



electrical focus

In this issue...

- Regulatory Requirements for Electrician Licences

- Safety of Underground Pits

- Standards Australian Seminar – Hazardous Areas

- New Arrangements for Appliance “Approvals” in Western Australia

- Electrical Equipment in Hazardous Areas

- Prosecutions for Breaches of the Electricity (Licensing) Regulations 1991



Office of **Energy**

Regulatory Requirements for Electrician Licences

The lead article of this Energy Bulletin No. 20 provided the rationale for review of the safety and technical competencies and assessment requirements for apprentices seeking an electrician (“A” grade) licence. The review and development work was carried out by members of the National Uniform Electrical Licensing Advisory Council (NUELAC), which includes industry associations and all members of the Electrical Regulatory Authorities Council (ERAC).

The Office of Energy, as an active member of both the above councils, has assisted with much of the development work. The following summary details the work done to date.

Essential Performance Capability Requirements

The 1996 list of 70 “learning outcomes” has been revised into a statement of 66 “essential performance capability requirements” ranging from electrical fundamentals through to diagnosing faults in electrical circuits and how to work safely on electrical plant.

Implementation of the revised list, in a practical sense, will be through the requirement of licensing authorities that each essential requirement is covered by each training package and that each apprentice must achieve the 66 specified essential performance capability requirements. This requirement should be met without difficulty as both existing approved national training package capabilities were recently successfully mapped against the essential requirements.

The document “List of Essential Performance Capability Requirements for Licensed Electricians” also identifies some items of the list as ‘critical items’ and these are the basis of the capstone assessment.

Capstone Assessment

Registered Training Organisations (RTOs) will be expected to apply a capstone assessment to each apprentice electrician during the late part of their training for the purpose of confirming they have attained the ‘critical items’ of the Essential Capabilities List. The capstone assessment is planned to be open book with both written and practical assessment components performed over the course of one day.

What are the Options?

If an RTO doesn’t apply these requirements, the apprentice will need to undertake and pass separate examinations, specifically to assess if a licence can be granted.

Certification

Following the successful completion of the required training, including On-Job, Off-Job and Capstone Assessment under the scheme outlined above, an apprentice is expected to receive a suitably endorsed qualification to certify that he or she has successfully completed the required electrical training and the capstone assessment. In the case of Western Australia, upon receipt of the endorsed qualification, the Electrical Licensing Board will issue an electrician licence to the apprentice without further examination, provided the issuing RTO has the prior approval of the Electrical Licensing Board.

Safety of Underground Pits

Western Power Corporation (WPC) has been installing underground pits (instead of URD pillars) in some areas that have been converted from overhead supply to an underground supply (eg. Wembley and Cottesloe). These pits are installed at the point where consumers' mains are connected to WPC's distribution system. The pits are made from polymeric compound and have a round concrete lid. Insulation Piercing Connectors (IPCs) are used to connect the consumers' mains cable to WPC's distribution system cable, inside the pit.

Incidences of electric shock have been reported where persons had been standing on the pits and had touched adjacent ground or other earthed objects. There has also been one report in which a workman who was working on equipment in a pit in wet conditions had received an electric shock.

The Office of Energy has asked WPC to investigate the problem and to carry out modifications to eliminate these safety concerns. This will take



Underground pit

some time due to the number of pits involved. Until the investigation and remedial actions are completed, electrical contractors are advised at all times to treat the cable and connectors within the pits as "live" and therefore use appropriately insulated gloves or tools.

Electric shocks, however minor, experienced by electrical workers or members of the public must be reported to the relevant supply authority (refer to the telephone directory) and the Office of Energy on telephone 1800 678 198 (all hours).

New Arrangements for Appliance "Approvals" in Western Australia

In Energy Bulletin No. 18 (August 2000), we invited expressions of interest from technical consultants to assist electrical appliance manufacturers and importers when preparing prescribed electrical appliances for type testing, and also to assist them with subsequent submissions of documentation required to facilitate "approval" from a regulator or any other competent (recognised) body.

The response has been good, with a number of individuals and companies expressing interest. Information about this assistance arrangement, together with details of the participating consultants and how to contact them, will be shown on the Office of Energy's website in April 2001 (refer to http://www.energy.wa.gov.au/html/body_5.1.html).

Electrical Equipment in Hazardous Areas

The article entitled "Electrical Equipment in Hazardous Areas" in Electrical Focus No. 19 (December 2000) has generated dialogue from key industry participants.

The Office of Energy is currently reviewing these hazardous area requirements with a view to drafting a Hazardous Area Policy. The draft policy will be circulated to industry for comment. Further information will be advised in subsequent editions of the Electrical Focus.

Standards Australia Seminar – Hazardous Areas

Standards Australia is hosting a series of nationwide seminars on the development in hazardous areas management and equipment.

The seminars will be of interest to those who deal, at any level, with "Ex" equipment and hazardous areas.

The seminars will consist of two half-day sessions:

- Morning Session
8.30 am to 12.30 pm
Changes in Hazardous Areas Standards
- Afternoon Session
1.30 pm to 5.30 pm
"Ex" Certification Schemes and

Electrical Equipment in Hazardous Areas Competency Standards

The Perth seminar will be held on 5th April 2001 at the Mercure Hotel, 10 Irwin Street, Perth. Registrations will commence at 8.00 am.

Kevin Rosher, Principal Engineer Electrical Installations & Appliances, Office of Energy, will chair the Perth seminar.

For further details and to register, please contact Standards Australia (quoting Hazardous Areas Seminars – S01025):

Tel: 1300 656 529 Fax: 02 8206 6041
Web: www.events.standards.com.au

PROSECUTIONS FOR BREACHES OF THE ELECTRICITY (LICENSING) REGULATIONS 1991 1 November 2000 to 28 February 2001

<i>Breach</i>	<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Fine & Court Cost (\$)</i>
<i>Caused or permitted unsafe wiring/equipment to remain connected Regulation 50A E(L)R 1991</i>	<i>M Whyte (Kelmscott)</i>	<i>EW 102651</i>	<i>997.00</i>

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