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For the first time in many years the Board completed a full and successful round of registration examinations in January. Further details are in this issue of ELECTRON.

I believe one of the fundamental reasons for the success of the examinations is the dedication of all those people from industry who so willingly give their time and vast practical knowledge to the developing of exam questions, moderation of questions and answers, and the marking of answer scripts.

It is through the efforts of those people that the integrity of the examination processes and thus the registration/licensing systems are maintained and improved.

The Associate Minister of Energy Hon. Harry Duynhoven has announced the appointment of Don Pryde, and reappointment of Tim Elms and Murray Willis as members of the Board for three year terms. Details of the appointees are in this issue of ELECTRON.



John Sickels
Registrar

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Safety • Competency

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TECHNICAL AND GENERAL QUESTION CORNER

Q Why does the Board take action against the electricians shown on television when the electricians have been trapped into doing work?

A Entrapment generally occurs where the actions of a witness progress to a point where the witness is the initiator of offences by another person when the other person would not otherwise have been an offender.

It is considered that the actions of the television programmes producers merely provide an opportunity for an electrical worker to carry out prescribed electrical work in a non-compliant manner.

The Board has considered many cases as a result of electrical workers being depicted carrying out non-compliant work on television.

In all of the cases the television programme only provided the opportunity for non-compliant work to be carried out.

The producers of the programme did not actively encourage any non-complaint work therefore there was no entrapment.

The situation would be different if the programme producers actively encouraged electrical workers to carry out work in a non-compliant manner.

Q You recently sent out supervision guidelines and would you please tell me why you have reissued the guidelines and what are the main changes?

A The Board and the Electrical Workers Licensing Group continue to be made aware of electrical incidents involving trainees/apprentices.

The Board and the Group will continue to make every effort to ensure the industry is well aware of its responsibilities

and obligations in regard to supervision and as such the material will continue to be updated as and when required.

The main changes to the guidelines are that:

- The terms "direct supervision" and "general supervision" have been introduced and definitions of the terms are made clear.
- Guidelines for site assessment have been introduced.
- Employer, supervisor of electrical work and trainee responsibilities have been introduced.
- A section on the assessment of trainees/apprentices has been introduced.

In addition, the development of a proposed Code of Practice for the supervision of trainees has been instituted. A notice on the proposal is in this issue of ELECTRON.

Q Now that the Board has an agreement with Site Safe does it now mean that all people have to do the tuition course conducted by the Electrical Training Company?

A The course which ETCO is to conduct was developed by Site Safe and ETCO to satisfy the overall objection for practising licences and the requirements for SiteSafe passports for electrical workers in the construction industry.

The Board has accepted the course as meeting the practicing licence issuing requirements. The course enables electrical workers in the construction industry to do one course to meet both Board and Site Safe requirements.

All people do not have to do the course.

Board Meeting Dates

The Board has set its meeting dates for 2004 and they are as follows:

17 and 18 March, 14 and 15 April, 19 and 20 May, 30 June and 1 July, 11 and 12 August, 15 and 16 September, 13 and 14 October, 10 and 11 November and 8 and 9 December.

Locations for meetings are set throughout the country to ensure that people who are the subject of disciplinary hearings are able to attend the hearings with the minimum of disruption to their schedules.

The Board welcomes anyone to any of its meetings, all of which are open to the public. If you have any issues that come within the Board's jurisdiction the Board would be pleased to hear your views.

If you would like to attend a Board meeting either as an observer or to present submissions please contact the Board's Secretary, Janine Anderson on 0800 661 000.

Complaints Assessment Committees Express Concern

The Complaints Assessment Committees have expressed concerns about the polarity of supply to installations.

In the past four months the Committees have considered five complaints about registered line mechanics who have carried out supply transpositions. All five of the complaints are being referred to the Board for disciplinary hearings.

The Committees believe there are a number of reasons why such complaints have arisen however people relying on visual tests

and assumptions rather than comprehensive testing seems to be a recurring factor.

The Committees and the Electrical Workers Licensing Group would like to remind line mechanics to be particularly vigilant about testing polarity.

This will ensure the safety of the public, workmates and themselves.

Flood damage house recovery



The Ministry has received a number of enquiries relating to the repair of electrical installations that have been damaged in the recent flooding. The following sets out the Ministry's interpretation of the regulatory requirements relating to the repair of such work. The Ministry has published this interpretation to provide clarity to those in the industry who are assisting flood victim recovery.

Irrespective of how much of the electrical installation wiring and fittings are being replaced, including an entire switchboard, it is the Ministry's opinion that:

- The work of restoring the electrical wiring within a flood damaged property is work to which regulation 68 applies and therefore no upgrading is required for compliance with AS/NZS 3000:2000 including the installation of RCDs,
- The work is not subject to certification under Regulation 39 [39(2) applies],
- The work is therefore not subject to inspection under Regulation 41, [41(1) applies],
- Regulation 44 must be applied, as the Ministry interprets any reconnection as being that of a recommissioned installation. *This does not imply that the provisions of Regulations 38, 39 and 41 (which are cited in 44) apply.*

- Therefore an inspection to verify the fundamental safety features is required which must be carried out in accordance with AS/NZS 3019. The installation would then be covered by a Certificate of Verification. However this inspection could be carried out by the person carrying out the installation work if they are a registered inspector.

Irrespective of the above factors:

- **The work must be tested** in accordance with **Regulation 37.**

Please note that the above mentioned does not prohibit the use of a certificate of compliance if the client or insurer wishes one to be issued. Also where a client is agreeable, RCDs should be considered for applications where the risk of electric shock is higher, such as bathrooms and laundries. This is however a matter of recommendation and not mandatory, excepting where socket outlets are located in damp zones where the use of RCDs are mandatory.

Registrar Makes Interim Suspension Recommendation

In the first action of its type the Registrar has recommended to the Board that an electrician's registration held by Mr Zhi Ming (Martin) Qian of Auckland be suspended before a complaint against the electrician was considered by a Complaints Assessment Committee.

The recommendation was made after the Electrical Workers Licensing Group investigated the activities of the electrician. The Registrar considered the investigation findings and was concerned at the public safety issues relating to the electricians work.

The Board accepted the recommendation and for the first time used the powers provided to it when the Act was amended in 2000.

Those powers permit the Board to suspend a registration prior to a Complaints Assessment Committee considering a complaint if the Board is satisfied that it is necessary to do so having regard to the need to protect the safety of members of the public.

November 2003 Examination Report

As indicated in the January issue of ELECTRON the first full round of registration examinations conducted entirely by the Board in recent years was completed in early January 2004.

The new procedures that the Board introduced throughout 2003 have resulted in a robust system with all organisations and individuals who offer registration examination tuition courses and facilitate Board examinations having formal contracts.

The Board also has nineteen contracted markers.

A total of 1,438 candidates sat the November 2003 Board examinations and the results are summarised as follows:

Examination	Candidates passed	Candidates failed	% Pass
Electrician theory	441	317	72
Electrician regulations	510	402	79
EST level "A"	300	245	82
EST level "B"	100	77	77
Electrical Inspector	86	76	88
Tradesperson certificate	1	0	100

A full report on the examinations has been sent to all contracted training providers and this is available to any person who would like a copy. To obtain a copy of the report please contact Paul Alsford telephone 0800 661 000.

Results of Disciplinary Hearings

Electrician

A complaint was received from a homeowner in Auckland who was concerned about the manner in which an electrician had installed downlights.

The downlights had been overheating and buckling.

The homeowner had also not received a certificate of compliance from the electrician.

The Board found the electrician guilty of installing the downlights in a negligent manner and for failing to provide a certificate of compliance.

The Board restricted the electrician's registration for a period of six months requiring the electrician to submit copies of certificates of compliance completed during that period, which may then be audited.

The Board also ordered the electrician to pay costs of \$500.

Electrician

A complaint was received from a homeowner who was concerned about the safety of electrical work carried out by an electrician from Wellington.

The Board found the electrician guilty of failing to identify conductors, failing to identify a main switch on a switchboard and failing to issue a certificate of compliance for the work that was carried out.

The electrician was fined \$750 by the Board and ordered to pay costs of \$750.

Electrician

Complaints were received from an industry organisation and a Government Department concerning electricians in Palmerston North who installed a socket-RCD in an inappropriate location in a bathroom and failed to properly test and certify their work.

The electricians were all found guilty of creating an unsafe installation by breaching regulation 90.

Some of the electricians were also found guilty of failing to complete the required tests.

The electricians were fined from \$200 to \$350 by the Board and each was ordered to pay costs of \$500.

Electrician

A complaint was received from homeowners who were concerned about an electrician from Auckland who failed to have their main switchboard inspected by an electrical inspector.

The homeowners were also concerned they had not received a certificate of compliance for the work that was carried out.

The Board found the electrician guilty of carrying out work contrary to regulation 41 by not having the work on the switchboard inspected. The electrician was also found guilty of furnishing a false certificate of compliance because the one he did provide was incomplete.

The Board censured the electrician and ordered the electrician to pay costs of \$500.

Electrician

A complaint was received from an electrical retailer concerning a meter running backwards. An investigation showed that the meter was wired from the live side of the main switch. This clearly demonstrated that the work had not been tested in accordance with regulation 37. Also an orange wire was used for the meter neutral. The Board censured the electrician and ordered payment of costs of \$750.00.

Inspector

Another instance of meter reversal was considered by the Board. Due to lack of substantive evidence no further action was taken.

Electrician

A complaint was received from a Government Department concerned that an electrician from Hawera had carried out work on a switchboard and not had that work inspected by an electrical inspector.

The electrician was found guilty of failing to have work on a switchboard inspected as required by regulation 41 and neglecting to furnish the proper certificate of compliance (one certified by an electrical inspector).

The electrician was censured and ordered to pay costs of \$250.

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\$10,000 Fine After Fatal Explosion

Electrical company ALSTOM has been fined \$10,000 and found to have been moderately culpable for a fatal workplace accident at Haywards Hill substation in March.

The maximum fine is \$50,000.

Kurt Stott, 22, of Upper Hutt, died and 26 year old Andries Nieman suffered horrific burns when 11,000 volt electrical gear they were working on exploded.

The company was also ordered to pay Mr Stott's family \$20,000 in reparation and Mr Nieman's family \$10,000.

In the Lower Hutt District Court, Judge Chris Tuohy said the accident was not symptomatic of a broader culture of laxity toward safety at the company.

The company had well developed safety practices and a very good safety record for such a big firm – 1,700 employees, Judge Tuohy said.

The management had demonstrated "very real" remorse and regret.

The company pleaded guilty to two charges of failing to take all practicable steps to ensure the safety of its employees.

Judge Tuohy said the company's level of culpability was "moderate", however a request to be fined and discharged without conviction was "quite unrealistic".

The accident happened after a supervisor's taping of red crosses on equipment to indicate it was not being worked on had apparently confused the men into thinking an unmarked switch was not live.

The switch exploded when one of the men opened a panel at the back and reached in.

The use of red tape had not been sanctioned by the company and had not come with proper training, Judge Tuohy said.

The men should also not have gone into the switch that exploded because they had not signed an access permit as they were required to do, he said.

It was not known why the panel was opened, he said.

Judge Tuohy said the reparation payments, for emotional harm – the only available criteria under the Sentencing Act 2002 – were "substantial" and reflected "harrowing" victim impact statements.

"Obviously severe emotional harm has been suffered by the relatives".

"The grief is immense. Mr Nieman's injuries are horrific and his disfigurement could hardly be greater."

Mr Stott's partner was awarded \$10,000 and his parents \$5,000 each.

Relatives of the victims and senior ALSTOM managers, including managing director Geoff Hunt were in court.

Mr Hunt said afterwards the tragedy had affected the company deeply.

"This is the first fatality we have experienced in the electricity industry and it is one fatality too many."

Practising Licence Refresher Course

In the October 2003 issue of ELECTRON the Board sought comment on the new minimum requirements for practising licence refresher courses.

By the closing date for submissions approximately three hundred people or organisations had provided comments.

Following full consideration of the responses and issues raised by commentators the Board has referred the draft minimum

requirements to the Registrar for further research and consultation. The Registrar is required to report back to the Board by June 2004.

As a result of the Board's decision the Board is targetting 2005 for the "start up" of "across the board" revised practising licence refresher courses.



Appointments to the Board

The Associate Minister of Energy Hon Harry Duynhoven has announced the appointment of Donald Stuart Pryde and the reappointment of Murray William Willis and David Timothy Elms to the Board for a period of three years from 23 February 2003.

Don Pryde is from Dunedin and has been employed by Delta Utility Services Limited and its predecessors since 1976. He has served on the previous Otago/Southland Electrical Apprenticeship Committee and has been a member of the New Zealand Engineering Printing and Manufacturing Union's National Council since 1994.

Don has been the Union's South Island Regional President and the National Junior Vice President. He has also been a school Board of Trustee Member.

Murray Willis is from Great Barrier Island and is self employed specialising in generation and communication systems. He is Presiding Member of the Board, a position he has held since 2001.

Murray has wide experience in the electronics and electrical industry both in New Zealand and overseas and has held many

management, Board and Committee positions during his career. Murray is a member of the Electrical Contractors Association of New Zealand.

Tim Elms is from North Canterbury and just prior to his appointment to the Board in 2000 sold his interests in a significant electrical contracting business in Christchurch. He has a long record of significant contributions to the Electrical Contractors Association of New Zealand and the Electro technology Industry Training Organisation. Tim has wide experience in the general electrical wiring sector of the industry both in New Zealand and overseas.

Presiding and Deputy Presiding member of the Board

At the February 2004 meeting of the Board Murray Willis and Barrie Mason were re-elected to their respective positions of Presiding and Deputy Presiding members of the Board.

New Fees for Board Members

New daily fees for members of the Board have been announced.

The Presiding Member and members' daily fees have been increased by \$40 to \$500 and \$330 per day respectively.

The fee increase is the first since 1999 and recognises the governmental manner in which the Board is expected to operate and the levels of expertise required from members.

Radio Spectrum Management shuts down illegal radio operators



In December, compliance action was taken against an Auckland broadcasting organisation for having multiple transmitters broadcasting the same programme.

The General Radio User Licence (GURL) allows for only two transmitters in a 25 km area. Networking multiple transmitters throughout the region contravenes the intention of the General User Licence which allows locally orientated broadcasts. Initially, 11 Infringement Notices were issued to the owners of properties with non-compliant transmitters. Six transmitters ceased operating immediately, but another 5 Infringement Notices had to be issued for the transmitters that continued to broadcast. Search

warrants were obtained and the transmitting apparatus was removed from two private residences that had continued to broadcast. One location had two transmitters on two different frequencies!

This type of compliance monitoring and intervention by RSM is a good example of the strong stance RSM are now taking against illegally operating broadcasters. RSM will continue to identify and, when appropriate, prosecute offenders.

For more information about General User Licences visit <http://www.med.govt.nz/rsm/licencing/guls.html>

Proposed Code of Practice for the Supervision of Trainees

Acting under delegated authority (pursuant to Section 41 of the State Sector Act 1988) from the Chief Executive, Ministry of Economic Development and in accordance with the provisions of 36 (1)(f) of the Electricity Act 1992, I wish to advise that I intend to seek the approval of the Minister of Energy to issue a Code of Practice for the supervision of trainees who are carrying out electrical work under the Electricity Act 1992.

Prior to seeking the above mentioned approval, the Ministry would like to offer all interested parties the opportunity to comment on the Proposed Code of Practice and, if applicable, contribute to a working party to develop a fully consulted document.

The Ministry and the Board have introduced supervision guidelines for the "general electrical wiring sector" of the industry and the Electricity Engineers Association of New Zealand have also developed supervision guidelines for the "supply" sector of the industry.

Despite the introduction of the guidelines, matters relating to the supervision of trainees continue to be drawn to the attention of the Ministry of the Board.

While the supervision guidelines have proven beneficial to some in the industry, it is considered that a Code of Practice will provide employers, people who supervise trainees, and trainees, with certainty as to what is expected in the areas of providing and working under supervision.

A Supervision Code of Practice would also be used by the Ministry and the Board as a baseline in judicial matters.

It is envisaged that the two supervision guidelines, which have been developed with considerable input from both above-mentioned sectors of the industry, will form the basis of the proposed Code of Practice.

The respective supervision guidelines are available on the Board website (www.ewrb.govt.nz) and the Electricity Engineers Association website (www.eea.co.nz).

The Ministry invites comments on the proposed Code of Practice and in particular the subject material it should contain.

Any comment must reach the undersigned by 7 May 2004.



John Sickels
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Electrical Workers Licensing Group

