

SERVICE CONNECTION INCIDENT & PROSECUTION (AUSTRALIA)

1. INTRODUCTION

AGL Electricity Limited (AGL) was recently found guilty by a jury of contravening section 22 of the *Occupational Health & Safety Act (Vic)* by failing to ensure, as far as practicable, that members of the public were not exposed to risks to their safety arising from the conduct of AGL's electricity distribution business. A fine of \$AUD100,000 was imposed.

The conviction relates to an aerial electricity service connection AGL linesmen made to a Rosanna building site in December 1998. Seven weeks later a carpenter working at that site was electrocuted when he touched the raiser bracket supporting the service which had become 'live' through contact with damaged tails of the service cable.

In returning the guilty verdict, the jury effectively found that:

- the service connection by the AGL linesmen had been faulty, and had been left in the manner in which it was found at the time of the fatality. That is, the cable insulation had been penetrated and the raiser bracket made live and the weight of the service taken by the cable tails rather than the termination clamp; and
- AGL should have had an inspector attend each site where a new service was installed to ensure that the termination clamp was properly taking the weight of the service and that the cable tails were clear of metal.

AGL had argued that the linesmen's account of their installation as being compliant with industry practice and left in a safe condition should be accepted, and the company should be found "not guilty".

In relation to the further element of the offence – that AGL did not have an adequate system for auditing and inspecting the work performed by the linesmen -- the court clearly understood that current industry practice in Victoria (as it had been in SECV times) did not involve any inspection of service connections in the period immediately following their installation by linesmen.

In his sentencing remarks the judge concluded that

"linesmen, however confident and experienced, will occasionally make mistakes with potentially lethal consequences"

and

"the Court must respond to the jury's verdict by sending a clear message to the industry that more rigorous scrutiny is required of the work of linesmen".

2. INVESTIGATION

Some time after the incident, reconstruction of the event by the Office of the Chief Electrical Inspector (OCEI), the Victorian electricity safety regulator, established a mechanism by which the raiser bracket could have become live during the installation of the aerial service cable. The jury accepted that this was how the incident must have occurred.

It is clear that the design and manufacture of the raiser bracket created a potential pinch point in which the tail of a service could be trapped, either through lack of care during service erection or by other events after the erection of the service. There have been no other instances of the cable tails jamming in this manner.

Current Victorian practice is for services to houses to be fused at the house end after termination on unearthed brackets. XLPE insulated aerial cable is used.

3. ACTION FOLLOWING INCIDENT

3.1 OCEI Committee

A committee established by OCEI, with representation from the Victorian electricity distributors and manufacturers of raiser brackets, recommended changes to:

- the customer provided raiser bracket to eliminate the pinch point; and
- the Victorian electricity supply industry standard service cable clamp to make clearance of tails from the steel raiser bracket easier to achieve.

3.2 AGL Electricity Action Following Incident

- (A) AGL Electricity introduced a cover sleeve to be fitted over the active tails of all new and replacement overhead services which prevents the tail being jammed and provides an additional layer to reduce the possibility of abrasion.
- (B) AGL adopted the new industry design service cable clamp and added a further modification where an open elongated hook was replaced with a closed eye. This reduces the possibility of service cables being supported by the cable tails rather than the clamp.
- (C) Revised procedures have been issued as to the manner in which services are to be attached to raiser brackets which eliminate the possibility of similar accidents.

4. FURTHER ACTIONS

Following the judgement, AGL approached OCEI and the other Victorian electricity distribution businesses to set up an industry forum to consider the inspection ramifications of the AGL conviction.

OCEI has since advised that *“companies will now need to ensure that they have in place a rigorous audit regime that can detect unsatisfactory workmanship of linepersons and correct matters before they manifest into serious and potentially tragic consequences”*.

5. CONCLUSION

The court's finding regarding inspection of the installation of services could have wide implications regarding the work of electricity distribution businesses, particularly where there is the potential of direct impact on the public. The electricity supply industry will need to consider the level of inspection and scrutiny to which tasks undertaken by its employees and contractors are subjected.