



# Engineering Standard

## Electrical

### CRN ET 001

# TRANSMISSION LINE EASEMENT CONDITIONS

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## Document control

Revision	Date of Approval	Summary of change
V2.0	March 2005	EP 10 00 00 04 SP Transmission Line Easement Conditions
V1.0	January 2012	Conversion to CRN Signalling Standard CRN ET 001
V1.1	August 2016	Review and update

## Summary of changes from previous version

Section	Summary of change
various	Update from CRIA to TfNSW

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## 1 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 Transport for New South Wales (TfNSW).

These conditions are also to be applied to those portions of land owned by TfNSW, which are leased to third parties and over which TfNSW 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.

## 2 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

## 3 Introduction

TfNSW may distribute electrical energy throughout the rail infrastructure system for the purpose of signalling, lighting, and supplies to various operators and maintainers.

The electrical energy may be 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 TfNSW, public and private land.

When a transmission line route is located on private land an easement is required so that TfNSW 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 TfNSW 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 TfNSW.

## 4 Encroachments onto Easement Areas

It is essential to TfNSW 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 TfNSW's 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

## 5 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.
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 TfNSW
Indemnified Activities	Acceptable risk to TfNSW

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

## 6 Approval for Encroachments

Encroachments onto easements are not normally permitted as an approval to encroach an easement places TfNSW 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 TfNSW. 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 TfNSW for development or controlled activities must be obtained prior to commencement of any work.

## 7 Easement Conditions

The following conditions and restrictions are required by TfNSW 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 Authority"	TfNSW.
"The Owner"	The owner of the land.

The Authority 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 Authority 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.

## 8 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".