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Electrical Accidents Cause Concern

Recently the State has seen a number of serious electrical accidents, some resulting in death. It is of great concern to this office that these accidents took place. It begs the question whether enough attention is being given to electrical safety within our community.

The first accident was that of a young woman working on an elevating work platform at a mango orchard in Kununurra. As she drove the platform out of a row of trees to turn and enter another row, the young woman drove into a nearby three phase 22 kV overhead power line. She was lucky enough to survive personal contact with the conductor.

The second accident was that of a young woman, her daughter and niece in Karratha. Both mother and daughter died when they received a severe electric shock from an electrically powered high pressure water cleaning unit, which had a badly damaged electrical cord. The damage resulted in the motor and pump becoming 'live' at 240 volts and because the earth wire was also broken due to the damage, the circuit protection did not operate. Had a 'safety switch' (RCD) been installed, it would have saved them from electrocution.

The last of the recent serious accidents involved the installation of a steel streetlight column near a 132 kV power line, in the northern Perth suburbs. The column was lifted by a crane and a



This streetlight column contacted 132 kV power lines

flashover occurred, killing one worker and very seriously injuring another worker. The crane driver also received some injury. It is too early to advise what exactly failed in terms of safety procedures, but the accident certainly should never have occurred.

These incidents show the extremely hazardous nature of electricity. It really does mean that as a community we have to be more proactive in "selling the electrical safety message" - too many people are simply not careful enough. Damaged electrical cords and appliances need to be promptly

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repaired, safety switches should be installed and safe work clearances from live conductors must be carefully observed – and ensured by appropriate barriers or formal work procedures.

Readers may recollect that this office has been working on something of a similar nature with the electrical contracting industry during the year, following detection of a trend of increasing serious electrical accidents by electricians working near or on live 240/415 volt equipment. Significant consultation has taken place with industry and proposals have been considerably modified. Recently we released a fresh discussion paper to the 'clients' of the electrical contractors, such as the Chamber of Commerce and Industry, the Master Builders Association and the Housing Industry Association. The paper invites comment on the proposals for reducing the incidence of live work, as part of the revision of Part IX of the *Electricity Regulations 1947* which deals with safety requirements for general electrical work. Anyone who would like a copy of the paper should contact Harry Hills at this office.

Best wishes for a safe and successful 2003.



ALBERT KOENIG
DIRECTOR OF ENERGY SAFETY

Reform of Western Australia's Electricity System

Energy Minister Eric Ripper recently announced wide-ranging reform of the State's electricity system was essential if Western Australia was to encourage economic growth, attract investment and create new jobs.

Speaking after the release of a framework for electricity reform, Mr Ripper said high electricity prices were a handbrake on the State's economy and disadvantaged consumers.

An independent study, commissioned by a top-level task force set up by the Government in 2001 to make recommendations for change, showed a cut in electricity prices and 2,900 new jobs would flow from reform plans.

"While the State's electricity system must become more competitive to develop the economy, this has to be balanced with strong regulation to protect consumers, maintain the uniform tariff principle and preserve existing rebates," the Minister said.

The electricity reform task force commissioned an independent cost and benefit study, which said the benefits of reform included an average 8.5 per cent cut in retail electricity prices, a boost to gross state product of up to \$300million a year by 2010 and 2,900 new jobs.

Mr Ripper said the Government remained implacably opposed to privatisation of Western Power. "Privatisation will not achieve true competition," he said. "It would simply turn a public monopoly into a private monopoly, which fails to address the structural problems blocking new entrants – including renewable energy suppliers – from competing in the energy market."

The Minister said the task force examined national and international energy reforms before drawing up its 79 recommendations. "The task force has learned from the positive and negative experiences of others and put forward a reform plan that suits Western Australian conditions," he said.

Mr Ripper said the Government would consider the recommendations – and the views of stakeholders including energy unions – before adopting its final position on the reforms.

He acknowledged the work of taskforce members – former United Kingdom oil and gas industry executive Mr John Hyslop OBE (chairman); energy economist Dr Frank Harman; former Western Power executive John Kelly and WA Office of Energy chief Anne Nolan and her predecessor Dr Les Farrant.

Copies of the report are available at <http://www.ertf.energy.wa.gov.au>



Hon. Eric Ripper,
Minister for Energy

Electricity Reforms Cleared by Cabinet

A milestone has been reached in the history of the State's energy industry, with the WA Government accepting the key recommendations of the electricity supply industry reform taskforce (refer to the previous article "Reform of Western Australia's Electricity System").

The taskforce, which had been commissioned in 2001 to investigate and report on the means to introduce competition into the State's electricity supply industry that is currently dominated by Western Power, recommended:

- Splitting Western Power into four separate Government-owned businesses:
 - A power generation business that would contain all the existing power stations of the South West grid and the Pilbara grid.
 - A networks business that contains the high voltage transmission system (330 – 66kV) and the distribution system (33kV and below), that manages the power system as a whole and that provides "transport services" to all users of the power system, through an access regime that will be independent of any other interests.
 - A retail business that sells electricity competitively sourced from various generation businesses (publicly owned and private, including also renewable energy providers) to the existing 800,000 electricity customers, who will become "contestable". This means other retailers (for example, AlintaGas, which intends to also retail electricity) will be allowed into the market to offer alternative, competing retail services for the supply of electricity.
 - A regional power business that will own and operate the independent electricity networks in the various remote parts of the State. These require ongoing Government support due to their scale and cost structures (ie. the

competitive framework for the south west of the State is not suitable for this part of the industry).

- A number of other measures such as new legislation for the licensing of participants (generators, network operators and retailers) in the industry, a framework of market rules for the electricity trading regime and a new network access regime, all to provide for the proper development of a competitive electricity market.

The Government has stated it will now proceed with the implementation program, which itself involves considerable work (such as the disaggregation of Western Power, the drafting of legislation etc). The reforms are expected to be in place by mid 2005.

Retail Gas Contestability

The Western Australian Government is committed to the establishment of a competitive gas market in this State, commonly referred to as 'retail gas contestability'. Allowing customers to choose their preferred gas retailer is an outcome of the Government's energy industry reform process and is in line with the competition principles agreement by which all the States, Territories and the Federal Government is bound.

Competition between producers and also between retailers is intended to improve service delivery and reduce energy prices. Having a choice means that gas retailers must compete to win business from consumers.

The process to provide full retail gas contestability in WA has commenced.

Since January 2002, customers using more than 1TJ per annum have been able to choose their own retailer. A number of customers have already changed retailer.

Once the necessary legislation, rules and processes have been put in place, which is likely to be completed during 2003, all gas customers will be able to choose their retailer.

Under full retail contestability, gas fitters will no longer only be dealing with one retailer; they may need to deal with several retailers.

Assessing the Risk to Critical Infrastructure in Western Australia

Following work undertaken by the Commonwealth's Critical Infrastructure Protection Group, of which Western Australia is a member, the Western Australian State Emergency Management Committee (SEMC) was requested to undertake a review of the prevention, preparedness, response and recovery aspects of critical infrastructure risk within the State.

To progress this, SEMC established a Critical Infrastructure Project Committee, Chaired by Mr B Brennan, Deputy Commissioner of Police. The Director of Energy Safety, as the Chair of the Lifeline Services Group, accepted an invitation to be a member of the committee and also to chair a sub-group responsible for energy and utilities critical infrastructure.

The sub-group is currently requesting owners/operators to review the security and resilience of their energy infrastructure (pipelines, gas production plants, power stations etc) and to develop strategies to manage any identified risks or vulnerability.

Liquid Fuels Shortage Planning

Energy Safety is the Hazard Management Authority responsible for liquid fuels shortages, representing the West Australian Government on the National Oil Supplies Emergency Committee (NOSEC).

This committee meets on a needs basis to plan for and develop strategies to manage a national fuel shortage should it occur.

Currently, NOSEC is planning a major exercise to test the national fuel shortage plan for 2003.

Reduction of 'Standby' Power Consumption of Appliances

Energy Minister Eric Ripper has announced that State and Federal Energy Ministers are considering a plan to reduce the power consumption of household appliances when in 'standby' (or 'sleep') mode.

This unnecessary power consumption creates about five million tonnes of greenhouse gas emissions per year and costs consumers around \$500million. Western Australia's share in this wastage/cost is about 10 per cent.

It is estimated that up to 10 per cent of domestic power use may

be due to standby power consumption. The appliances include televisions, video recorders, computers, microwave ovens, cordless phones and hi fi equipment.

Mr Ripper said there was a range of possible measures designed to reduce standby power consumption, including:

- incorporating standby energy consumption in the 'star' ratings to allow consumers to compare domestic appliances;
- conducting an annual survey to benchmark the standby power consumption of products on the market;
- expanding a voluntary international benchmark for energy-efficient office and home entertainment equipment to cover domestic appliances; and
- setting minimum energy performance standards for standby power and removing the right to sell products that don't meet these standards.

Ministers are expected to decide on a national strategy to reduce standby power consumption by as much as 75 per cent. This issue will be of significance for the energy efficiency regulatory regime, which is enforced by Energy Safety.

Further information, including energy saving tips on house

design, insulation, water heating (including solar), home cooling and heating, lighting, white goods and renewable energy applications, is available from Sustainable Energy Development Office website:

<http://www.sedo.energy.wa.gov.au> or by phoning the Energy Smart Line on 1300 658 158.

Staff Exchanges Between States

In July this year, Peter Harris, Deputy Chief Inspector Petroleum and Gas Queensland, spent four weeks in Energy Safety's West Leederville office to gain an understanding on the way Energy Safety regulates the industrial segment (including the safety of Type B appliances) of the Western Australian gas market.

Following Peter's visit, a reciprocal arrangement provided Energy Safety's Jillian Reynolds, Principal Engineer Gas Installations and Appliances, with the opportunity to spend three weeks with our Queensland equivalent.

We are looking forward to Jillian being able to introduce a number of strategies that she has learnt from her Queensland experiences, to improve the safety of gas appliances and installations in Western Australia.

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