification title	Standard in the qualification
National Certificate in Electricity Supply (Technician) (Level 3) with strands in Control and Instrumentation, Power Technician, and HVDC Technician [Ref: 0922]	14275, 14276
National Certificate in Electricity Supply (Technician) (Level 4) with strands in Control and Instrumentation, Power Technician, and HVDC Technician; and an optional strand in Electrical Services [Ref: 0917]	14273

## Summary of main changes to standards' Ids, classification, titles, levels, and credits

The following summary shows the changes made to the standards as a result of the review. All changes are in **bold**.

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

Subfield      Electricity Supply  
Domain        Electricity Supply – Core Skills

Id	Title	Level	Credit	Review Category
10507	Use personal protection equipment within an electricity network environment	2	4	B
12296	Apply earths to and remove earths from electrical conductors, plant and equipment	3	2	B
17028	Demonstrate the requirements for holding permits on high voltage electrical equipment	3	2	B

## Domain Electricity Supply – Design and Commissioning

Id	Title	Level	Credit	Review Category
14297	Carry out commissioning and maintenance tests on multiple input protection systems <b>Carry out tests on multiple input protection systems</b>	5	6	B

## Domain Electricity Supply – Power System Management

Id	Title	Level	Credit	Review Category
19481	Demonstrate knowledge of electricity supply protection equipment	4	5	B

## Domain Electricity Supply – Testing

Id	Title	Level	Credit	Review Category
14271	Carry out tests on transmission power transformers of above 33kV maximum voltage and above 10 MVA <b>Carry out tests on power transformers</b>	4	6	B
14272	Carry out maintenance and/or acceptance tests on high voltage circuit breakers	4	6	B
14273	Carry out maintenance and/or commissioning tests on instrument transformers <b>Carry out tests on instrument transformers</b>	4	5	B
14274	Carry out electrical tests on other high voltage bus connected equipment	3	4	B
14275	Carry out commissioning and/or maintenance tests on earth mat (grid) and equipment bonding systems <b>Carry out tests on earth mat (grid) and equipment bonding systems</b>	3	3	B
14276	Carry out maintenance and/or commissioning tests on high voltage power cable and terminals to 220 kV <b>Carry out tests on high voltage power cables</b>	3	4	B
14280	Carry out acceptance and maintenance tests on single input protection relays	4	4	B
14282	Carry out repairs and tests on protection relays	4	5	B
14285	Carry out tests on ancillary service (AC and DC) and uninterrupted power supply supplies	3	4	B
14287	Use and maintain test instruments used within the high voltage electrical industry	3	4	B
14288	Carry out tests on battery banks and charge systems	3	4	B
14291	Repair, maintain, test and commission a SCADA system <b>Repair, maintain, and test a SCADA system</b>	5	8 6	B