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Bulletin

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Review of the Electricity Regulations Part IX

During 2002, Minister for Energy Eric Ripper requested the Director of Energy Safety to review the work practices of the electrical contracting industry. This request arose out of the disturbing trend of an increase in the percentage of 'live work' accidents involving electricians. (Another serious accident of this kind involving two electricians occurred late in March 2003)

It became evident after a short time that not only did this particular issue need addressing, but also the general obligations for safe electrical work practices in the electrical contracting industry, as covered by existing regulations.

A good deal of industry consultation has been carried out on this important project, especially with the Electrical Contractors Association. As part of that process, a discussion paper was released to industry in December 2002, encouraging feedback. A series of forums was also convened throughout the State, to explain the issues and to seek further feedback.

The 'live work' issue has been a difficult one to deal with but ultimately it is important that the personal safety of the electrical contractor/electrician and their clients is not compromised. As a result, it is proposed to provide general obligations on electrical contractors and also their employees for safe electrical working, and particular obligations (and conditions) for work on or near live equipment.

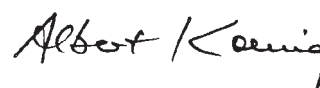
Furthermore, electrical contractors' clients already have a duty to maintain a safe workplace and it must be made clear this duty cannot be "contracted out" by employing a licensed electrical contractor and demanding that the electrical work be

done in a way that involves substantial risk to safety.

The proposed regulatory revisions will cover this issue by requiring the client to be involved in decisions to perform electrical work on or near live equipment. Where there appears to be a real need to work 'live', the client will have to balance the workplace safety obligations against the business case for no interruption to the plant. If the client's decision is to proceed without a shutdown, then strict safety requirements will apply to the way the electrical work is to be done.

This proposed new regime for carrying out electrical work will result in a safer working environment for electrical contractors, electricians, other employees and their clients. Importantly, it will apply to all in industry, so no one will be commercially disadvantaged by refusing to do work without a shutdown, when either not permitted by the regulations, or when it is simply unsafe to do so.

The review is now at the stage where a final summary report (including recommendations for changes to the regulations) is being prepared by Energy Safety. It will ultimately be forwarded to the Minister for Energy for approval and action. The latter is expected to include a promotional campaign to advise both the electrical contracting industry and its clients of the new requirements for safe electrical work practices.



ALBERT KOENIG
DIRECTOR OF ENERGY SAFETY

Energy Safety



Successful Prosecution for Failure to Report an Electrical Accident

In May 2002, the Director of Energy Safety brought prosecution proceedings against Western Power for failing to report an accident when a barge-mounted vertical derrick struck a power line crossing a river. Some months later, a yacht had struck this same power line and a young man was electrocuted.

When hearing the proceedings against Western Power's failure to report the accident involving the derrick, Magistrate R B Lawrence concluded that Western Power did not have a duty to report the accident to the Director of Energy Safety under regulation 63 of the *Electricity (Licensing) Regulations 1991*, although he did rule that the Director was entitled to bring the prosecution and that an accident (within the meaning of the regulations) had occurred.

The Director of Energy Safety commissioned the Crown Solicitor's Office to conduct an appeal against this decision by the Magistrate.

His Honour Justice Heenan of the Supreme Court of WA brought down his decision on the appeal in favour of the Director. He ruled that:

- The appeal be allowed.
- The decision of the learned Magistrate to dismiss the complaint and make an order for costs be set aside.
- In lieu thereof, the Defendant (Western Power) be convicted of the offence and be fined the sum of \$12,500.
- The defendant pay the Director's costs of the trial.

This outcome is an important one. It reaffirms the need for persons (including businesses and other organisations) to advise the electricity supplier and also the Director, when they become aware an electrical accident has taken place. This allows the necessary investigation to be carried out and appropriate action to be taken.

Breaches of Safety Requirements in Respect of Electricity Supply Cables to Customers' Installations

Western Power was recently charged by the Director of Energy Safety in relation to several electricity service cable safety failures which could have had serious consequences for customers.

In February 2003, Western Power pleaded guilty to three offences of the Electricity Regulations 1947, Regulation 242 (1) (a).

The offences related to:

- Transposing the active and neutral connections when terminating the consumers mains cable at premises in November 2001.
- Reconnecting an electricity supply with the active and neutral connections transposed on the service aerial to premises in March 2001.
- Transposing the active and neutral connections when terminating a service aerial to premises in November 2001.

Western Power was fined \$9,000 (for each offence) plus ordered to pay costs of \$277.70 (for each offence). Total cost was \$27, 833.10.

The transposition of active and neutral conductors can be very dangerous, as metallic plumbing fittings generally become "live" and may give occupiers of premises a potentially lethal electric shock. The electricity supply authority has the obligation to make sure that the work of its own personnel or contractors is properly performed, so service apparatus is installed and maintained in a safe condition.

These successful prosecutions by the regulator are a significant reminder for electricity supply authorities to ensure their work is carried out to a safe standard.

Energy Safety's Geraldton Office Moves to New Location

In February this year, Energy Safety's Geraldton Office moved to a new location in Geraldton.

Energy Safety is now co-located with the Department of Consumer and Employment Protection's (DOCEP's) other regulatory arms dealing with consumer protection and labour relations.

Contact details for the new Geraldton Office of DOCEP are:

Location:

Shop 3 Post Office Plaza
50-52 Durlacher Street
Geraldton WA 6530

Postal Address:

PO Box 1447 Geraldton WA 6531
Telephone: 08 9964 5644
Facsimile: 08 9964 5678



Pictured outside DOCEP's Geraldton office are, from left to right, DOCEP staff Kath Mawer, Bob Lawrence (Senior Electrical Inspector) and Irena Dillon, Shane Hill (MLA), Brian Bradley (Director General of DOCEP) and Ian Halligan

Electricity Supply Quality and Reliability Issues

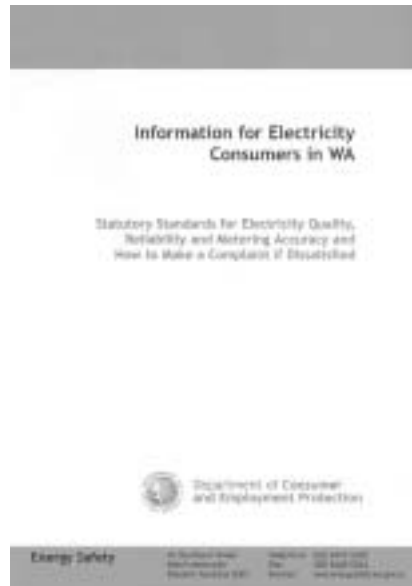
The *Electricity (Supply Standards and System Safety) Regulations 2001* specify minimum standards of supply quality and reliability and provide a procedure for consumers to refer complaints to the Director of Energy Safety for independent investigation. The supply standards and complaints procedure are described in the booklet *Information for Electricity Consumers in WA – Statutory Standards for Electricity Supply Quality, Reliability and Metering Accuracy and How to Make a Complaint if Dissatisfied*.

A recent public meeting in the wheat belt town of Koorda has highlighted the fact that many people who live in rural areas are dissatisfied with what is perceived as an unreasonable number of disruptions to the Western Power electricity supply.

Most people in country areas are mindful of the practical realities of supplying electricity throughout sparsely populated areas and appreciate the efforts made by local operational staff. They are usually reluctant to complain about the electricity supply. However, as a consequence of recent failures that resulted in long periods without supply in some areas, more than 150 complaints have been registered with Energy Safety.

If people have a complaint about their electricity supply, they are encouraged to initially refer it to their electricity supplier for resolution. If they have already done this and are not satisfied with the outcome, then they may

register a complaint with Energy Safety. The booklet explaining how to do this can be obtained from Energy Safety by telephoning 08 9422 5200. The booklet can also be viewed and downloaded from the "Publications" section of Energy Safety's website at www.energysafety.wa.gov.au.



The booklet "Statutory Standards for Electricity Quality, Reliability and Metering Accuracy" available from Energy Safety

Ethical Prize to WA Energy Firm

A WA alternative energy company has won the Ethical Investor magazine's national award for sustainable small company of the year 2002.

Welshpool-based Advanced Energy Systems won the award for its international work producing solutions to the problem of providing electricity in remote locations and linking renewable energy generation to traditional electricity grids.

The award was co-sponsored by the Council for the Encouragement of Philanthropy in Australia.

AES was formed in 1990 after the State Government's Renewable Energy Research Institute was wound up. Four engineers who found themselves out of jobs decided to band together and continue their work.

According to managing director Stephen Phillips, the company aimed to fill "technology gaps" between new energy technologies like solar, wind and fuel cell power and traditional electricity generation.

Most of its work is done in Asia, where it has won contracts to provide solar power generation plants to small, isolated villages.

"We have always believed that success and sustainability are compatible," Mr Phillips said.

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Energy Minister Announces New Power Stations for WA

South West Interconnected Grid



*Hon. Eric Ripper,
Minister for Energy*

In December 2002, Energy Minister Eric Ripper announced the long-awaited call for expressions of interest to provide between 300

and 330 megawatts of new generating plant to supply base load electricity to Western Power.

The private sector is being invited to build this new base load power station to meet Western Australia's electricity needs from 2007.

Mr Ripper said the new base load power station would be a key component of a strategy to increase electricity generation in the South-West of WA to deliver reliable and quality power supplies as the State continued to grow.

"This is an open and competitive process to get the best result for the people of Western Australia. Coal and gas based alternatives will have to compete head to head," he said.

"Because of the Government electricity market reforms, it's possible that the successful company or consortium may build a bigger power station and sell the excess electricity on the open market," the Minister said.

Other expected benefits included the opportunity to introduce leading edge electricity generating technology to improve efficiency, lower costs and reduce greenhouse emissions – whether coal or gas.

At the same time, Western Power has begun a program to replace some of its older generating equipment with modern and efficient gas-fired combined cycle plant at Cockburn Power Station, which will allow the replacement of older gas fired plant at Kwinana Power Station and 40 year old coal-fired plant at Muja near Collie.

Expressions of interest closed in February 2003.

Esperance

In March 2003, the Minister announced that work was set to start in July on the new \$45 million Esperance power station.

Mr Ripper said Esperance Power Station Pty Ltd, a subsidiary of energy company Burns and Roe Worley, would build the gas fired station to supply local Western Power customers.

Work will start in May on a 340km gas pipeline from Kambalda to fuel the power station.

The Minister said the power station, expected to be operational early in 2004, would supply more than a quarter of Western Power's regional customers outside the South-West interconnected grid and open up local employment and economic development opportunities.

Western Power had entered into an 18-year power purchase agreement with the company and signed a related agreement promoting investment in a new wind farm.

"This is a cost-effective and environmentally friendly solution to Esperance's future power needs," Mr Ripper said. "The gas pipeline will also open up other opportunities to replace diesel generation with gas fired generation."

Mr Ripper said it cost Western Power \$50 million a year to subsidise power supplies in regional areas off the grid.

"While there will be no change to the tariff for customers as a result of this new power station, electricity will be supplied to Western Power at a lower generation cost and at higher environmental standards than existing diesel generators," he said

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