

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

Subfield	Domain	Id
Electricity Supply	Electricity Supply - HVDC	14314-14327
	Electricity Supply - Power System Maintenance	10400, 10403, 10404, 10408
	Electricity Supply - Testing	14268-14270, 14277, 14283, 14293

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

Date new versions published

November 2008

Summary of review and consultation process

A review of these standards was undertaken as part of a regular review cycle. Apart from one usage in 2006 for each of unit standards 14277 and 14293, no other credits had been reported for the standards since 2004. Industry confirmed that it had no need for them. The standards were only in qualifications which will be designated as expiring. These standards were therefore designated as expiring.

Main changes resulting from the review

Unit standards 10400, 10403, 10404, 10408, 14268-14270, 14277, 14283, 14293, and 14314-14327 will expire at the end of December 2010 as they cover skills no longer required by industry.

Unit standards categorised as category D expire at the end of December 2010.

Impact on existing provider accreditations

None.

Impact on Accreditation and Moderation Action Plan (AMAP)

None.

Impact on existing qualifications

Qualifications that contain the reviewed standards or classifications are tabled below.

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 affected by the outcome of this review and will be reviewed in 2008.

Qualification title	Classification or standard in the qualification
National Certificate in Electricity Supply (Electrical Fitter Hydro) (Level 5) [Ref: 0920]	10403, 10404
National Certificate in Electricity Supply (HVDC and Mercury Arc Valve Maintenance) (Level 4) [Ref: 0923]	14314, 14317, 14319, 14320, 14321, 14322, 14323, 14324, 14325, 14326, 14327
National Certificate in Electricity Supply (Mechanical Fitter) (Level 4) with strands in Hydro, Networks, and Thermal, and with an optional strand in Electrical Services [Ref: 0918]	10400, 10408, 14314
National Certificate in Electricity Supply (Technician) (Level 3) with strands in Control and Instrumentation, Power Technician, and HVDC Technician [Ref: 0922]	14268, 14277, 14314, 14317, 14319, 14320, 14321
National Certificate in Electricity Supply (Technician) (Level 4) with strands in Control and Instrumentation, Power Technician, and HVDC Technician, and with an optional strand in Electrical Services [Ref: 0917]	14268, 14269, 14270, 14277, 14283, 14293, 14315, 14316, 14318, 14326,

Review Categories and changes to 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

Subfield Electricity Supply
Domain Electricity Supply - HVDC

Id	Title	Level	Credit	Review Category
14314	Demonstrate basic knowledge of the fundamental circuits of the New Zealand HVDC transmission system	3	4	D
14315	Investigate and analyse common High Voltage Direct Current (HVDC) power system disturbances	5	8	D
14316	Setup and operate power system disturbance recording facilities	5	8	D
14317	Use and maintain "as built", and modify, HVDC transmission documentation systems	3	4	D
14318	Service High Voltage Direct Current (HVDC) transmission control and protection system equipment	5	8	D
14319	Demonstrate knowledge of the principles of mercury arc valve (MAV) operation	3	6	D
14320	Apply health and safety requirements in a mercury arc valve environment	2	3	D

Id	Title	Level	Credit	Review Category
14321	Maintain mercury arc valve (MAV) records	3	3	D
14322	Prepare High Voltage Direct Current (HVDC) mercury arc valve (MAV) for renovation	4	10	D
14323	Renovate High Voltage Direct Current (HVDC) mercury arc valves (MAV)	4	12	D
14324	De-gas and reassemble High Voltage Direct Current (HVDC) mercury arc valve (MAV)	5	9	D
14325	Renovate High Voltage Direct Current (HVDC) mercury arc valve (MAV) anodes	3	8	D
14326	Carry out scheduled and unscheduled servicing on HVDC mercury arc valves (MAV)	4	6	D
14327	Carry out pre-service conditioning and function testing of HVDC mercury arc valves	4	8	D

Domain Electricity Supply - Power System Maintenance

Id	Title	Level	Credit	Review Category
10400	Repair and overhaul fans	4	5	D
10403	Service generator compensator hydrogen cooling and seal oil systems	5	8	D
10404	Repair and overhaul generator compensator hydrogen cooling and seal oil systems	6	20	D
10408	Repair and overhaul hydro control valves of 450mm diameter and above	4	5	D

Domain Electricity Supply - Testing

Id	Title	Level	Credit	Review Category
14268	Conduct acceptance tests on energy meters and demand recording equipment	3	4	D
14269	Locate faults in distribution and transmission power cables	4	5	D
14270	Carry out tests on ripple injection equipment	3	5	D
14277	Carry out maintenance tests on high voltage rotating plant	4	5	D
14283	Carry out tests on distribution oil filled power transformers of 33kV and below 10 MVA	4	5	D
14293	Carry out inspection and servicing tests on control instrumentation and indication hardwired system	5	4	D