



Office of **Energy**

Office of *ENERGY* WA

*Electrical* **FOCUS**

### ***Electrical Licensing Board***

Recently there were two changes to membership of the Electrical Licensing Board.

Bob Pritchard replaced Jeff Tranter as Chairman. Jeff had resigned due to ill health. Bob is a professional electrical engineer who has his own consulting engineering practice.

Terry Banton, nominated by the WA Department of Training, replaced Ian Linn. Ian resigned from the Board early in 1998.

### ***Tribute to Jeff Tranter***

It is with regret that we advise of the passing away of former Chairman of the Electrical Licensing Board, Jeff Tranter, on 12 April 1998, after a recurring illness.

Jeff was a professional electrical engineer who held a senior position with consulting engineers, Sinclair Knight Merz. As Chairman, his knowledge of the electrical industry was invaluable to the Board. He was committed to improving safety standards and work practices in industry. This commitment was clearly reflected in the achievements and work of the Board in recent times.

Jeff was a dedicated Christian and family man. He will be sadly missed by members of the Board, Office of Energy staff, colleagues and friends.



*Members of the Electrical Licensing Board are, standing left to right, Peter Tuck, Terry Banton, Jim Murie, Jim Jarvis and Ross Campbell and, seated left to right, Bob Briggs, Bob Pritchard (Chairman) and Craig Dundas*

## **Faxing Notices to Western Power**

Western Power recently restructured its network operations to improve efficiencies within the Corporation. Part of those changes included some District offices being established as operational depots or being closed completely.

To improve services to electrical contractors, Western Power has announced a more effective arrangement for the faxing of Notices for completed electrical installing work.

Preliminary Notices, Notices of Completion and completed Inspector's Orders may be faxed to one of the numbers shown in the table below. **This does not apply to Notices of Completion - Minor Work.**

Notices of Completion - Minor Work, together with other Notices and Orders, may be lodged in person or mailed to one of the offices shown in the table.

Transmission of the signed Notice of Completion will be accepted as proof of certification of the electrical work. Electrical contractors should not forward the original copies of the Notices to Western Power, but retain them as a record for the required statutory period.

Western Power advises they will send a letter to all registered electrical contractors in the State, outlining the essential procedure to be followed for the lodging of Notices by fax.

For further enquiries, please contact Western Power Connection Offices at the locations shown in the table <b>Western Power Area</b>	<b>Location Address</b>	<b>Facsimile No.</b>
Metro North	Balcatta Depot, Cnr Wanneroo/Balcatta Roads Balcatta WA 6021	08 9441 1494
Metro South	Belmont Depot, 47-65 Belgravia Street Belmont WA 6104	08 9479 2662
Rockingham/Mandurah	Rockingham Depot, Nasmyth Road Hillman WA 6168	08 9527 8843
Geraldton	Geraldton Office, Eighth Avenue Utakarra WA 6530	08 9921 4857
Three Springs	Three Springs Office, Perenjori Road Three Springs WA 6519	08 9954 1121
Moora/Lancelin	Moora Depot, Berkshire Valley Road Moora WA 6510	08 9651 1150
Northam/Toodyay/York	Northam Depot, York Road Northam WA 6401	08 9622 1815
Merredin/Kondinin	Merredin Depot, Combes Drive Merredin WA 6415	08 9041 2429
Kalgoorlie/Boulder	Kalgoorlie Depot, Great Eastern Highway Kalgoorlie WA 6430	08 9021 0528
South Country (includes Bunbury, Busselton, Margaret River, Bridgetown, Manjimup, Albany, Jerramungup, Katanning, Narrogin, Waroona, other minor towns)	Albany Depot, Chester Pass Road Albany WA 6330	08 9841 0851 or 08 9841 0810
Karratha/Roebourne	Supply Depot, NW Control Centre Karratha WA 6714	08 9159 7288
Port Hedland	Port Hedland Office, Anderson Street Port Hedland WA 6721	08 9173 2339
Regional Power Division (all towns fed from diesel/hydro power stations, includes Kununurra, Wyndham, Derby, Broome, Exmouth, Carnarvon, Meekatharra, Exmouth, Leonora, Esperance, other minor towns)	Kewdale Office, Abernethy Road Kewdale WA 6105	08 9441 3439

## **A New Connection Process For Loads up to 125 Amps**

Western Power recently wrote to all electrical contractors advising of the introduction of a new, optional installation connection process for new electrical installations. The new process will be available for new residential and small non residential installations, up to 125 amps and using direct wired metering.

In brief, the new arrangements will allow the electrical contractor, if he or she wishes (and is so authorised by Western Power), to install the Western Power revenue meter and install/connect the cable between the consumers main switchboard and Western Power's point of supply (typically a pillar in the front garden) in preparation for Western Power's inspection and/or fitting of a fuse to energise the consumer's installation.

**Note:** A Notice of Completion must be received by Western Power before it can energise the installation.

This new process was detailed in the recent letter sent to all registered electrical contractors and builders in the metropolitan area. The letter included application forms for new connections, meter issues and the introductory session for electrical workers to become authorised by Western Power, for this work.

Any electrical contractor who did not receive this information may obtain a copy by telephoning Western Power on 08 9479 2659.

The process will be introduced into non metropolitan areas during the ensuing twelve months.

Electrical contractors and their electrical mechanic employees may become authorised to do this extra work by attending a Western Power training course. At the completion of the course, the electrical worker will receive a certificate, a copy of the work book, a video and a pillar access key. The authorisation received applies only to Western Power supplies.

Contractors may choose to do this extra work as a way of value-adding to their service and differentiating it from that of other contractors. The value-adding comes from the reduction in delay to having supply connected.

This Office supports the concept of giving electrical contractors the option of offering the meter installation and connection device if they wish, on the basis of improved customer service.

*For further enquiries, please phone Maurie Elvin, Western Power, on 08 9240 4156.*



*Peter Rowson of DBR Electrics oversees his electrician Renato Varricchio completing the first installation connected under the new Western Power connection arrangement*

## **Electrical Standards - Marine Vessels**

The Office of Energy recently issued a formal Guideline to clarify requirements for:

- electrical safety standards of marine electrical installations, and
- related electrical licensing needs.

The Guideline supersedes an earlier policy statement.

A copy of the Guideline is attached as a supplement to this Electrical Focus.

## **Amendment No 1/98 to WA Electrical Requirements**

Western Power has introduced a standard arrangement for single phase un-metered low voltage supplies up to 20 amps, located in road verges.

The following action is required:

- Add the new page 2-53 "2.13 Public Area Supplies" after page 2-52 in the WA Electrical Requirements manual.

A copy of the page is enclosed with this Electrical Focus.

## ***Dangerous Practice - Sleeving of Earthing Conductors***

Electrical inspectors are finding increasing instances where an unused earthing conductor, typically laid up in a sheath with live conductors, has been sleeved and then used as an active or neutral conductor.

**This is a dangerous practice.** A person who cuts into an earthing conductor part way through the length of a circuit expects the conductor to be at earth potential. Or, in the case of older installations, the bare earth conductor could be live. This was actually revealed in a recent investigation.

This practice also contravenes the requirements of AS 3000 Wiring Rules.

Standards Australia Committee EL/1 Enquiry C.781/95 to Clause 3.2.2.1 addresses this matter specifically. The Ruling to the enquiry concludes "Green and green/yellow insulated conductors may be used only as earthing or equipotential bonding conductors".

There are two conclusions to this important safety issue:

1. An earthing conductor must only be used as an earthing (or bonding) conductor. It is not acceptable to sleeve an earthing conductor for use as an active or neutral conductor.
2. An active or neutral conductor must not be sleeved for use as an earthing conductor.

## ***Fee Increases for Renewal of Registration of Electrical Licences***

Fees for renewal of registration of licences for electrical workers, in-house electrical installers and electrical contractors were increased on 24 April 1998. The fee increases were necessary to recover some of the increased costs associated with providing electrical licensing and related services.

The new registration renewal fees are:

electrical worker	\$16.00 per year
in-house electrical installer	\$115.00 per year
electrical contractor	\$230.00 per year

This is the first increase in registration fees since 1994. It is intended that, in future, registration fees will be reviewed more regularly.

These fee increases were published in the Government Gazette on 24 April 1998.

## ***Dangerous Light Fittings***

There have been reports of several recent instances in Victoria where the inappropriate use of luminaires has caused fires.

The basic problem was the use of tungsten halogen light fittings that did not retain a dislodged or shattered lamp. In the reported cases, fragments of the shattered lamps fell onto combustible material, resulting in fires.

Electricians need to be aware that any electrical accessories that are being installed, in addition to being approved or acceptable, must also be 'fit for purpose'. Manufacturers have a responsibility to provide safe electrical accessories and equipment. Persons who install the products have a responsibility to ensure that the operation of these accessories and equipment in particular locations will be safe.

Clause 1.2 of AS 3000 covers general protection arrangements for electrical installations.



*Electrical accessories that are being installed, in addition to being approved or acceptable, must also be 'fit for purpose'*

## **Electrical Licensing Board Disciplinary Actions**

Since Energy Bulletin No.9 was published in December 1997, the Electrical Licensing Board has interviewed six persons and conducted six disciplinary proceedings.

The outcomes of the proceedings are summarised as:

- Mr D McHugh of Dex Electrical had his electrical contractor's licence cancelled.
- Mr P T Joel of Hi Grade Electrical Services had his electrical contractor's licence cancelled.
- Mr J F Branch had his electrical worker's licence suspended.
- Mr B M Martin had conditions placed on his electrical worker's licence. These conditions require him to work under supervision until he demonstrates his competence in checking and testing and safe working practices, to the satisfaction of the Board. As a result of these actions,

Mr Martin's electrical contractor's licence in the name of Perth Electrical Services was no longer valid.

The Board's main area of concern continues to be the failure of some electrical workers and contractors to check and test installations. Serious faults are sometimes not detected because thorough checking and testing is not being carried out. These faults include transpositions of phase and neutral conductors and the MEN connection not being made.

As a consequence of this, the Board requires the majority of operatives who are the subject of interviews or proceedings to undergo an assessment of their competence with particular emphasis on checking and testing. In some cases, the Board has required the person to submit documentary evidence of appropriate checking and testing procedures, or a management plan to ensure that future electrical work they perform (or for which they are responsible will meet required standards).

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### **PROSECUTIONS FOR BREACHES OF THE ELECTRICITY (LICENSING) REGULATIONS 1991 1 February 1998 to 30 June 1998**

<i>Breach</i>	<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Fine &amp; Court Costs (\$)</i>
<i>Unlicensed electrical work Regulation 19(1)</i>	<i>G Blevins (Eaton)</i>	<i>NLH</i>	<i>1685.00</i>
	<i>D Buchanan (Heathridge)</i>	<i>NLH</i>	<i>400.00</i>
	<i>S Coulcher (Morley)</i>	<i>NLH</i>	<i>835.00</i>
	<i>R Rapp (Willetton)</i>	<i>NLH</i>	<i>889.00</i>
	<i>R Trickey (Innaloo)</i>	<i>NLH</i>	<i>469.50</i>
	<i>A Trinder (Gingin)</i>	<i>EW 125688</i>	<i>665.00</i>
	<i>C Rawson (Ballajura)</i>	<i>EW 122322</i>	<i>2025.00</i>
<i>Advertising without displaying the electrical contractors licence number Regulation 45(1)</i>	<i>Value Holdings Pty Ltd T/A Ace Electrics (Kewdale)</i>	<i>EC 000082</i>	<i>575.00</i>
	<i>Al Pearce Electrics Pty Ltd (Mt Pleasant)</i>	<i>EC 001148</i>	<i>575.00</i>
	<i>Arrow Electrical Services Pty Ltd (South Fremantle)</i>	<i>EC 000193</i>	<i>260.50</i>
	<i>Onofaro Nominees Pty Ltd T/A Atlas Electrical Service (Stirling)</i>	<i>EC 000205</i>	<i>575.00</i>
	<i>Slate Holdings Pty Ltd T/A C G Ryan Electrical Contractors (Kallaroo)</i>	<i>EC 1588</i>	<i>575.00</i>
	<i>Eric Noel Reid T/A Challenge Electrical (Heathridge)</i>	<i>EC 000465</i>	<i>575.00</i>

<i>Advertising without displaying the electrical contractors licence number Regulation 45(1)</i>	<i>Neville John Thwaites T/A Coronet Electrical (Morley)</i>	<i>EC 003778</i>	<i>575.00</i>
	<i>Current Affair Electrical Pty Ltd (Leederville)</i>	<i>EC 003883</i>	<i>330.00</i>
	<i>Blackbox Holdings T/A Dunsmore Electrical Services (Halls Head)</i>	<i>EC 002714</i>	<i>145.00</i>
	<i>G Fielder T/A Fielder Electrical (Willetton)</i>	<i>EC 002999</i>	<i>245.00</i>
	<i>G.A.S. Structural Pty Ltd T/A G &amp; S Industries (Osborne Park)</i>	<i>EC 000923</i>	<i>345.00</i>
	<i>Christopher John Newick T/A Newro Electrical Service (O'Connor)</i>	<i>EC 000971</i>	<i>279.00</i>
	<i>P Holland T/A P G Holland Electrical Service (Midland)</i>	<i>EC 003597</i>	<i>575.00</i>
	<i>B Russ T/A Russ Electrical (Geraldton)</i>	<i>EC 001577</i>	<i>500.00</i>
	<i>B Leppard T/A Sentinel Electrical (Noranda)</i>	<i>EC 002913</i>	<i>575.00</i>
	<i>Shand Electrics Pty Ltd (Kingsley)</i>	<i>EC 001636</i>	<i>575.00</i>
	<i>Norma Nominees Pty Ltd T/A Wanneroo Electric &amp; Alarm Service (Greenwood)</i>	<i>EC 001379</i>	<i>575.00</i>
<i>Substandard electrical work Regulation 49(1)</i>	<i>A Gilbert (South Yunderup)</i>	<i>EW 110386</i>	<i>1575.00</i>
	<i>T Titterton (Margaret River)</i>	<i>EW 109171</i>	<i>675.00</i>
<i>Caused or permitted unsafe wiring to be connected or remain connected to an installation Regulation 50A</i>	<i>T Titterton (Margaret River)</i>	<i>EW 109171</i>	<i>675.00</i>
<i>Failed to submit a Preliminary Notice Regulation 51</i>	<i>I Rothnie T/A Murray River Electrical Co (Pinjarra)</i>	<i>EC 004373</i>	<i>3820.00* 12 Offences</i>
<i>Failed to submit a Notice of Completion Regulation 52</i>	<i>I Rothnie T/A Murray River Electrical Co (Pinjarra)</i>	<i>EC 004373</i>	<i>* 7 Offences</i>
	<i>P Mouncey (Geraldton)</i>	<i>EC 002326</i>	<i>345.00</i>
<i>Engaged, Employed or Instructed an unlicensed person to carry out electrical work Regulation 53</i>	<i>P Kay T/A Urban Electrics (Gingin)</i>	<i>EC 001539</i>	<i>665.00</i>
	<i>Winsill Pty Ltd T/A Wedgefield Plumbing (Broome)</i>	<i>NLH</i>	<i>3800.00</i>
<i>Submitted a Notice of Completion which was not signed by the nominee Regulation 54</i>	<i>I Rothnie T/A Murray River Electrical Co (Pinjarra)</i>	<i>EC 004373</i>	<i>* 7 Offences</i>

NLH No Licence Held \* Global conviction (fine and/or costs cover multiple charges).

Note: There were four other prosecutions finalised in this period. The details of these prosecutions are not printed above as they resulted in either a spent conviction order or a conditional release order being issued.



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## SUPPLEMENT

### **Advice to Marinas, Yacht Clubs and Pleasure/Commercial Fishing Boat Owners/Operators in Western Australia**

#### *Pleasure/Commercial/Fishing Boats — Electrical Installation Guideline*

In the interests of safety and protection from fire and shock, the following Guideline has been issued under the provisions of Section 33AA of the *Electricity Act 1945*.

#### **Shore Power Supply**

Shore power supply installations including marinas are to comply with AS 3000 and Sections 1 and 2 of AS 3004 where relevant, in accordance with Regulation 49 of the *Electricity (Licensing) Regulations 1991*.

For **pleasure craft**, connection of permanent on-board 240 volt wiring to the shore supply may only be done via a double insulated 15 amp (heavy duty) flexible cord which plugs into an appliance inlet socket installed on the superstructure of the boat.

Inspections may be carried out by electrical inspectors to monitor compliance.

Safety switches (residual current devices) are recommended for protection of the shore and marina power outlets.

#### **On-Board Electrical Installations**

It is recommended that for **pleasure craft**, on-board electrical installations comply with Sections 3 and 4 of AS 3004, as this is effectively the national Code of Practice for boat installations.

In the case of all types of boats/vessels, if the person performing the installation work decides not to conform to Sections 3 and 4 of AS 3004, the work will nonetheless need to be technically sound. It must comply with the safety and technical requirements of AS 3000 to ensure protection from fire and shock.

Inspectors may inspect on-board electrical installations and forbid their use if considered unsafe or dangerous, until rectified.

**Note:** For commercial vessels whose on-board installations will not comply with AS 3004 Parts 3 and 4, additional requirements under the Western Australian Marine Act 1982 and Regulations may need to be complied with — contact the Department of Transport (Marine Safety) for further details.

#### **Electrical Licensing**

Any part of an installation that is to operate at a voltage greater than 50 volts AC or 115 volts DC must be carried out competently and by licensed electrical mechanics or electrical contractors as appropriate.

*Issued by the Director of Energy Safety  
Office of Energy  
August 1998*