

# **ANGE 222**

# Working Around Electrical Infrastructure

#### **Applicability**

NSW SMS

#### **Publication Requirement**

**External Only** 

#### **Document Status**

Issue/Revision #	Effective from
2.0	11 October 2015

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### **Purpose**

To prescribe the rules for non-infrastructure workers working around electrical infrastructure in the Australian Rail Track Corporation (ARTC) NSW Network.



Workers *must* keep themselves, tools, equipment and materials as far as possible from exposed electrical equipment and wires, and never closer than 1metre to the 1500V overhead wiring.

#### **General**

Infrastructure workers must comply with the requirements specified in the *Maintenance Representative's Electrical Safety Instructions*.

Workers in the vicinity of exposed electrical equipment and wires in the *Rail Corridor* must keep or be kept at safe distances.

Unless they are told by an *Electrical Representative* that they are not live, untrained workers must treat as live:

- electrical equipment
- fallen electrical wires
- vehicles, equipment or objects in contact with wires or fallen wires
- water or fires in contact with electrical infrastructure.

Workers must treat objects caught in or touching overhead wiring as live. Only Electrical Representatives *may* remove these objects.

#### **Electrical infrastructure**

Electrical infrastructure includes:

- high-voltage and low-voltage wires, and electrical equipment, on poles
- 1500V overhead wiring and associated equipment
- electrical conductors carried in above-ground troughs, or buried in the ground
- low-voltage electrical switchrooms
- substations.



#### Working near electrical infrastructure

Unless *authorised* in accordance with the requirements specified in the Maintenance Representative's Electrical Safety Instructions, workers must not climb on top of rail vehicles on an electrified *track*.

#### Work above electrical equipment

Workers must not cause water or debris to fall onto 1500V overhead wiring.

#### Work tools and equipment

Workers must not use metal or metal-reinforced ladders within 6 metres of 1500V overhead wiring or equipment.

Steel tapes, metal-reinforced linen tapes and long steel rules may be used only in accordance with the Maintenance Representative's Electrical Safety Instructions.



Workers must take extra care when handling long objects near overhead equipment.

# **Underground services**

Before the whereabouts of buried services and underground cables are known, workers must not dig, break the ground or drive anything into the ground.



Untrained workers must not try to fight fires near electrical infrastructure and signalling *locations*.

#### Faults in electrical infrastructure

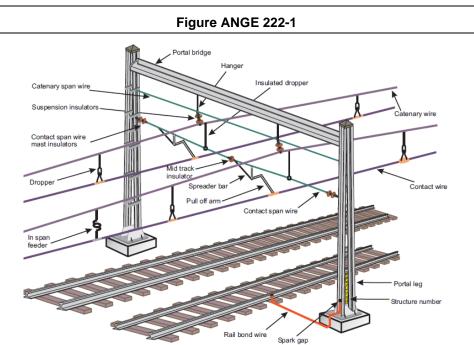
Workers who see or suspect faults, fallen wires or fires in the electrical infrastructure must immediately tell the *Network Control Officer*.

The Network Control Officer must tell the *Electrical System Operator*.



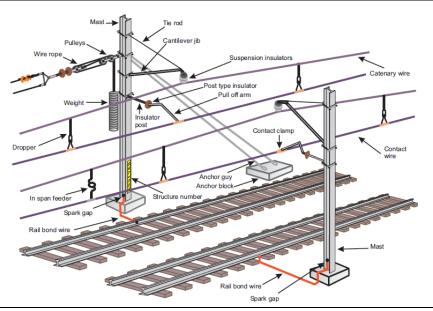
## Illustrations

If possible, refer to these diagrams to report faults, fallen wires or fires in 1500V overhead wiring.



Simple catenary, fixed-anchored, span-wire construction on portal structures

#### Figure ANGE 222-2



Simple catenary, regulated-tension, cantilever construction on masts



# **Related ARTC Network Procedures**

NIL

# **Effective Date**

11 October 2015