

Report of External Evaluation and Review

Electricity Supply Industry Training Organisation

Highly Confident in ITO performance

Highly Confident in capability in self-assessment

Date of report: 12 October 2010

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Purpose of this Report

The purpose of this external evaluation and review report is to provide a public statement about the industry training organisation's (ITO) performance and capability in self-assessment. It forms part of the accountability process required by Government to inform investors, the public, trainees, prospective trainees, communities, employers, and other interested parties. It is also intended to be used by the ITO itself for quality improvement purposes.

Introduction

1. ITO in context

Location: Hamilton

Type: Industry Training Organisation (ITO)

First recognised: 1997

Number of STMs 2010: 1380 student training measures (STMs)

451 Modern Apprentices

Number of staff: 25 full-time equivalents

Gazetted coverage: Pursuant to section 5 of the Industry Training Act 1992,

the Electricity Supply Industry Training Organisation Incorporated (ESITO) is granted full recognition as an ITO to set standards at levels 1-8 on the National

Qualifications Framework for the management of power systems and assets, design, construction, operation, and maintenance of the production, transmission, and

utilisation of the electrical energy industry.

Sites: Head Office, Hamilton; regional offices in Christchurch

and Auckland.

Distinctive characteristics: ESITO is the single ITO for the electricity supply

sector.

The industry, which employs around 10,000 employees, is characterised by the following:

 Provides and maintains the electricity infrastructure (generation, transmission, distribution, and retailing of energy) throughout New Zealand.

• Is highly regulated and employees are relatively

well educated and skilled compared with the New Zealand workforce norm. The increasing number of qualifications from formal educational institutions held by employees reflects the rising proportion of managerial, professional, associated professional and technical jobs for which formal educational qualifications are increasingly essential.

- Comprises ten large employers employing more than 250 employees, 30 medium-sized firms having between 30 and 250 staff, and the remainder having less than 30 staff, being often small contracting companies. The employers also include SOEs and international contracting companies
- Operates mainly in a high voltage environment, but individuals have the ability to work across the point of supply boundary into what is recognised as the low voltage commercial and domestic sectors.

Recent significant changes: N/a

Previous quality assurance history:

At the previous quality assurance visit by NZQA, an audit in 2006, ESITO did not meet three requirements in relation to assessor registration processes, external moderation of registered assessors, and using feedback from national external moderation activities to review unit standards.

2. Scope of external evaluation and review

The scope for the external evaluation and review consisted of the following two focus areas:

 National Certificate in Electricity Supply with optional strands in Electrical, Electrical Fitter, and Line Mechanic (Level 2)

This area was selected as a focus because it is a core qualification across the ITO's sectors and has the highest proportion of trainees. ESITO also provides a number of options for training towards this qualification, for example distance learning, on-job, or provider-based. In addition, the ITO has developed an embedded literacy programme for the electrical strand of this certificate.

• National Diploma in Engineering (Electrotechnology) (Level 6)

The ITO is interested to see how well the diploma is meeting the needs of the sector. The diploma was developed in 2007 to provide a higher level of training to meet the ongoing needs of experienced workers in the sector. Development of the training arrangements has been challenging because of the geographical spread of trainees, of which there are 100 enrolled currently.

3. Conduct of external evaluation and review

All external evaluation and reviews are conducted in accordance with NZQA's published policies and procedures. The methodology used is described fully in the web document Policy and Guidelines for the Conduct of External Evaluation and Review available at: http://www.nzqa.govt.nz/providers-partners/registration-and-accreditation/external-evaluation-and-review/policy-and-guidelines-eer/introduction/

The evaluation was conducted over three days by two NZQA evaluators at ESITO's head office. Representatives from NZQA and the Industry Training Federation (ITF) also attended as observers of the process.

The evaluation team spoke to current apprentices, one employer, and a member of the ESITO board to gain information on the ITO's performance. The team also spoke to relevant staff on site to gather further evidence of the ITO's performance and its self-assessment capabilities.

The Electricity Supply Industry Training Organisation has had an opportunity to comment on the accuracy of this report, and submissions received have been fully considered by NZQA before finalising the report.

Summary of Results

Statement of confidence on ITO performance

NZQA is **Highly Confident** in the performance of **Electricity Supply Industry Training Organisation (ESITO).**

ESITO is highly effective in meeting the complex training needs of its sector by providing valued qualifications and overseeing the training arrangements for employers, trainees, and the government.

The ITO consults extensively with industry, trainees, and the government to develop qualifications and arrange training to meet a wide range of needs. A primary example is the development of the national certificate as a pathway to the industry registration requirements for employees. In addition, the diploma is successful in providing higher qualifications for people with a high level of industry experience to meet the ongoing needs of industry. The value the ITO contributes to the sector is also reflected by the high level of industry investment in the training.

ESITO is responsive to industry needs, as indicated by the variety of training options for people in the industry, from on-job to distance learning or attending a polytechnic course. Some comments from industry indicate that employers would prefer the ITO to fully coordinate the on-job training. In response, ESITO is trialling a coordinated model in the lower South Island to see whether this would benefit other parts of the country through improving completion rates. The ITO is also piloting a mobile telephone learning package with trainees in remote areas.

The qualification completion rate in the industry is increasing. The data supplied by the ITO shows that its activities have helped to steadily increase the number of qualification completions over the last few years, although there is still room for improvement. The economic environment over the past few years has been a factor in the decrease in the number of new training agreements in the workplace. However, training providers such as Waikato Institute of Technology (Wintec) have reported an increase in enrolments in off-job training in the industry for people who would like to prepare for employment in the industry when it picks up again.

The on-job training and assessment, which most trainees undertake, has issues for the ITO to manage, such as consistency between trainers and assessors. ESITO has provided professional development within the industry to improve consistency. In addition, it has developed new training materials to address identified literacy issues.

Overall, the ITO is able to demonstrate that it is managing its role as an ITO for this sector to meet skill shortages and contribute to the ongoing training development for employees and employers in the electricity supply sector.

Statement of confidence on capability in self-assessment

NZQA is **Highly Confident** in the capability in self-assessment of **Electricity Supply Industry Training Organisation (ESITO).**

ESITO is highly capable in conducting comprehensive reviews of its performance to make decisions about the training requirements on behalf of the sector for which it is responsible. The organisation's strong research culture is the key driver in ensuring that qualifications and training arrangements are suitable and meet the needs of the trainee, industry, and government. The ITO monitors outcomes using feedback from an annual customer survey of trainees, middle and senior managers, and training providers. The results are used by the ESITO staff and board to see where improvements can be made and to help with further initiatives.

The ITO provided examples of implementation and ongoing improvements as a result of its self-assessment activities. These included the review of its training packages for trainees up to level 4, which include the embedding of literacy and numeracy teaching practices. The ITO has also employed a dedicated coordinator with strong industry background and educational experience for the diploma trainees. NZQA is therefore highly confident that ESITO understands and responds appropriately to the industry's training requirements.

ITO response

ESITO has commented on the factual accuracy of this report, and the comments received have been incorporated into the final report.

Findings¹

1.1 How well does the ITO understand and meet the needs of industry, trainees and government?

The rating for performance in relation to this key evaluation question is Excellent.

The rating for capability in self-assessment for this key evaluation question is **Excellent.**

ESITO comprehensively understands the training needs of the electrical supply industry as demonstrated by the high input into the development and review of qualifications and training delivery by the industry. The ITO has always provided a variety of training pathways for trainees, from distance learning to on-job and off—job training, and now a trial of training using mobile technologies. The content of the level 4 national certificate, of which the level 2 certificate is a pathway, covers a broad base of industry skills. This means that employees can help in other parts of the country when there is a crisis and it also enables employees to more easily transfer between employers.

Previously, workers in the electricity supply had to complete two qualifications to achieve all the requirements for registration and industry skills. ESITO identified this as a barrier and subsequently merged the qualifications together with optional strands. This has led to an increased understanding of the training requirements for registration and better alignment of training to workplace needs.

The ITO has aligned its level 2, 3 and 4 qualifications to meet the Electrical Workers Registration Boards (EWRB) registration requirements, although only a small component of work carried out by employees in this sector requires them to be registered. ESITO updates unit standards in response to regulatory and industry changes. The ITO has future-proofed its unit standards to ensure that ongoing changes to legislation do not trigger a complete review of unit standards, saving the industry and the organisation time and money.

The ITO has also revised the level 6 diploma with the intention of it becoming a pathway to the soon-to-be-established National Engineering Education Plan and pathway to provide higher-level training to meet the educational aspirations of more experienced workers in the industry.

ESITO has links into a number of government agencies and departments to help develop qualifications and standards to meet industry needs. It also reports to the Department of Labour (DoL) on current and predicted skills shortages in the industry based on its own commissioned research. The latest advice provided to DoL led to an increase in immigration for workers in the sector. In response to this increase, the ITO formed a partnership with English Language Partners (formerly ESOL) to develop a foreign worker examination to identify electrical competency and any English language training needs.

¹ The findings in this report are derived using a standard process and are based on a targeted sample of the organisation's activities.

ESITO has also partnered with the Institute of Professional Engineers New Zealand (IPENZ) to develop a higher-level qualification. Other agencies the ITO interacts with to enable it to enact and contribute to policy directions include the Department of Building and Housing, the Tertiary Education Commission (TEC), and the Industry Training Federation (ITF).

Currently, ESITO has a Future Skills strategy developed to capture changes in the industry such as the increase in wind and geothermal sustainable energy sources. The ITO is collaborating with three large distribution companies to provide standards for which employees are trained and assessed on the job, with the level 2 national certificate as a prerequisite. The ITO also recognises the high literacy and numeracy skills required to work in the industry and has been implementing TEC-funded literacy and numeracy projects over a number of years, which it believes has contributed to an increase in completions.

Overall, the evidence demonstrated a comprehensive approach to researching the needs of employers, trainees, industry leaders, and training providers to identify needs and make improvements.

1.2 What is the value of the outcomes for employers and their trainees?

The rating for performance in relation to this key evaluation question is **Excellent.**

The rating for capability in self-assessment for this key evaluation question is Excellent.

ESITO is valued by industry and contributes to highly skilled workforce outcomes. Trainees gain credible industry qualifications that meet industry registration requirements, and higher-level qualifications enable the advancement of industry skills, which helps to retain workers. The sector values the training arrangements that are aligned to the practical industry skills and knowledge required, as well as the training support the ITO provides to assist trainee outcomes.

The figures provided by TEC, the government funding allocator, show that over 65 per cent of employers are involved with ESITO training infrastructure, which is high in relation to other ITOs. Along with a large proportion of industry funding, this indicates that industry values the qualifications.

The biggest incentive for employees to engage with the training towards qualifications developed by ESITO is that they enable them to gain mandatory registration required by EWRB. Those who gain the National Certificate in Electricity Supply (Level 4) can also use this qualification to become registered in Australia; EWRB registration alone is not sufficient.

A large distribution company has endorsed the ESITO unit standards by requiring employees to hold credits for some unit standards for employment. This shows that the skills outlined in the standards are valued. The ITO hopes that more employers will align their training requirements to these unit standards.

Employers are risk-conscious, and feedback from industry indicates that ESITO qualifications have led to better health and safety practices on the job. These outcomes are related to the improvements in literacy and numeracy support provided by the ITO since it began its literacy and numeracy strategies in 2006. The strategies include early intervention and strengthening of the induction process as well as incorporating embedded literacy and numeracy principles in the training packages.

DoL workforce planning statistics show that over 40 per cent of electricity supply workers are over 45 years of age. ESITO has training agreements with experienced people to ensure they have qualifications aligned to current industry requirements as well as training agreements with people just starting in the industry.

Off-job training providers such as Wintec and Christchurch Polytechnic Institute of Technology (CPIT) use the ESITO national certificate level 2 to help people prepare for work in the industry. The ITO also encourages school leavers into the industry through its "taster" programmes. Anyone who is newly qualified can be placed on a new entrants register for employers seeking employees.

The ongoing review of outcomes and feedback from the industry, including trainees and employers, is used to inform the ITO's strategic priorities for planning activities that benefit industry.

1.3 How well do trainees achieve?

The rating for performance in relation to this key evaluation question is Excellent.

The rating for capability in self-assessment for this key evaluation question is **Excellent.**

A high number of trainees complete the training to meet EWRB mandatory registration requirements. This indicates that ESITO is highly effective in aligning qualifications and training arrangements to meet industry needs.

The completion of the national certificate (level 4) measured by TEC is only 46 per cent, which is slightly above the average for the ITO sector but well below the top-performing quartile in the sector. However, this measure is not a true reflection of the qualification progress and achievement of trainees in the workplace.

The original guidelines for qualification funding approval by the TEC led to the grouping of the level, 2, 3 and 4 certificates under one category for funding purposes. The majority of trainees only need to complete the level 2 and level 3 qualifications to gain EWRB registration and therefore tend not to go on to complete the level 4 certificate. As a result, ESITO is working with TEC to unbundle the level 4 qualification to provide a clearer understanding of trainee achievement. ESITO is collaborating with ETITO to do this as the qualifications consist of unit standards administered by both standard-setting bodies.

Trainees undertaking training towards the level 6 diploma are progressing as expected. However, it is too early to identify the number of successful completions of the two-year programme, as only three trainees out of the hundred that enrolled at the start of 2008 have completed.

ESITO is also monitored on the achievement of student training measures (STMs), which are set by TEC based on the total number of credits trainees achieve each year. The STM rate increased between 2008 and 2009, but has decreased in the last year due to the downturn in the construction industry and industry changing from an employee model to a contracting model, which means fewer people participating in industry training agreements. The ITO also identified that the decrease in credit achievements was due to migration to Australia where there were more employment opportunities.

ESITO has a high proportion of Māori in training agreements in the retail sector. However, the ITO has a priority to increase the participation of women, Pasifika as well as Māori in other segments of its sector. Currently, the ITO plan is to address this gap using its current coordinators and advertising.

ESITO understands the reasons for the lack of completions. Not only is it related to how completions are measured but the ITO's research also shows that lack of completion is related to employer support for training while trainees are on the job as well as the extent of ITO support during the first year of a training agreement.

ESITO has shown responsiveness to low trainee achievement and has implemented strategies to improve qualification achievement at level 4. This is a number one priority in the 2010 strategic and business plans. The ITO has introduced a number of activities that aim to address this issue as well as the participation of under-represented groups. It is still too early to determine the effectiveness of these initiatives.

One initiative is a new student management system to enable ESITO to better track trainees' progress and identify suitable interventions, such as literacy support or assistance with completing on-job requirements. The mobile telephone learning project aims to raise completion levels by providing learning support and access to learning resources for people working and living in remote areas of New Zealand using mobile phone technology. Whether this will have an effect on trainee completions will be known when the trainee end-of-year results are analysed.

In addition, the ITO has considered the type of learners in the design of its training materials to ensure that this is not a barrier to completion. The newly revised materials have incorporated literacy and numeracy strategies such as using colour to differentiate between the trainee and assessors' tasks.

1.4 How effective is the training arranged by the ITO?

The rating for performance in relation to this key evaluation question is **Excellent.**

The rating for capability in self-assessment for this key evaluation question is **Excellent.**

ESITO has successfully used its government funding allocation to develop and arrange training programmes that are highly valued and relevant to industry needs. The training arranged by the ITO consists of a high proportion of on-job training and assessment activities that are highly appropriate for the needs of the industry and trainees. This is supported by a number of training packages and assessment activities with some off-job training at tertiary education providers.

The training is largely supported by the contribution employers make to cover training costs, such as training for supervisors and assessors as well as attendance at off-job training components. Trainees are not required to pay for the training if employed by the industry.

The ITO has a good relationship with industry and providers to enable it to make training arrangements that suit the various companies involved in the electricity supply sector. The majority of training is provided on the job, with on-job assessment. There is some off-job training, particularly at the pre-trade level, and currently there are ten off-job courses to complete at the diploma level.

The level 6 diploma originally consisted of two parts administered by ESITO and ETITO. The two ITOs, along with IPENZ and Competenz (the Engineering, Food and Manufacturing Industry Training Organisation), collaborated to review the diploma and, as a result, it is likely to be a three-year programme consisting of two years of off-job block courses with a final year that trainees complete in the workplace. This blended learning approach enables the trainees to receive the relevant skills and knowledge required. However, the ITO has yet to come to an agreement with industry and the training partners as to how the off-job training will be delivered.

An example of a training arrangement that has benefitted both employers and employees is the apprenticeship programme for Mighty River Power (MRP). Apprentices are employed by MRP and undertake a two-year programme consisting of the level 2, 3, and 4 national certificates. The apprentices attend ten-week block courses at a training provider twice a year. The reminder of the time they are working on the job for contractors to MRP, or for "host employers" all over New Zealand. This arrangement enables trainees to focus on the theory component and achieve a high number of credits each year. The outcomes show that nearly all gain employment through the skills and knowledge gained on the job. On completion, a minimum of two apprentices are selected to work for MRP and the remainder gain employment with the host employer. The apprentices interviewed at the evaluation visit, including one woman, said they intended to continue on to further training in the industry at diploma or degree level.

People interested in the industry are able to attend pre-trade courses where they undertake training towards the level 2 national certificate in electricity supply, including the optional strands. A high number of trainees go into employment on completion of the training or go on to further training.

ESITO is proactive about encouraging secondary school leavers into training for the industry by offering "taster" courses in secondary schools where students can achieve some credits towards the level 2 qualification. The information gathered by the ITO on enrolment indicates that the taster courses lead to trainee agreements.

ESITO monitors the training on the job through its moderation and assessor training activities (see section 1.5 of this report). Training outcomes are also directly measured by credit achievement and qualification completion rates (see section 1.3 of this report). The ITO also gains feedback from trainees and employers through the annual customer survey to identify where improvements are required with the training arrangements.

1.5 What is the quality of the assessment being undertaken towards industry standards and qualification?

The rating for performance in relation to this key evaluation question is Good.

The rating for capability in self-assessment for this key evaluation question is **Excellent.**

ESITO has identified improvements to its assessment processes, including the moderation of assessment decisions to improve consistency and understanding. The ITO provides premoderated assessment resources and contracts people with industry experience and relevant skills as moderators. The ITO has a responsibility for ensuring that trainees who are trained and assessed on or off the job experience consistent training and assessment and that they meet national standards. ESITO has identified areas for improving the consistency of training and assessment as a result of its moderation activities. In response, the ITO has included tutors employed by accredited training organisations into the moderation system and has provided moderation upskilling.

The moderation requirements for accredited training organisations are outlined in ESITO's Accreditation and Moderation Action Plan (AMAP), which was last revised in 2008. Both on-job and off-job assessors are required to attend assessor meetings and submit completed assessments for checking by ITO moderators to ensure they are valid and at the appropriate level.

The annual assessor survey identified a need for further professional development for assessors, who may also be workplace trainers. Some of the issues related to the frequency of assessment and having current knowledge of assessment principles. As a result, the ITO is providing workshops for assessors to upskill them in assessment practices and using naturally occurring evidence. The assessors also receive ongoing support from ITO coordinators who visit workplaces every three months to help with training and assessment on the job.

ESITO has revised the national certificate training packages, including the assessment materials, and intends to complete the diploma training package by 2011. This is to help increase assessment outcomes and therefore trainee qualification completion rates. The initial feedback from users is very positive. The embedding of literacy and numeracy training principles in the new package has also helped to increase completions.

Trainees meet with the ESITO coordinator on site every three months. The ITO follows up progress and helps with any questions about the training. The ITO expects that the new student management system will be able to better track trainees' progress to identify when they should be ready for assessment. The trainees also receive ongoing feedback from their employers at daily meetings, which they are required to record as evidence towards meeting the practical component of unit standards.

Overall, the strong research culture of the organisation provides the management team with the ability to respond to any issues around assessment. It is monitoring the effects of its interventions to identify whether the consistency of assessment improves and the number of assessments increases as a result of better assessment materials, more targeted assessor training, and support from the ITO.

1.6 How well does the governance and management support trainees' achievement?

The rating for performance in relation to this key evaluation question is Excellent.

The rating for capability in self-assessment for this key evaluation question is **Excellent.**

ESITO has a research culture supported by its governance and management structure which has led to many improvements over a number of years in the removal of barriers to training and in improving the achievements of trainees. The ITO's priorities are based on customer surveys and a strategic plan that highlights priorities according to the needs of the trainees, industry, and under-represented groups.

The ESITO board plays an integral part in ensuring that training managed by the ITO supports industry and trainee achievement. The board members consist of education and industry leaders. The current strategic training plan is based on the need to increase completions and encourage more women, Māori, and Pasifika people into the industry. The ITO also operates a literacy and numeracy strategy which has helped increase completions through the development and implementation of a training package for trainees and assessors. Management staff are responsible for implementing these initiatives and reporting monthly on progress or outcomes to the chief executive officer, who then incorporates this into reports to the board. Monitoring will be further enhanced by the introduction of a student management system that will be able to track trainee progress throughout their training agreement to assist higher completions.

The organisation reviews its policies and procedures to ensure they are aligned with current practices. A recent review led to changes in the processes and forms for assessors to align them to actual practices and make them more user-friendly.

ESITO now sends a newsletter to employers and chief executive officers as a response to an industry-wide survey that identified a need for a higher level of communication to help employers understand the responsibilities of training to boost the numbers of trainees and assist with completions.

The organisation has a history of successfully indentifying the needs of the industry and implementing actions to improve qualifications and training arrangements. This provides a high level of assurance that ESITO will continue this success with the current initiatives underway which are focussed on increasing qualification completions and greater participation from under-represented groups.

Focus Areas

This section reports significant findings in each focus area, not already covered in Part 1.

2.1 Focus area: National Certificate in Electricity Supply with strands in Electrical, Electrical Fitter, and Line Mechanic (Level 2)

The rating in this focus area for educational performance is Excellent.

The rating for capability in self-assessment for this focus area is Excellent.

2.2 Focus area: National Diploma in Engineering (Electrotechnology) (Level 6)

The rating in this focus area for educational performance is Excellent.

The rating for capability in self-assessment for this focus area is Excellent.

Recommendations

There are no recommendations arising from the external evaluation and review.

Further actions

The next external evaluation and review will take place in accordance with NZQA's policy and is likely to occur within four years of the date of this report.

Appendix

Regulatory basis for external evaluation and review

In 2009 NZQA introduced the evaluative approach to quality assurance in the tertiary education sector, consisting of self-assessment and external evaluation and review. This is applied in the quality assurance of course approvals and accreditations under sections 258 and 259 of the Education Act 1989, as well as for PTE registration under Part 18 of that Act.

The NZQA Board also published policies and guidelines for the conduct of external evaluation and review of ITOs on 27 May 2010. NZQA relies on ITOs to build the self-assessment and external evaluation and review model into their infrastructure. ITOs will be evaluated on their infrastructure and use of the model in the following ways:

- Advising Ministerial recognition of an ITO under the Industry Training Act, 1992
- Accepting arrangements for monitoring and assessing of industry training under section 10 of the Industry Training Act, 1992
- Registering standards on the Directory of Assessment Standards
- Awarding consents for ITOs (or their assessors) to assess against standards on the Directory of Assessment Standards under section 253(1)(c) of the Education Act, 1989
- Applying course approval criteria where ITOs are course owners.

External evaluation and review is also used by NZQA as a monitoring and evaluation tool, with the outcomes of these processes informing Tertiary Education Commission decisions relating to re-recognition of an ITO. In addition, external evaluation and review reports are one contributing piece of information in determining future funding decisions in relation to an investment plan agreed between an ITO and the Tertiary Education Commission. The understandings and expectations for the implementation of ITO quality assurance are set out in a protocol to the Memorandum of Understanding between NZQA and the Tertiary Education Commission.

This report reflects the findings and conclusions of the external evaluation and review process, conducted according to the policies and criteria approved by the NZQA Board. The report identifies strengths and areas for improvement in terms of the ITO's performance and capability in self-assessment.

External evaluation and review reports are public information and are available from the NZQA website (www.nzqa.govt.nz).

Information relevant to the external evaluation and review process is summarised in the publication Policy and Guidelines for the Conduct of External Evaluation and Review. Two other documents explain how the process is applied to ITOs: EER Policy and Guidelines – ITO Supplement and Evaluation Indicators for Industry Training Organisations. These documents are available at: http://www.nzqa.govt.nz/providers-partners/registration-and-

accreditation/external-evaluation- and -review/policy- and -guidelines- for-eerito/introduction/

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