

Minutes of the meeting held on Thursday 2 April 2020 by Microsoft Teams

Attendees: David Glenn, Stephen Griffiths, Katrina Foster, Jackie Messam, Jessica Wilcox, Earl Hasse, Dave Edgar, Peter Carr, Angela Bailey, Graeme Jackson, Neil Borlase, Dewalt Venter, Antony Ainsworth, Kate Duggan, Andrew Massie, Joseph Reti, Mike Grumball, Michele Miller.

Tentative: Wayne Field, Brett Pou, Brent Dais, Ashley Chisholm.

Apologies: Graeme Johnson, Darran Mumford, Dave Houston.

Meeting opened at 10 am with welcome and introductions.

Updates

- No responses to consultation for NZC Transmission Line Maintenance. This project will resume when stakeholders have time to respond.
- No responses to consultation on Live Lines. This project will resume when stakeholders have time to respond.
- Review of unit standards for Cable Jointing (as discussed at the March meeting) is almost complete.
- Draft unit on pilot cables is with Connetics for review.
- Programme for Utility Arboriculture. Suggest the addition of a safety observer unit
 - e.g. US 17596. This is a generic unit, but probably too complex for this role. Unsure where this US is used.
 - Fundamental part of utility arboriculture; an official role.
 - Ensure there is no duplication with existing training for arborist or utility arboriculture. Compare with training of arborist (this qualification is under review by Primary ITO)
 - Ask what is required by the asset owners e.g. sometimes line mechanics are used as a safety observer.
 - Connexis to email employers for their response to this suggestion, and if safety observation is required, a specific US can be written.
- Reply from Worksafe: reviews of ECPs 34 and 46 are unlikely to occur in 2020.
 - Indication from Peter Morfee (principal technical advisor) that Worksafe would like a decrease live work, whereas our feedback indicates there is an increase in demand. Some companies maintained the same level of live work.
 - Noted EEA has produced a best practice guide because ECP 46 is outdated.
 - The ES RG is welcome to provide recommendations to inform Worksafe's review. Connexis to set up and coordinate **a working group to provide recommendations on ECP 34 and 46.** (David G, Joe, Antony)

Summary of Review: Field Switching

- Small number of graduates. 2019 survey of graduates: fewer positive responses.
- Employers were positive: "lined up with what we expect the learner to do out in the field" but noted the duplication with the L4 programme.
- Consistency review: Connexis demonstrated that graduates met the qualification outcomes.

- Current programme has all all the unit standards for the Level 2 introductory certificate, 21 credits at L3, and 24 credits at L4 (not accepted practice to have L4 US in L3 qual)
- 12 trainees, most at Delta Utility Services.
- WEL use level 3 for electrical fitters etc. who undertake ground based underground equipment and 33KV zone substation switching and are connected party operators operating Transpower equipment that supply our feeders. To get two capstones and exposure to switching.
- “We use L3 as L4 has units that can’t be achieved in our company.” (an employer)

Summary of Review: Fault Response and Switching

- Transmission strands have not been used (see below)
- Graduate response was positive.
- Company didn’t have a specific role as Field Switcher but used Level 3 because some of the unit standards in the Level 4 are difficult to achieve at their company.
- Graduates of DFR gain endorsement on registration.
- Less repetition would be good, e.g. 16280, 16285 & 20093.
- In WEL we are using the Level 4 fault response and switching qual for upskilling our line mechanics (and electricians/electrical fitters) who are first response faults technicians.

Transmission strands are not used by Transpower because of a change in industry practice: Transmission doesn’t have fault response switching any more. Have Fault Responder, Field Operator and Maintenance Switcher. The Transmission strands could be removed. Check with asset owners for Transmission: ElectroNet, Eastern Networks, Powerco, Counties, Top Energy. Northpower has one line and uses a workplace competency rather than a qualification. Some of these companies send their workers for Grid Skills’ switching training.

Discussion about experienced electricians not being able to RCC the three capstones: 30111, 30112, 30113. For example, US 30113 DKO three-phase theory is already covered by US 2031 in an electrician’s training. Noted 2031 is more in-depth than 30113. The capstones are not able to be ‘RCCd’ because it adds robustness for EWRB registration. There is no exam required for an endorsed line mechanic, so the capstones add certainty they have achieved relevant skills and knowledge. Recommend a **working group on capstones and exemptions** is required. (Mike, Jackie, Jacko, Earl, Peter, Dave). (See also later discussion).

Comments on unit standards:

- Some are difficult to attain e.g. 16285, 20093, 20095. At some companies, all work is digital, and simulations are necessary to attain the units.
- Repetition: 16280, 16281, 16285, 20090, 20093.
- US 27655 is too in-depth for the Faultman role, particularly relays. Protection relay information is sent back to the network control and the switcher operates under their instructions
- US 16276 some PCs are hard to meet as a Faultman or switcher.
- US 20095 is too in-depth, more suitable for power technician. Should be more related to the job role: DC/AC supplies, LTAC from VT transformers, battery charger fail. Need to interpret what secondary systems are actually saying, what they need to look for and what to do about it. Acknowledge simulation will be required.

- US 30111 difficult to attain because 6 on-job observations required. It is hard to get this number of exposures; may take several months. Change assessment to include simulations off-job. Credit value needs to be high for EWRB endorsement.

Working group to review unit standards (Graeme Johnson, Peter, Bill, Dave E).

Actions agreed

1. Remove L2 unit standards from L4 programme, add the L2 qualification as an entry requirement for L4 qualification.
2. Expire L3 Field Switching.
3. Review unit standards to remove duplication and unnecessary complication and ensure the programme is achievable in all distribution workplaces.
4. See draft version 2 for alterations to Strategic Purpose Statement and Outcome Statement. Credit values to be determined after unit standard review.

Discussion on unit standards for polarity and phasing tests

Some networks ask for US 23898 (LV phasing) and US 23899 (HV polarity) as well as the qualification. These have been used extensively for workplace competencies, as critical tasks. At last year's ES RG some companies asked for their retention, so they have recently been republished.

However, these tasks are covered by US 28194, which is in Cable Jointing and Line Mechanic programmes and also in Common Competency Framework. If companies accept CCF they're accepting US 28194 is all that's required. Powerco, Vector, Aurora, Orion and WEL have all accepted CCF.

Noted must show current competency every two years in both theory and practice. This can be difficult in some areas where number of exposures can be limited. Some companies use eLearning and/or simulations.

Shorter pathways for electricians

A distribution line mechanic needs to earn 126 credits to achieve NZQA 3586 Fault response & field switcher qualification. However, an ES electrician has to earn a further 270 credits to achieve it and a Dom/Com electrician needs to earn an additional 306 credits, the entire qualification, as there are no common units.

Noted there are common *outcomes* but because the US *number* is different, the prior knowledge is not recognised. This adds considerable cost to training and is frustrating for electricians.

Discussed a list of unit standards (submitted by RG member) which would provide a shorter pathway for electricians to become Faultmen or Linemen. Recognises the extra skills required by an electrician. Don't want a 'short cut': Most domestic electricians take a long time in distribution to get comfortable and competent at network switching especially RMU's etc

Network competency requirements: evidence of the initial training and current competency

If the Fault Response & Switching programme was improved (see action item 3, above), an additional pathway would not be required. It is important to have achievable, less costly training. On-job exposures to diagnosis, climbing and working at heights are important.

Gap analysis is also required between Electrical Fitters and Cable Jointers. Two possible solutions:

1. RCC pathway if someone has worked in the industry a long time
2. Compare Record of Learning: based on the US a person has achieved (the outcome not the number), they need to do the following list of US.

Reiterated the importance of electrical workers being able to move easily between job roles.

Meeting closed at 12.10 pm, with thanks for participation.