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John Sickels
Registrar

The commencement of 2005 has seen progress being made on the previously circulated proposals to amend fees payable for Board services. It is anticipated that a paper recommending amendments to the fees will be presented to Government in the near future.

Considerable Board time is continuing to be expended on the hearing of complaints against registered electrical

workers and this Issue of ELECTRON contains further details of hearings of complaints.

The November 2004 national examination round was completed and further comment on the subject, particularly the result of the electrician theory examination is contained in this issue of ELECTRON.

A recent review of the Board's registers has shown that in excess of 12,000 people will be required to undertake safety training to satisfy the prerequisites for the issue of a practising licence in June 2005.

One of the most common reasons for practising licence applications being declined is that applicants have not completed the required safety training. This can lead to considerable disquiet with registered people and in order to alleviate potential difficulties I have sent an email or paper reminder to affected people. Further detail appears in this issue of ELECTRON.

The Board is seeking comment on proposed registration examination format amendments and full details of the proposals are contained in this issue of ELECTRON.

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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:

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Results of Complaints

Since Issue 17 of ELECTRON, Complaints Assessment Committees have considered thirty-three complaints, which had been laid against eight inspectors, twenty electricians, one line mechanic and one electrical service technician.

The Committees are referring nineteen of the thirty-three complaints to the Board for disciplinary hearings. Four

complaints are going to the Board with recommendations that the Board considers interim suspension of the electrician's registration pending the outcome of the disciplinary hearing.

The Committees have five complaints adjourned and dismissed the other ten complaints.

Electrical Workers Practising Licence Renewals 2005

The Registrar has conducted a review of the Electrical Workers Register and has identified over 12,000 Electrical Workers who will have their periodic safety training expire this year.

In order to be eligible for the issue of a practising licence, all training i.e. Testing, Safe Working Practices, CPR and Basic First Aid must be current at the time of renewal.

Due to the large number of Electrical Workers in this situation the Registrar will be sending an email or paper reminder to affected clients. This will give people the opportunity to make the necessary arrangements to receive tuition before the start of the renewal process in May.

One of the most common reasons for rejecting Electrical Workers Practising Licence Renewals is due to expired training. This can often be frustrating for Electrical Workers as they need to complete this before resubmitting their application.

A list of training providers is available from our website at www.e wrb.govt.nz. To access, click on training, then click on 'list of safety training providers'.

To check when your periodic safety training is due to expire please visit our website at www.e wr.govt.nz.

- From the left-hand menu select 'Electrical Workers Register' then 'EW Services' then 'Update Your Safety Training Details'
- Enter your surname into the 'Quick Search' box, locate and select your name from the results list by double clicking on it
- Enter your 'File Key' and select 'Continue'. NOTE: Your file key is case sensitive so please check your CAPS LOCK key. To obtain your file key please contact 0800 661 000
- Check in the left hand column when the safety training is due to expire. NOTE: Site Safe is an optional course only required if you wish to have a Site Safe endorsed license
- To update simply enter the Training Provider and Date Completed into the appropriate boxes, then click on 'Save'.

Results of Disciplinary Hearings

Mark Moncrieff (E 16694)

A complaint was lodged against Mr Moncrieff, an electrician from Torbay, Auckland by an individual from Auckland. The complaint alleged that Mr Moncrieff wired a socket outlet into an existing adjacent light switch circuit contrary to the Electricity Regulations; and that Mr Moncrieff negligently or deliberately “burned out” light switches.

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

- Contravened regulation 37(3) of the Electricity Regulations 1997 by not carrying out earth continuity tests or insulation resistance tests when he carried out the prescribed electrical work; and
- Contravened regulation 39 of the Electricity Regulations 1997 by neglecting to furnish a return.

Mr Moncrieff was fined \$750 and ordered to pay costs of \$1,250.

Ian Geoffrey Gambles (E 15022)

A complaint was lodged against Mr Gambles, an electrician from Christchurch by a his former employer. The complaint alleged that Mr Gambles:

- Failed to bury conduit containing wiring at an adequate depth; and
- Failed to use cable marking tape over conduit wiring; and
- Failed to provide mechanical protection at the existing bollard pole; and
- Failed to install danger signs indicating that the cable was buried; and
- Failed to issue a certificate of compliance for the work carried out within ten days of the completion of the work.

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

- Carried out prescribed electrical work in a manner contrary to regulation 84(2) of the Electricity Regulations 1997 by failing to earth metal that is not fully isolated from both live parts and earth;
- Neglected to furnish a return required in accordance with regulation 39 of the Electricity Regulations 1997 by failing to complete a certificate of compliance within one day of completion of the work. (The certificate must be given to the owner of the fittings or the occupier of the premises within 20 working days, reg 40).

The Board fined Mr Gambles \$1,250 and ordered that he pay costs of \$750.

Electrician

A complaint was lodged against an electrician by a homeowner from North Beach, Christchurch. The complaint alleged that prior to 2003 the electrician:

- Incorrectly installed a 10 amp box on a spa pool installation when the manufacturers instructions called for a 15 amp box, which caused the fuses on the spa pool to “blow”; and
- Failed to provide a certificate of compliance. The owner of the installation has not been furnished with a certificate of compliance for the electrical work carried out.

The Board considered the complaint and found the electrician guilty of a disciplinary offence in that he neglected to furnish a certificate of compliance in accordance with regulation 39 of the Electricity Regulations 1997.

In view of the circumstances, the Board ordered that no action be taken. The electrician was ordered to pay costs of \$350. The Board directed that the electrician's name not be published.

Malcolm Leonard Boal (LM 466)

A complaint was lodged against Mr Boal by an employer of an electrical company in Christchurch. The complaint alleged that he:

- Transposed phase and neutral conductors while connecting a street light circuit which subsequently caused the livening of the exposed metal at premises in a residential area when the streetlights were switched on in the evening; and
- Failed to carry out appropriate tests to ensure that the work was safe before livening.
- Certified prescribed electrical work which was not electrically safe.
- Failed to ensure that the connected work was electrically safe.

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

- Carried out prescribed electrical work in a negligent manner by failing to test the work; and
- Carried out prescribed electrical work in a manner contrary to regulation 37 by failing to test the work and
- Carried out prescribed electrical work in a manner contrary to regulation 69(1) of the Electricity Regulations 1997 in that livened water mains present a significant risk of injury or death to persons and are not electrically safe; and
- Negligently created a risk to life and limb.

Mr Boal was ordered to pay a fine of \$2,250 and costs of \$1000.

Electrician

A complaint was lodged against an electrician by a Government department. The complaint alleged that the electrician certified prescribed electrical work that had been carried out by another person and which he failed to test.

The Board considered the complaint and found the electrician guilty of a disciplinary offence in that he issued a false return. The Board ordered the electrician to pay a fine of \$1,000 and costs of \$1,000. The Board directed that the electrician's name not be published.

Electrician

A complaint was lodged against an electrician involved with the "Target" television programme, by an electrician from Invercargill. The complaint alleged the electrician:

- Left the terminals exposed on an appliance; and
- Failed to carry out requisite testing on the appliance for the work carried out; and
- Failed to identify that a socket outlet on the front of a range was faulty and potentially dangerous.

The Board considered the complaint and found the electrician not guilty of any disciplinary offence. The Board directed that the electrician's name not be published and took no further action.

Electrician

A complaint was lodged against an electrician by a homeowner from Christchurch. The complaint alleged that the electrician, during the course of the installation of down lights in a kitchen area:

- Carried out prescribed electrical work without a current practicing license.
- Cut an unnecessary hole in the ceiling for the down lights.

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

- Contravened section 95 of the Electricity Act by not holding a current practicing license when he carried out the prescribed electrical work; and
- Furnished a false certificate of compliance.

The Board fined the electrician \$500 and ordered that he pay costs of \$500. The Board directed that the electrician's name not be published.

Evan Raymond Butt (LM 985)

A complaint was lodged against Mr Butt by an employee from an company located in Christchurch.

The complaint alleged that Mr Butt connected a street lighting circuit in such a manner that there was a transposition of the phase and neutral conductors with caused exposed metal to be livened in a residential area (when the streetlights were switched on for the evening). The complaint further alleged that Mr Butt failed to carry out the requisite testing and certification requirements and that the work undertaken by him was not electrically safe.

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

- Contravened regulation 37 of the Electricity Regulations 1997 when he failed to ensure his work was tested; and
- Contravened regulation 69(1) of the Electricity Regulations 1997 by causing water mains to be livened; and
- Negligently created a risk to life and limb; and
- Issued a false return.

Mr Butt's line mechanic registration was suspended until he passes the line mechanics examination. The Board also fined Mr Butt \$1000 and ordered Mr Butt to pay costs of \$1000.

Electrician

A complaint was lodged against an electrician by a homeowner in Auckland. The complaint alleged that the electrician: failed to test the work that he certified, certified fittings which were not safe to operate and certified work

which was not done in accordance with the Electricity Act 1992.

The Board considered the complaint and found the electrician guilty of a disciplinary offence in that he

- Furnished a false certificate of compliance in contravention of regulation 39(6)(a) of the Electricity Regulations 1997 by failing to test work (in accordance with regulation 37), which he certified, that was carried out by others; and
- Furnished a false certificate of compliance in contravention of regulation 39(6)(b) by certifying that downlight fittings were safe to operate when in fact they were buckling due to excess heat; and
- Furnished a false return by certifying work that was carried out contrary to regulations 69, 87(1)(c) and 87(5)(c).

The Board censured the electrician and ordered that he pay costs of \$500. The Board directed that the electrician's name not be published.

Line Mechanic

A complaint was lodged against a line mechanic by a representative from an electrical supply company in Pukekohe. The complaint alleged that while the line mechanic was carrying out prescribed electrical work on a supply of power to a house, he:

- Transposed a phase and neutral conductors in a two phase installation; and
- Failed to test the work carried out.

The Board considered the complaint and found the line mechanic not guilty of disciplinary offences. Although the Board determined that the line mechanic did fail to test the work, which was carried out by others, the scope of that work was not effectively communicated to him before he started. The Board directed that the line mechanics' name not be published. No further action was taken against the line mechanic.

Line Mechanic

A complaint was lodged against a line mechanic by a representative from an electrical supply company in Pukekohe. The complaint alleged that while the line mechanic was carrying out prescribed electrical work on a supply of power to a house, he:

- Transposed a phase and neutral conductors in a two phase installation; and
- Failed to test the work carried out.

The Board considered the complaint and found the line mechanic not guilty of disciplinary offences. The Board determined that the line mechanic did not carry out the work in question. The Board ordered that the line mechanic's name be suppressed. No further action was taken against the line mechanic.

Andrew Francis Clarke (E 1986)

A complaint was lodged against Mr Clarke, a registered electrician from Tokoroa, by an electrician from Mangakino for prescribed electrical work carried out by Mr Clarke at a farm. The complaint alleged that Mr Clarke:

- Failed to bond metallic switchboard to earth; and
- Failed to provide mechanical protection for cables entering into the board; and
- Failed to label sub circuit mains;
- Was responsible for a broken switchboard door which was lying on the ground; and
- Was responsible for missing fuse carriers and exposed live terminals.

The Board considered the complaint and found that while Mr Clarke's trainee carried out the work in question, Mr Clarke was responsible as a trainee can only assist. Accordingly Mr Clarke was found guilty of disciplinary offences in that he:

- Carried out work in an unsatisfactory manner by leaving live exposed parts accessible in a switchboard especially when they were in close proximity to switches used for function control; and

- Carried out prescribed electrical work in a manner contrary to regulation 69 in that leaving live exposed parts in close proximity to function control switches creates a significant risk of injury or death and is therefore not electrically safe; and
- Carried out prescribed electrical work in a manner contrary to regulation 69A(1) virtue of clause 1.7.3.4.1 of AS/NZS 3000:2000 by leaving live parts without protection by a barrier with at least IPx2 rating.

The Board noted the level of training Mr Clarke's trainee had received and also noted that Mr Clarke was entitled to expect that the trainee should have carried out the work to the required standards.

In view of the above the Board gave Mr Clarke the option of his name being suppressed but Mr Clarke asked that his name be published.

The Board censured Mr Clarke and ordered that he pay costs of \$850.

Electrician

A complaint was lodged against an electrician by a homeowner from Long Bay, Auckland. The complaint alleged that the electrician during the course of an electrical installation at the property:

- Left an unterminated live wire hanging out of a wall into a hallway; and
- Left TPS cables unprotected and accessible in the back of a kitchen cupboard.

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

- Contravened regulation 69 by virtue of regulation 87(1)(f) of the Electricity regulations 1997 by leaving TPS cabling with exposed primary insulation within a cupboard; and

- Contravened regulation 70(1)(a) of the Electricity Regulations 1997 by leaving TPS cabling with exposed primary insulation within a cupboard;
- Issued a false certificate of compliance.

The Board ordered the electrician to pay a fine of \$1,250 and costs of \$1,500. The Board directed that the electrician's name not be published.

Electrician

A complaint was lodged against an electrician by an Inspector from the Coromandel. The complaint alleged the electrician had made an illegal reconnection to the supply.

The Board considered the complaint and found the electrician guilty of a disciplinary offence in that he carried out prescribed electrical work in an unsatisfactory manner by interfering with the operation of a revenue meter.

The Board censured the electrician and ordered that he pay costs in the amount of \$500. The Board directed that the electrician's name not be published.

Line Mechanic

A complaint was lodged against a line mechanic by a representative from an electrical supply company in Pukekohe. The complaint alleged that while the line mechanic was carrying out prescribed electrical work with respect to three different properties, he:

- Transposed a phase and neutral conductors in a two phase installation; and
- Failed to test the work carried out.

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

- Carried out prescribed electrical work in an incompetent manner; and
- Carried out prescribed electrical work in a manner contrary to regulation 37(1)(a) of the Electricity Regulations 1997 by failing to identify and remedy a phase and neutral transposition through testing; and

- Carried out prescribed electrical work in a manner contrary to regulation 69(1) by creating significant risk of injury or death; and
- Negligently creating a risk to life and limb, and a serious fire hazard.

The Board censured the line mechanic and ordered that he pay a fine of \$1,000 and costs of \$1,500. The Board directed that the electrician's name not be published.

Electrician

A complaint was lodged against an electrician by a relative of a homeowner in New Plymouth. The complaint alleged that the electrician:

- Transposed the phase and earth conductors supplying a bathroom wall fan heater; and
- Failed to ensure that the main earth conductor was effectively connected.
- Failed to ensure that the TPS sub circuit cabling in the ceiling space was tidy securely fixed, thus exposing it to mechanical damage; and
- Unsatisfactorily joined cables and
- Failed to adequately test; and
- Issued a false certificate of compliance.

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

- Neglected to furnish a certificate of compliance; and
- Issued a false return by certifying work without personally testing it; and

In the circumstances the Board made no order for discipline but ordered that the electrician's name be suppressed.

Alan Grigg (E 1540)

A complaint was lodged against Mr Grigg, an electrician from North Shore City Auckland, by homeowners in Campbell's Bay, Auckland. The complaint alleged that Mr Grigg, while carrying out prescribed electrical work at a residence:

- Failed to issue a certificate of compliance; and
- Failed to earth lights; and
- Incorrectly connected lighting circuits by way of a junction box to an existing light circuit with no earth wire; and
- Installed lighting and power circuits into the same double light switch; and
- Failed to ensure that wiring was colour compliant; and
- Failed to ensure that lighting and power cables were protected from mechanical damage.

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

- Carried out prescribed electrical work in an incompetent manner by failing to identify the associated active conductors of a common neutral when one is used; and
- Carried out prescribed electrical work in an incompetent manner by installing lights without earth conductors; and
- Carried out prescribed electrical work in a manner contrary to regulation 69 by virtue of regulation 87(1)(B) of the Electricity Regulations 1997 by using green and un-sleeved black conductors as phase conductors; and
- Carried out prescribed electrical work in a manner contrary to regulation 70(2) of the Electricity Regulations 1997 by failing to adequately identify conductors; and

- Negligently creating a risk to life and limb by allowing separately protected circuits to share a neutral conductor; and
- Neglected to furnish a return.

The Board ordered Mr Grigg to pay a fine of \$2,050 and costs of \$1,500.

Keith William Maisey (E 5341)

A complaint was lodged against Mr Maisey, an electrician from Tauranga, by a homeowner in Tauranga. The complaint alleged that Mr Maisey, while carrying out prescribed electrical work in a kitchen area:

- Placed isolating switches in respect to an oven and microwave that were inaccessible.

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

- Contravened section 95 of the Electricity Act by not holding a current practicing license when he carried out the prescribed electrical work; and
- Neglected to furnish a return in contravention of regulation 39 of the Electricity Regulations 1997.

The Board ordered that Mr Maisey pay a fine of \$1,750 and costs of \$1,500.

Examination Report

The Board conducted another full round of registration examinations during November 2004 and the following chart summarises the results of those examinations.

Examination	Total Candidates	Candidates Passed	% Passed
EST A	276	232	84
EST B	182	94	52
Electrician theory	523	191	36.5
Electrician Regulations	503	347	69
TEWC	1	1	100
Electronic Security Installer	0	0	

A full report on the examination round has been forwarded to all contracted training providers and these are available on request to any person who would like a copy.

To obtain a copy of the report please contact Kate Rossiter on 088 66 1000.

Examination centre contact details, previous examination papers and model answers are available on the Board's website at www.ewrb.govt.nz

Comment on the electrician theory examination

In comparison to previous electrician theory examinations the pass rate of 36.5% is considered to be low. The result of the examination has been analysed and is summarised as follows:

- All questions in the examination paper were derived from previous papers that go back to 1997 however in the context of recent papers questions relating to electronic speed controllers, soft starters, power factor correction and specific topics on lighting have not been asked lately.
- Seventy eight candidates had attempted the examination previously and of those one candidate passed the examination.
- Thirty two candidates were granted extra assistance (mainly extended time) and of those seven passed.
- When the examination results are compared with those for the November 2003 and June 2004 electrician theory examinations it can be shown that the percentage of candidates in the 60-69 mark range is consistent.

Review of fees payable for Board Services

In Issue 17 of ELECTRON a summary was provided on a discussion paper relating to proposed fee amendments which the EWLG had released for comment. The discussion paper was mailed to all persons registered under the Electricity Act 1992 and all other persons on the Board and EWLG mailing lists.

The closing date for comments on the discussion paper was 8 December 2004 and by that date forty three submissions had been received. A further three late submissions were received and all forty six submissions have been considered by the Ministry and the Board.

The vast majority of commentators endorsed the proposals however one was discouraged as that person considered

that people who did not operate credit cards would be disadvantaged.

The Board following its consideration of the submissions advised that the practising licence on line fee should be \$60.

The Board believes that the \$60 fee will enable it to continue providing practising licence holders with up to date information and ensure the public is aware of the need to engage competent electrical workers.

The Ministry is at present preparing a submission to the Government on the fee amendments.

Registrar Makes Interim Suspension Recommendation

For the second time within a year the Registrar has recommended to the Board that an electrician's registration be suspended before a complaint against the electrician was considered by a Complaints Assessment Committee.

The Registrar recommended that the electrician registration held by Mr Suresh Chandra (E 11988) of Auckland be suspended in the interim as the Registrar considered that there was a need to protect the safety of members of the public particularly given that:

- general purpose switch socket outlets had been installed in a number of locations where protection from the ingress of moisture could not be provided, and

- non compliant prescribed electrical work has been certified as compliant with the regulatory requirements.

The Board accepted the recommendation and suspended the electrician registration held by Mr Chandra in the interim.

Mr Chandra applied to the Board for a revocation of the interim suspension and the Board declined the application.

Board Examinations

In January 2005 people/organisations whose names appear on the Board/EWLG mailing list were advised of proposed changes to Board examination format. To enable all registered electrical workers the opportunity to comment on the proposals the closing date for submissions has been extended two months.

One of the Board's strategic goals is to set electrical worker competency standards which achieve maximum public and worker safety with the least impediment to industry.

As part of its ongoing development of the above mentioned strategic goal, the Board has carried out a review of the format of all registration examination papers and proposes to introduce a system whereby all categories of examinations will require the same percentage pass mark and will be presented in the same format.

The Board proposes to introduce the new format at the commencement of the 2006 tutorial year.

Fundamentally, the proposed format will require candidates to obtain 60% to achieve a pass in any Board examination and all examinations will be presented in two sections with the first section having ten 2 mark questions and the second section having eight 10 mark questions.

The following table summarises the proposed format. All interested persons are invited to provide comment on the proposed examination format.

If you would like to comment, please address your correspondence to the Registrar at PO Box 10156 Wellington or email to john.sickels@med.govt.nz by 30 May 2005.

Examination	Present Format	Shortcomings	New Proposed Format	Reason for change
ESTA	<p><u>Section 1</u> Ten 5 mark multi-choice questions.</p> <p><u>Section 2</u> Ten 5 mark questions 60% pass mark, but at least 25 marks must be obtained in this section.</p>	<p>Skewed towards multi-choice questions.</p> <p>5 mark questions:</p> <ul style="list-style-type: none"> – lack depth – make it difficult to achieve consistency of marking and mark allocation for similar questions in other papers. <p>Candidates can get 74 marks and still fail.</p> <p>Little emphasis on legislation and standards.</p>	<p><u>Section 1</u> Ten 2 mark multi-choice questions</p> <p><u>Section 2</u> Eight 10 mark questions 60% pass.</p>	<p>60% pass mark. No confusion over pass mark</p> <p>More in-depth questions 10 mark questions confined to one area.</p> <p>More focus on legislation/ standards.</p> <p>Easier to achieve consistency of marking and mark allocation for similar questions in other papers.</p>
ESTB	Ten 10 mark questions 60% pass mark.	<p>Short answer questions scattered throughout paper.</p> <p>Little emphasis on legislation and standards.</p>	<p><u>Section 1</u> Ten 2 mark short answer questions</p> <p><u>Section 2</u> Eight 10 mark questions 60%pass.</p>	<p>10 mark questions confined to specific areas.</p> <p>More focus on legislation/ standards</p>
TEWC	<p><u>Section 1 – All candidates</u> 70 marks – questions of varying length and value</p> <p><u>Section 1 – Plumbers only</u> 30 marks – questions of varying length and value</p> <p><u>Section 1 – Gasfitters only</u> 30 marks – questions of varying length and value</p> <p>To pass must gain at least:</p> <ul style="list-style-type: none"> – 40/70 marks section 1 – 20/30 marks section 2 – 20/30 marks section 3 	<p>Mark allocation skewed.</p> <p>57% pass required for section 1</p> <p>67% pass required for sections 1 and 2</p> <p>A plumber or a gasfitter can gain 88% (88/100) and still fail.</p> <p>A plumber/gasfitter can gain 83% (108/130) and still fail</p> <p>Difficult to achieve consistency of marking and mark allocation for similar questions in other papers.</p>	<p>Split into two papers: First paper for plumbers or gasfitters</p> <p><u>Section 1 – All candidates</u> Ten 2 mark questions</p> <p>Three 10 mark questions</p> <p><u>Section 2P – Plumbers only</u> Five 10 mark questions</p> <p><u>Section 2G – Gasfitters only</u> Five 10 mark questions</p> <p>Second paper for Plumbers/ Gasfitters</p> <p><u>Section 1</u> Ten 2 mark questions</p> <p><u>Section 2</u> Eight 10 mark questions</p> <p>Will be derived solely from the 1st paper</p> <p>60% pass</p>	<p>60% pass mark for either paper. No confusion over pass mark.</p> <p>Consistent question values</p> <p>More in-depth questions</p> <p>10 mark questions confined to one specific area</p> <p>Easier to achieve consistency of marking and mark allocation for similar questions in other papers.</p>

Examination	Present Format	Shortcomings	New Proposed Format	Reason for change
Electrician Regulations	<p><u>Section 1</u> Seventeen 2 mark questions</p> <p><u>Section 2</u> Eleven 6 mark questions 60% pass mark</p>	<p>6 mark questions:</p> <ul style="list-style-type: none"> – limit the depth to which questions can be asked – make it difficult to achieve consistency of marking and mark allocation for similar questions in other papers. – widen the subject matter being examined comparatively to other papers. <p>2 mark questions inconsistent with electrician theory paper where questions of similar degree of difficulty are worth only one mark.</p> <p>Skewed towards short answer questions.</p>	<p><u>Section 1</u> Ten 2 mark questions</p> <p><u>Section 2</u> Eight 10 mark questions 60% pass mark.</p>	<p>More in-depth questions.</p> <p>10 mark questions confined to one specific area – less areas covered but more depth.</p> <p>Easier to achieve consistency of marking and mark allocation for similar questions in other papers.</p>
Electrician Theory	<p><u>Section 1 – Compulsory</u> Question 1</p> <p>Twenty 1 mark questions Questions 2 to 4</p> <p>Three 10 mark questions</p> <p><u>Section 2</u> Questions 5 to 10</p> <p>Six 10 mark questions.</p> <p>Candidate to choose 5 questions 60% pass mark.</p>	<p>Inconsistent with ESTA and TEWC. Candidate can fail section 1 and still pass.</p> <p>Candidates often confused with the requirements of Section 2.</p>	<p><u>Section 1</u> 10, 2 mark questions</p> <p><u>Section 2</u> 8, 10 mark questions. 60% pass.</p>	<p>Consistency with electrician regulations examination.</p> <p>All questions must be answered.</p>
Electrical Inspector	<p><u>Section 1</u> Twenty 1 mark questions</p> <p><u>Section 2</u> Eight 10 mark questions</p>		<p><u>Section 1</u> Ten 2 mark questions</p> <p><u>Section 2</u> Eight 10 mark questions 60% pass</p>	Consistency
Security Alarm installer	<p><u>Section 1 – Theory</u> 5, 2 mark questions 4, 10 mark questions</p> <p><u>Section 1 – Regulations and Safety</u> 5, 2 mark questions 4, 10 mark questions</p>		<p><u>Section 1</u> Ten 2 mark questions</p> <p><u>Section 2</u> Eight 10 mark questions 60% pass</p>	Consistency