Review of New Zealand Certificate in Electricity Supply (Field Switching) (Level 3) [Ref: 2613]

This qualification was published in 2015. It was a new development, offering a smaller qualification than the NZC in Electricity Supply (Fault Response and Switching) (Level 4) [Ref: 3586].

Graduates

Year	2017	2018	2019
Number	39 graduates (NZQA)	35 graduates (NZQA)	11 completed (Connexis data)

Summary of Graduate survey 2019

7 people responded to the survey (10% of graduates)	positive
Has achieving the New Zealand Certificate in Electricity Supply (Field Switching) (Level 3) increased your career opportunities? *Somewhat (3), Not sure (2), Perhaps a little (2)*	43%
Are you able to use the training and skills you gained during Electricity Supply (Field Switching) Qualification in your job?	100%
If yes: How useful was this in your job? *Extremely (0), Very (3), Somewhat (4)*	43%
How useful did you find the skills learnt during the qualification in terms of applying industry standards and codes of practice for carrying out switching operations on electricity networks? *Extremely (0), Very (3), Somewhat (4)*	43%
At the completion of your qualification were you able to apply a range of skills and electrical knowledge to the operation of overhead switch gear and protection systems used on networks? *Extremely able (3), Very (2), Somewhat (1), Not so able (1)*	72%
At the completion of your qualification were you confident you could ensure that health and safety requirements are met while working on electricity supply structures? *Very (4), Somewhat (2), Unsure (1)*	86%
At the completion of your qualification were you confident you could apply a range of communication procedures and processes relevant to field switching? *Very (4), Somewhat (2), Unsure (1)*	58%

Comment

Throughout my career as a line mechanic I had already acquired the skills, knowledge and ability to complete the required tasks for this qualification. This was merely a box ticking exercise to satisfy the EWRB and whoever else is involved in re-writing these qualifications. It is disappointing that my existing qualification as a line mechanic, along with industry experience wasn't enough to satisfy a role which I had undertaken for eight years prior to this course coming out.

Five respondents had achieved another qualification (Adult Ed, Power Systems, Cable Jointer, 2 x Fault Response and Switching)

All respondents were still working in the Electricity Supply Industry.

Summary of Employer survey 2019

4 people responded to the survey (represented 71% of graduates)	positive
Do you agree the Connexis workplace programme leading to the New Zealand Certificate in Electricity Supply (Field Switching) (Level 3) qualification is suitable for your business?	100%
Did your internal workplace training and day to day activities align well with the Connexis workplace programme leading to the New Zealand Certificate in Electricity Supply (Field Switching) (Level 3) qualification? *Extremely well (2), Quite well (2)*	100%
Was the workplace assessment process suitable and sufficient to confirm graduates did gain the skills and knowledge outlined in the standards leading to the qualification?	100%
Were the graduates able to use the training and skills they gained during the Electricity Supply Field Switching qualification in their job? *Extremely able (2) Very able (2)*	100%
At the completion of your employees' qualification, were you confident they could apply industry standards and codes of practice for carrying out switching operations on electricity networks? *Extremely (3), Somewhat (1)*	100%
How confident are you in the graduates' ability to apply a range of skills and electrical knowledge to the operation of overhead switch gear and protection systems used on networks? *Extremely (1), Very (3)*	100%
At the completion of your employees' qualification, were you confident they could ensure that health and safety requirements are met while working on electricity supply structures? *Extremely (3), Very (1)*	100%
How confident are you in the graduates' ability to apply a range of communication procedures and processes relevant to field switching? *Extremely (2), Very (2)*	100%
Are you confident the graduate has provided the Electricity Supply industry with a competent employee who will be able to work safely to industry standards, taking responsibility for their work and that of others, and be capable of working with limited supervision? *Extremely (3), Very (1)*	100%
Overall, are you satisfied that your employees met the graduate profile outcomes and were proficient at their job at the completion of the Electricity Supply Field Switching qualification?	100%
Do you think having employees completing the Electricity Supply Field Switching qualification has assisted your business?	75%
Are you likely to sign further employees up onto the programme leading to the Electricity Supply Field Switching qualification?	100%

Comments

- Worked really well and achievable
- Can do with adjustments - Used to be level 4 which was more useful - But need the qual
- Comment on workplace assessment process: Look at different levels and splitting them up into levels - Could be 2 or 3 levels
- Definitely will sign further employees up - Every trainee needs to do this
- With the new CCF we will need to sign them up so they can switch on other networks
- When the level changed - bits of it are quite similar to the strand in field switching (the two programmes could be combined)
- Very painless, lined up with what we expect the learner to do out in the field.

Excerpts from the Consistency Review Report

A Consistency Review was held in November 2019. Connexis provided a range of evidence to the NZQA reviewer to demonstrate that their graduates met the graduate profile outcomes. National consistency was confirmed.

Evidence was presented to demonstrate the alignment of the programme with the purpose and graduate profile of the qualification, strengthened by the fact that all students are in work and putting into practice what is learned in a real-world context. Assessment is moderated by external experts to ensure validity.

Examples of good practice

The on-job assessment and use of learning work logs signed by supervisors ensures there is a direct link between learning, application, and assessment.

Issues and concerns

The ITO builds close relationships with employers through the field staff (Customer Support Account Managers) who visit regularly to ensure the training is progressing well. This contact could provide rich, valid evidence of achievement of the GPOs as well as gain authentic employer feedback. It is recommended that the ITO consider how this process could be used to provide evidence of consistency.

There were no recommendations raised at the meeting for the qualification developer.

Qualification version 1

The first version of the qualification lists compulsory unit standards 12300, 10508, 12387, 20091, 20093, 12295, 10526, 18275, 20092, 28020, 23896, 10509, 10507, 17602, 18038, 17025, 17026, 17027, 26551, 26552. The underlined unit standards are shared with the programme for NZC Electricity Supply (Introductory) (Level 2). The unit standards listed are a mix of levels 1-4.

Current trainees

At 16 January 2019 there were 12 active trainees and 1 on hold. Nine are employed at Delta Utility Services. Other companies with trainees are Netcon, Power Jointing, PowerNet, and WEL Networks. Seven trainees are completing the programme within the expected time, and two have exceeded the expected duration.

Is Field Switching a separate job role? i.e. is a qualification is required in addition to NZC ES (Fault Response and Switching) (Level 4)?

If this qualification is retained, is NZC ES required for entry?

Connexis programme (without NZC ES L2) (45 credits)				
10526	Operate ground and structure mounted electrical equipment associated with electric lines or cables up to 66kV	3	4	
17025	Carry out a rescue from an electrical structure	3	2	
17027	Demonstrate the requirements for holding access permits for work on high voltage electrical lines, cables, and equipment	3	4	
20091	Read and interpret single line diagrams in the electricity supply industry	3	3	
30265	Apply health and safety to a job role	3	8	**21**
10509	Climb and work on electricity network structures	4	6	
12295	Apply and remove earths from conductors on electricity supply networks	4	4	
12387	Operate electrical switchgear in the electricity supply industry	4	6	
20093	Develop and action an operating sequence in the electricity supply industry	4	4	
23896	Demonstrate knowledge of electrical circuit protection for distribution networks	4	4	**24**
	Total			**45**

Unit standards in red are also in the programme for Fault Response and Switching (Distribution Fault Response) and (Distribution Network Switching) strands.