

# ELECTRICAL SAFETY UNDERTAKING

*Electrical Safety Act 2002*

Undertaking to the Chief Executive, Department of Employment and Industrial Relations given for the purposes of Section 49 of the *Electrical Safety Act 2002*

By

**QR LIMITED**  
**ACN 124 649 967**

## Background

1. QR Limited (QR) is a company government owned corporation that provides rail transportation and associated services. It has provided rail transportation since 1865. It has approximately 13,200 employees.

## Incident

2. No injury, damage or incident is alleged. The prosecution is a risk-based prosecution.

## Acknowledgement

3. The Electrical Safety Office (ESO) has alleged that QR has contravened section 27 of the Electrical Safety Act 2002 (Qld) (the "Act") by failing to discharge an obligation prescribed by section 30 of the Act.
4. The facts and circumstances of the alleged contravention are as set out in the Complaint and Summons issued at Brisbane on 9 October 2007. It is alleged that "Between the 1st July 2007 and the 31st August 2007 at diverse locations in the State of Queensland QR LIMITED being a person on whom an electrical safety obligation prescribed by Section 30 of the Electrical Safety Act 2002, was imposed, did fail to discharge that obligation contrary to Section 27 of the Electrical Safety Act 2002, in that being an employer the said QR did fail to ensure that its business or undertaking was conducted in a way that was electrically safe."
5. In October 2007 an audit of the QR Electrical Safety Management System by an ESO accredited auditor found QR to be compliant. This audit was conducted as a requirement of section 67 of the Act. A Safety Management System Certificate was issued on 11 October 2007 and a copy given to the ESO.
6. QR has a current electrical safety plan which addresses improvements in the following areas:
  - Updating electrical documentation
  - Electrical safety documentation being made available electronically
  - Updating the Control Room Instructions

- Updating and modifying switching processes
- Updating the NP accreditation training

### **Alleged Contravention**

7. An Inspector appointed under the Act has made a complaint that QR contravened section 27 of the Act by failing to discharge an obligation imposed on it under section 30 of the Act ensuring QR's business or undertaking is conducted in a way that is electrically safe.

### **Statement of Regret**

8. No injury or damage has occurred and QR regrets that circumstances arose that resulted in the need for an ESO Inspector to allege a breach of section 27 of the Act.

### **Commitment to Cease Alleged Contravention**

9. QR is committed to compliance with its obligations under the Act.

### **Commitment Not To Commence Behaviour That May Lead To Contravention**

10. QR is committed to not commence any behaviour which may result in a failure to discharge its obligations under section 30 of the Act.

### **TERMS OF THE UNDERTAKING**

11. QR acknowledges its responsibility to keep workers, passengers and the public electrically safe.
12. The prosecution is a risk-based prosecution relating to non-vital QR systems. QR maintains that it manages its entity works free from electrical risk and in accordance with good industry practice.
13. QR acknowledges however the potential operational benefits of examining issues beyond compliance and what might be considered "best industry practice".
14. Within three months of the acceptance of the electrical safety undertaking QR will undertake the following actions:
  - Action 1. Engage a consultant with expertise in SCADA and communications systems, to review and report on ways to improve compatibility between the QR communications network, remote terminals and the Supervisory Control and Data Acquisition (SCADA) System. The estimated cost associated with completing Action 1 is \$70,000.00.
  - Action 2. QR will commence a review and research into protection and communication systems currently utilised by electricity entities with sizeable infrastructure, as well as those of interstate and overseas rail

operators. This review and research will include reclosing philosophies and the operation of protection systems. The following organisations will be approached to determine their willingness to participate in such an examination:

- Energex
- Ergon Energy
- Public Transport Authority (Perth, WA)
- Rail Infrastructure Corporation (Sydney, NSW)
- Network Rail (UK)
- MTR (Hong Kong)

QR will provide a report compiling the results of the above findings and suggest recommendations for improvements. The estimated cost associated with completing Action 2 is \$110,000.00.

Action 3. QR will review communication needs of field staff with respect to communications with the ECO, and review procedures for raising safety concerns relating to the operation of QR entity works.

QR will provide a report compiling the results of the above findings and suggest recommendations for improvements. The estimated cost associated with completing Action 3 is \$20,000.00.

15. QR will complete the above Actions 1, 2 and 3 and finalise the relevant reports within 12 months of signing this Electrical Safety Undertaking.
16. Within 30 days of the reports produced under Action 1, 2, and 3 above being finalised, QR will forward a copy of each report to the Executive Director ESO.
17. QR will provide to the Executive Director ESO a separate progress report into the above Actions 1, 2 and 3, 6 months after the signing of the Electrical Safety Undertaking.
18. QR, through the Electrical Safety Steering Committee will review the recommendations from the above Actions and develop an appropriate implementation plan which will be included as part of the Electrical Safety Plan.
19. Within 30 days of finalising the implementation plan, the above reports, including a copy of the implementation plan, will be forwarded to the Executive Director ESO.
20. QR will implement all of the report recommendations resulting from the Actions at clause 14, in timeframes consistent with QR's implementation plan, unless exempt by the Chief Executive, Department of Employment and Industrial Relations.

21. Various other stakeholders will be provided advice on the outcomes of the reports following the actions at clause 14, including:

- Participating Queensland electricity entities
- Participating rail organisations
- QR business units including Trackside Systems
- ECO's and electrical staff

### **BENEFIT TO INDUSTRY**

22. The potential operational benefits of reviewing issues beyond compliance through the above Actions, and an examination of what might be considered "best industry practice" will be of significant benefit to industry.

23. Findings of the above Actions will be communicated within the electricity industry and the railway industry, in particular the participants in Action 2. This will benefit both the electrical and rail industries.

24. The estimated cost of fulfilling the above three Actions is \$200,000

### **BENEFIT TO COMMUNITY**

25. Findings of the above Actions and addressing any issues identified will have potential to result in systems which go beyond compliance with consequential benefits to the community. It will also assist to define "best industry practice" and help address any community concerns for safety in the industries.

26. Additionally, benefits to the electricity industry and the railway industry will have similar potential flow on benefit to the community.

27. The estimated value of this undertaking is \$216,481. QR is committed to investing a minimum of \$216,000 on this undertaking which has the potential to significantly enhance QR safety systems and provide benefits to industry and the community. Accordingly, if the 'actual' total expenditure associated with delivery of the undertaking is less than \$216,000, the cost difference will be spent directly on funding actions contained in the Implementation Plan.

### **Auditing for Compliance with the terms of this undertaking.**

28. QR acknowledges that the ESO will conduct a series of audits to ensure QR's compliance with the terms of this undertaking. The following compliance audit schedule is agreed:

1. First compliance audit is to be conducted during April 2009
2. Second compliance audit is to be conducted during October 2009

3. Third compliance audit is to be conducted during March 2010
  4. Fourth and final audit is to be conducted during October 2010 unless all activities have been completed earlier and QR formally requests an earlier audit date.
29. QR acknowledges its responsibility to cooperate with the ESO Auditor and will ensure relevant material (evidence of compliance) will be available. QR understands that costs of these compliance audits will be met by QR and is detailed at Clause 31(iii).
30. QR acknowledges that DEIR may initiate additional compliance audits as considered necessary, at DEIR's expense.

### **Costs**

31. The following costs shall be payable to DEIR:
- (i) Investigation costs in the amount of \$11,278.00 representing the reasonable investigation costs arising out of the incident.
  - (ii) Consideration costs of \$800.00
  - (iii) Compliance Auditing and Regulatory Monitoring costs of \$2,403.00 representing costs to DEIR in monitoring and auditing of compliance with the terms of this undertaking.
  - (iv) Costs of \$2,000.00 being the costs to the Department in publishing the Notice of Acceptance.
32. The total amount of \$16,481 will be due for payment 30 days after receipt of DEIR's invoice.

APPROXIMATE VALUE OF THE UNDERTAKING IS \$216,481

It should be noted that considerable additional costs may need to be expended implementing the recommended actions.

Dated at [REDACTED] this [REDACTED] day of [REDACTED] 2008

[REDACTED]  
Lance Hockridge  
Chief Executive Officer  
QR Limited

ACCEPTED BY THE CHIEF EXECUTIVE, DEPARTMENT OF EMPLOYMENT  
AND INDUSTRIAL RELATIONS PURSUANT TO SECTION 50 OF THE  
ELECTRICAL SAFETY ACT 2002.

[REDACTED]  
~~Peter Henneken~~ Barry Leary  
A/Director-General, Department of Employment and Industrial Relations

Dated at BRISBANE this 6th day of October 2008