Field Engineering and Technology

Review of *Electricity Supply* unit standards

Subfield	Domain	ID
Electricity Supply	Electricity Supply – Core Skills	12387, 12390, 19323, 19324, 19325, 20090, 20091, 20093
	Electricity Supply – Power System Maintenance	14700, 14701
	Electricity Supply – Power System Management	16281

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

Date new versions published **December 2010**

Planned review date **December 2015**

Summary

These unit standards were reviewed as part of the review of the National Certificate in Electricity Supply (Operator) (Level 3) [Ref: 1375]. Industry was invited to participate in the review and was asked to comment on these standards. As a result of industry feedback, legislation and terminology were updated and other minor changes were made.

In addition the format and terminology for all the unit standards have been updated to reflect the introduction of *Quality assurance criteria for the listing of unit standards on the Directory of Assessment Standards* in August 2010. The main differences are: changes to terminology – Special Notes, Elements, and Performance Criteria renamed Explanatory notes, Outcomes and Evidence Requirements respectively; and the provision to specify last dates for assessment of previous versions.

As a result of the review the structure of the National Certificate in Electricity Supply (Operator) (Level 3) [Ref: 1375] was revised to make it accessible to thermal operators. A thermal operator strand was added to the qualification and a new standard was developed covering direct current (DC) system and uninterruptable power supply (UPS) operations.

Main changes

- Special notes (now explanatory notes) updated.
- Unit standard 19323 credit increased from 2 to 4.
- Unit standard 12387 credit increased from 3 to 4.
- Title of unit standard 12387 amended.
- Unit standard 19324 was expired as it duplicated outcomes covered by unit standard 12387.
- New unit standard 26748 was developed.

The Category D unit standard will expire at the end of December 2012

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 impacted by the outcome of this review and are currently under review. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
894	National Certificate in Electricity Supply (Thermal Operator) (Level 4) with strands in Thermal Operations, Combined Cycle Operations, and Geothermal Operations	**12387**
1117	National Certificate in Electricity Supply (Field Switcher) (Level 4) with optional strands in Distribution Networks, Transmission Networks, and Operational and Co-ordination Planning	**19323**, **19324**
1118	National Certificate in Electricity Supply (Sub Station Maintainer) (Level 4)	**19323**
1294	National Certificate in Electricity Supply (Electrical) (Level 3) with strands in Electricity Supply Electrician, Electrical Fitter, and Electrical Technician	**12387, 19323**, **19324**
1375	National Certificate in Electricity Supply (Operator) (Level 3)	**12387**, **19323**, **19324**

The following table identifies NZ Extractive Industries Training Organisation qualifications that are impacted by the outcome of this review. The standards that generated the status *Affected* are listed in **bold**. The SSB has been advised that the qualifications require revision.

Ref	Title	ID
0804	National Certificate in Extractive Industries (Mining Electrical Engineering Non-hazardous Areas) (Level 5) with an optional strand in Underground Extraction	**12387**
0805	National Diploma in Extractive Industries (Mining Electrical Engineering Hazardous Areas) (Level 5) with an optional strand in Underground Extraction	**12387**

Detailed list of unit standards – 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

Engineering and Technology > Electricity Supply > Electricity Supply – Core Skills

ID	Title	Level	Credit	Review Category
12387	Operate electrical switchgear **Operate electrical switchgear in the electricity supply industry**	3	3 **4**	B
12390	Demonstrate knowledge of electricity supply systems	3	5	B
19323	Demonstrate knowledge of single and three phase transformers used in the electricity supply industry	3	2 **4**	B
19324	Demonstrate knowledge of the theory and operation of switch gear in the electricity supply industry	3	2	D
19325	Demonstrate knowledge of the fundamentals of electricity generation in New Zealand	3	3	B
20090	Carry out switching operations on metal clad switchgear	4	3	B
20091	Read and interpret single line diagrams in the electricity supply industry	3	3	B
20093	Develop and action an operating sequence in the electricity supply industry	4	4	B

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

ID	Title	Level	Credit	Review Category
14700	Apply and remove safety measures in an electricity supply environment	3	3	B
14701	Manage electricity supply work control systems	4	4	B

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

ID	Title	Level	Credit	Review Category
16281	Maintain and update operating log for electricity supply operational purposes	3	3	B
26748	**Carry out operations on a DC system associated with a power station electrical system**	**4**	**6**	**New**