

ISSUE NO 19

MAY 2005

The Board has formally agreed on a new practising licence refresher course for electricians and electrical inspectors. In October 2003, the Board sought comment on draft proposed new requirements it had developed for practising licence refresher courses.

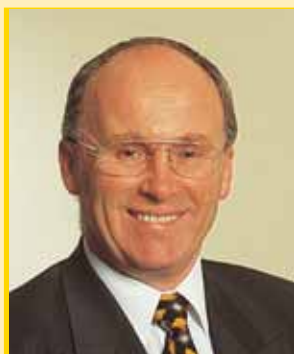
In the discussion document released, the Board listed concerns it had with present refresher courses and approximately three hundred people or organisations provided comment.

○ Following consideration of the comments, the Board referred the draft document to me for further research and consideration.

I released a further discussion document in early 2004 for comment. Eighty five people provided comment on the second discussion document and the Board considered those comments in March of this year.

In agreeing to a tuition course for electricians and electrical inspectors, the Board is satisfied its concerns have been addressed. The Board has also agreed to seek regulatory amendment to require persons completing refresher courses for practising licences to undertake a refresher course approved by the Board and introduce a selection, moderation and auditing system for both refresher courses and presenters.

○ Further detail on the refresher course is contained in this issue of ELECTRON.



John Sickels
Registrar

IN THIS ISSUE

Editorial

Technical and General Question Corner

Request for Expressions of Interest

Audit Programme

Examination Top Achievers

Examination dates for 2006

Results of complaints

Results of Disciplinary Hearings

Update from Inland Revenue

Practising Licence Refresher Courses



Safety • Competency

ELECTRON is published by the Electrical Workers Licensing Group, the service unit of the Ministry of Economic Development for the Electrical Workers Registration Board. If you have any enquiries or comments on this newsletter please contact:

Editor:

Kirsten Lapham
PO Box 10-156, Wellington
info@ewr.govt.nz
Phone 0800 66 1000

TECHNICAL AND GENERAL QUESTION CORNER

The following articles have been supplied by the Energy Safety Service

SAFETY ALERT



ATCO Controls issued a Trade Alert in March 1998 in relation to ATCO 'CP' type lighting capacitors.

As a result of that Trade Alert and an inspection and replacement program carried out with assistance from the lighting industry, a large number of the potentially affected capacitors were identified, removed and replaced.

ATCO Controls has since received reports of several incidents which may be associated with potentially affected capacitors. ATCO Controls expects there are only a few of these capacitors still in use.

Affected capacitors can be identified by the brand name "ATCO" and the model "CP" type 250V rated lighting capacitor, with the Batch Numbers 20/94 to 32/96, indicating the capacitor was sold between May 1994 and August 1996.

It is possible that a small number of the affected capacitors within the Batch 20/94 to 32/96 could fail in a destructive manner, and depending upon the structure of the fitting in which they have been installed, could result in a fire.

It is highly recommended that any electrical worker becoming aware of an installation containing ATCO 'CP' type lighting capacitors (250V rated) from the batch numbers 20/94 to 32/96 replace the affected capacitor, which will be nearing the end of its effective life in any event.

Electrical workers seeking any further information concerning this Electrical Safety Alert can contact their local ATCO office.

Quality concerns with imported TPS Cable

The Energy Safety Service has expressed serious concern that a batch of imported TPS cable failed to meet the requirements of AS/NZS 5000 "Electric Cables - polymeric insulated."

The Energy Safety Service has advised that the cable failed the ageing test.

In addition, it has been claimed that the cable is rated at V90 however when it was tested to the V90 requirements the insulation material crumbled.

The cable was imported from Taiwan and manufactured by BANKO.

The cable has no sheath markings.

Electrical workers are urged to ensure that any cable they purchase conforms to the requirements of AS/NZS 5000.

Conformity can be proved by a supplier of the cable producing evidence in the form of an independent test report certifying compliance to AS/NZS 5000.

Request for Expressions of Interest

The Board is required to ensure the ongoing competency of persons who are registered under the Electricity Act 1992.

As part of its 2005/2006 competency programme the Board wishes to audit the electrical work of people who carry out such work under the Certificate of Compliance system.

The Board is calling for expressions of interest from potential service providers who consider they have the relevant experience

and resources to provide a cost-effective and efficient audit inspection of electrical workers within New Zealand.

Interested parties should register their interest by post to the Registrar, Electrical Workers Registration Board, PO Box 10156, Wellington by Friday, 1 July 2005.

Present audit programme

The Board is currently carrying audits of electrical work carried out in schools under the Certificate of Compliance system. This means that all work carried out under the Certificate of Compliance system in schools is potentially subject to audit.

Audit scope

The audit involves an assessment of what has been written on the certificate of compliance against:

- a) A checklist that covers the requirements for electrical inspections contained in NZS 3019 sections 3.
- b) A checklist of predetermined categories of non-compliant work.
- c) A checklist of the mandatory tests outlined in section 6 of AS/NZS 3000:2000 that the electrical worker should have completed.

Audit objective

The objective of the audit is to:

- a) Verify by objective evidence that the electrical work has been done in accordance with the Act and Regulations.
- b) Confirm the Certificate of Compliance has been correctly completed.
- c) Ensure the electrical work carried out in schools is safe.

Initial audit findings

While only a small number of audits have been completed at this stage the electrical work identified on the Certificates of Compliance has been completed to an excellent standard.

However, the main issues identified have been that:

- a) The specific location of where the work was completed has not been adequate.
- b) Particular attention to the damp situation zones outlined in section 7 of AS/NZS 3000:2000 is required.

Some defective issues have been identified in schools and it is strongly recommended that when damaged extension leads, switch socket outlets etc are identified by electrical workers the matters should be brought to the attention of the school Principal.

If you require any further information relating to the school audit programme contact Tony Doyle on 0800-66-1000 or email tony.doyle@med.govt.nz

Examination Top Achievers

2004 was the inaugural year for the Board's Top Achiever Awards.

To become a Top Achiever, candidates of the Board examinations receive a result of 95% or higher. Certificates were presented to students whom the Board recognised as 'Top Achievers'. In 2004, 83 candidates received 95% or higher, this is a remarkable achievement and the Board makes special mention of the following students for their exceptional efforts.

Electrical Service Technician 'A'

Hamish Bell	(99/100)
Roger Inwood	(99/100)
Brendan Horne	(99/100)
Karl Tunnicliffe	(99/100)

Electrical Service Technician 'B'

Laurence Prior	(97/100)
----------------	----------

Electrician's Theory

Timothy Scherer	(100/100)
Tristan Fish	(100/100)

Electrician's Regulations

Kevin Emslie	(100/100)
Mark Zangel	(99/100)
Luke Warnock	(99/100)
Ramakrishna Ammisetti	(99/100)
Xinjun Duan	(99/100)

Examination dates for 2006

The dates of the Board's examination for 2006 have now been set and these are as follows:

- 6 May EST A, Electronic Security Installer
- 13 May EST B, Tradespersons Electrical Work Certificate
- 17 June EST A, Electrician theory, Electronic Security Installer
- 24 June EST B, Tradespersons Electrical Work Certificate, Electrician Regulations

- 9 September EST A, Electronic Security Installer
- 16 September EST B, Tradespersons Electrical Work Certificate
- 18 November EST A, Electrician Theory, Electrical inspector, Electronic Security Installer
- 25 November EST B, Tradespersons Electrical Work Certificate, Electrician Regulations.

Results of complaints

Since issue 18 of Electron, Complaints Assessment Committees have considered fifteen complaints, which had been laid against four inspectors, ten electricians and one trainee.

The Committees are referring eleven of the fifteen complaints to the Board for disciplinary hearings. One complaint is going to the

Board with a recommendation that the Board considers interim suspension of the electrician's registration pending the outcome of the disciplinary hearing.

The Committees dismissed the other four complaints.

Results of Disciplinary Hearings

Derek Brian Hall (E 5052)

A complaint was laid against Mr Hall, an Electrician of no fixed abode, by a homeowner from Auckland. The complaint alleged Mr Hall worked without a practising licence and was tardy in supplying the Certificate of Compliance for his work, which included installing a new stove by reusing the existing permanent connection and installing socket-outlets. The homeowner also alleged Mr Hall did not test his own work.

The Board considered the complaint and found Mr Hall guilty of disciplinary offences in that he:

- Contravened regulation 78 by installing a single phase low voltage fixed electric range by means other than a socket outlet; and
- Contravened section 95 of the Electricity Act by working while not being the holder of a current practising licence.

However, the Board found Mr Hall not guilty of offences relating to failure to test as the Board found there was insufficient evidence to prove the charges.

The Board censured Mr Hall for the way he connected the stove and fined him \$750 for working without a practising licence. The Board also ordered Mr Hall to pay costs of \$1,250.

Comment

The connecting of the electric range in question was carried out in October 2002 and regulation 78 was revoked by the Electricity Amendment Regulations which came into force in January 2003.

Electrician

A complaint was laid against an Electrician from Wellington arising from a regulation 50 notification to the Secretary. The complaint alleged that the Electrician: livened an unsafe installation by failing to install an earth electrode and failed to connect the main earth conductor to that electrode; failed to ensure that the mains were adequately protected and installed; failed to have the relocation of the meter box inspected; and he failed to furnish a Certificate of Compliance for the work carried out, which was the relocation of the mains, and the installation of a new earthing system and a new switchboard.

The Board considered the complaint and found the Electrician guilty of disciplinary offences in that he:

- Negligently created a risk to life and limb and contravened regulation 69 by failing to ensure the installation was electrically safe. An MEN electrical installation that does not

have an earth electrode presents a significant risk of injury or death to persons, and of damage to property, as a result of the use of the installation – it is not electrically safe; and

- Carried out work in a negligent and unsatisfactory manner and contravened regulation 86 and section 5 of AS/NZS 3000:2000 by failing to ensure the earthing system of an MEN electrical installation included an earth electrode; and
- Contravened regulation 37(2) by failing to test his work before connected it to the supply; and
- Contravened the regulations by reconnecting the supply to an installation, which had been worked upon, without having that work inspected as required under regulation 41(1)(c)(iv)

However the Board found the Electrician not guilty of:

- Failing to adequately protect the mains cables; and
- Contravening regulation 50; and
- Neglecting to furnish a Certificate of Compliance prior to connecting an installation to the supply. (Not guilty because of inappropriate wording of the charge).

The Board restricted the Electrician's registration with the condition that he must submit all Certificates of Compliance to the Registrar at the end of each month for a period of twelve months for the purpose of audit. The Board also fined the Electrician \$2,000 and ordered that he pay costs of \$1,500. The Board directed that the Electrician's name not be published.

Electrician and Inspector

Complaints were laid against an Electrician and an Inspector from Christchurch by an Engineering Officer from a supply company. The complaint alleged the Electrician transposed the neutral and one of the phases in the supply for a light industrial premise and, while inspecting and connecting the supply, the Inspector failed to identify the transposition.

The Board considered the complaints and found the Electrician not guilty of a disciplinary offence because he did not personally make the connection causing the transposition and he had carried out all the tests he could have prior to that connection, which was made by a person working under an employer licence. However, the Board found the Inspector guilty of disciplinary offences in that he:

- Contravened regulation 41(3) by failing to inspect in accordance with NZS 3019; and
- Contravened regulation 43A by failing to ensure, upon connection, that the polarity and phase rotation of the supply was correct; and

- Contravened regulation 69 and 69A by livening an installation with transposed supply conductors (one of three phases with the neutral), which creates a significant risk of injury or death or damage to property as a result of the use of the installation; and consequently
- Furnished a false return.

The Board fined the Inspector \$750 and ordered him to pay costs of \$1,500. The Board made an Order suppressing publication of the Inspector's name.

Comment

A significant contributing factor to the transposition was the number of workers involved with laying and connecting the supply cable. This case demonstrates the importance of all workers carrying out their own tests and not falling into the trap of presuming everyone who has worked on a job before them has done the right thing.

The following article has been provided by IRD

Update from the Industry Partnership team

Do you remember Dave? He used to do "under-the-table" electrical jobs until he contacted Industry Partnership and got back on track. He's never looked back!

You might remember reading Dave's story in June last year when we did an industry-wide mail out.

Well, Dave's back. This time, he's having trouble paying his GST and needs some help to sort it out.

You'll find that our second Dave instalment is shorter and contains helpful tips in bullet form, so you can get the information you need

quickly. We've learned, after talking to electricians over the past year, that you're busy people and you appreciate short, plain English messages.

Keep an eye out for the next instalment! We hope you find it's helpful. If you're having trouble paying your taxes, please phone the Industry Partnership team (toll-free) on 0800 TAX TALK (0800 829 825).

Practising Licence Refresher Courses

In issue 15 of ELECTRON people were given the opportunity to comment on policy proposals for practicing licence refresher courses.

Eighty five people provided comment on the proposals and at its May 2005 meeting the Board passed a resolution in relation to future practicing licence refresher courses. The Board has agreed to:

- a new format for practicing licence refresher courses for electrical inspectors and electricians;
- continue issuing combination practicing licence/Site Safe Passports to people who complete the above mentioned refresher course;
- modify the above mentioned refresher course for electrical service technicians;

- not preclude electrical service technicians from completing the electrical inspector/electrician refresher course if they wish to do so;
- introduce a selection, moderation and auditing system for both refresher courses and presenters;
- develop a further refresher course for line mechanics;
- seek regulatory amendment to make refresher courses and their delivery subject to Board approval.

Full details of the new format refresher course will be published in the near future.

