

RL D 79800

Electrical Network Safety Rules

1 Purpose

The Electrical Network Safety Rules (ENSR) specify the minimum requirements based upon 5 Primary Principles, when operating or working near or on/within electrical equipment/assets controlled by Sydney Trains.

2 Statement

The ENSR form part of the Sydney Trains Electricity Distribution Management Plan, as well as the Sydney Trains Safety Management System (SMS).

All operations and work near or on/within electrical equipment operated and maintained by Sydney Trains must be carried out in accordance with the ENSR and relevant approved processes.

The SMS sets out Sydney Trains safety and risk mitigation principles. When read in conjunction with the SMS, the ENSR sets out the Primary Principles in relation to electrical safety and forms the basis for the development of additional electrical safety documents in order to eliminate or minimise risks So Far as is Reasonably Practical (SFAIRP).

Work near or on/within electrical equipment shall be carried out in accordance with the:

- Rail Safety National Law National Regulation 2012
- NSW Electricity Supply Act 1995 and NSW Electricity Supply (Safety & Network Management) Regulation 2014
- NSW Gas and Electricity (Consumer Safety) Act 2017 and NSW Gas and Electricity (Consumer Safety) Regulation 2018
- NSW Work Health and Safety (WHS) Act 2011 and NSW Work Health and Safety Regulation 2017.

For a description of the process by which Sydney Trains complies with "electrical safety" legislation, refer to Section 5. Additional information refer to *SP D 79035 Sydney Trains Electricity Distribution Network Management Plan*.

3 Primary principles

1. One Method of Safe Working

All workers (as defined in the Work Health and Safety Act 2011 [NSW]) and contractors must perform work in accordance with the SMS, including the ENSR, and incorporate the requirements of the SMS and ENSR into their Safe Work Method Statements where applicable.

While at work, all workers must take reasonable care for their own health and safety, as well as the health and safety of others and acknowledge how individual actions or omissions at work can affect others. Workers must comply with the Network Rules, Network Procedures and other safe working documents, prescribed by Sydney Trains, and will be regarded as having fulfilled their responsibility and accountability.

Principle Reference Documents

Document number	Document title
	Rail Safety National Law
	Rail Safety Act
SP D 79035	Sydney Trains Electricity Distribution Network Management Plan
RL D 79801	One Method of Safe Working
PR D 78700	Working around Electrical Equipment
SP D 79056	Special exception from working to the ENSR
SP D 79056 FM01	Electrical Network Safety Rules Waiver

2. Electricity Distribution Network Management

The Electrical Network and Electrical Equipment operated by Sydney Trains is to be designed, constructed, commissioned, operated and decommissioned (or any part of its network) in a safe manner per *SP D 79035 Sydney Trains Electricity Distribution Network Management Plan*. This is to ensure the safety of all workers, contractors and members of the public.

Principle reference documents

Document number	Document title
SP D 79035	Sydney Trains Electricity Distribution Network Management Plan
RL D 79802	Electrical Distribution Network Management
PR D 78700	Working around Electrical Equipment
SP D 79056	Special exception from working to the ENSR
SP D 79056 FM01	Electrical Network Safety Rules Waiver
	Sydney Trains Electrical Network Operating Manual (Document custodian: Electrical Network Manager)

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3. Working Near or On/Within

All workers must ensure that all individuals, plant, equipment and objects are safe from electrical hazards by doing any one or more of the following in order to minimise or eliminate any risk:

- Conduct comprehensive preparation and planning for the delivery of work and ensure reviews are completed utilising electrical expertise, and:
 - a. Remove the hazard, or
 - b. Isolate, make safe, or
 - c. Do not encroach electrical Safe Approach Distance.

Principle reference documents

Document number	Document title
SP D 79035	Sydney Trains Electricity Distribution Network Management Plan
RL D 79803	Working Near or On/Within
PR D 78700	Working around Electrical Equipment
SP D 79056	Special exception from working to the ENSR
SP D 79056 FM01	Electrical Network Safety Rules Waiver

4. Electrical Safety Incidents

An electrical safety incident is an unplanned, undesired event that adversely affects the safety and operation of the Sydney Trains Electrical Distribution Network. Electrical Safety Incidents that occur on the electrical distribution network shall be managed consistently as per ENSR.

For information relating to reporting safety-related incidents and investigating the associated incidents, refer to *SMS-17-SP-3077 Incident Notification, Reporting and Investigation*.

Principle reference documents

Document number	Document title
SP D 79035	Sydney Trains Electricity Distribution Network Management Plan
RL D 79804	Electrical Safety Incidents
PR D 78700	Working around Electrical Equipment

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5. Personnel Competency

All workers must have the appropriate competencies to operate, work near or on/within electrical equipment and be authorised for their duties to be carried out in adherence to the Rail Safety National Law, Transport for NSW (TfNSW) standards and Sydney Trains documents.

Persons working or reviewing work methods, near or on/within electrical equipment, shall be trained and accredited both technically and as per the ENSR for the equipment and work that they are to perform.

Principle reference documents

Document number	Document title
SP D 79035	Sydney Trains Electricity Distribution Network Management Plan
RL D 79805	Personnel Competency
PR D 78700	Working around Electrical Equipment
SP D 79056	Special exception from working to the ENSR
SP D 79056 FM01	Electrical Network Safety Rules Waiver
PR D 78701	Personnel Certifications – Electrical
SP D 79055	Electrical Competency Specific Certifications

4 Adherence to primary principles

The ENSR and related procedures, processes and Safe Work Instructions form the framework and set the expectations for safe working on the Sydney Trains Electrical Distribution Network and electrical assets.

Managers and Supervisors must:

- ensure all persons, including contractors, undertaking electrical work are appropriately qualified, and their competencies maintained, in accordance with PR D 78701
- ensure appropriate Personal Protective Equipment (PPE), tools and equipment for electrical work, are issued, used, inspected and maintained in accordance with Sydney Trains documents and/or Industry Standards
- ensure persons under their control are familiar, and comply with the requirements of the ENSR
- undertake periodic reviews to ensure compliance with ENSRs
- review completed forms including Electrical Permits.

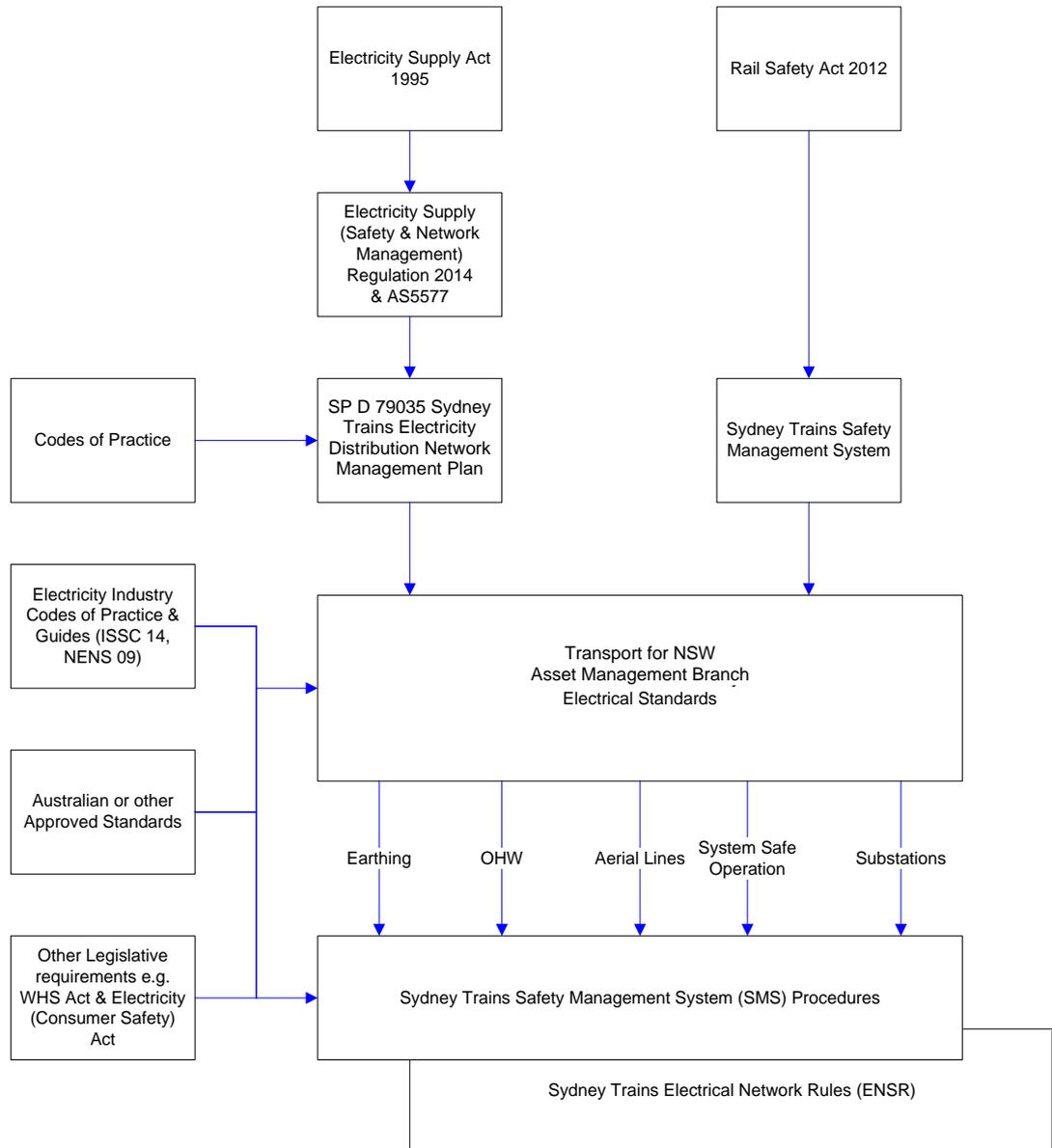
Workers must:

- comply with the requirements of the ENSR, Instructions and in particular the Primary Principles
- raise any queries or concerns regarding the ENSRs with their supervisors or managers
- inspect any PPE, tools or equipment issued, prior to use, to make sure they are serviceable
- be appropriately qualified and maintain currency of competence.

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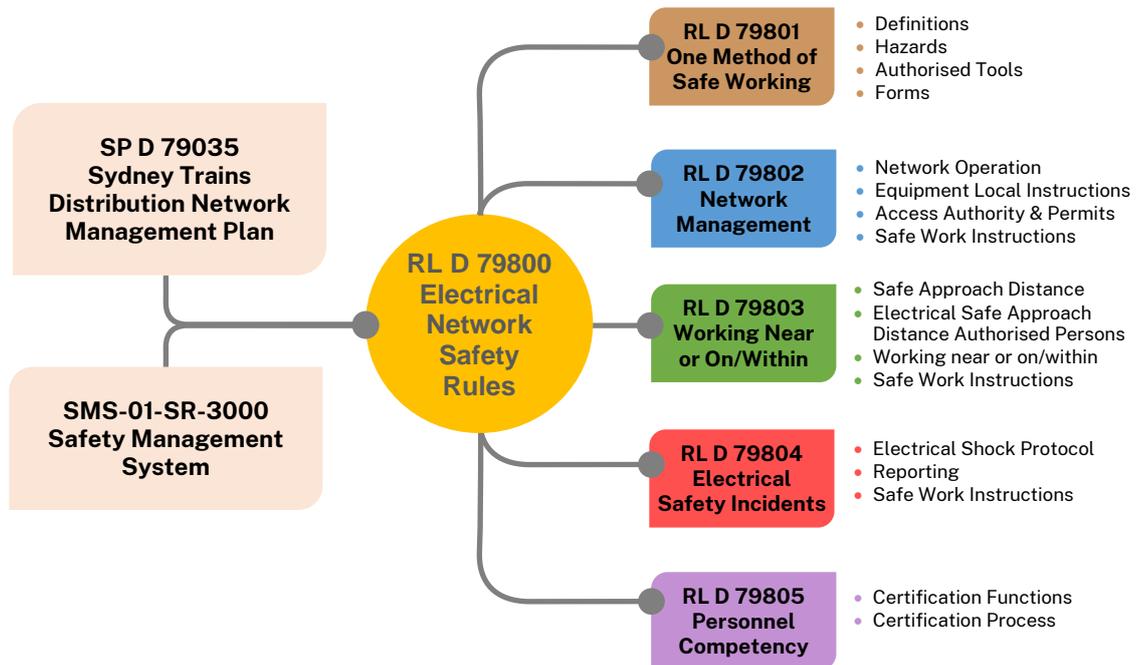
5 Overview

The process by which Sydney Trains complies with 'electrical safety' legislation.



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6 Navigating the ENSR library



7 Reference documents

SP D 79035 Sydney Trains Distribution Network Management Plan

SMS-01-SR-3000 Safety Management Plan

RL D 79801 One Method of Safe Working

RL D 79802 Electrical Distribution Network Management

RL D 79803 Working Near or On/Within

RL D 79804 Electrical Safety Incidents

RL D 79805 Personnel Competency

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Document properties

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Version	Date	Author/Prin. Eng.	Summary of change
1.0	1 February 2022	ENSR Project Team	First issue as Sydney Trains document. Extracted from PR D 78000 Electrical Network Safety Rules and PR D 78101 General Requirements for Electrical Work. Reviewed as part of the ENSR Project.
1.1	9 February 2026	Nick Loveday	Periodic review, republished with no change.

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