

Electricity Industry Bulletin No: 67 December 2007

FOR THE ATTENTION OF ALL ELECTRICAL WORKERS

1. WIRING RULES REVISION – AS/NZS 3000:2007, IT'S HERE!

The new edition of the Australia/New Zealand Wiring Rules AS/NZS 3000 Electrical Installations was published on 12 November 2007.

A major change has been the separation of the document into two parts but within the one cover.

Part One provides an “outcomes” style approach to allow flexibility in design, while still satisfying the fundamental safety principles.

Part Two details “deemed to comply” solutions that are expected to be used in the majority of electrical installations.

Some of the changes are:

- Extended application of requirements for Residual Current Devices (RCDs).
- Limiting the number of circuits connected to any one RCD to three.
- Verification of operation of RCDs where supply is connected, mandatory in Australia.
- Electrical installations for construction and demolition sites shall comply with AS/NZS 3012.
- Earthing electrode types and installation conditions have been specified.
- Main earthing conductors to be labelled at the connection to the earth electrode.
- The location of an underground cable must be marked at entry to a structure or recorded on a map.
- The date of initial energization of an installation should be available on-site.
- Reinforced concrete slabs in a shower or bathroom must be equipotentially bonded.
- Enhanced requirements for recessed luminaires.
- A single main switch (per tariff) for a single domestic installation.
- The reinstatement of much of the guidance material removed from the 2000 edition.
- Additional informative appendices.
- An improved and more intuitive index.
- A more logical layout with additional illustrations and background information to make the standard easier to read and user friendly.

SAI Global will be holding seminars in various centers around the country on the revised standard in 2008. Keep an eye out for information about these seminars.

As with previous revisions, AS/NZ 3000:2007 will not be applied on a mandatory basis in Tasmania before a date at least six months after publication. Consideration will also be given to work on an installation that was commenced before publication of the 2007 edition, permission may be granted for the installation to be completed in accordance with AS/NZS 3000:2000. Application must be made to Electricity Standards *and* Safety and will be considered on a case by case basis.

Included in this mailout is a brochure from SAI Global about how to obtain a copy of AS/NZS 3000:2007. If you did not receive a brochure please phone 6233 7851, and we will post another out to you.

2. OCCUPATIONAL LICENSING ACT 2005 UPDATE

Early 2008 will see the implementation of the *Occupational Licensing Act 2005* (the Act).

In developing the Act, Electricity Standards and Safety (ESS) has tried to transform, as far as possible, the licensing parts of the *Electricity Industry Safety and Administration Act 1997* and the *Electricity Industry Safety and Administration Regulations 1999* (which will both be repealed in part) into one set of legislation to govern plumbing, gas fitting and electrical work in a similar way.

As far as electrical contractors and electricians are concerned, there will be mainly minor changes to the position as it was under the earlier legislation.

ESS has circulated proposals under consideration to those concerned as they become available. To keep up with developments (and give us your comments please) you should regularly click on http://www.wst.tas.gov.au/industries/licensing/occupational_licensing.

The changes most likely to be of importance to contractors are:

- the duty to record and notify electrical work will be expanded and clarified;
- the duty to rectify defective electrical work within compulsory time frames;
- the duty of inspectors to tell ESS when electrical work has serious defects;
- the obligations of nominated managers will be expanded and clarified;
- the duties of electricians in supervising apprentices will be clarified;
- the content of the register of electrical workers is to be expanded;
- the need to be and remain “fit and proper” will be expanded and clarified: and
- lineworkers and cable jointers will be licensed and those contracting to do this type of work must hold a contractor’s licence, have insurance and nominated managers.

These are the main changes made to the duty to record and notify electrical work:

- until they run out and are replaced - electrical installation notices, preliminary installations notices, notices of defective or incomplete work and work rectified - can still be used;

- the performance of all electrical work must be recorded and retained - a copy (showing your insurance company) must be given to the customer: and
- there are clear time limits in which to deliver the documents mentioned above and rectify defective electrical work.

On the website there will soon be a statement of electrical work that must be notified:

- after it has been performed (essentially it will be all but minor work as set out previously in the Bulletin):
- and before it is commenced.

When the Act is up and running, work will continue on developing:

- a unit in the TAFE contractors course to reflect these changes;
- proposals about skills maintenance and professional development;
- infringement notices and demerit points for defective electrical work and non-compliance issues that may lead to suspension or cancellation of licences: and
- the ability to lodge electronically electrical installation notices, preliminary installations notices and work rectified notices.

3. WORKPLACE SAFE WEEK

Electricity Standards and Safety (ESS) would like to thank the electrical contractors who allowed time for their new and young electrical workers to attend the three electrical safety seminars presented by Tony Millhouse.

It was pleasing to see over 100 people attend the seminars, gaining valuable information on issues surrounding a number of serious electrical accidents and fatalities investigated by ESS and what actions they can take to prevent a serious electrical accident.



Tony Millhouse is pictured here talking to attendees of the Burnie seminar.

4. NEW LICENCE HOLDERS

Electricity Standards *and* Safety have recently licensed the following people to work as electricians in Tasmania. Some of these electricians are recently graduated apprentices, we extend to them our congratulations.

Licence Number	Name
A7391	Christopher James Considine
A7392	Jeremy William Lang
A7393	William John Harkins
A7394	Michael David Morgan
A7395	Andrew Williams Burns
A7396	James Charles Horton Syrett
A7397	Mischa Paulus Bezemer
A7398	Luke Nicholas Matthews
A7399	Peter John Ross
A7400	Dennis Joseph Tracey
A7401	Adam Douglas Johnson
A7402	Joshua Lloyd Nunn
A7403	Jeffrey Neil Brooks
A7404	Barry Lindsay Lawrence
A7405	Steward William Proudfoot
A7406	Tony Hourigan
A7407	Scott Daniel Norton
A7408	Brett Francis Waterson
A7409	Norman James Hanna
A7410	Goran Horak
A7411	Steven Kamman Tse
A7412	Julian Simon Baldwin
A7413	Michael Darren Kelly
A7414	Todd Joseph Tracey
A7415	John Luigi Panetta
A7416	Michael John Campbell
A7417	Malcolm William Dodd
A7418	Christopher Eugene Quinn
A7419	Jonathon Williams
A7420	Kelvin Philip Smith
A7421	Andrew Robert Kendall
A7422	Lucas Brett McDonald
A7423	Les Bari
A7424	Peter Dennis Grimes
A7425	Timothy John Gooding
A7426	Samuel Clyde Hain
A7427	Stephen Andrew Thornton
A7428	Neville Brian Hudson
A7429	Alan Stephen Friend
A7430	Lyndon Charles Hunter
A7431	Dale Andrew Keher
A7432	Robin Andrew Johnson
A7433	Robert Frederick Pizzie
A7434	Tony Conti
A7435	Jason Anthony Stack
A7436	Adrian Stuart Smith
A7437	Michael Voss
A7438	Darren Grant Bartlett

5. PRIVATE HIGH VOLTAGE (HV) INSTALLATIONS & WORK

In recent years with the disaggregation of the Hydro Electric Commission and introduction of the National Electricity Market, there has been a progressive move to more private HV Installation work. This work may only be undertaken by a licensed Tasmanian Electrical Contractor who employs competent licensed electricians.

Mandatory pre-energization inspections of many private HV installations have identified a number of recurring issues (which must be addressed for safety and compliance) such as;

- Deficient earthing systems, transformer neutral not earthed, earth mat/grid and connections buried (can't inspect), no step and touch potential consideration/design;
- Equipment test certification not available/under-taken;

HV Installation design and test specifications are identified in the new AS/NZS3000:2007 – Wiring Rules (clause 7.6) and also AS2067 “Switchgear Assemblies and Ancillary Equipment for Alternating Voltages above 1kV”. Please note, when the new/revised version of AS2067 is published in 2008, then clause 7.6 and appendix K will be removed from AS/NZS 3000.

Additionally, chapter 5 of the National Electricity Rules, which is mandated in the Electricity Supply Industry Act 1995, has specific requirements and reporting responsibilities between the customer and the Network Service Provider (currently Aurora Energy Pty Ltd). These are required prior to starting work and also prior to energizing the installation. A copy of the National Electricity Rules can be viewed at www.aemc.gov.au/pdfs/rules/contents.pdf.

6. SIGNING AND SUBMITTING ELECTRICAL INSTALLATION NOTICES (EIN'S)

Electrical contractors need to be diligent when completing Electrical Installation Notices (EINs).

All required information must be correctly supplied, it's the law. In particular electrical contractors must ensure that both signature places on an EIN have the relevant signature. One is the electrical contractor's and the other the electricians' certifying compliance with AS/NZS 3000.

Having to send EIN's back to electrical contractors for signatures is time-consuming and inconvenient for all.

In the not too far distant future we intend to move to electronic lodgement of notices but until that happens the present forms will be used and must have all details completed.

7. PRIVATE POWER POLES & SAFETY

The management and maintenance of private power poles is the responsibility of the owner. All power poles have a limited life which varies depending on the type of pole (natural or treated wood, steel or concrete) and vegetation management around the base etc.

A visual inspection of the pole may indicate some of the possible structural integrity problems, however it generally cannot detect heart rot (center of pole) or soft rot (outside circumference at and below ground level) of wooden poles or corrosion issues for steel poles. One way to identify whether a power pole is in a serviceable condition is through an inspection and test regime.

Currently Aurora Energy inspects and tests all power poles up to the customer's metering point as part of their pole management regime, free of charge to the customer. Therefore, privately owned power poles past the metering point could have questionable structural integrity, unless the owner has initiated an inspection and test regime. Currently there are no known competent power pole testing contractors that operate within Tasmania.

Poles with unknown structural integrity must not be climbed and care should be taken working around them.



Seasons Greetings

John Hammersley and staff at
Electricity Standards *and* Safety
would like to wish you all a safe
and happy holiday.

Electricity Standards *and* Safety office hours over the holiday period:

Closing Monday 24 December 2007 at 3.00 pm,
re-opening Wednesday 2 January 2007.

* Please note that it is still possible
to renew electrician licences
online during this period



Important information—copies of this recall can be obtained from the web address below 16/11/2007 Airflow Bathroom Heater Exhaust Fan & Light Combination

Following concerns raised by electrical regulators who had investigated a number of fires involving the Airflow brand 3 in 1 bathroom heaters, an electrical safety recall notice was published on the 16 November 2007. Electricity Standards *and* Safety would like all contractors to obtain a copy of the recall notice to help identify listed models and to enable them to assist their customers.

Other recalls:

28/08/07	King Power Surge Protector Power Board
13/09/07	Orford Refrigeration Cabinets
25/09/07	Hair Straightening Irons (Silver Bullet Centurion and Platinum)
10/10/07	Magrath Stock Prods and Stock Prod Extensions
16/10/07	Atra Ace W0-3200 Magnetic Base Drill
5/11/07	Onga VF150 Sump Pump

For further recalls and precise product information, defect details and consumer action, visit the
Product Recalls Australia website at www.recalls.gov.au



Department of Justice

Office 30 Gordons Hill Road, (PO Box 56)
Rosny Park, Tasmania, 7018
E-mail: wstinfo@justice.tas.gov.au

Electricity Standards *and* Safety

Telephone: (03) 6233 7831
Facsimile: (03) 6233 8338
Website: www.wst.tas.gov.au/electricity