

electrical focus

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Amendment No. 03 to WA Electrical Requirements

Amendment No. 03 to WA Electrical Requirements was issued on 17 March 2003.

The amendment involves changes to Section 13.8.6.2 "Types of Metering Systems Available" and Section 13.8.6.3 "Conditions for Multiple and Distributed Master Metering with Remote Reading Facilities".

The amended information is provided in a loose-leaf 'cut and paste' format inside this edition of the Energy Bulletin. The amendment may also be obtained from Energy Safety's website at www.energysafety.wa.gov.au and by clicking on "Information"/"Publications".

The amended version of the WA Electrical Requirements (ie. incorporating this Amendment No. 03) may also be downloaded from the above page on Energy Safety's website.

Clashing Overhead Lines and Bushfires

This summer [2002/03] has seen a large number of severe bush fires occurring throughout the State.

The causes of the bush fires are many and varied. However, one known source of ignition is clashing of overhead power lines. Conductors clash when trees hit against them in high winds or when slack aerials make contact in strong or turbulent winds. The resultant electric arc produces hot metal debris that falls to the ground, setting fire to dry vegetation.

Other known causes of bush fires include the operation of high voltage drop-out fuses which can expel hot particles that fall to the ground and pole top fires caused by electrical leakage over polluted insulators setting fire to wood poles.

If the hot debris lands in flammable material such as dry grass, it can start a ground fire, which may spread quickly in hot dry winds. The consequences can be disastrous.

It is therefore very important that, where overhead conductors are suspected of being able to clash together or where trees are likely to interfere with overhead conductors, this is reported to the electricity supply network operator for preventative action. If the instances are on private systems, then the relevant action must be taken by the owners and operators of the lines.

Where high voltage expulsion fuses or other electrical equipment are located in areas such as dry grass paddocks or natural bush land, then provision should be made to reduce the risks of ground fires occurring and spreading. The matter should be brought to the attention of the electricity supply network operator or owner of the equipment for appropriate action.

Energy Safety



Identity of Operatives and Lost or Stolen Licences

Energy Safety licenses electrical contractors, electrical workers and gas fitters who, by the nature of their business, may have access to homes and businesses, including sensitive sites. This is becoming more of a security issue in the current environment and it is now more important to ensure the correct identity of persons being licensed.

Energy Safety is currently reviewing its processes and considering the most appropriate methods of checking a licence applicant's identity, and suitability to be licensed, particularly when they first make application.

It has also reviewed its processes for reissuing lost or stolen electrical worker or gas fitter licences and certificates of registration. Previously, new licence documents were issued with the same licence number. In future, if a licence holder reports his/her licence or registration as lost or stolen, the licence will be cancelled and new documents issued with a new electrical worker/gas fitter number.

To assist employers and others, details of lost and stolen licences will be listed in future Energy Bulletins.

Spouses/Partners in Electrical Contractor Partnerships

The "management" and "nominee" modules of the Electrical Contractors Training Program (ECTP) must be held by the person(s) who operate(s) the electrical contracting business.

The modules may be held by one person, for example, the electrical contractor who is also the registered nominee, or they may be "shared" by two persons.

Persons operating an electrical contracting business often comprise a couple where one is the electrical worker and the other is the person who carries out the paperwork.



Generally however, it is only one person who has completed all the required management and nominee modules of the training program (or filled the previous requirements by being interviewed by an electrical inspector).

A problem then arises if there is a change of circumstances and the registered person leaves the business, becomes incapable of working as a contractor or dies, as the other person is often left in a situation where they are unable to continue operating the business as they do not meet the criteria for holding a licence. This results in the licence being cancelled, a situation that can be avoided. If the other person had also completed the management modules of the ECTP, they would then be able to employ a nominee (who has completed the appropriate ECTP nominee modules) to perform the electrical work and continue to operate the business.

Energy Safety therefore suggests that both partners consider completing the management modules of the ECTP so they are able to continue trading in unforeseen circumstances. In any case, completing the management modules will give the non-registered partner a better insight into the business of electrical contracting.

Electrical Licensing and Safety Requirements for Ground Geophysical Survey using Electrical Transmission Equipment

Energy Safety recently introduced electrical licensing requirements for electrical work associated with the above equipment.

Typically, ground geophysical surveying work that uses electricity as a testing medium involves the use of a portable generator supplying a variable frequency/voltage device by cables connected to large shallow electrodes installed in a pit. The installation and connection of the above equipment is considered to be "electrical work" as defined in the *Electricity (Licensing) Regulations 1991* and is not exempted from the need for the work to be carried out by a person holding the appropriate licence. As such, a permit or licence is required to be held by a person performing this work.

Energy Safety, in recognising the nature of the work, the generally remote location of its operation and the specialised equipment used, considers the application of certified electrical safe work procedures (certified by an

electrical engineer) and compliance with either of the two following licensing arrangements to satisfy the current legislative requirements:

1. Permit for the installation of Ground Geophysical Survey Equipment

Company selected employees who are deemed by the company to be competent in respect of the certified electrical safe work procedures can apply for a permit. The company is to maintain a register of current permit holders.

or

2. "A" Grade Electrical Mechanic

A licensed "A" grade electrical mechanic can perform installation of this equipment in accordance with the certified electrical safe work procedures.

Companies that operate this equipment are required to produce and hold the certified electrical safe work procedures. The certification is to be provided by a professional electrical engineer registered on the National Professional Engineer Register.

These new requirements were introduced during 2002 after industry consultation and came into effect on 1 January 2003.

Fee Increases for Electrical and Gas Licences

Fees for application, registration and renewal of registration of licences for electrical workers, electrical contractors, in-house electrical installers and electrical contractors were increased on 31 January 2003. Application and re-application fees for gas permit

and authorisation holders were also increased.

The fee increases were necessary to move toward full cost recovery in respect of expenditure associated with administering electrical and gas licensing and related services.

The purpose of licensing is to ensure the competence of persons who work in industry, thus ensuring high standards of safety for the community generally. The system of licensing for electrical and gas operatives is operated to maintain these standards of safety for the public and industry.

It is anticipated that only one more "step increase" in electrical worker/gas fitter licence fees will be required to bring them to full cost recovery. After that, fees are expected to be adjusted annually only to cover costs due to inflation.

Unfortunately, as the costs involved in administration (including audits, enforcement actions etc.) of this system rise, it is necessary to increase licence fees.

The new fees are:

Electrical worker licence	\$50 pa
Electrical worker application	\$30
Electrical contractor licence	\$320 pa
Electrical in-house installer licence	\$160 pa
Electrical contractor/in-house application	\$60
Gas authorisations	\$230 pa
Gas permit holder fees	\$50 pa

These fee increases were published in the Government Gazette on 31 January 2003 and became effective from that date.

Disciplinary Action Taken by the Electrical Licensing Board

1 November 2002 to
31 January 2003

The Electrical Licensing Board dealt with seven operatives during this period.

Competency Assessments

Three operatives were required to complete a competency assessment as follows:

Brendan Todd McFarland (EW 127624)

Mr McFarland failed a competency assessment on 16 December 2002 for the second time. His licence will remain suspended until he can prove his competence.

Matthew Syme (EW 127350)

Mr Syme successfully completed the competency assessment on his third attempt and his electrical worker's licence was reinstated.

Peter Hilton (EW 120523)

Mr Hilton failed to successfully complete a competency assessment on 2 December 2002. His licence will remain suspended until he can prove his competence.

Formal Proceedings

Anthony Huckerby trading as Port Hedland Electrical Services (EW 104899 EC 005134)

Mr Huckerby/Port Hedland Electrical Services caused or allowed unsafe electrical wiring to be connected and remain connected to a homestead. He failed to report electric shocks received by consumers at the homestead and failed to submit notices for work completed, within the prescribed time frames.

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The Electrical Licensing Board suspended his electrical worker's licence until he can demonstrate he is competent and satisfy the Board that he is fit and proper to hold such a licence.

The Board also cancelled Port Hedland Electrical Services' electrical contractor's licence because Mr Huckerby was considered not a fit and proper person to hold a licence. To regain the electrical contractor's licence, Mr Huckerby must satisfy the Board that he is fit and proper and must also demonstrate his business/practical skills by

undertaking and successfully completing the Electrical Contractor Training Programme.

Note: Mr Huckerby has since satisfied the Board of the requirements for his electrical worker's licence [only] and that was reissued on 18 February 2003.

Adam Volkerts

(EW 133950 EC 006362)

Mr Volkerts carried out electrical installing work at a residence in Geraldton. The work was not in accordance with the *Electricity (Licensing) Regulations 1991* and *AS/NZS 3000:2000 Wiring Rules* and an unsafe situation was created. An inspection revealed

that live parts were exposed to direct contact within the switchboard enclosure.

The Board suspended Mr Volkerts' electrical worker's licence as of 18 December 2002 and until the Board is satisfied that he is fit to carry out electrical work in a safe and satisfactory manner.

Peter James Young (EW 129908)

Peter James Young, an 'A' grade electrical worker employed by Asset Services, carried out substandard electrical work at three branches of the National Australia Bank.

The Board censured Mr Young for his actions.

**PROSECUTIONS FOR BREACHES OF THE *ELECTRICITY (LICENSING) REGULATIONS 1991* AND *ELECTRICITY REGULATIONS 1947*
1 November 2002 to 31 January 2003**

Breach	Name (and suburb of residence at time of offence)	Licence No.	Fine & Court Cost (\$)
Carried out electrical work without holding an electrical workers licence Regulation 19(1) E(L)R	Paul Francis O'Dwyer (Wilson)	NLH	561.25
Carried on business as an electrical contractor without a licence Regulation 33(1) E(L)R	Paul Francis O'Dwyer (Wilson)	NLH	561.25
Carried out substandard electrical work Regulation 49(1) E(L)R	Mathew Syme (Darlington) – 3 Offences	EW 127350	1,467.70*
Submitted a Notice of Completion to the relevant supply authority in respect of the electrical installing work not being completed Regulation 52(3) E(L)R	A B Tilbury Pty Ltd (Bayswater)	EC 001327	2,195.40
Employed/instructed an unlicensed person to carry out electrical work Regulation 53(2) E(L)R	Global Electrotech (Osborne Park)	EC 006533	1,277.70
Carried out vegetation control work within the danger zone (for reward) without training and/or in compliance with the Code of Practice Regulation 316A ER	Terrence Charles Payne (Maida Vale)	NLH	837.80

Legend: NLH No Licence Held
E(L)R Electricity (Licensing) Regulations 1991
ER Electricity Regulations 1947
* Global fine (more than one offence)

Note: There was one other prosecution finalised in this period. The detail of this prosecution is not included above as it resulted in a spent conviction order being issued.

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