AECI NEWS



The Voice of the Electrical Contracting industry

March-June 2010

AECI EXECUTIVE COUNCIL 2010



The AECI AGM was held on Saturday 20th March 2010 in Maldron Hotel, Portlaoise.

The new Executive Council for 2010 was elected and our New President Mr. Brian Flanagan understands at first hand, the difficulties our "Electrical Contracting Industry" is experiencing. He will be directing his enthusiasm and energy into preparing the ground for when our Industry and our economy improves, hopefully in the near future.





50th Anniversary (1960 - 2010)

Association of Electrical Contractors (Ireland), Woodview Centre, Main Street, Celbridge, Co. Kildare Phone: 01-288 6499, Fax: 01-288 5870, Email: aeci@indigo.ie

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RECI AGM

The 17th Annual General Meeting of RECI was held in the Green Isle Hotel (Dublin 22) on Saturday 29th May 2010. The Chairman John Desmond in his annual statement refers to the very busy year just past.

AECI INFORMATION EVENING

Date: 22nd April 2010

Venue: Springfield Hotel, Leixlip, Co. Kildare



1. FM Auditors

Presenter: Mr. George Frisby

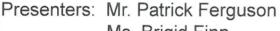
- * Getting paid
- * Financial advice on business decisions





2. CWPS

- * Pensions
- * Sick Pay
- * Short time workers
- * Part time workers



Ms. Brigid Finn





3. NSAI

- * Emergency Lighting regulations
- * Qualifications
- * Certification

Presenters: Mr. Kieran Cox Mr. Derek Waters





"If we both work and set aside ten percent of our annual income, we can retire at ninety."



This is an information evening that the AECI arranged to allow our Members the opportunity to question the presenters on what we feel are topical items.

The first of these information evenings (Dublin region) held on Thursday 22nd April 2010 in the Springfield Hotel, Leixlip from 5pm to 7pm (at no cost to our Members) was supported very well and have received many compliments on the content of the evening.

We would like to get feedback (by email, phone or fax) from Members in other Regions, i.e. West, SouthWest, SouthEast and NorthEast to determine sufficient interest to arrange similar information evenings.

You can see our website with itinerary http://www.aeci.ie/InformationEvening22ndApril2010.htm



AECI Members attending the Information Evening in April 2010 (Dublin region).

CONSTRUCTION CONTRACTS BILL 2010

You can see Pat Kenny show on RTE (31st May 2010) www.rte.ie/news/thefrontline/



AECI are fully supportive of the proposed Construction Contracts Bill 2010 which is being brought before the Seanad by Senator Feargal Quinn. Our pictures shows Des Kenny (AECI Member) and Mr. Chris Lundy (Executive Secretary of the AECI). If this Bill is passed we hope it will resolve the issue of subcontractors getting paid.

PSA

Further meeting has been called between AECI delegates and PSA delegates to discuss the conflict in relation to restrictions/licence requirements and other issues effecting Electrical Contractors.

HIGH COURT

The High Court decison is expected to be known on Wednesday 30th June 2010.

AECI SUBSCRIPTION 2010

Many thanks to all Members who have paid for 2010 Subscription to date and we would appreciate if those who still have not paid to do so as soon as possible as it will affect many of the beneficts, i.e.discount arrangement with Arachas; updates on technical issues and matters, use of the AECI logo on letterheads, vans, business cards etc.

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CER UPDATE

A meeting of the Electrical Contractors Criteria Review Panel was held on 9th March 2010. This panel monitors the progress of the new regulatory system and considers suggestions from panel members for improvements of modifications to the Criteria Document. Ms. Karen Trant who is the Manager Safety Supervision of the CER gave a presentation on the progress of the scheme to date.

Common Procedures for Certification, Enforcement, Modifications, Change of Contractor, Transfer of Registration and Third Party Inspection have been published so far. A procedure for Performance Marking is being developed and will "go live" on 1st July 2010. A Notification of Potential Hazard and Emergency Notice procedure which is part of the Criteria Document is also being worked on.

MODIFICATIONS

The following modifications to the Criteria Document have taken place so far. These modifications can be viewed on the CER website www.cer.ie:

- Modification 1 (cer/09/174) role of complaints officer
- Modification 2 (cer/10/035) role of complainant in the Disciplinary Process
- Modification 3 (cer/10/036) SSB investigation of change of contractor requests

LEGISLATION

The CER are working on an amendment to the legislation in relation to the powers of enforcement of an Authorised Officer. This will enable an Authorised Officer to carry out inspections of electrical work on any building where the Authorised Officer believes such work is being or has been carried out by registered or non-registered contractors. The proposed amendment will create an "Electrical Investigation Officer" who will have powers of entry.

RESTRICTED WORKS

Controlled Works are electrical installation work for which a completion certificate must be issued by a registered contractor but can also be completed by non-registered contractors (in which case an inspection must be obtained from a Safety Body for a fee. The CER are now preparing to identify categories of electrical installations that can only be completed and certified by registered electrical contractors. These categories will be called Restricted Works. RECI want as wide a scope as possible of installation work to be designated Restricted Works and will be advocating this to the CER. Preliminary proposals are to be submitted to the CER in quarter three for discussion on the matter and the CER will publish their decision paper in quarter four. This will be the most important decision in relation to the Regulatory Scheme and we will keep RECI members advised of progress.

TRAINING

The CER recognize the need for a common standard for Verification and Certification training courses and especially a common assessment system. In order to develop a training system to meet this need the ETCI are teaming up with Dublin Institute of Technology and will make a DIT award available for attendance and assessment on an approved training course. It is envisaged that training organizations currently providing Verification and Certification courses will be approved to present the course. Once a person has obtained the award they will not be required to attend the course again after a three year period. An assessment will be all that is necessary.

NEXT STEPS

The next steps in the development of the Regulatory System can be summarized as follows:

- Audit of Safety Bodies. KMPG have been appointed by CER as the auditors. Each Safety Body will be subject to two audits this year.
- PR campaign CER launched a campaign in April
- · Disposal of three part certificates and new four part certificates in operation
- Full operation of Performance Marking scheme
- Working group to develop "Notification of Potential Hazard Procedure"
- · Commence work on "Restricted Works"

AECI TRADE SHOW/CONFERENCE 2010

AYTON.

Clayton Hotel, Galway (www.clayton.ie)

Saturday 11th September 2010





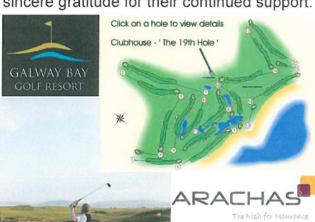
Friday the 10th September 2010

Annual Golf Day at Galway Bay Golf Resort, Trade Show/Conference will be open at 10am. Renville, Oranmore, Co. Galway (www.galwaybaygolfresort.com). Prize Giving with music on Friday evening at Clayton Hotel starts at 7:30pm. The Golf Day will be sponsored by Arachas Insurance, to whom we express our sincere gratitude for their continued support.

Saturday the 11th September 2010

Technical Seminars/Presentations during the day.

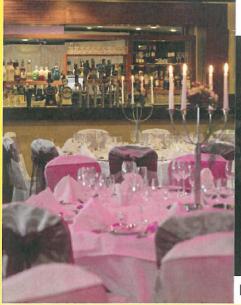
Evening Gala Ball celebrating AECI's 50th Anniversary begins with the reception drink at 7:30pm, hosted by the AECI president Mr. Brian Flanagan, followed by dinner & entertainment.





Exhibition last year in Cork.

ANNIVERSARY 1960-201





If you wish to take part in this event, please contact the AECI office.

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CER LAUNCH SAFE ELECTRIC LOGO

The CER consider promotion of the new regulatory system as a critical element to ensuring its success, especially promotion targeting the public and customers. This is essential in order to ensure that the public, specifically customers of electrical installation services, are aware of the regulatory system.

The following areas are to be promoted targeting the public and customers:

 Raising awareness of the necessity, importance and advantages of selecting a Registered Electrical Contractor.



- The entitlements of the customer with respect to using a Registered Electrical Contractor (with respect to certification etc).
- Making complaints against Registered Electrical Contractors concerning the safety of electrical work and / or other relevant matters.

The CER is of the view that it is important that one clear brand message is established and that this is critical to the success of raising public awareness of the new regulatory system. The distinctive Safe Electric logo has been designed for this purpose. The CER will launch this brand on 28th April 2010 and the launch will be followed by a TV and radio advertising campaign. Only Registered Electrical Contractors will be legally permitted to use the logo.

WIRING RULES

This article concludes our three-part series which gave an insight into the National Rules for Electrical Installations (ETCI Rules) – 4th Edition ET101 (2008) by presenting the changes associated with Residual Current Devices (RCDs), installations in "special locations" and the logistics encompassing verification, testing and certification of electrical installations.

RESIDUAL CURRENT DEVICES

The role of RCDs has been significantly enhanced in a number of contexts such as inclusion on certain circuits within bathrooms, as well as increased priority in construction installations and in agricultural and horticultural sites. Indeed, in non-standard installations or where there are requirements for special installations or locations, there have been changes and new entries into the ETCI Rules. Finally, and perhaps the area where the most significant changes have occurred, the whole process of verification, testing and certification of electrical installations has changed to be cognisant of the requirements pertaining to electrical safety as defined by the Commission for Energy Regulation (CER). Residual Current Devices RCDs are selected for protection in case of a fault (indirect contact) in accordance with 411.3 and for additional protection against direct contact in accordance with 416.1. Clause 531.2 expands on the requirements for RCDs and there is now a new annex, Annex 53A, summarising RCD requirements. This annex details information including RCD application; sources of energy utilised for device operation; the effects of dc components — prevalent with IT equipment — which can be embedded on the supply; issues governing selectivity of RCD operation; and causes of nuisance tripping. Some of the main changes relating to RCDs include:

- There is now a requirement for a dedicated RCD (30mA) to protect all circuits, i.e. (including LV luminaires) located within the zones of a bathroom with the exception of Safety Extra Low Voltage (SELV) circuits;
- Construction and demolition site socket outlets rated in excess of 32A must be protected by an RCD with residual current sensitivity rating not in excess of 500mA. In addition to this requirement, the device must be of type A or B (depending on the dc component present);

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WIRING RULES (continued)

· Agricultural and horticultural installa- Special Situations 32A must be protected by an RCD with residual current sensitivity rated not in excess of 100mA. For all other (related)

circuits requiring an RCD, the associated residual current sensitivities cannot exceed 300mA and, if selectivity might be an issue, time delay of RCD operation (upstream) may be implemented (Type S RCD).

See web-link to Guide to the Selection & Use of Residual Current Devices ET214:2005 Edition 1 ET214 (www.etci.ie/doc/ET214.pdf).

A major change introduced by National Rules for Electrical Installations (ETCI Rules) - 4th Edition concerns problems associated with "stiction". Stiction is a colloquial term used to describe incidences where the inertia of the tripping mechanism results in delays or even in-action of the tripping mechanism, leading to - in some instances - fatal consequences. The maximum allowable tripping time for RCDs with $I\Delta N = 30mA$ is 300 seconds. In order to ensure the tripping mechanism is operating properly, reqular activation of the device (mechanical) is required. In accordance with 531.2.2.2, RCDs shall be installed so that the test-device is easily accessible and beside a clearlyvisible notice to the effect that the testdevice should be operated regularly by the user. The label illustrated is available from ETCI free of charge (Figure 1).



Protect yourself from electric shock

Test your RCD trip switch

Press the test button then reset the switch

(Figure 1)

tion socket outlets rated in excess of Part 7 (Requirements for special Installations or Locations) serves to supplement, enhance or modify the general requirements of other chapters within the ETCI Rules. The Fourth Edition of ET101 has introduced modifications on some of the existing inclusions in this section, as well as introducing new types of industrial/commercial applications (Figure 2).

New inclusions in Part 7 (ET101: 2008)

702A Fountains

708 Caravan Parks

709 Marinas

710 Medical Locations

711 Exhibitions, Shows and Fairs

712 Solar Photovoltaic power supply systems

715 ELV lighting installations

717 Mobile or transportable units

721 Caravans and Motorcaravans; Temporary installations for structures

740 Amusement devices (booths), fairgrounds and circuses

753 Floor and ceiling heating systems

(Figure 2)

There have been changes in 701 (bathrooms) as outlined above in the discussion on RCDs, as well as in construction sites and agricultural and horticultural installations. Again in these

installation types, the role of the RCD has been enhanced. In agricultural and horticultural installations, temperature marking of luminaires is required in areas considered high risk. Also, where

high-density livestock rearing is prevalent, automatic life support systems are required.

Verification, Testing and Certification

The requirements when performing a visual inspection (as contained in Annex 61A) have been significantly expanded and indeed, the whole emphasis of inspection has been developed to engage "all the senses".

There are a number of changes affecting this area. Testing of electrical installations is divided into two priorities: preconnection testing and post-connection testing:

The first such change relates to the formal introduction of a test - which has been custom and practice with Electrical Contractors – among the pre-connection suite of tests. This "new" test (which was actually introduced in an amendment to the Third Edition!), the detection of erroneous connections, is detailed in 613.4.

WIRING RULES (continued)

Pre-Connection Tests

613.2.1: Continuity of Protective/Bonding Conductors, Annex 61B

613.2.2: Continuity of all conductors of final ring circuits

613.3: Insulation Resistance (in accordance with Table 61A)

613.4: Detection of erroneous connections between circuits

613.6: Verification of conditions for automatic disconnection of

supply including earthing and bonding

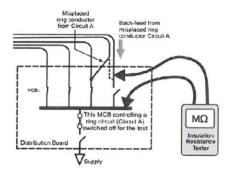
613.8: Polarity

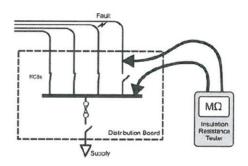
Pre-Connection Tests

613.13: Fault-loop impedance measurement

613.14: Verification of operation of RCDs

The test is meant to reveal a phase to phase fault; • The values associated with insulation resistance have been effectively doubled; • A factor has been applied to the values associated with earth fault loop impedance to be cognisant of thermal effects increasing the effective impedance of wiring systems; An erroneous connection can occur in the context of a ring circuit where one of the circuit conductors is inadvertently connected – in error – to an adjacent protective device fuse or MCB; or in the case where, for example, a nail in a wall "shorts' between two circuits. The test is implemented through measurement of insulation resistance. In the context of results associated with the measurement of insulation resistance, there have been changes. The values of minimum insulation resistance associated with all circuit categories have been doubled. For instance, circuits greater than extra low voltage (ELV) but less than or equal to 500 volts (including functional extra low voltage, FELV) have a minimum value of 1 Mega-Ohm (1MΩ) Figure 3.





(Figure 3)

Clause 613.13 relates to earth fault loop impedance measurement and the methodology for measurement outlined in Annex 61F and collated with respect to Tables 61C-1 and 61C-2. The main change is associated with the measured values. The "new" values permissible under this test have been reduced by 33% to take account of the thermal influence on the cables due to the fault current in the effected circuit. Up to now, these values were described as "cold values" with no adjustment in effect for heating affects from faults. In relation to the requirements of Chapter 62, Periodic Inspection and Testing, a new Periodic Inspection Report Form has been included (an example being contained in Annex 62 A). Significant work has been invested into this report so that filling out the form is a transparent procedure with minimal opportunity for "personalising" or "interpretation", where opinions are minimised and replaced with actual "black and white" entries. This obviously facilitates easier comparison of reports across the breadth of the sector. There have been widespread changes associated with the process of certification. This area has been strongly influenced by the introduction of the new regulation paradigm and, as a consequence, there have been further developments since the publication of ET101:2008. The changes to the Certification process will be explicitly detailed in the 1st Amendment to ET101:2008, but one such change concerns the record of the post-connection tests, where it is mandatory for the electrical contractor to submit a copy of these results to the respective Safety Supervisory Body (SSB), eg, Register of Electrical Contractors of Ireland RECI) or Electrical Contractors Safety and Standards Association (ECSSA). Indeed, under the new regulatory system, a completion certificate will only be considered fully completed following the return of a copy to the relevant SSB with post-connection tests successfully completed and recorded.

The views expressed in this document represent a personal opinion and should not in any way be construed as a definitive interpretation of ET101:2008 or indeed of the ETCl itself. This is not a legal interpretation; in the event of a specific legal question, the reader should consult a practicing solicitor or a member of the Incorporated Law Society.

EMERGENCY LIGHTING REGISTRATION SCHEME



To whom it concerns,

In November 2008 NSAI published an updated version of the I.S. 3217 Emergency Lighting Standard. As with all standards, I.S. 3217:2008 was developed by a committee which was comprised of stakeholders from the emergency lighting industry and public service bodies.

In annex B of this version of the standard, qualifications for those designing, installing, commissioning, inspecting and servicing emergency lighting systems were indicated. These qualifications were required to be at a nationally recognised level. At the time of publication, no nationally recognised qualification existed and so, in order to facilitate compliance with this informative section of the Standard, the NSAI Training Centre initiated a public procurement process to procure the services of an organisation to, develop and deliver a suitable course in design, commissioning and inspection of emergency lighting systems.

At the same time the process of having a nationally recognised award developed and published by FETAC was under way. The course developed for the NSAI Training Centre was developed in such a way as to comply with the specification to be laid down in the FETAC emergency lighting awards.

As one of the final steps in publishing the FETAC award, the award specifications were published for public comment. This part of the process has been completed on May 24th 2010 with no submissions being received. The award specification was presented to the FETAC Advisory Board on June 3rd and they have made a recommendation to the FETAC Standards Council (due to meet June 24th) to approve.

In an attempt to facilitate the emergency lighting industry users in identifying suitably qualified individuals, and also to facilitate employees in this sector demonstrate their qualifications, all those successfully completing the NSAI Emergency Lighting training course have been issued with an NSAI Registration Number and are listed on the NSAI website. All those holding an NSAI Registration number are issued with a certificate showing this number.

Building Emergency Safety System registration scheme

Annex B also talks about a registration scheme which is currently under development by a steering committee with participants from: **CFOA**, **NSAI**, **ETCI**, **RECI**, **ECSSA**, **AECI ACEI**, **Engineers Ireland and EMDA**. The scheme is hoped to be operational by the end of **Q3** 2010.

The intention behind the scheme is to ensure that individuals in the emergency lighting industry operate in an optimal way to ensure public safety as outlined in the BESS mission statement:

"In the interest of public safety, the mission of the Building Emergency Safety Systems (BESS) Registration scheme is to raise the level of compliance to standards of Emergency Lighting installations in the republic of Ireland through the application of a quality assurance scheme for the industry, regulators and those procuring Emergency Lighting systems. The quality assurance scheme will maintain a register of Emergency Lighting (BESS) contractors and issue controlled certificates to those BESS contractors."

In order to join/be a member of this scheme, all individual applicants must be able to demonstrate competence in the design (for certain types of installation), and/or commissioning/inspection of emergency lighting systems.

This competence can be demonstrated by:

- 1) holding a nationally recognised qualification in design, and/or commissioning/inspection of emergency lighting systems,
- 2) holding equivalent qualifications determined by the registration body as being acceptable for membership.

In the meantime however, until the FETAC Award is available and the Registration Scheme is fully operational, NSAI would urge the emergency lighting industry to rely on the NSAI certificate as being equivalent to the nationally recognised qualification called for in Annex B of I.S. 3217:2008, and thus, those holding the NSAI certificate in emergency lighting can be deemed qualified to operate in the field designated on their NSAI certificate.

Ger Buckley – Chairman of BESS steering committee Justin Tallon – Acting Secretary of BESS steering committee

Kieran Cox - NSAI Training

Date: 15th June 2010

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