



**AUSTRALIAN RAIL TRACK CORPORATION LTD**

*This document has been adopted by the ARTC with the permission of the NSW Government and will continue to apply under the authority of the ARTC General Manager Infrastructure, Strategy & Performance until further notice*

**Discipline**

**Engineering Standard - NSW**

**Category**

**Electrical**

**Title**

**Transmission Line Easement Conditions**

**Reference Number**

**PYS 01 - (RIC Standard: EP 10 00 00 04 SP)**

**Document Control**

<b>Status</b>	<b>Date</b>	<b>Prepared</b>	<b>Reviewed</b>	<b>Endorsed</b>	<b>Approved</b>
Issue 1 Revision 1	Mar 05	Standards and Systems	Signalling Standards Engineer	GM Infrastructure Strategy & Performance	Safety Committee
		Refer to Reference Number	T Moore	M Owens	Refer to minutes of meeting 24/01/05

## **Disclaimer**

Australian Rail Track Corporation has used its best endeavors to ensure that the content, layout and text of this document is accurate, complete and suitable for its stated purpose. It makes no warranties, express or implied, that compliance with the contents of this document shall be sufficient to ensure safe systems of work or operation. Australian Rail Track Corporation will not be liable to pay compensation in respect of the content or subsequent use of this document for any other purpose than its stated purpose or for any purpose other than that for which it was prepared except where it can be shown to have acted in bad faith or there has been willful default.

## **Document Approval**

The technical content of this document has been approved by the relevant ARTC engineering authority and has also been endorsed by the ARTC Safety Committee.

## **Document Supply and Control**

The Primary Version of this document is the electronic version that is available and accessible on the Australian Rail Track Corporation Internet and Intranet website.

It is the document user's sole responsibility to ensure that copies are checked for currency against the Primary Version prior to its use.

## **Copyright**

The information in this document is Copyright protected. Apart from the reproduction without alteration of this document for personal use, non-profit purposes or for any fair dealing as permitted under the Copyright Act 1968, no part of this document may be reproduced, altered, stored or transmitted by any person without the prior written consent of ARTC.

## **About This Standard**

This document sets out the terms and conditions which apply to all new Registered Easements under the Conveyancing Act which are occupied by aerial transmission lines owned by the Australian Rail Track Corporation of New South Wales.

These conditions are also to be applied to those portions of land owned by the State Rail Authority of New South Wales, Australian Rail Track Corporation of New South Wales, Railways Services Authority of New South Wales and the Freight Corporation of New South Wales which are leased to third parties and over which Australian Rail Track Corporation aerial transmission lines pass. These conditions must be included in any such leases and the portion of the land to which these conditions apply must be identified.

The conditions set out in this document do not automatically apply to existing easements and leases. Reference should be made to the relevant easement dealing or lease for the conditions applying to each individual case.

When any existing lease is renewed, the conditions must be updated in accordance with the requirements of this document.

## Document History

**Primary Source** – RIC Standard EP 10 00 00 04 SP Version 2.0

### List of Amendments –

<b>ISSUE</b>	<b>DATE</b>	<b>CLAUSE</b>	<b>DESCRIPTION</b>
1.1	11/03/2005	Disclaimer	Minor editorial change

## Contents

<b>1 References .....</b>	<b>6</b>
<b>2 Introduction .....</b>	<b>6</b>
<b>3 Encroachments onto Easement Areas .....</b>	<b>6</b>
<b>4 Restrictions Imposed on Easements .....</b>	<b>7</b>
<b>5 Approval for Encroachments .....</b>	<b>7</b>
<b>6 Easement Conditions .....</b>	<b>8</b>
<b>7 Management of Easements .....</b>	<b>9</b>

## 1 References

- 1) Electricity Council of NSW publication EC20 “Guidelines for the Management of Electricity Easements”.
- 2) Electricity Council of NSW publication ISSC3 “Guide to Tree Planting and Maintaining Safety Clearances Near Power Lines”.

## 2 Introduction

The Australian Rail Track Corporation distributes electrical energy throughout the rail infrastructure system for the purpose of electric traction, signalling, lighting, and supplies to various operators and maintainers.

The electrical energy is reticulated through a network of power lines consisting of high and low voltage aerial transmission lines and underground cables. The transmission lines are located on Australian Rail Track Corporation, State Rail Authority, Railways Services Authority, FreightCorp, public and private land.

When a transmission line route is located on private land an easement is required so that the Australian Rail Track Corporation can legally exercise their right to have access for the purpose of construction, maintenance, renewal, replacement and the safe operation of the transmission line. The easement refers to a defined area on a plan of survey which is registered on the relevant Certificate of Title lodged at the Land Titles Office. This enables the Australian Rail Track Corporation to control development activities within that defined area which, by accident or otherwise, create unsafe situations. Such easements impose an obligation on affected property owners not to do anything which may interfere with the rights of the Australian Rail Track Corporation.

## 3 Encroachments onto Easement Areas

It is essential to the Australian Rail Track Corporation that buildings, structures or other objects which could interfere in any way with access along the easement not be placed within an easement area and that nothing is to be done which would affect the safe and continuous operation of the transmission line or prevent its repair, replacement or renewal.

It is desirable that persons be prevented from doing anything in the easement which, while not necessarily interfering with the Australian Rail Track Corporations ability to carry out its business, may create a safety risk to persons on the easement or on adjoining land. Safety risks could possibly occur from induction, step and touch potentials or transferred potentials under fault conditions, infringement of safety clearances to conductors, failure of line components or support structures.

## 4 Restrictions Imposed on Easements

The restrictions relating to various activities within easement areas can be grouped into various categories;

Permitted activities	No written approval, normally permitted provided the activity does not interfere with the operation of the transmission line.
Controlled activities	Written approval, restrictions could apply.
Prohibited Activities	Unacceptable risk to AUSTRALIAN RAIL TRACK CORPORATION.
Indemnified Activities	Acceptable risk to the AUSTRALIAN RAIL TRACK CORPORATION

The above categories are detailed in the Electricity Council of NSW publication EC20, "Guidelines for the Management of Electricity Easements".

## 5 Approval for Encroachments

Encroachments onto easements are not normally permitted as an approval to encroach an easement places the Australian Rail Track Corporation in a compromised position if a claim is made by the property owner for damage or injury resulting from an encroachment approval.

For details of restrictions and permitted activities within easement areas refer to Electricity Council of NSW publication EC20, "Guidelines for the Management of Electricity Easements".

However, an application for approval of encroachment which includes, controlled activities, prohibited activities and indemnified activities affecting easements can be made in writing to the Australian Rail Track Corporation. The authority to grant such approvals is delegated along with that to provide other wavers to this standard and other standards. See the front page of this Manual.

In granting such approvals due consideration must be given to the proposed encroachment or controlled activity relative to safety, restriction of access, clearances, induction, step and touch potentials or transferred potentials under fault conditions, the failure of line components or support structures and the future requirements or utilisation of the easement. An on site inspection should be an integral part of the approval procedure.

Approval from the Australian Rail Track Corporation for development or controlled activities must be obtained prior to commencement of any work.

## 6 Easement Conditions

The following conditions and restrictions are required by the Australian Rail Track Corporation of NSW to be placed on the portion of the land subject to the easement in order to protect the transmission lines and rights of access.

The following definitions apply to the conditions and restrictions.

“The Corporation”	The Australian Rail Track Corporation of NSW.
“The Owner”	The owner of the land.

The Corporation has the right to:

- (i) Erect, construct, place, repair, renew, maintain, use and remove electricity transmission mains, wires, cables, towers, poles and ancillary works on the surface, undersurface, or subsoil of the easement for the purpose of transmission of electricity.
- (ii) Cut, trim or lop trees and other growth or foliage and to remove any other obstruction of any kind which encroaches the easement and which is likely to interfere with any right, leave, liberty or licence granted to the Corporation for the purposes listed at i) above.
- (iii) Authorise persons to enter into and upon the easement or any part thereof at all times and to remain there for any reasonable time with surveyors, workmen, vehicles, things or persons and to bring and to place and leave thereon or remove therefrom material, machinery, implements and things.
- (iv) Include the Corporations lock, at its cost, on any gate providing access to the easement which the owner elects to lock in such a manner that persons authorised by the Corporation can gain access to the easement independent of any other lock on that gate.

The Corporation and persons authorised by it must:

Take all reasonable precautions to ensure as little disturbance as possible to the surface of the easement and will restore that surface as nearly as practical to its original condition.

The Owner of the land must not :

- (i) Erect or permit to be erected any building or fence or other erection of any kind or description on, over or under the easement or alter the surface level thereof or carry out any form of construction affecting the surface, undersurface or subsoil without the Corporations permission in writing.

*Permission will not be granted for*

- Any structure or thing that would impede vehicular access to support structures and access along the easement.
- Swimming pools either in ground or above ground.

*Permission will only be granted for metallic fencing where there is no practical alternative and touch and transferred potentials are adequately controlled.*



- (ii) Plant or permit to be planted any tree or shrub on the easement having a maximum expected height at maturity exceeding 4.5 metres.
- (iii) Plant or permit to be planted any tree or shrub in a position where it would, or will at maturity, impede vehicular access to support structures or access along the easement.

The Owner of the land must ensure that :

- (i) Anything permitted by the Corporation shall be executed in all respects in accordance with the reasonable requirements of the Corporation and to the reasonable satisfaction of its engineer.
- (ii) The requirements of the Dangerous Goods Act are to be observed and no flammable materials are to be stored on the easement.
- (iii) Where an antenna is installed on the easement in such a position that there exists the possibility that the antenna might fall on to the power line in the event of failure of any part of the antenna or supporting structure, the installation should be checked by the Corporation for mechanical strength and safe installation. The antenna construction and installation shall be carried out in accordance with Australian Standard AS1417.1.

## **7 Management of Easements**

Owners of land encumbered by an easement shall be informed on a regular basis of the restrictions placed on development or activities which are prohibited or permitted to take place. See Electricity Council of NSW publication EC20, "Guidelines for the Management of Electricity Easements", "Safety Aspects of Electricity Easements".